# International Exchange of Ideas in Student-Interactive Videoconferences – Sustainable Communication for Developing Intercultural Understanding with Student Teachers

Stellan Sundh
Department of Education, Uppsala, Sweden

## Abstract

International communication with different digital tools is now established both at universities and in other contexts worldwide. It is therefore relevant to describe how one of these tools is used in higher education. In the present study the focus is on seminars carried out in student-interactive video-conferences on didactic and pedagogical issues with student teachers. The participants were international and Swedish student teachers at the Department of Education at a Swedish university and at two different campuses. The results are based on analyses of the students' written reports completed after the seminars and show that the interactive video-conference is useful to establish contacts between students in different places and to develop intercultural understanding of school-related matters. The video-conference is thus a way to work with internationalization in a sustainable way in teacher education, giving opportunities for the exchange of ideas and experiences both at personal and professional levels without mobility.

*Keywords*: sustainable communication, teacher students, interactive video-conferences, internationalization.

## Background

The world has become easy to reach both in mobility and with the help of modern technology. This leads to more encounters between citizens of the world and thereby more learning and shared experiences at a global level. In this way more international perspectives can be included in the development of services, products, teaching and learning and research. At the same time ever increasing travel for meetings is not desirable for reasons associated with sustainable development. This is true both for business as well as academic contexts.

The exchange of ideas at an international level thus becomes more and more frequent due to the development of modern technology. This leads to the fact that many tools are available and easy to use in order to facilitate 'virtual' meetings between people from different places in the world. The strong and established position of social media

for communication facilitates international study- and work-related communication. Other means such as Skype make it feasible to meet in new contexts and new environments and exchange ideas. Communication has in this way become free from borders and limits, and a natural part of everyday life which puts new demands on knowledge of these means of efficient communication for international understanding.

At universities, working with internationalisation is an instrument to achieve high quality both in didactic and research issues. Research demands cooperation in international environments, and frequent contacts with fellow researchers in many places in the world and the use of sources and data for investigations from other contexts and written in other languages are and have been characteristics of high quality. These necessary contacts require means for efficient international communication.

Nevertheless, mobility has to be limited in order to care about the environment. It is necessary to use alternative and sustainable ways of meeting with persons others than travelling to each other. With this in mind, it is essential to introduce students to efficient and sustainable ways of communicating internationally as early as possible in their education so that they easily adopt these ways of communicating in their careers later on.

Universities have a special responsibility to spread the ideas about sustainable communication and to apply them when feasible. Partnerships between universities which comprise both research and education are frequent and efficient communication facilitates the development and spreading of ideas in both these contexts. This can be particularly important when it comes to university colleges or special campuses of universities which do not have access to meetings with visiting scholars and researchers and therefore need to adhere to other ways than mobility for the development of high quality in all respects.

## International Cooperation at Universities

Internationalisation is given more emphasis in higher education and is now central on the agenda for universities in Europe that strive for high quality in their activities. This tendency has also increased over the past 25 years (de Wit, 2010). At the same time and over the last decade, ethnic and cultural diversity has dramatically increased in student enrolments (Tawagi & Mak, 2014). This leads to new demands on educational institutions at all levels to work on making students interculturally aware and prepared for the challenges in education and working life.

In the same way that continuous professional development can have an impact on teachers' work in the classroom (Mohammadi & Moradi, 2017), the sharing of ideas between student teachers from different cultural backgrounds may influence their future ways of handling the didactic dilemmas in their future everyday work. The theory of transformative learning is relevant to include in this discussion since it is said to occur when there is a change in meaning perspectives that happen when students cross cultural borders (Webb, 2015). The outcome may be that the students experience personal and particular learning outcomes, especially when it comes to living abroad for a longer period of time. This was the case in a study on twelve international students' learning experiences at four universities in Portugal. Narratives from their two-year stay which were collected showed the significance of their out-of-classroom experiences in this partnership cooperation with Portuguese universities (Nada, Montgomery, & Araújo,

2018). International partnerships between universities are essential to prepare students for efficient learning in these new circumstances and contexts both when it is a matter of actual personal mobility or cooperation with the help of ICT (Mutabazi & Sundh, 2017).

Students learn together and the sociocultural theory can be used as a background perspective which highlights the fact that mental functioning is a mediated process which is organized by cultural artefacts, activities and concepts (Lantolf & Thorne, 2007). It then becomes essential to focus on communication between students in their learning to enable them to learn about phenomena which cannot be reached with other means. According to the Vygotskian view, language serves "as a buffer between the person and the environment" and acts to "mediate the relationship between the individual and the social-material world" (ibid, p. 199). It goes without saying that interpersonal communication regarding cultural differences and shared values in out-of-classroom contexts can be extremely valuable to have an impact on the understanding of the similarities and differences in national educational guidelines and school systems.

The fact that there are students with different backgrounds, learning styles and knowledge levels in higher education has become more topical in recent years (Dzelzka-lēja & Sen, 2018). This fact should be considered so the diversity and complexity when organizing teaching and learning with groups of different nationalities is taken into account. Carroll (2015, p. 17) distinguishes three diversity factors to consider. Firstly, there is educational mobility with students moving to and from various learning settings. Secondly, students learn in different ways and adhere to a variation in values and beliefs regarding how their learning should be organized and carried out. Thirdly, when it comes to having a mixture of nationalities in groups, the language factor is not to be neglected. The students' (and lecturers') proficiency level in English is in many cases crucial for successful interaction and learning.

When it comes to certain programs and disciplines it is of significance to identify useful ways for how learning and development can take place. International contacts and comparisons are definitely of importance but also in-school placements are necessary in order to place the theoretical parts in a practical and applied context. Applications of theories and concepts from educational and didactic studies are frequently regarded as being very positive by student teachers. This was for instance investigated in a limited study on 12 doctoral students taking a teacher education course in Jordan where the findings advocated school-based teacher training as a part of sustainable teacher education (Alkhawaldeh, 2017).

### Communication in Student-Interactive Video-Conferences

The skill of communicating in the first language or in a foreign language is important for university students in general. It may be argued that this is the case particularly for teacher students since in some cases university lecturers consider that their teacher students lack some communication skills (Gallego Ortega & Fuentes, 2015). Consequently, priorities should be given in teacher education to this important aspect in order to prepare student teachers to be efficient in their communication in the future multicultural and multilingual classrooms.

Speaking and communicating in a foreign language is even more demanding than in the mother tongue with all the mastery that is needed in pronunciation, vocabulary,

structures and communication strategies. Speaking gives no time to plan or elaborate on formulations but the immediate response is required. This was expressed in a study on students' voices in videoconferencing in university language education by a Slovakian student in the following way: "There are also some disadvantages. For example fear from necessity of quick formularization and politically unsuitable comments" (Stepanek, 2018, p. 113). Speaking in student-interactive video-conferences is nevertheless one way of practising this important skill.

ICT has taken major steps into second language acquisition and intercultural learning. Various mobile technologies are useful and studies of students' experiences and habits have been carried out (see e.g. Ma, 2017). The fact that student-interactive video-conferences are used to gain intercultural insights and awareness was studied in cooperation between Swedish and Czech universities (Sundh & Denksteinova, 2015). The results show that in spite of great differences in language proficiency, the students, and in this case students basically of business administration, considered that the communication had been important for their learning about different values and views on business communication in the two countries.

The lecturer can choose a role in the student-interactive video-conference. This was investigated in a project with Czech and Swedish university business students. Seven teacher roles were identified and are discussed as a finding in this project. They are designer, manager, process facilitator, content facilitator, technologist, assessor and researcher (Denksteinova & Sundh, 2018). What decides this choice, as is the case in all didactic dilemmas and decisions depends on the group and the desired learning outcomes and is a part of the professional work of the lecturer.

### Purpose and Research Questions

The purpose of the present study is to present students' views on seminars carried out in student-interactive video-conferences. The video-conference provided a setting for students to meet and discuss certain issues in spite of the fact that they were in different geographical places. The research questions to be answered are the following:

How do student teachers experience seminars carried out in autonomous student-interactive video-conferences in an international context?

What issues are raised in discussions about education and learning in communication between international student teachers?

For what purposes and in what ways can seminars with student teachers in student-interactive video-conference be used for the internationalisation of their education?

### Method and Data

In the autumn semester of 2018, international students at the Department of Education at Uppsala University in Uppsala, Sweden were assigned to complete a task in a video-conference with Swedish students at the same department and university but placed at another campus on an island in the Baltic Sea, namely Campus Gotland of Uppsala University. The seminar was to be carried out without the guidance of the lecturer. The empirical data of the present study is students' answers and reflections after having experienced their first seminar in a student-interactive videoconference. Immediately

after the seminars, the students were asked to meet and summarize their experiences together and submit a written report of their discussion. In addition, they could also write individual reports if they preferred to do so.

The participants were on the one hand, 33 international exchange students who studied a course of education in Uppsala, and on the other hand, 20 Swedish students who studied their first semester of a primary school teacher programme at Uppsala University Campus Gotland. The international students were from Austria, El Salvador, France, Germany, Japan, the Netherlands, Serbia, South Korea, Spain, Switzerland, the United States. The students had already experienced or were going to have their school-based part in the following few weeks (cf. Alkhawaldeh, 2017).

The students met in a one-hour seminar when the international students were in Uppsala and the Swedish students were in Visby on the island of Gotland. Before the seminar both the categories of the students were given a list of suggested questions which could be used in the seminar. The task was to find out as much as possible about the interlocutor's personal experiences and ideas regarding issues such as classroom procedures, the teacher's role and values identified in the educational system. They were then to use these findings in the respective final examination paper of their different courses. (See Appendix 1 for the list of questions provided.) The role of the lecturer in these student-interactive video-conferences was designer, manager and researcher (cf. Denksteinova & Sundh, 2018).

The data comprise 19 reports with a total of 6,450 words collected. Analyses of the data were carried out to identify the themes. In what follows these themes are described with quotations from the reports for illustration. The reports were analysed with the help of a thematic analysis when key words were collected according to the five categories: (1) procedures in the student-interactive video-conferences, (2) the organization of education at schools with reference to national guidelines, (3) the actual teaching and learning in classrooms and schools, (4) the teacher education at university and (5) the teachers' working conditions. The approach was thus qualitative with the following four principles. Firstly, the approach is that the results presented are completely based on the written data retrieved. Secondly, the analyses are well-founded and only come from detailed scrutinizing of the written data. Thirdly, no presumptions or conclusions based on previous studies are to be the starting-point in the presentations. Finally, the analyses of the data were regarded as continuous processes between the actual data and the five decided categories (Denscombe 2007).

## Results

The following five categories are thus used to systematically present the results: (1) Procedures in the student-interactive video-conferences; (2) The organization of education at schools; (3) The teaching and learning at schools; (4) The teacher education at university and (5) Teachers' working conditions. The five categories are presented below with the themes and key words identified. The term *key words* is used for recurrent words that were identified in each theme in the data. In order to illustrate the content in the reports, a number of quotations are provided in each category.

Table 1
*Procedures in the Student-Interactive Video-Conferences*

| Themes | Key words |
|---|---|
| Generally | interesting exchange, practical issues highlighted, advantage to have the Swedish student's perspective on many issues |
| Organization | advantage with small groups |
| Personal | new/first experience, interesting and rewarding |
| Technology | no problems with technical matters, good quality |
| Before the conference | prepare with an article to get more knowledge beforehand |

*"In conclusion it was a good experience and an interesting exchange with the students from Sweden."* (1)

*"We all found this experience helpful"* (2)

*"I think it was a good idea to get some insights from Swedish people on how they experienced their time in school and also how their education as a teacher is."* (3)

The students emphasized the positive aspects of the communication with small groups and that they learned about many new aspects regarding school and education in Sweden. The technical part was without problems but the communication could have been more prepared in advance so that the students were fully aware of the purpose.

Table 2
*The Organization of Education at Schools*

| Themes | Key words |
|---|---|
| The school day | lesson length, schedule, the size of the classes, the number of hours per day, the characteristics of an ordinary school day |
| The school year | summer break, the semesters |
| Breaks | outdoor activities and physical activity |
| Meals at school | free meals |
| Social work | moral values and social abilities at school |
| Transportation | free transportation to school for all, even disabled |
| Material at schools | free books, frequent use of ICT |

*"Also we found out that one of the most important things in Swedish schools is that the students spend their time during the breaks outside. In this case the importance of physical activity is emphasized and it's considered necessary for the health and development of children. Students spend their break time outside even during the winter when the weather is rainy and very cold. Students take some warm clothes and go out to play. This fact surprised me, because in schools in my country, children spend their time during breaks inside school during the winter. This was surprising for other students too, because the students in their countries also spend break times inside, if the weather is bad."* (4)

*"It's one thing to talk about policy, but it's another to hear it from a first-hand account."* (5)

As can be seen in (4) above, the discussion could touch upon very detailed matters which then gave the students a concrete picture of the organization of the school day and the framework for education at primary schools in Sweden. Personal narratives provided information that became a useful addition to general descriptions of policies and national guidelines.

Table 3
*The Teaching and Learning at Schools*

| Themes | Key words |
|---|---|
| Curriculum and syllabus | national guidelines, core subjects, school profiles |
| Assessment | grading system used, national tests |
| Home contacts | contacts with parents, homework |
| Languages | foreign languages learnt, the start when learning foreign languages |
| External factors | the presence of the English language in society in Sweden |
| Working routines | children can make choices in methods and material in Sweden |
| Didactic issues | language teaching, the age to start and methodology with English for young learners, the emphasis on the reading skill, different approaches in teaching, group work with advantages and disadvantages |
| Subjects | cross-disciplinary work |
| Motivation | the significance for the teachers of finding interesting and useful material and approaches |
| Inclusion | the presence of teacher assistants |
| Teacher role | working on motivation and students' independence |

*"Firstly, and one of the most important things in my point of view is the fact that learning English can be something "natural" for Swedish children, thanks to the importance given not only by the school but also for society."* (6)

*"We found out that teachers in Sweden are trying to combine lessons from different subjects, and in this way they try to make the class interesting for the students and make it easier for students to build meaningful connections within learning process on a new content, and then to connect new content with previous experience and knowledge of students."* (7)

Issues regarding the actual learning and teaching processes at schools constitute one of the dominating fields of interests in the one-hour communications. Students were much engaged in detailed didactic questions regarding the concrete procedures used in the classrooms, how teachers actually plan their work and the teacher's attitudes to the grading system, national tests and inclusion in the classroom.

Table 4
*The Teacher Education at University*

| Themes | Key words |
|---|---|
| Theoretical | teacher education seen as too theoretical |
| Practical | school placements in teacher education |
| The structure | teacher programme organized differently |
| Responsibility | students are given a big responsibility in their studies |

*"At Campus Gotland the Department of Education is much smaller than at home, so they have smaller classes and are taught via video-conference with Uppsala. That was interesting."* (8)

*"Secondly and related with the education degree, is the point that bachelor students are able to go to school once a week in order to work with children of different ages. This is an incredible help to make students realize two things: if they are really interested in becoming teachers, and also to put into practice the theory studied in the different lectures they have every day."* (9)

The teacher students of different educational and cultural backgrounds could also elaborate on the characteristics of their own teacher education and compare it with the practice carried out at Uppsala University, Campus Gotland.

Table 5
*Teachers' Work*

| Themes | Key words |
| --- | --- |
| Financial | salary |
| Working hours | regulated |
| Working conditions | high pressure, risk for burnout |
| Social status | low status in comparison with many other professions |

*"They also explained the teachers' work hard regardless of not so high salaries and the not so high teacher status."* (10)

The students also compared the teacher's work regarding salary, working hours and conditions, and how the teaching profession is regarded in society.

### Data Analysis

Tables one through Table five above show that these one-hour meetings between international students and Swedish students provided the opportunities for them to discuss a number of different themes and topics related to school and teacher education. There are four points to highlight.

Firstly, currently, the use of student-interactive video-conferences is not widely spread, especially considering the field of higher education in Europe. For the participating students, it was the first time they had this experience and they were generally very positive to this way of communicating. In the context of the present study, the video-conferences were between two campuses in Sweden and with international students at one end and Swedish students at the other end. Evidently, the set-up could just as well have been in two different countries with great geographical distances.

Secondly, the category and themes that the students were especially engaged in were related to central didactic issues and the actual work in the classroom. Not much focus was on technical details in the video-conference itself or on organizational matters related to the curricula and syllabi. This would imply that the student-interactive video-conferences gave the opportunity to discuss highly concrete matters related to the students' background, experiences, ideas and future professional lives.

Thirdly, a wide range of themes could be reviewed in the one hour-conversation. Groups with a limited number of students and in the framework of organized student-interactive video-conferences provided the setting and circumstances to take part in the discussion in a personal but at the same time serious and planned way.

Fourthly, one-hour seminars with student interactive discussions focusing on making comparisons on such wide and complex areas as educational systems, teachers' priorities in the classroom and the organization of teaching and learning can definitely be a challenge and lead to stereotypical ideas, simplifications and misunderstandings. It is therefore of importance to have follow-up activities of various kinds to these seminars. Nevertheless, in order to promote international understanding these encounters are important when there is a purpose in a course of higher education to face students with accounts based on "real" and personal experiences.

## Discussion

Internationalization is given priority in higher education at all levels: undergraduate, advanced and for research purposes. Student and teacher mobility is one of the activities in this prioritized internationalization. At the same time, it is self-evident that not all university students will have the practical or financial means to carry out an exchange semester of studies in a foreign country. This can be illustrated by the national stipulated goal to reach for in Sweden regarding student mobility in 2018 which is 20% of the university student cohort. It is also relevant to include sustainability in this discussion and critically examine the effect of the increasing numbers of travels by students world-wide, primarily by air. It is thus necessary to find other sustainable means for the international sharing of personal and professional experiences in higher education, for instance in Sweden for the remaining 80%. Student-interactive video-conferences are one of the ways of working with an increased number of encounters in international and inter-cultural communication in a sustainable way.

The issues discussed in the one-hour-seminars were identified and classified in themes of five different categories: procedures in the student-interactive video-conferences, the organization of education at schools, the teaching and learning at schools, the teacher education at university and teachers' working conditions. There was a tendency that many themes were comparisons between Sweden and other countries of the third category: the teaching and learning at schools. Generally student teachers experienced these autonomous student-interactive video-conferences in an international context as an efficient means for discussing and sharing both professional and personal matters. They learned in other ways than by studying theoretical perspectives and these planned student-interactive video-conferences are according to the ideas of learning in the Vygotskian sociocultural perspective.

To conclude, student-interactive video-conferences can thus be used between student teachers for sustainable communication when the purpose is to integrate international, multicultural and multilingual perspectives into their teacher education. In today's world these perspectives are to be given priority and this way of creating contacts between student teachers from different cultural and educational context without travelling is a sustainable way of preparing future teachers for the challenges that they will encounter in their careers.

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Correspondence regarding this article should be addressed to Stellan Sundth, Uppsala University Campus Gotland, SE 621 67 VISBY, Sweden. Email: stellan.sundh@edu.uu.se

## Appendix 1

Questions to use in the interactive video-conference between international students at Uppsala University in Uppsala and Swedish students at Uppsala University, Campus Gotland University.

What was it like at school when you were 10 to 12 years old? Describe an ordinary school day.

What do you remember about the teacher and the teaching situations?

How were the learning outcomes checked (exams and tests, oral or written check-ups, grades used)?

Tell us about the following: the lunch meal, the school yard, activities during the breaks, your way to and from school.

If you have time:

What do you consider to be the main ideas and beliefs in your school system about teaching and learning?

How would you describe the teacher's role in your school system?

In what situations do you think that children at your school learnt the most?