When Lecturers have a Choice: Covid-19 Teaching Format Preferences in a Large-Scale Course of Freshmen Students in Switzerland.

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Abstract: Covid-19 is increasingly forcing educational institutions to explore new avenues and weight the pros and cons between on-site instruction, online instruction, and mixed formats. Understanding teaching format preferences of lecturers may be helpful for creating meaningful solutions with educational technologies. The paper at hand documents and reflects on the organization and implementation of a large-scale first-semester course in Switzerland in the fall term 2020, where seminar lecturers were free to decide on their used course format (on-site, online, mixed). The format preferences of all 39 seminar lecturers were captured and evaluated. Our results indicate that seminar lecturers predominantly opted for mixed or online seminars; often they like to conduct the very first lesson on site for the purpose of becoming familiar with the students.

Keywords: Higher Education, Teaching Format Preferences, On-Site vs. Remote Teaching, Covid-19 Teaching.

1 Introduction

The covid-19 outbreak in Wuhan in December 2019 [Wo20] has changed the world, causing existing practices and long-standing routines to adapt in a very short time. These developments have also implications for education, schools, and universities. Although there are several established forms of teaching and learning with digital media available, a significant part of teaching often still takes place on-site in classrooms or auditoriums. In light of the pandemic, pragmatic solutions as an alternative to classic on-site teaching had to be developed quickly.

Depending on the country, the covid-19 pandemic is managed very differently, partly due to different underlying contextual factors [Ya20]. Switzerland - which is the subject of this study - is a federally structured country [De20] that allows citizens a relatively high

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degree of freedom in dealing with the pandemic and relies on personal responsibility. Against this backdrop, lecturers can decide for themselves in some cases whether to conduct their lessons on-site or online in a digital format (e.g., in formats with relatively small groups). Mixed formats as a combination of on-site and online teaching may also be possible. However, they face benefits and challenges [Va07]. Lecturers have to weigh the benefits of on-site (e.g., better informal exchange) and online teaching (e.g., no need to wear masks, no commuting) against each other and find a solution that works for them as well as for the students.

The circumstances described above apply to our large-scale first-semester course "Introduction to Academic Writing" at the University of St.Gallen in the fall term 2020. As the course administration, we were free to design the teaching format (on-site vs. online vs. mixed) for the fall term and decided to let the lecturers choose from a predetermined set of possible teaching formats. Through this paper, we aim to document our practice experiences and answer the following two questions:

- How can a large-scale course during a pandemic take place?
- What preferences do lecturers have regarding the course format (on-site, online, mixed)?

The objectives of the paper at hand are, therefore, twofold:

- Documentation of the situation at the outset, the decision-making process, and the steps of implementation that were relevant in the design of the possible course formats, with the aim of identifying good-practice recommendations and guidelines for future implementation of similar course formats;
- Identification and analysis of course format preferences of lecturers who participated in our course, with the aim of obtaining a better understanding of their individual needs and expectations, as a prerequisite for creating meaningful solutions supported by educational technologies.

To this end, the paper is structured as follows: Section 2 provides a brief overview of the first-semester course "Introduction to Academic Writing" and explains our design of the teaching formats. Section 3 illustrates potential benefits and downsides of the different teaching formats and reports on the chosen teaching format of lecturers. Section 4 concludes with some final remarks.

2 Context

2.1 Course: Introduction to Academic Writing

The large-scale first-semester course "Introduction to academic writing" (IAW) is

mandatory for all 1730 freshmen at the University of St.Gallen. During the course, students learn necessary skills for writing their own scientific paper (e.g., finding and narrowing down a topic; conducting literature research). After a first kick-off lecture, students engage in smaller groups during six seminars and finally have to write a scientific paper as an examination. Seminar groups typically have a size between 20 and 30 people and are taught by a seminar lecturer (usually on-site on campus).

The course has an English track (528 students, 24 groups, 14 lecturers) and a German one (1202 students, 48 groups, 25 lecturers). Several of the lecturers teach two groups. Apart from the language, the course content and course materials are standardized and, hence, similar across all seminar groups. Most of the 39 well-trained and qualified seminar lecturers hold a PhD and have been teaching the course for several years.

Due to the covid-19 situation in Switzerland at that time (see [Fe21]), the permitted capacity for most classrooms has been reduced by the university administration by the factor of two in order to ensure a safety distance of 1.5 meters during lessons. Teaching on-site was still possible, but only in half classes (45 minutes per half class, instead of 90 minutes for the full class).

2.2 **Course: Design of the Teaching Formats**

University administration left it open as to whether courses should be conducted on-site or online in the fall term 2020. Where appropriate and possible, however, the university administration encouraged the use of on-site seminars. In this case, a switch to an entirely online version of the course at any time had to be ensured. The university administration provided a detailed "Covid-19 code of conduct" and compliance to this code of conduct was the top priority at all times.

The aim was to take into account the individual lecturers' preferences (on-site vs. online vs. mixed) and life situations (e.g., belonging to a covid-19 risk group) while at the same time providing certain guidelines to ensure covid-19-compliant and high-quality seminars. In light of this, we allowed seminar lecturers to choose from the following three options:

First, lecturers could conduct all six seminars on-site, but due to room-restrictions in halfclasses of only about 10-15 people. This means that for each half class, only half the time of the lesson (45 instead of 90 minutes) is available and students are instructed to solve exercises in advance. Students can find all relevant exercises and documents on the learning management system of our university. During the class, the focus can then be placed on coaching and discussing the solutions of the exercises. Lecturers are required to fill in attendance lists for possible contact tracing and to ensure that the minimum distance of 1.5 meters is maintained as well as that all persons wear protective masks before, during and after lecture.

Second, lecturers could conduct all six seminars online via Zoom. In this case, the halfclass setting described above could be replaced by break-out-groups if necessary. As mutual individual feedback and coaching is an important part of the seminar, smaller subgroups can sometimes be useful. We chose Zoom as our preferred tool, because Zoom had been already frequently used at the University of St.Gallen and is integrated in the learning management system.

Third, lecturers could conduct the seminars in a mixed format of their choice (some seminars on-site, some via Zoom). For example, lecturers could carry out the first seminar on-site on campus (e.g., to get to know each other) and then do the other five seminars online via Zoom. Any combination – from five seminars on-site and one via Zoom (5/1), to one seminar on-site and five via Zoom (1/5) – was allowed.

3 Chosen Teaching Formats of Lecturers

At an online workshop with the lecturers prior to the start of the fall term in September 2020, the potential benefits and downsides of the different teaching formats were discussed together with all lecturers. Tab. 1 illustrates the perceived benefits and downfalls from the view of the lecturers. After the discussion, the lecturers chose their preferred format. If necessary, the chosen teaching format could also be changed during the fall term (after consultation with the course administration). If the University of St.Gallen had to implement new directives due to the covid-19 pandemic, all seminars would have been conducted online via Zoom.

Teaching Formats	On-site (6/0)	Mixed (5/1–1/5)	Online (0/6)	
Perceived Benefits	Lessons (almost) as before; classroom- interactivity & informal conversations; No technical implementation via Zoom needed	Combination of the benefits of on- site and online- seminars	Exploring new ways of teaching; ensuring that no contagions can take place; no consideration of pandemic aspects (e.g., to wear masks)	-
Perceived Downsides	Compliance to pandemic guidelines (e.g., to wear masks, maintain attendance list)	Additional burden due to implementation of technical (e.g., Zoom) as well as pandemic aspects (e.g., compliance with pandemic guidelines)	Technical aspects (use of Zoom); limited interactivity	
Lecturers (Number)	9	13	17	9
Lecturers (Proportion)	23%	33%	44%	23%

17 44%

Tab. 1: Chosen teaching formats for the six seminars at the beginning of the fall term.

Tab. 1 gives also an overview of the teaching formats used by the 39 lecturers. As we can see in Tab. 1, 23% of the lecturers chose teaching on-site, 44% chose teaching online via zoom and 33% chose a mixed format. For mixed formats, three different variations of execution have emerged: The mixed-3/3 format (n=1), where the 1st, 4th and 6th seminar was conducted on site (3 on-site, 3 online), the mixed-2/4 format (n=3), where either the 1st and the 2nd or the 1st and the 6th seminar was conducted on-site (2 on-site, 4 online), and the mixed-1/5 format (n=9), where only the 1st seminar was conducted on-site (1 onsite, 5 online).

The most popular mixed format was the 1/5 format, chosen by 23% of all lecturers. It was considered a good compromise to get to know the students in person first and then do the other five seminars online. These findings seem to be in line with [WL12] who point out that meetings on-site are an important success factor at least in terms of "higher perceived presence and satisfaction" (p. 390).

During the fall term, a few minor adjustments regarding their course format were made from the side of the lecturers. Three lecturers, who originally indicated they would conduct classes purely via Zoom, switched to a mixed format over the course of the semester. They argued that they could make their classes more interactive on-site. Three lecturers switched their classes completely to online during the fall term due to the worsening pandemic (e.g., students had to go into quarantine).

All other course formats could be carried out as planned. The percentage of on-site seminars was relatively high at the beginning of the fall term (1st seminar class: 56%) and then decreased over the following weeks (6th seminar class: 26%), which can be explained primarily by the existence of the mixed formats.

Conclusion & Outlook

In this paper, we illustrated for the case of Switzerland how teaching of a large-scale firstsemester course can take place during a pandemic. Taking domestic circumstances into account (i.e., official regulations regarding the management of the pandemic, but also implicit norms and ideas, e.g., about the degree of personal responsibility people should bear), the top priority must be to ensure covid-19 compliant teaching solutions. This includes ensuring hygiene measures as well as creating back-up plans in case the pandemic situation worsens. It may also be important to create a flexible, adaptive system that can respond quickly to changes in the pandemic at any time. Individual preferences (e.g., onsite vs. on campus) and life situations (e.g., belonging to a risk group) should be considered. As we have seen in our case, that lecturers' preferences vary widely with regard to different teaching formats. Even though - from our point of view - a certain degree of freedom in choosing the format is important, guidelines are necessary to ensure the quality of teaching and to provide adequate support for lecturers. In our case, we provided such guidelines during an online lecturer workshop prior to the start of the fall term, where we walked lecturers through their various format options along with tips and stumbling blocks for each option.

An important limitation of this paper is the Swiss context. Not every country allows its citizens as much autonomy and freedom with regard to the implementation of covid-19 measures. Therefore, the results of this practice study may only be applicable for countries with similar institutional arrangements and with similar cultural orientation [Ya20] (e.g., Sweden). On the part of the lecturers, the freedom with regard to the course format was very much appreciated. However, opinions remain divided regarding the optimal course format. While some lecturers consider online teaching only as a fallback solution, other lecturers would prefer to conduct classes much more often in purely digital formats in the future.

Covid-19 is forcing us to break new ground and adapt quickly and opportunistically to the new situation. In light of the digital transformation, it is still an open question, if we should increasingly integrate mixed or online formats into the classroom in the future – or just go back to business as usual, as soon as the pandemic is over. Through this paper, we aim to stimulate the discussion about what can be meaningful analog and digital teaching formats.

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