

HOW WILL THEY REACT IF WE MAKE THEM TALK? STUDENTS' EXPERIENCES FROM LEARNER-CREATED VIDEO TASKS IN ONLINE UNIVERSITY EDUCATION IN SWEDEN

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Abstract

In focus in this paper are students' views on their experiences of an educational design with oral assessment tasks supported by video technology in online university education in Sweden. Questions targeted how the students perceived the impact of oral tasks on their learning. The data were gathered through questionnaires, qualitative interviews and students' self-reflection documents. Results indicate most students appreciated the oral assessments, and their descriptions of this learning experience indicate that the studied video-based task-design may enhance online students' learning experiences.

Keywords: online teaching, oral assignment, design for learning, case study, pedagogical digital competence (PDC)

Introduction

In this paper students' views on their experiences of an educational design with oral assessment tasks aided by video technology in online university education in Sweden are in focus. The idea behind the implementation was to develop strategies to support the students' oral communication skills and to explore if oral tasks using video technology could support the students' sense of social, cognitive and teaching presence. One important reason for the start of the project was related to expectations from national policy documents that the students also should develop oral communication and presentation skills (Swedish Code of Statutes, 1993:100). Previous studies (Dunbar, Brooks, & Kubicka-Miller, 2006; Ice, Curtis, Phillips, & Wells, 2007; Mathieson, 2012) have also revealed the importance of oral tasks in higher education for students' learning process. The study is a contribution to the growing understanding of what learning designs using video technology in online education could add to the overall learning process. The questions targeted in this paper are: (a) How do students perceive the impact of oral tasks for learning in online education? And (b) What could the results indicate regarding the quality of this design for learning?

The Case-Setting and the Participants

Courses and programs delivered by Information Communication Technologies (ICT) have become an integral part of most of the higher education institutions' overall strategy worldwide. Many countries have experienced a rapid growth in this area to the extent that the growth in online enrolments is now overtaking the growth of traditional enrolments (Allen & Seaman, 2011). During the last ten years, the proportion of students in higher education online in Sweden has increased from one-tenth to nearly one third. In similarity to online students worldwide, a great number of online students in higher education in Sweden state that one important reason for their decision to study online is the flexibility, which enables them to fit studies into their general life situation (Statistics Sweden, 2012). However, conducting studies online may come at a price as: "...high frustration levels, lower levels of satisfaction, technical and logistical problems, lack of teacher interaction, difficulty developing student friendships..." (Hirschheim, 2005, p. 97). This could indicate that the designs of online courses do not always match students' expectations and the quality of their overall learning experience.

The strategy plan for e-learning at Umeå University explicitly specifies that all decisions related to e-learning should be guided by simplicity, flexibility, and cost effectiveness, with customized systems, learning environments and support for users' different needs (Umeå University, 2016). The Higher Education Ordinance stipulates that university education should enhance the students' skills to demonstrate the ability to present and discuss information, problems and solutions in speech and writing and in dialogue with different audiences (Swedish Code of Statutes, 1993:100). The need to assess speech performance was consequently an important reason for the experiment to design and implement oral tasks in the online courses. Along with this followed a curiosity regarding if oral tasks could enhance students' learning experience and if so, what aspects were involved. These institutional frames highlight the challenge to design for learning that ensures that the students develop expected skills through flexible attendance, which meets their expectations regarding the learning experience - whilst using inexpensive, accessible and easy-to-use technology that does not exclude individuals due to location or personal disposition.

The complex challenge to create good learning conditions within the above described frames, has been addressed at the Department of Education at Umeå University in various ways. As one of the largest departments of Education in Sweden, the department has become a major actor in online university education in the country, both in terms of research related to distance education and the number of students enrolled in online and distance courses (Holmgren & Johansson, 2012). The department has a long history of distance teaching and already used video conferencing tools for this purpose in the early 1990s (Dahlgren & Karp, 1998). In those days, the university did not provide a central online education environment that met the requirements for high quality online education. Therefore, the Department of Education invested in technology, to be able to control and adjust ICT solutions in relation to pedagogical needs.

As pointed out by Laurillard et al. (2013), many teachers in higher education lack teacher training and have little time and/or support to learn how to teach online. Fortunately, most teachers engaged in online courses at the Department of Education have teacher training and experience from research in online education, which are two good conditions for developing Pedagogical Digital Competence (PDC) – the “ability to develop/improve pedagogical work by means of digital technology in a professional context, primarily in web course/online teaching” (From, 2017, p. 7). Most teachers have a constructivist or sociocultural outlook on learning, in line with the teaching strategies found in research in online learning. For example, instructional scaffolding (Belland, 2017; Garrison, Anderson, & Archer, 1999; Jumaat & Tasir, 2014; Ruey, 2010) is practised through templates, guides, instructional videos, practise questions and teacher feedback to groups and individuals, with an aim to provide beneficial conditions supporting the development of cognitive, social, and teaching presence (Shea, Sau Li, & Picket, 2006). Further, successful experiments such as peer-review elements (Liljeström, Hult, & Stödberg, 2008; Liljeström, 2010) and tutoring in virtual seminars (Holmgren & Johansson, 2012) have become integrated, although sparsely, together with, study guides, feedback templates and a mixture of text-based and video instructions.

The video-task design in focus in this paper was tested in the Bachelor and Candidate degree programs in Educational Science during 2015 and 2016. These courses are provided entirely online, with 100-120 active students per semester. They form a very heterogeneous group; some of them are new university students whilst others have studied at university level for several years. Some students have never studied online before and others have completed many online courses in the past. Most students live in Sweden, where the technological infrastructure is rather advanced in aspects such as fast broadband connection, up-to-date technology and a population with generally good computing skills. However, some learners participate whilst abroad, sometimes staying in countries with poor Internet connections and out-of-date technology at hand. A handful of learners have some sort of a disability, and some speak Swedish as a second language.

The Design of the Learner-Created Video Tasks

The studied case is a 30-credit course (European Credit Transfer System) composed of four modules, each with their own expected learning outcomes. The learning management system (LMS) used for online education at the Department of Education is Moodle, a result of investments in ICT-tools at the department based on the possibility to adjust it to educational strategies, and the versatility with built-in tools suitable for online education. The standard design for coursework and assessments was entirely text-based and asynchronous until the implementation of learner-generated video tasks and real-time video conferences in 2015. This includes a mixture of mandatory and optional seminars, in which the students are expected to interact through asynchronous text-based discussions based on the course content. Scaffolding is provided in the form of schedules, study guides, written instructions, video lectures, library resources and Q&A-forums. The standard final assessment is

a written paper based on the course content, and the completion of a self-reflection document, in which they are to reflect on their own learning process during the course work, and in what ways their experiences from various course activities have supported their learning. In three modules, one of the assessment tasks was modified to be a video task. The tools were chosen because they seemed easy to use, even for students with limited experience of digital technologies, and could be managed despite older technologies or slow Internet connection. Further, there were no additional costs for the students since either freeware or programs provided by the university were used. Technical support in forms of various instruction videos was provided, alongside with the option to contact an ICT- educationalist.

The synchronous video conference - Video task 1. The synchronous Adobe Seminar was implemented in the first module, to create an opportunity for interaction during “life-like” circumstances. The idea was to explore if this could raise the students’ awareness of their peers and stimulate the students’ motivation to engage with peers in future group activities. This could increase the awareness of the presence of knowledgeable and supportive group members, which could be crucial to learning satisfaction in online study environments (Grieve, Padgett, & Moffitt, 2016). The task was designed to engage the students in discussions about their previous study experiences, their view on the course content and tasks, their individual learning goals and how their personal resources could be used to support the group members during the learning process. The idea was to help the students identify the dimension of teaching presence that can emerge through inquiry in collaboration with peers (Garrison et al., 1999). Teachers did not participate in the Adobe Connect seminars. However, inexperienced students could find guidance from more experienced peers.

The asynchronous learner-generated presentation - Video task 2 and 3. Both learner-generated video tasks were designed foremost to enhance the students’ oral presentation skills, but a second motive was to stimulate in-depth interpretation of the course materials. Both tasks were designed to stimulate the students in understanding the content in relation to their own experiences and engage the students in the role of teaching others. The idea was that the expectation of taking on the teacher role could endorse cognitive presence (Garrison & Cleveland-Innes, 2005). In Video task 2, the students were asked to choose a part of the course content, e.g., a theory, some concepts or an interesting article and create a video presentation directed to (and with relevance to) an audience of their own choice (e.g., a workplace, school, sports club). The study object was identity, mirrored through theory of gender, normality, social reproduction and ethnicity

Video task 3 was tested in a module in which the study object was theory and research in ICT and learning. Four fictive cases were presented to the students through video clips in which teachers played the role of a potential manager with a request for a proposal for a study plan to educate employees, parents at a school or the general public. The students were to choose a case and, based on course content and research in ICT, design a study plan (aided by ICT) that addressed the requests presented in the case. This task was assessed through

the video presentation of their proposal, which had to be performed in such a manner that the persons in the case could understand the relevance of the proposed learning activities and the justification of their choice of ICT aids for these activities in relation to the circumstances and learning goals presented in the case. In parallel the students also submitted a written paper in which they applied the course content in discussions about strengths and weaknesses in their proposed study plan. Both Video task 2 and 3 required that the students used PowerPoint for their video presentation (maximum 15 minutes) as a base for recording a presentation in Screencast-O-Matic, which was uploaded to Office 365. The original design included a mandatory peer review element to further stimulate social, teaching and cognitive presence. However, as one of the students had a hearing impairment, the opportunity to share their videos for feedback from peers was made optional.

Method

A qualitative case study approach forms the methodological framework of this study. Accordingly, a detailed description of the rationale behind the design of the course elements supported by audio-visual tools tested is provided. Stake (1994) argues that case materials, to some extent, can be compared to actual experience in the fundamental processes of awareness and understanding of a case study. The detailed description of the circumstances in which the video tasks were implemented has been an attempt to help readers relate the results of this study to their own experiences as well as to provide a holistic foundation for the study, as a phenomenon anchored in a real-life situation (Merriam, 1998).

Data Samples

Samples from Video task 1 were collected through evaluation questionnaires at the end of the module from the implementation in 2015. In 2016, the second time the Video task was used, there were a total of 87 answers, including free text comments (N=43). Data samples from Video task 2 were collected at the end of the module from the implementation in 2015 (N=45) and in self-reflection documents from all 172 students. Here, spontaneous remarks in the self-reflection documents about the video task were found in 78 of the 172 self-reflection documents (N=78). Data samples from Video task 3 were collected from (N=45) and supplemented with spontaneous remarks in the students' self-reflection documents and interview data (N=10) from the implementation in 2015.

Table 1. Data Collection

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<p>Module 1 Video-task 1: Purpose: Develop peer-supportive relationships and familiarity with technology. Performed at beginning of course. Data collection methods: Course evaluation, self-reflection documents.</p>	<p>Module 2 Video-task 2: Purpose: Develop content knowledge and oral abilities and ability to discuss theory and research. Performed at mid-time in module. Data collection methods: Course evaluation, self-reflection documents.</p>	<p>Module 3 Video-task 3: Purpose: Develop content knowledge and oral tasks to present motivate and problematize an educational plan based on theory and research. Final assessment in module. Data collection methods: Course evaluation, self-reflection documents, interviews.</p>

Analysis

The data from Video-task 1 were analysed with a focus on how the students rated the impact of the task on their learning and the quality of interaction with peers, and also regarding their general experience of the video technology. In the first stage, the data from Video task 2 and 3 were analysed separately. The data were thoroughly analysed to identify general themes, which were used to create categories. The data from both tasks were triangulated in the next step, due to the similar task design and equal patterns, in search for how the students in general perceived the task of performing and recording an oral presentation and what impact they found that tasks like this had on their overall learning experience. However, rare or deviating comments were also identified to nuance the general patterns. All members of the research group were actively involved in the analysis and categorisation of the data.

Results

Almost all students' remarks about the three oral tasks were expressed in positive terms like *fun*, *challenging* and *good variation*. Some students chose to give more detailed information about their opinion, and what impact they thought that the video tasks had on their learning, as reported in the themes presented below.

Students' Perceptions of Video Tasks as Support for Learning

The students' remarks on the two video presentation tasks show that the students experienced that these tasks had a positive impact on their oral skills. For instance, 34 of 54 students commented on this in their self-reflection documents after completing Video task 2, and similar results emerged in the self-reflection documents and free text comments from Video task 1. The students described how they felt the need to refine their presentation repeatedly, after listening to their own recording. Listening to their own presentation made them identify the need to organise their speech more systematically and to carefully choose their words to add clarity. They also described how they realised that they had to consider how to adapt their speech to create a convincing tone, which was needed to capture the audience's interest and assurance of their expertise. Some students reflected over how the task to record an oral presentation was useful to help overcome previous issues about oral performance. Beyond the findings that most students seem to perceive that the oral tasks enhanced their oral skills, other interesting results emerged regarding other aspects of learning. The students' comments about what impact the oral tasks had on their learning revolve around two distinct themes such as the impact they perceived that the tasks had on their understanding of the course content, and how they developed their Pedagogical Digital Competence (PDC).

Understanding of the course content. The central theme in the students' remarks about Video task 1 revolves around beneficial aspects on learning through interaction with peers. The students' general portrayal of how they experienced Video task 1, is that it was beneficial to engage in a synchronous discussion with peers about the course content and upcoming tasks, and that this stimulated their approach to coursework and assessments. Their reasons

given for this opinion, for example, that they (18 out of 43 free-text evaluation comments) found that their discussion had a positive effect on their own ability and understanding of course content and tasks, indicate that interacting in this format can stimulate the involvement of an interpersonal dimension in the interaction with peers. Many students noted that participating in this conference had made them aware of the presence of peers and that they could contribute to each other's learning. One student stated: "Since I have studied before, I could contribute with my experiences from previous seminars and exams" (Self-reflection document, Video task 1). Others mentioned how their participation in the seminar had resulted in the creation of a Facebook group to use for further interaction. When answering the evaluation questionnaire, a majority agreed that they would like to participate in synchronous video seminars in future course modules.

The students' descriptions of their approach to and experiences from completing Video task 2 and 3 are very enlightening. Several students report how they to a higher extent felt the need to reflect upon the accurateness of the content covered in their video manuscripts, compared to what they usually do when creating traditional papers for assessment. For example, one student stated that "to make the recording good, I had to make it several times, which meant extra reflection on my own text" (Self-reflection document). Thus, it seems that working with Video task 2 and 3 stimulated in-depth learning approaches, and thereby their understanding of the course content. The assumption that the video tasks stimulated deep-learning approaches to the course content is supported by other data derived from all three modules. For example, 18 out of 43 free-text evaluation comments contain explicit comments about how working with the video presentation tasks had a strong impact on their understanding of course content. Some 20 of 54 remarks about Video task 2 in the self-reflection documents contained descriptions of how the students felt the need to interpret the course content in depth to clarify their own understanding of concepts and theories and gain enough understanding to be able to create their presentation. The results from the students' evaluation of how they perceive that the oral assessment task contributed to their learning in comparison to the written part of this assessment show that 39 out of 45 students perceived that the oral elements contributed to their learning as much as the supplementary written element. However, learning about the course content from the experience of creating this type of oral task is not the only learning outcome that the students identified. A few students perceived that these tasks truly challenged their previous learning strategies. One student expressed that "I'm not used to studies at the university level being so concrete and practical. This task forced me to go outside my comfort zone" (Interview with student after task 3). Others noted that this experience made them aware of the importance of increased reading and reflection to achieve a deeper understanding of the course content.

Pedagogical Digital Competence (PDC). The second theme that emerged was the students' perceptions of how the task contributed to their PDC, through the understanding of how content and digital competence relate to each other when creating a video presentation. For example, one student wrote

about gaining “increased reflection and understanding between technologies, content and pedagogy” and another stated “I have understood that different digital technologies can be used for various educational purposes, which may be based on different theories of learning” (Self-reflection documents). The overall results indicate that the general experience of these tasks was that it enhanced this type of competence. A handful of students described that technological issues restrained their learning during Video task 1, but testified that these issues were resolved during their work with Video task 2, when they already were familiar with the technology.

The opinion that working with the video tasks supported a deeper understanding of the course content also emerges in the students’ remarks on what they learned from the use of the ICT-tools and what this meant for learning from the task itself, i.e., the content as well as the purpose, oral communication, for which it was used. For example, when the students describe the process of using ICT-tools to create both the presentation and recording and draw the conclusion is that it stimulated and enhanced their ability to reflect on the content and on how they presented this content. In addition, several students reported that they reflected to a higher extent on the content of their video presentation than what they usually do in written examinations. Thus, there seems to be an added value when students hand in an oral presentation for assessment in which the digital technologies used seem to support the development of processes enhancing deeper understanding of the content. Finally, the results regarding PDC show that the students (19 out of 20 remarks in self-reflection documents) perceive that they have enhanced their general technology skills. This is put forward in remarks about how performing the video tasks have inspired them to plan how to use this type of task in their work life. For example, one student claims “I am convinced that I, in my future career, will have the benefit of having designed and presented a plan for an education activity” (Self-reflection document).

Indications Regarding the Quality of this Design for Learning

During the implementation and monitoring of the video tasks, the teacher team, as well as the students, have identified some quality aspects on the design. These aspects are presented below.

Achievement of educational objectives. The implementation of the technology-supported oral tasks implies that the guidelines given by the Higher Education Ordinance (Swedish Council for Higher Education, 2014) have been met in a more expedient way than before. In accordance with the guidelines, the students have been given many opportunities to demonstrate their abilities to, orally and in writing, present and discuss educational content, problems and solutions in dialogue with different groups. Given the previous design of courses, the implementation of these tasks has also created further opportunities for students to achieve the course objectives, such as presenting, discussing and problematizing the course content. This is also supported by the students’ statements concerning their increased understanding of content, oral ability and PDC, which indicate that their learning has been strengthened by the work with these tasks. Furthermore, the overall analysis of the task design also demonstrates that the different tasks have contributed to higher

degrees of social, teaching and cognitive presence. For example, the video conference provided an opportunity for the exchanging of students' experiences and peer-support. The video presentation tasks resulted in students increasing their reflections on the course content, their manuscripts and oral presentations.

Progression. The overall analysis of the implementation of the tasks indicates that the progression between the three tasks, concerning the design and requirements, has been important for the students' learning. The group-based video conference meant that the students were given the opportunity to familiarize themselves with the technologies and develop supportive peer relationships, which made them more comfortable in the forthcoming courses. A further progression is seen between Video task 1 and 2. While the first task stipulated that they should present and discuss a self-chosen course content, in the second task the students were also asked to motivate and argue for their choices of technology and learning activities for an external actor. This increased degree of complexity meant that they could benefit from their previous experiences and gradually enhance their learning in the abovementioned areas.

Generic competences. The design of the video tasks should also be highlighted in relation to the development of generic skills. As the results show, the students perceived that their improved oral ability and PDC-skills could be used in other circumstances than studies.

Discussion

As the overall result indicates, the design of the video tasks was appreciated by the students and seems to have had a positive effect on their learning experience. The descriptions of how they experienced the synchronous video conference indicates that oral seminars could enhance the students' awareness of peers and provide a platform for the development of social presence and to some extent provide the feeling of teaching presence through helpful peers. The students' descriptions of how they approached Video task 1 and 2 and how they perceived the outcome of this experience indicate that this design for learning can have a stimulating effect on cognitive presence, in that the students testified how these tasks triggered in depth-learning strategies and repetition. Nevertheless, the design could be improved in the future. In this design, the students only performed asynchronous video presentations, focusing on their own delivery. In the future, it could be of interest to carry out presentations synchronously in for example a video conference. This would involve a different type of presentation, opportunities to ask questions in real-time and perhaps promote presenter skills, which could also be relevant for working life. Further development could be to implement a mandatory review process of oral presentations to enhance their oral ability further. Finally, future designs need to be considered regarding accessibility according to students' needs as students are composed of a heterogeneous group, which includes individuals with various disabilities, such as being hearing-impaired, and students in places in the world with poor Internet connection. Future design needs to continuously keep these aspects in mind.

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