

Opportunities and limitations regarding praxis in online education - three narratives

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Abstract

The corona crisis has challenged the academic organizations and their employees. In particular, the employees who have concentrated on live “performances” and live seminars have had to move to digital platforms. However, many academics have already done the shift, or at least a semi-shift to digital platforms. Some academics have recorded lectures, while some have done online lecturing.

There are a variety of aids and tools for academics to use. The limitation for many is TIME. Generally speaking, one has enough with lecturing and all the preparations, correcting assignments, student contact, evaluating, reports to deans and whatnot. The time to explore and play with tools is simply not within the normal amount of academic hours.

Nonetheless, the corona crisis has contributed to many academics taking a plunge into the online world, some gladly, some “kicking and screaming”.

Through three narratives, we present the work-life of “online academics”, our experiences with online lecturing, online seminars and our own research on online education. Our point of departure is the opportunities and limitations that lie in the use of tools, exploring the nature of the online medium and our own experimentation. We will present theory that we have found useful for the explorative approach to online education. Our data are our own experiences, as we discuss our experiences and conclude with suggestions for further opportunities and eventual limitations regarding online education.

Keywords: video recording, video conference, seminar, group size, interaction, expectations and motivation

1. Introduction

At the Inland Norway University of Applied Science, we have had large classes online this spring, due to the corona crisis. Yet, we also have large numbers of students on our ordinary online study

programmes. This has posed a situation for the lecturers that has been challenging since we have little or no control of the learning that occurs before we receive their answers to mandatory assignments, and ultimately, their exams.

The groups of students are large: from approximately 100 students and up to 200+ students. It is a challenge to “reach” all the students, and it is difficult to observe them in order to catch nonverbal communication that one has the opportunity to perceive in a face-to-face setting.

In this study, we present narratives from our own work-life as lecturers, both in online settings and face-to-face settings. We have only chosen to use the three respondents who have the longest experience with online teaching at our college. These three have experiences that are relevant to the topic discussed, presenting real-life examples of what ought to be improved in online teaching.

Our research is primarily about finding challenges, but also opportunities regarding online education. The challenges need to be uncovered in order to be addressed, whereas the opportunities need to be shared and developed further.

We first present the theory that has enlightened our study before we present our experiences, both from the ordinary online study programmes, and from the on-campus study programmes that from March 13th also turned online. We then discuss the findings, before we summarize and conclude on the limitations and opportunities.

2. Theoretical foundation

Online education is about learning by communicating in different ways. These different ways have a different information richness to them. Formal reports, recorded speeches, e-mail and letters generally have a low richness of information, while synchronous communication such as face-to-face, video conferencing, live speeches and phone calls are rich sources of information (Daft and Lengel 1986).

Blended learning is defined by Garrison and Vaughan (2008) as “the thoughtful fusion of face-to-face and online learning experiences...such that the strengths of each are blended into a unique learning experience... Blended learning is a fundamental redesign that transforms the structure of, and approach to, teaching and learning”.

According to Glazer (2012), blended learning requires activity in order to be effective. Discussions incorporate reflection and critical thinking. There are different approaches: front-loading – in which the students are to prepare beforehand, and back-loading – in which the students are provided with information after the lecture (Glazer 2012).

We have also chosen to use theoretical concepts from a socio-cultural perspective, because they look at knowledge as constructed in and through interaction with other people (Cole 2003, Säljö and Moen 2001, Wertsch 1998, Wertsch and Semin 1991). This perspective will be used as a resource to develop a description of the kind of interaction that can potentially take place in online teaching.

Vygotskij et al. (2001) emphasize that all learning takes place in the interaction between people and tools. The material and psychological tools will describe the tools the lecturer uses in online teaching. Video conferencing and video recording will be examples of material tools used in meeting with students. Psychological tools, such as language, are key to interpersonal communication. When lecturers and students interact with each other, they use material and psychological tools. For

example, language is a prerequisite for interacting through video conferencing and using video footage.

Communication in the digital media proposes some challenges. A lack of nonverbal communication often disturbs the meaning in verbal communication. This may cause misunderstandings (Daft and Lengel 1986), thus making the students feel insecure.

There may be different conditions that can affect transaction distance (Moore 1997). We choose to link the transaction distance to lecturers' teaching online, as well as how to experience the quality of the relationship between themselves and students. Moore (1997) argues that dialogue, group size, and interaction are factors that all have a bearing on transaction distance. Moreover, the use of video conferencing can affect whether the transaction distance between lecturer and students increases or decreases.

There are also other techniques that have been tested as a result of previous learning with one of the lecturers. One of the techniques tested stems from a theory on police interrogations (Rachlew 2020). This may seem as an extreme measure, but has had an amazing effect. We have chosen here to call it "the awkward moment". This is about posing a question, and being able to wait until someone finds the "sound of silence" so awkward, that despite their own fears they provide a reply.

Seminars

Colleges organize four or five *seminars* during a semester. Because the students come from all over Norway, it is important that the gatherings are attractive regarding student output. *Seminars* include administrative information, group work, individual conversations and lecturing. The purpose of these seminars is to interact with the students, and to get the students to be active and engaged during lectures and seminars. Seminars are an example of synchronous communication. Lage et al. (2000) argue that it is common in online teaching to combine a digital recording that students can see on their own, and then meet at a seminar where everyone is present. At the seminar, students are challenged with questions, and students can ask the teacher about things they are wondering about.

Group size

The number of students in the individual online lecture is also considered a critical factor. Bates (2005) assumes that the size of classes involved in online education, in addition to the number of overall students involved, are key factors in order to succeed with communication, dialogue, activity and group discussions. Large student groups being lectured online may inhibit the lectures interactivity with the students, which could cause more one-way lectures without the possibility of discussions, confrontations and critical questions.

In his transactional distance theory, Moore emphasizes that to succeed with online teaching dialogue and communication is important. His theory includes "the universe of teacher learner relationships that exist when learners and instructors are separately in space and/or time" (Moore 1997). Moore (1997) called these universes, which exist between teacher and learner relationships when separated by space and/or time for the transactional distance. Online teaching results in an interaction between teachers and learners in a context having the special characteristics of a separation of teachers from learners. This psychological and communication space is termed "transactional distance". According to Moore (1997), videoconference media will permit a more intensive, more personal and more dynamic dialogue than can be achieved when using a recorded medium. Audio conferencing systems are therefore likely to reduce the transactional distance more effectively than programmes using recorded media.

3. The methodological approach

The method used is practice narratives with descriptions of three different practices, and these experienced opportunities and limitations in online teaching. These experiences are subjective, and the interpretations represent examples from online teaching practice. The purpose of the stories is to document pedagogical practice, create reflection and understanding, and to further develop practice. According to Mørch (2004), practice narratives can be used as a method for developing, understanding or documenting pedagogical practice.

We have based this research on our own narratives as researchers, and explained about our own experiences regarding online lecturing. This resembles what George Kelly (1991) refers to regarding there being no objective truth, but that most of the perceptions are construed by individuals. It is about how individuals perceive the environment around them, and how they interpret what they observe. These interpretations are coloured by their existing mental structures, as it is about making sense of what one experiences.

Kelly (in Cohen, Manion and Morrison 2011) suggests a repertory grid, which is a representation of the relationship between elements and constructs. This is used to “understand a person’s processor is psychologically channelized by the ways in which he or she anticipates events”(Cohen et al. 2011). We have made a table that sums up our findings, although this table is not as stringent as Kelly's constructs and events. Nevertheless, we are confident that it will provide a picture of how we are experiencing the online teaching environment and its opportunities and limitations.

4. Findings

The main findings from the narratives were that all of us struggled with obtaining a dialogue in the online medium. Although Respondent 2 seems to have found a way, it is not without some discomfort that the respondent imposes what the respondent calls “an awkward moment”. This occurs when the respondent asks a question, and a “deafening silence” strikes. Daring to wait for someone to respond to the question asked is about leaving some of the control to the learners, and to step back as a lecturer. The exercise does take its toll on the lecturer the first few times. According to Respondent 2 (Narrative 2 in table 1), the students finally responded in larger numbers. This also applies during the corona crisis, in which not only seminar-based students attend, but where on-campus students must also be online.

All the respondents found it difficult to not end up in a monologue. Giving the students short assignments has helped, making the students become somewhat more active. The on-campus students who became online students during the corona crisis are not very talkative when they are online. And the common feature is that it is primarily the students who are active on campus who are the also the most active in the online medium too.

The standard system used for online lecturing, where the students meet in groups and which is seminar-based, does not allow for questions to be asked in writing. Zoom, the tool chosen as the main conferencing tool during the corona crisis, has features that allow for questions to be asked in a chat. Additionally, the lecturers can divide the group into smaller groups using “breakout rooms”.

Respondents 2 and 3 have both used “breakout rooms” with great success. The students seem to work well, collaborating and cooperating as desired by the lecturer.

In the standard system, the lecturer sees the students unless they leave the room. In Zoom, the students have the option of showing their faces and real names, or having a black screen with their own or a fake name. Respondents 2 and 3 both prefer to see the students' faces, but these wishes are for different reasons, and not always taken for granted. This may be due to an unstable internet connection. Also, when a seminar is recorded in Zoom, the students are given notice about the recording that it will be published in the learning management system (LMS). Many students then choose to be anonymous. Respondents 2 and 3 claim that this is giving the lecturers a sense of being “alone” and again providing a monologue, as well as a sense of being asynchronous.

The findings from the narratives are structured in the table below. Some experiences are similar, and some are somewhat different, both from previous experiences and from the changed setting that the corona crisis has brought upon us. The first column in the table below shows the similarities that we agreed that our narratives should contain, whereas columns 2, 3 and 4 show the content of the narratives of the authors.

Table 1: Overview of narratives and their content

| | Narrative 1 | Narrative 2 | Narrative 3 |
|---|---|--|--|
| Tools used during academic career for synchronous teaching | Video conferencing system | Zoom, Video conferencing system | Zoom, Video conferencing system, TV broadcasting system |
| Tools used for recording lectures (producing streaming video or similar) | Silverlight | MediaSite, Zoom | Silverlight, Camtasia, MediaSite, Zoom |
| Experience from online teaching | Online seminars with persons attending in groups | Online seminars with persons attending in groups Online seminars with students attending from office or at home | Online seminars with persons attending in groups Online seminars with students attending from office or at home |
| Combinations of online courses | Online seminars + streaming video + mandatory assignments with an e-mail response | Online seminars + streaming video + mandatory assignments with e-mail response Zoom seminars (online) + mandatory assignments with e- | Online seminars + streaming video + mandatory assignments with an e-mail response Zoom seminars (online) + mandatory assignments with e-mail response + streaming video |

| | | | |
|---|---|---|--|
| | | mail response + streaming video | |
| New features tested during corona crisis | N/A | Breakout rooms in Zoom for group work Recordings of zoom seminars Using a poll (Mentimeter) online | Breakout rooms in Zoom for group work Recordings of zoom seminars Gaming using a quiz game online |
| Personal experiences of dialogue with students in online education | Difficult, but not impossible to obtain dialogue with some of the students | Hard to obtain dialogue, the same who answer live are the same who answer online | Hard to obtain dialogue, the same who answer live are the same who answer online |
| | Even if attempting to support and encourage dialogue, it is mostly a monologue by me as a teacher | Group Work prior to dialogue aids the dialogue | Group Work prior to dialogue aids the dialogue |
| | | If I have a question, I have learned to be patient and wait for the students to answer - after a while some students respond to the "awkward moment" that arises when I am silent | Zoom allows for asking questions in a chat function. By having two lecturers during seminars, it is easier to "see" all of the students and to respond to their questions |
| Seminars | | | I prefer it when the students are showing their faces on Zoom; however, not all will comply (this may be due to an unstable internet connection or similar), but is not preferred by me as a lecturer. Not being able to see the student's responses (as I would in a classroom) makes me almost "over-compensate" and exaggerate my movements and expressions |
| Worse or better during the corona crisis? | N/A | There has been more online, but I am learning more features | There has been more online, but I am learning more features to make use of, which may lead to |

| | | | |
|--------------------------|--|--|--|
| | | to make use of, which may lead to more dialogue (e.g. breakout rooms) | more dialogue (e.g. breakout rooms) |
| Other experiences | | The students that do the courses online have higher grades than the ones attending the same course on campus | The students that do the courses online have higher grades than the ones attending the same course on campus |

5. Discussion

All three of the respondents are experienced teachers in online and blended learning.

The purpose of online seminars, and the use of video conferencing, is to ensure that the students are engaged. However, this is difficult to achieve due to the large groups of students attending lectures, thereby resulting in a large transaction distance between lecturers and students.

One of the common features is the difficulty of getting online students to engage in dialogue. They are working on their assignments both singularly and in groups, but they are reluctant to talk “in public”. This may be due to the transactional distance (Moore 1997) they experience in the online setting. One of the lecturers (Respondent 2) has found a way to get the students to respond. This is by introducing what has been referred to as “the awkward moment” (Rachlew 2020). This is leaving the students in silence until some find it too awkward and answer. Even so, this may take time, and there is a risk of not getting any answers anyway.

The experiences are that group work prior to trying to get the students to discuss in plenary online helps, though there are still only a few who voluntarily speak. Again, the transactional distance (Moore 1997) may be a major cause. Another possible explanation is the lack of nonverbal communication, such as body language, etc., which makes the student feel less secure (Daft and Lengel 1986). For the same reasons, Respondent 3 (Narrative 3 in table 1) may exaggerate gestures when teaching online, and by this trying to compensate for the lack of nonverbal communication.

According to all the respondents, large online groups (from 100-200 students) are too many. One loses the opportunities of adjusting as a lecturer, and provides students with more examples and explanations. This again is due to the lack of opportunities of catching nonverbal communication (Daft and Lengel 1986).

Using “breakout rooms” (a feature of the video conferencing tool Zoom) allows the lecturer to deal with smaller numbers of students at a time. For instance, one can choose to have groups of approximately 10 or less. This makes it easier to “see” each student. In addition, the students seem to be more able to communicate in smaller groups (Bates 2005).

The assumption that the students in study programmes that are exclusively online perform better than the ones with blended approaches is interesting, and should be investigated further.

6. Summary and conclusion

The opportunities in online and blended education are vast. Some of the opportunities lie in the tools themselves, such as the possibility of dividing classes into smaller groups. Also, opportunities for adding features to the online medium in order to support the learning outcome are present. One of the respondents claims (Respondent 3 (Narrative 3 in table 1)) to have played a quiz game, which is an extension of the existing repertoire, while another (Respondent 2) has used a poll with great success.

Being trained in different techniques helps to make students communicate despite the lack of nonverbal communication (Daft and Lengel 1986) and transactional distance (Moore 1997), e.g., how to organize “breakout rooms”, and how to be more confident regarding pushing the students to answer.

Again, limitations are both the transactional distance (Moore 1997) and the nonverbal communication missed in the online medium (Daft and Lengel 1986). Furthermore, the lecturers who are to teach online also need to be “up-to-speed” regarding the differences between online and face-to-face lecturing that they will experience. This is primarily a managerial responsibility, but there is also a certain responsibility that rests on us as colleagues. Cooperation and collaboration in online and blended learning may also help combat the limitations experienced by the lecturers.

6.1 Further research

We aim to expand our research to first include our own colleagues at the Inland Norway University of Applied Sciences, and secondly, a broader survey, including other universities.

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