The Online Condition as a Structuration of Feedback

Christian Poulsen, PhD

Copenhagen School of Design and Technology (KEA)

Abstract

This article offers an analysis of codes of a broad spectrum of feedback situations reported during lockdown online teaching. The article will account for findings and provide explanatory frameworks for solid observations on feedback situations in a broad sense; for instance, there was a notion of Online Supervision having a structuring effect that suited many students' learning; Peer feedback in assigned group work was reported as a central approach to learning at the School and provided the group members with well-being and a sense of belonging; Break-out rooms served as a special occasion for fast peer feedback in randomly assigned groups; and finally, evidence will be provided that Online group work is especially suited for Code script and other disciplines where Screen sharing technology serves as a structuring device.

Keywords

Feedback, Online education, group work, structuration, randomly assigned group discussions

Article History

Received 5 January 2022 Received in revised 28 January 2022 Accepted 31 January 2022 Available online 18 March 2022

Author Note

Christian Poulsen PhD is a pedagogical and didactic consultant at Copenhagen School of Design and Technology.

Introduction

The second COVID-19 lockdown in Denmark in Spring 2021 gave birth to a large student wellbeing initiative at the

Copenhagen School of Design and Technology (KEA), a bachelor's degree university of applied sciences. The school's approx. 4700 students were contacted, and a combined wellbeing chat and survey was conducted.

Although the tag line for the chat was the students' social and academic wellbeing, the initiative also provided a rich insight into different aspects of feedback in times of online teaching. More so, the initiative would also hypothesize a relation between the appearance of feedback situations and student well-being in an educational setting.

Danish students experience less feedback from their teacher than students from other Nordic countries, yet they have a marginal higher sense of belonging (UFS, 2021). For a decade, nevertheless, feedback has been on the agenda for higher education, and national compulsory student surveys ask the students to rate if they "receive sufficient amount of feedback." Noteworthy, this restricted use of the notion of feedback, as something that is "given" by the educator to the student, has had some impact on how feedback is framed in the educational sector. I understand feedback as a term introduced to pedagogics from communication theory, and only later, it was given the narrowed meaning of being (official) feedback given by the educator to the student in a formalized manner. Such a narrow definition, however, reduces the learning from feedback to letting the student develop the skill of being able to receive feedback. Broadening the scope of feedback would allow us to include skills like being able to understand feedback, to give feedback, and to dialogue on feedback. Feedback in a broad sense would in the original sense of communication theory be a message that tells the original sender how clearly her message was understood and what effects it had on the receiver (Bloisi, Cook & Hunsaker, 2007). In the UFSreport, students with a higher study activity rate (the importance of) feedback higher than other Danish students.

It is noteworthy that under the COVID lockdown, online education

© This article is published under a Creative Commons Attribution-Non Commercial-No Derivatives 4.0 International License (CC BY-NC-ND 4.0)

*Original Research Papers These papers report on original empirical research with a focus on teaching and learning, research and innovation, and insights and observations resulting from participation in a particular project or case study.

62 C. POULSEN (2022)

in the higher education systems throughout the world ought to be analyzed as emergency education using some techniques and didactics of distance education. Thus, the change brought about in the lockdown period was not an example of a planned intervention. Although management of crisis is an interesting subject, this article will concentrate on analyzing aspects of the performed teaching and learning during the lockdown. Across the sector it is widely recommended to create a stronger and more transparent structure in online teaching. Schools and polytechnics emphasize clear communication on where and what the next interactions are about (Haahr, 2021). The activities to be dealt with during the study day should be structured as you "do not sit in the frame" (as of the school) (ibid). The need for a higher degree of structure in distance learning has consequences on the ideal arrangement of feedback mechanisms.

A study in the EA-sector shows that feedback from peers is not appreciated by students (Haahr, 2021). We expected to find something similar in our study, yet we found the opposite. Peer feedback in a broad sense of the word is a fundamental ingredient in students' social and academic wellbeing.

Method

The student wellbeing initiative conducted at KEA contained phone calls to all full-time students studying at the time. The phone calls were conducted by Psychology students, thus the name of the initiative, Student to Student. The phone calls had a response rate of 53% of the total population with a functional phone number. A sample of the respondents of the survey filled out a satisfaction questionnaire upon termination of the chat. The satisfaction survey showed that the respondents were very pleased with the call; thus 95% of the respondents rated the call to be "fine" or "very fine" (meget god). The dataset consists of a large survey report with both open and closed answers. While prioritizing the flow of the chat, the callers had been trained to note the scores for the closed questions and take notes from the open questions. The calls were thus not recorded, and the notes from the conversations should not be seen as direct quotes from the respondents, rather as the caller's memory notes from the chat. In addition, the caller completed a reflection report on finishing calls to a class.

Open-ended answers

The survey contained sections with open answers annotated by the interviewers, which provided a rich qualitative data set. The surveys were imported to a qualitative analysis software, Nvivo, after completion of the interviews. The data was coded by a researcher and a student assistant providing more than 13,000 unique codes. The codes were internally validated amongst the coders and later externally validated with the reflection reports of the interviewers.

The coding was done manually, bottom up; and a pattern of clusters of codes ultimately appeared. The researcher and assistant were immersed in the material, starting the coding from a *tabula rasa*, and letting coding patterns and clusters evolve through repetitive analysis of short fragments of data in a grounded theory sense (inspired in Rosengren & Arvidsson, 2002). The five biggest groups of codes were: Socially Missing Out, Structure of Classes, Group Work, Feedback, and Bad Communication.

The results analyzed in this article come from Feedback and Group Work, representing 14% of all the codes.

Quantitative Data

The quantitative data was accessed with Survey Exact, a survey tool. The interviewers noted the respondents' answers directly into the system giving room for some interviewer bias. Peer learning and heavy instructions of the interviewers, however, point to a low interviewer bias on the quantitative questions. The tool allowed the researchers to make descriptive statistics for the dataset, to control the data quality, and make simple analysis of non-response bias. The results reported here are judged to have a low non-response bias and all differences in values are deemed statistically significant.

Results

Thematic Clustering

Supervision. Lacks and Benefits of Online Supervision.

A thematic cluster that stood out at an early stage of the analysis was that of Supervision. Supervision was, more often than not, conducted via Teams or similar conference tools after scheduling via the LMS or shared spread sheet file. Students report that this setup worked well, and many students value teachers' availability for supervision as well as the possibility of extra slots put into supervision as positive factors. "Online guidance is going well" is a frequently reported statement in the material. Moreover, the possibility of sharing screen with the supervisor is something many students suggest should be continued in a post-COVID scenario. Online supervision was appreciated for several reasons. Amongst them were the practical aspects such as higher availability in lockdown and saving long commutes to campus.

Others were the technical and organizational aspects of Online supervision, such as enabling various persons to look at the same detail of a document, code, or drawing, at the same time. Another organizational aspect students emphasized is the advanced possibility of booking supervision when needed or of being able to ask the teacher to join the "room" where the group is working. As opposed to counselling hours scheduled in advance, it works out well, that you can sign up Online for supervision, when you feel you have the need for help.

The students that have concerns about online supervision primarily complain about the availability of teachers, too little time for counselling or the lack of structure in the feedback process. The structure of most online counselling requires that the student prepare material or questions in advance of the supervision. Some students express that it would be more comfortable for them to have improvised *ad hoc* supervision. The "small help" is more difficult to attain when things are formalized: "Less help from the teacher now when it is online. Difficult when having small problems to get a hold of them (getting teacher's attention)."

Peer feedback

Peer feedback was a cluster of themes that appeared from a wide range of descriptors. The students often missed the talks they had with each other in the breaks between physical classes. These breaks provided a chance to "deliberate things with your fellow students." Some students report that their class is one where "we help each other" and that the helper also learns a lot from that.

Sometimes students have arranged their time to "brainstorm" with peers online. The students that failed to self-structure their time between online classes report that they miss "sparring with peers." The sparring received and given to peers depend on the student's own initiative. One student notes that she has in-depth sparring with "two good fellow students" and sparring with a larger group when it comes to formal issues regarding hand-in assignments.

"They made a knitting club where they could also share knowledge. It was really cozy", a student reports. Virtual "study cafés" are appreciated by the students as it lends a room for both peer feedback and authoritative feedback from the teacher. A group of students from the same study reports that they "demanded" of the teacher and the management to have a study café. Teachers who provide or design a room for sharing of knowledge between students, especially across study groups, are appreciated.

Even though many have established peer feedback mechanisms Online, the missing physical meeting has social consequences: "The student was a lot less motivated—peer motivation was missing." "Sparring with fellow students" is often referred to as having "small academic communities" often giving room to quick, small questions.

Dynamics and natural flow of conversation

A smaller cluster of themes (less than 40 codes) refers to students reporting that they miss the "natural" flow of conversations in a physical setting. Some students refer to the ping-pong of small questions and remarks between the class and teacher that they find in physical teaching. Others refer to this as "dynamics" between teacher and class. Plenum discussions in Online classes are often reported to miss the dynamics and naturalness of a physical debate. This loss also has a social aspect as "Smalltalk means more than you think, talk with classmates you know, natural interaction."

Summative feedback

A very small cluster of codes refers to summative feedback. A few students report that they miss feedback to give them a sense of how well they are doing in their studies. They expect the feedback to measure their performance compared to a standard, preferably within a short time span. According to some students, feedback should show commitment from the teacher towards the students and show how far the students are from the goal according to the teacher. This finding is replicated by Haahr (2021). "What worries the student the most is whether the teachers pay attention to him. He would like to show what he is capable of."

Feedback in group work

From one of two largest groups of clusters in the sample Group work (more than a thousand observations attributed to Group work), we find that many students acknowledge feedback aspects of groupwork as something fundamental to their studies. When study groups are working well, they are attributed positive relational aspects such as "being nice in the group" and "we are having a nice time." A sense of belonging in Online terms is also addressed: "The study group is determinant. Feels more like a part of that than part of the class." It is described that the assignment is the major task the study groups share, and through the work with this, they get to know each other. A student remarks that it works well for him, "Because I am good at conducting a query on what I am insecure about and good at collaborating with the study group." Many address that queries are at the heart of their study group work. "If you have a problem, you do not ask

64 C. POULSEN (2022)

the teachers, you ask the Internet and then each other." Another student remarks: "I have a good group where we figure things out on our own."

The Online meetings in the study groups are reported to be more focused on the tasks at hand, and less on social aspects, as compared to real life. "You have to be disciplined." When study groups are doing well, students find they are being challenged in the groups.

"When things are like they should be, then it is cool, that you have group work—where you can spare and get different viewpoints, which heightens the academic level (faglighed)."

Less than a third of the observations coded as group work are associated with troublesome group work, and again most of the expressions are on study groups. Some speak of the limitations of study groups, e.g., in scope. One student notes that there is a lack of culture in the groups. They work together on the big assignments and hand-ins but fail to do so in more mundane learning tasks. In the student's mentality, "You are on your own." This large group of students acknowledge the advantages of group work but find that it is difficult to "have a meaningful dialogue online."

A recurring issue is the composition of study groups. Some find that the teacher should select the group members and others that they should have autonomy to choose their own study group. The speed of recompositing groups is also debated. Underneath lies the worry that intergroup feedback will not be of good quality in the beginning of a group's life, when they use a lot of effort on discussing how to conduct the group work. At the end of a group's life, consensus and common norms are so well established that they no longer feel challenged.

Some express that reading body language is more difficult online, especially if the camera is off. This results in a lack of "sparring." Such groups do not work well virtually. Some report that they have to "drag help out of the group, instead of it coming naturally."

Break-out rooms

One aspect of group work which was given special attention and which was almost always mentioned in a positive sense was break-out rooms. Break-out rooms are randomly assigned groups in Zoom or Teams where students work and discuss together for a short while, before they are brought back to plenum. The students appreciate the swiftness of the creation of the groups and the dialogue they allow around a teacher-designed problem. Some also note that break-out rooms provide a "flow" in a long on-line day. An important aspect of break-out rooms

is that students value the chance to ask questions of a "small" and "personal" nature, which allows for good feedback and "communality (fællesskab)." Students see the advantage of small group discussions and advocate for self-organizing or having such groups during breaks as well. Some teachers add a feature to the structure of Plenum—Break-out rooms—Plenum in that they circulate between break-out groups. This allows students to have feedback that is both from peers and later validated by a teacher. Furthermore, this adds to the feeling that students are being "brought on" and listened to. Students note that break-out rooms allow them to ask questions from each other that they would not "dare to ask in class."

Closed-ended survey results

Overall, during the pandemic, students' academic well-being scores a little higher than students' social well-being (2.9 and 2.7, respectively on a five-point Lickert scale). First-year students score a bit higher on academic well-being compared to the general student population.

The quantitative results show that when students "meet" other students outside class, the most popular way to meet is in study groups, far more than social media contacts, private encounters, physical meetings, and others. Across cohorts, 80% of the respondents report that communication with other students is done in the study groups. First-year students tend to strengthen this tendency. Students that report meeting often in study groups score higher than other students on both social and academic well-being.

These results appear across study programs as remarkably identical, a finding that is supported by other studies (Haahr, 2021).

Discussion

You might ask if what we have learned from an emergency situation, as the COVID-19 lockdown, should at all guide us in policy making for a post-COVID educational world? If both teachers and students longed for the time before lockdown, it would certainly be an easy choice to go back to teaching the way we did in the past. However, I find that such a de-route back to the tracks of pre-COVID teaching would be an error of omission. I find that we owe to those students that discovered they possess new learning styles to cater for advanced Blended Learning in the time to come.

A much-cited example (Clarke, 2021) of educators having a moral obligation to learn from the lockdown is from Eric Mazur Balkanski, Professor of Physics and Applied Physics at Harvard University

who noted that the past year was his most successful in his 40-year career at Harvard. Mazur largely attributed this success to the asynchronous teaching practices he employed in remote learning environments, "which enable students to access materials, ask questions, and hone their skills at any time that works for them rather than traditional synchronous teaching, which mandates simultaneous attendance at scheduled meetings or course lectures" (Di Stefano, 2021).

A strong finding of the Student to Student project is that group works can contribute to fruitful feedback situations in an online setting. This is true both regarding peer feedback in the group, especially in study groups, and regarding teacher to student feedback in online supervision.

For study group peer feedback to be effective, the study documents that asynchronous learning should be highly structured by teacher instruction, and learnings needed to be scaffolded in the LMS. This gives students access to materials, as Mazur mentions, but also structures the questions that students ask of the material. The connection between feedback in study groups and student social well-being is one of the key findings of the thematic analysis. Mauss's theory of the gift supports the notion that these feedback situations give rise to academic well-being (Mauss, 2000). Thus, feedback as "reciprocal gift giving" (Benzie, 2015, p. 212) is reported as a sign of successful intergroup feedback.

There is some evidence that organized peer group feedback can improve the timely completion of assigned tasks (Benzie, 2015) or improve students' learning outcomes (Rienecker & Jacobsen, 2021, p. 25). Thus, it would not be adventurous to consider that the "small" peer feedback that does take place in study groups could gain from feedback sensibility and well-defined help structures. What we have learned from the Student to Student study is that valuable feedback in a study group is given when it is needed with the work/utensils/prototypes at hand and in a helpful and constructive manner. More knowledge on how in-group peer feedback is working would be very helpful for educators and it calls for further anthropological, in-depth studies. For a promising research design, see Ramberg, Edgren, and Wahlgren (2021). It might also be worth discussing whether feedback sensibility, e.g., knowing peers' feedback preferences, is enough to secure good in-group peer feedback. Does dialogic feedback occur (Benzie, 2015, p. 201) in the groups when they follow a natural group dynamic? That is, does the feedback reported offer a chance for the feedback giver to engage in a dialogue? Some evidence shows that a skilled facilitator is helpful in bringing

about a good structure for feedback in a group and will secure a group success (Benzie, 2015). Furthermore, shown affection (most) and interdisciplinarity (disputed) can lead to group success in delivering good feedback (Benzie, 2015). The first finding is supported in the Student to Student study and likewise, a national Danish survey found that students experiencing support from fellow students affects their learning positively (UFS, 2021). In the present study, only full-time students participated, and appreciation of peer feedback was found more often than misappreciation. However, Haahr (2021) found that only parttime students, already on the labor market, appreciated giving feedback to each other. They found it valuable to have other perspectives on their otherwise "locked" analysis. How come this does not transfer to daytime students? A tempting explanation could be that the Study group culture is not well established in all educational institutions.

Effective teacher to student feedback is reported to be found in online supervision sessions. Whether these are well-prepared Online meetings booked in advance, or the teacher visits the channel in Teams where the students are working, these sessions tend to be more structured and differently structured compared to counselling sessions in a physical setting. In the present study, students represent a variety of disciplines ranging from computer coding classes to designing and sowing classes. The former group finds that these types of classes are especially suited for online education whereas the latter find that tactility of the clothes is not easily transferred to online supervision. By and large, however, online supervision is appreciated across the study. This is not only because of the practicality and timelines of online supervision, but also because of a less obvious structure: the focus. The present study reveals that being able to share screen enables a group and their supervisor to look at the same screen. Taken together with the notion that body language is less well-suited for online communication, this has an indirect pre-meeting structuring function of the supervisions performed in the lockdown period. Students and teachers know they must focus the supervision on something that is shareable on the screen, so students bring questions to the table that are structured around the object they share on the screen. This focus will most probably lower the risk that discussions with the teacher reroute from the problems the students have at hand. Once the supervision session begins, the screen sharing function allows students and teacher to focus on a small detail of the object at the same time. A sentence in a report will, for example, be focused quicker and more accurately than in a live setting. Shorter supervision sessions which focus on fewer problems promise a higher success rate of students acting

66 C. POULSEN (2022)

on the feedback they receive (Kierkegaard, 2015). Educators at polytechnics and universities of applied science would need to bear this in mind when designing courses post-COVID.

The example of break-out rooms deserves special mentioning. The phenomenon of randomly dividing a class into small groups is somewhat of a novelty in higher education. A totally random assignment of groups in a physical setting is often avoided because of time and space constraints. Instead, when educators would like students to reflect for six to seven minutes in a group, they would ask students to gather up with students sitting next to each other. Although the difference between the two designs might seem minimal, it does suggest that we should be very observant on these differences. In a classroom setting there is both a tendency to sit next to people we know or have similar physical attributes to ourselves. Furthermore, the way we are seated in the first class is almost determinant for how we sit in the following classes. Finding yourself discussing with the same few people is thus more likely to happen in the physical class than in a break-out room. The rapid organization and random assignment are, however, not the only advantages of break-out rooms. Other studies have shown that break-out rooms had a function of social room for students when they followed up on small task assignments (Haahr, 2021). At this school, the students were longing for less frequent shifts of groups and preferred semesterlong group durations to avoid getting stressed. In the present study, however, we also find many students that are eager to form new groups and meet across teams.

Many negative connotations to feedback in the present study are associated with large group discussions. Let alone the technical problems, especially with sound, sometimes found when many participants communicate through a conference tool, there seems to be an upper limit to the number of participants for good feedback to occur. A teacher and some five to six students seem to be within the threshold of good online communication. Haahr (2021) found that feedback given by the teacher in plenum does not work well in online teaching, a finding that is supported by our data. It is worth considering if large classroom feedback is suitable under any conditions. Kierkegaard (2015) found that feedback from teacher to students must be highly directed, brief, and given when students need the feedback. Further studies on collective retainment of large auditorium feedback are much needed. Even the negative findings of the COVID-19 lockdown calls for us as educators to reconsider current practices of feedback mechanisms.

References

- Benzie, H. (2015). Reflecting on Feedback in a Peer-led Research writing group. in *Learning to research researching to learn* (pp. 195-218), Oxfordshire, UK: Libri Publishing.
- Bloisi, W., Cook, C., & Hunsaker, P. (2007). *Management and Organisational Behaviour*. McGraw Hill, UK.
- Clarke, D. [OEB Conference]. (2021, December 9). *OEB 2021 Plenary Debate: This House believes Education has failed to learn the lesson of Covid-19* [Video]. YouTube. https://www.youtube.com/watch?v=rXlo_u1MoHY&t=867s
- Distefano, S. (2021, June 22). Lessons on active learning in the covid 19 era. Adobe Blog. https://blog.adobe.com/en/publish/2021/06/22/lessons-on-active-learning-in-the-covid-19-era#gs.ivup81
- Haahr, U. (Ed.) (2021). Vi ses på skærmen en undersøgelse af studerendes perspektiver på online undervisning. Aarhus Erhvervsakademi, forsknings- og innovationsafdelingen Forsknings og innovationspublikation #20.
- Kirkegaard, P. (2015). Feedback i undervisningen. in *Didaktik* (pp. 53-62). Akademisk Forlag. Didaktikserien.
- Mauss, M. (2000, (1925)): Gaven: gaveudvekslingens form og logik i arkaiske samfund, Copenhagen, Denmark: Spektrum.
- McKenney, S., & Reeves, T.C. (2012). *Conducting Educational Design Research*. Croydon, UK: Routledge.
- Ramberg, U., Edgren, G., & Wahlgren, M. (2021). Capturing progression of formal knowledge and employability skills by monitoring case discussions in class. *Teaching in Higher Education*, 26:2, 246-264.
- Rienecker, L., & Jacobsen, D. (2021). Peer feedback hvorfor og hvordan. En håndbog til professionsbachelorstuderende.

 Latgales Druka: Samfundslitteratur.
- Rosengren, K. E., & Arvidson, P. (2002). *Sociologisk metodik*. Sweden: Liber.
- Uddannelses- og Forskningsstyrelsen (UFS). (2021). Danske studerendes læringsmiljø og trivsel i et Nordisk perspektiv, Eurostudent VII en sammenligning mellem de Nordiske lande.