

## 1.5 Conducting Oral Examinations Virtually using MS Teams – An Insightful Experience Report

Anne Jantos  
Technische Universität Dresden

### 1 Introduction

An unusual situation requires unusual methods. The Corona pandemic emergency operation of the Technische Universität Dresden began March 21st, 2020. Already on March 18th, the Chair of Wirtschaftsinformatik esp. Information Management prepared oral examinations for two courses in a virtual meeting in case the premises were closed due to the approaching corona pandemic. Prof. Eric Schoop and his staff prepared measures in advance to enable students to take their exams and thus to be able to complete the semester for all course participants, but above all to take away the uncertainty for the examinees and to assure that the exams will take place, even under different circumstances. For this purpose, MS Teams was chosen to organise safe and stable meetings in groups of five and four without delay. All eight candidates from the courses “Designing E-Learning Arrangements” and “Corporate Communications” agreed to a virtual exam and performed it successfully after a short briefing by the minute taker. This article describes the planning, the procedure, any complications, opportunities, and limitations within an analysis of the meetings and with the help of interviews of the examinees as well as the examiner and the recording clerk and thus shows a first-hand experience report which is decisive for the future. For this purpose, a list of reflections will be created, which can be used to prepare similar exams. This list will be structured in didactics, information technology, organisation, and preparation and examination regulations. Building on that, we created a timeline with a corresponding check list of actions and considerations which can be used in similar cases.

### 2 Virtual Examinations



Illustration 1: Online Exam Screenshot on March 18<sup>th</sup>, 2020

In two master modules of the winter semester 2019/2020 in the courses *Designing E-Learning Arrangements* and *Corporate Communications*, two 45-minute group examinations of three students each and a 30-minute group examination with two examinees have been completed successfully and without impairment without an otherwise expected delay of several months for the candidates. Eight of the nine participants agreed to a virtual examination after a short introduction to the procedure and gladly took the opportunity to take their exams.

The official tool provided by the university, Adobe Connect based on DFN, was not sufficiently reliable. Therefore, a flexible collaboration solution, Microsoft Teams/Office 365, which runs in a European cloud based on the European data protection regulation, was used. The candidates were free to take part in the examination, and there would also have been the option of an unfounded short-term withdrawal from the examination. This option was also taken up by another candidate through an informal e-mail application to the examination office.

## 2.1 Planning

We carefully planned the examinations by trying all features and analysing the details of a five-way-video-call in MS Teams. The research assistant would protocol all answers in a regular exam and be, under the new circumstances, just as capable of doing so in a virtual environment. We offered a trial run with the participants to ensure that all devices worked perfectly, and all software components were installed. As all participating students were invited as guests to a team in Teams timeslots and details were communicated via comments in the chat.

## 2.2 Procedure

After making sure that all participants plus the examiner are in the meeting by inviting them to the video chat. We checked the sound and video all around and explained the further phases of the exam. The exam took about 15 minutes for each student. Students will be asked questions by the examiner and discuss topics together. The assistant takes down all details to the answers and will not take part in the exam. All technical difficulties should be discussed immediately to be fixed promptly. After all exam questions have been answered and no further issues occur, the assistant asks the participants to leave the meeting so that the examiner can discuss with the assistant about the grade and other details. After they consent on grades, the invite the participants into the meeting one by one to discuss the performance and grade. Other participants wait and can use the chat to communicate with the assistant.

### 2.3 Problems

Overall, we are very satisfied with the technical quality of the solution used. There were no noticeable limitations to the usual interaction in oral group discussions. We would also like to praise the candidates who courageously facing up to this new situation, as they had only learned of the corona restrictions (immediate prohibition of attendance examinations) 24 hours before their examination dates. The digitalisation of university teaching, our application-oriented research topic, now has another best practice example.

### 2.4 Opportunities

Establishing such virtual examination procedures can lead to increased student mobility (The Scottish Centre for research into On-Line Learning & Assessment, 2007, P. 70), reduce travel costs, and attract international students (Lehtine at all, 1999). However, a sensitive consideration of the limits is necessary in order not to distort examination law and didactic effects. We generally aim for the Internationalisation of teaching and furthering our ERASMUS connections.

## 3 Reflection

The following list of experiences and reflections are concerned with various aspects of online exams. We aim to include a wide range of details but cannot focus on information technology.

### 3.1 Organisation

We planned and discussed all details with all participating students and find that the more we integrate them in the process of planning the exam the more engaged they are. Creating a detailed chart with the stages of the exam lowers uncertainty in the students. With more time to organise I would suggest discussing the process of the exam even further to make sure nothing gets mixed up or forgotten.

### 3.2 Information technology

We used MS Teams as a platform to use as a video chat to test the groups. We find that others such as Big Blue Button, Skype, Zoom and many others that offer high-quality video chat might be just as suitable. But Teams made the process of reinviting students quite easy. The overall accessibility was very good as we already integrated Teams into our daily work. It does come with a cost as a standard licence is not free for everybody. There is also the issue of internet access and speed. We did not face any time lapsing or disturbances in video or sound. We asked all participants to check their devices and no technical errors occurred. Again, with more time and more students, I would suggest communicating on multiple occasions how to prepare well for a virtual oral exam. As we created the whole course with various virtual tools and the course contents cover digital learning in detail we did not expect any problems with these particular students but at this point, it is important to consider the barrier it can create for students (Tawileh et al, 2013).

### 3.3 Legal Issues

Virtual exams are not usually legally binding as it does not comply with the university's examination laws. With the unusual circumstances through the restriction has been waved. For the future, there must be some sort of legal changes to allow online oral exams to continue. We prepared an open book exam for this specific occasion as we feared that students would look up details in their notes. But as we went along, we noticed that students rarely did anything but listen intently to their fellow students or the examiner. We think that there is no chance of actual cheating in an exam with three students with their cameras on because the situation does not create any room to look up facts. We created a conversation about facts and opinions, procedures, and experiences.

### 3.4 Didactics

As a teacher, I feel that oral exams are usually preferable to written exams as they show the students' abilities more clearly and offer the opportunity to change course in the questioning. The same goes for oral exams in virtual surroundings. I did not experience any differences in the quality of the interaction other than the missing body language due to the limited video frame (Roberts, 2004, P. 55). Voices were clear. So was the video. Neither of the students complained about the procedure or the quality of the broadcast. It is important to mention though that all participants and the examiner and assistant knew each other from the past course and were therefore well acquainted (Soller, 2001, P. 42 f.).

#### Timeline and Check List for Oral Exams in Groups in MS Teams

	Time	Action	Tools	Result
Preparation	Weeks in advance	Check availability and willingness of students to participate in a virtual exam	Mail or in person	Written consent of all students
		Prepare paperwork for the exam	Word, Paper	One Protocol per student with Names, Student ID, date and time, space for notes
	Days before the exam	Invite Students to the platform	MS Teams	Students accepted the request or logged on to the system
		Create teams for every exam slot and invite students to their teams	MS Teams	One team per exam, students can write messages
		Schedule a Video Meeting	Teams Meeting	Examiner and students are invited to the meeting
		Post timetable and procedure to each examination team and react to students' inquiries	Teams Chat	Students may ask questions and share concerns, offer sound checks

Exam	One hour before the exam	Check if students are logged on to Teams	Teams Chat	All participants are online	
		Post a short explanation to the chat	Teams Chat	Welcome students to the examination. Explain the procedure and reassure them	
	15 Minutes before the exam	Start the meeting with video and sound, check sound and video quality and adjust accordingly	Teams Meeting	Welcome Students, Check their IDs and answer their questions, sound and video are clear	
	timeframe of the exam	Introduction by the examiner	Teams Meeting	Examiner joins the meeting	
		Examiner conducts the exam	Teams Meeting	Assistant fills out protocols,	
		Finding the grade. Examiner asks students to leave the meeting to consult on the individual grades	Teams Meeting	Assistant and examiner are alone in the meeting and finalise the grade using the protocol	
		Giving out the grades. Assistant invites students back into the meeting individually	Teams Meeting	Students receive their grade verbally with an explanation and give their consent verbally. The examination ends here.	
	Follow-up	Minutes after the exam	Examiner and assistant sign protocol	Paper	Protocol is officially signed by examiner and assistant
			Assistant scans protocol to forward it to the students individually	Scan, Paper	Protocol is signed by all participants
			Delete all teams and meetings	MS Teams	All exam related tools and teams are closed and deleted

## Literature

- Lehtinen, E., Hakkarainen, K., Lipponen, L., Rahikainen, M., & Muukkonen, H. (1999). Computer supported collaborative learning: A review. The JHGI Giesbers Reports on Education, 10.
- Roberts, T.S.. (2004) Online Collaborative Learning: Theory and Practice Information Science Publishing Melbourne
- Soller, A. (2001). Supporting Social Interaction in an Intelligent Collaborative Learning System. International Journal of Artificial Intelligence in Education (IJAIED), 12, 40–62.
- Tawileh, W., Bukvova, H., & Schoop, E. (2013). Virtual Collaborative Learning: Opportunities and Challenges of Web 2.0-based e-Learning Arrangements for Developing Countries. In N. A. Azab (Ed.), Cases on Web 2.0 in Developing Countries: Studies on Implementation, Application, and Use. Hershey, PA: IGI Global.
- The Scottish Centre for research into On-Line Learning & Assessment. (2007). Student Mobility in a Digital World. Victorious Final Report: <http://www.coimbra-group.eu/victorious/VIC%20Final%20Report%20print%20version.pdf>