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Online Teaching and Learning

First impressions from **students** as NTNU transitions to an online only mode of learning

Trondheim, 20. April 2020

After NTNU and Norway in general was locked down on March 12 because of the corona virus crisis we all had to turn digital in record speed. In the following week, the question of how this is impacting and affecting students and teachers rose to our attention. How are educators dealing with the rapid change to online teaching? How are the students handling this change, and what are their experiences with digital learning? In other words we set out to shed some light on the question: *"How are the students and educators experiencing the change from campus-based to online learning?"*

In an attempt to shed some light on these questions two surveys were developed; one for educators and one for students. They were both designed with the goal of getting a first impression of this new situation, and therefore included both quantitative and qualitative elements. In addition, the surveys were kept as short and precise as possible.

The two surveys were distributed on Monday March 23rd, after one full week of online teaching and learning had been completed. For deployment of the survey the authors used their own departments as a starting point. Later the survey was distributed through the student parliament's Facebook page and via department heads. The data reported on in this report is based on the responses that came in before March 31st.

In the following report, only the student survey will be described. The educator report is still being digested and analyzed. Since we have been working very fast to, we would like to note that there might be some additional results added at a later time. Please follow the Excited website for updates.

The preliminary results of both the surveys are summarized in these key takeaways and recommendations.

This work was done in collaboration between all authors. Madeleine Lorås has been responsible for the student survey and analysis, and questions and comments can be sent to madeleine.loras@ntnu.no.

1 About the student survey

The student survey consisted of 13 questions in total, including background on the students, their experiences with online learning and consent. The whole survey can be viewed in Appendix B, or [online here on this link](#). In total, we received 332 responses. After cleaning the data and removing the non-consenting students, 323 responses remained. We received responses from students all over NTNU, a total of 61 different bachelor- and master programs (Table I), in all grades (Fig. 2) and across all campuses (Fig. 2).

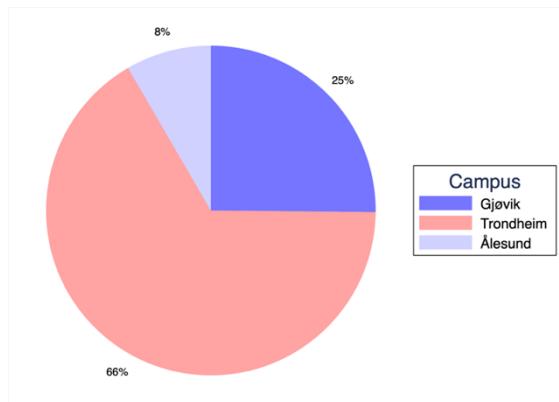


Fig. 2: Campus distribution

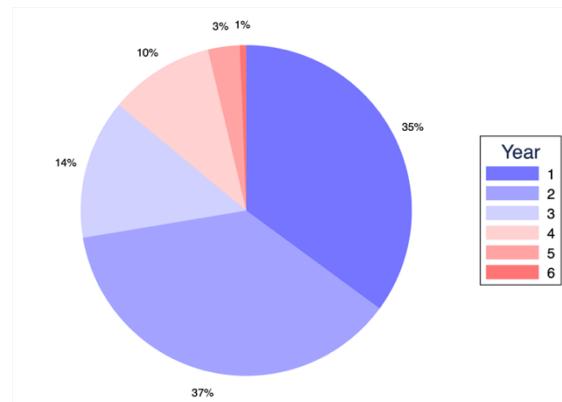


Fig. 2: Class distribution

Table I: Student survey study program distribution

Studyprogram	Frequency	Percent
Bachelor i Dataingeniør	31	9.6
Datateknologi	28	8.7
Bachelor i Digital Infrastruktur og Cybersikkerhet	21	6.5
Bachelor i Biologi	20	6.2
Kybernetikk og robotikk	15	4.7
Bachelor i IT-drift og informasjonssikkerhet	14	4.4
Industriell økonomi og teknologiledelse	12	3.7
Bachelor i Informatikk	11	3.4
Bachelor i Økonomi og Administrasjon	11	3.4
Energi og miljø	11	3.4
Bachelor i Elektroingeniør	9	2.8
Elektronisk Systemdesign og Innovasjon	9	2.8
Bachelor i Drift av datasystemer	7	2.2
Grunnskolelærer 5-10	7	2.2
Ingeniørvitenskap og IKT	7	2.2
Kommunikasjonsteknologi	7	2.2
Bachelor i Markedsføring, innovasjon og ledelse	5	1.6
Bachelor i Statsvitenskap	5	1.6

Bachelor i programmering	5	1.6
Grunnskolelærer 1-7	5	1.6
Lektor i realfag	5	1.6
Master i Informasjonssikkerhet	5	1.6
Sivilingeniør	5	1.6
Bachelor i Digital Forretningsutvikling	4	1.2
Bachelor i Sosiologi	4	1.2
Fysikk og matematikk	4	1.2
Bachelor i Programmering	3	0.9
Bioteknologi	3	0.9
Marin teknikk	3	0.9
Master Applied computer Science	3	0.9
Master i Interaction Design	3	0.9
Produktutvikling og produksjon	3	0.9
Arkiv og samlingsforvaltning	2	0.6
Bachelor i Digital Samhandling	2	0.6
Bachelor i Informatikk, Drift av datasystemer	2	0.6
Bachelor i Matematiske fag	2	0.6
Bachelor in Computer Science	2	0.6
Industriell Kjemi og Bioteknologi	2	0.6
Master i Informatikk	2	0.6
Norskkurs	2	0.6
Bachelor i Automasjon	2	0.6
Bachelor i ingeniørfag, elektro	1	0.3
Bachelor i økonomi og Administrasjon	1	0.3
Bioingeniør	1	0.3
Grunnskolelærer	1	0.3
Industriell design	1	0.3
Master International Business	1	0.3
Master i Electric Power Engineering	1	0.3
Master i Industriell Kybernetikk	1	0.3
Master i Kybernetikk og robotikk	1	0.3
Master i Matematikk	1	0.3
Master i Sosiologi	1	0.3
Master i Statsvitenskap	1	0.3
Master i fag- og yrkesdidaktikk, Naturfag	1	0.3
Master i matematikk	1	0.3
Master in Electronic Systems and Instrumentation	1	0.3
Master in International Business and Marketing	1	0.3

Nanoteknologi	1	0.3
Psykologi profesjon	1	0.3
Ubesvart	1	0.3
Utvekslingsstudent	1	0.3
TOTAL	61	323
		100.0

1.1 Analysis and reporting

In the following sections the results from the various questions will be presented in the following order:

2. Experiences with the online learning activities*
3. Use of and usefulness of new digital tools
4. Experiences with getting feedback
5. Experiences with getting help
6. The new study environment*
7. Staying in touch and being social

Each of these sections is related to one of the text-based questions, and for the sections marked (*) the quantitative Likert-style results have been added. Each section starts with a point-wise summary of the findings at a whole, followed by a categorization of the qualitative responses, and if applicable a figure for the quantitative elements. An additional breakdown of the quantitative responses by class and campus can be viewed in Appendix A.

The text answers from students were read through, anonymized and categorized. Categorization was done by reading through the responses and assigning appropriate labels. In this way we can make clear the topics many students are referencing, and in that way highlight possible tendencies. Where relevant, a word count is also presented. Lastly some selected quotes from the students, exemplifying some of the most common or interesting responses (mostly in Norwegian).

The key recommendations in the executive summary in the beginning of this (page 1-2) documents are the summarizing take away messages and conclusions.

2 Experiences with the online learning activities

- When asked about their experiences moving to an online learning environment, students report that information and communication is essential to their experience. In some cases, there was a no information about transitioning to online learning or a lack of communication about possible changes, causing confusion and stress for the students. Solutions suggested from the students included: setting up a clear schedule for when live lectures are being held, giving students at least 24-hour notice of major changes, using the email-function in Blackboard, etc.

- Many students reference getting help, asking questions and the general difficulty of interacting with others as a major drawback with digital learning. Setting up digital spaces for teacher-student, learning assistant-student and student-student communication is very important. In addition, some guidelines for use is helpful. Even if such spaces are available, there seems to be some barriers. Some useful guidelines could include “office hours”, options of anonymity, FAQ, etc.
- The students’ responses were often centered on lectures, or the lack thereof. Many students are very positive when describing their experiences with online or video lectures. They enjoy the freedom it gives and the possibility to adapt tempo and timing. However, some students report on some important issues:
 - Recording of live lectures are very helpful and the students prefer that all lectures are recorded.
 - Referring students to filmed lectures from previous years, or other courses, is not seen as a good substitute because of bad quality (video, sound) or irrelevant content.
 - Replacing lectures with PowerPoint presentations or self-study of the book is not appreciated.
- In general, many students are reporting that even though the current situation is alright considering the circumstances, they do not seem to think that the fully digitalized situation can replace the campus-based learning. The lack of formal and informal interactions, the physical learning environment and/or the structured study day lectures and labs provides are mentioned often as challenging. Previous research by Excited has found the campus provides the basis for study and learning activities, and since the campus is not unavailable it is understandable that the students
- Zoom and Teams are mentioned as very useful platforms for lectures, group work and communications. Blackboard (including ultra and collaborate) received more mixed feedback as a learning tool. When it comes to discussions/Q&A students highlight Discord and Piazza.
- Students from lab intensive programs such as biology and chemistry report that the online substitutions are not as useful for their learning as the physical labs.
- Some students report difficulties with project- and group activities. Both regarding what tools to use, when to meet and how to distribute workload. It is important that educators set up the appropriate tools, provide guidelines for the work and express clear expectations. The students report that the lack of a mutual study structure leads to difficulties scheduling meetings, and the lack of physical meetings seem to make it easier for some students to become freeloaders.
- There seems to be some large differences in courses as to how much digital adaption has been made, and how much effort has been put into creating effective solutions, causing much frustration among the students.
- Looking at Fig. 3 it is clear that getting help and support in the online environment is something students are struggling with. Only 36% of students report that these activities work well or extremely well, and 11% report that these do not work at all.
- When it comes to joint activities, such as lectures, 58 % report that this is working very well/extremely well, and a very small number report that it does not work at all (3%)

- Individual learning activities are reported to work even better, with 63 % reporting it works well/extremely well. And 36% of those saying it works extremely well.

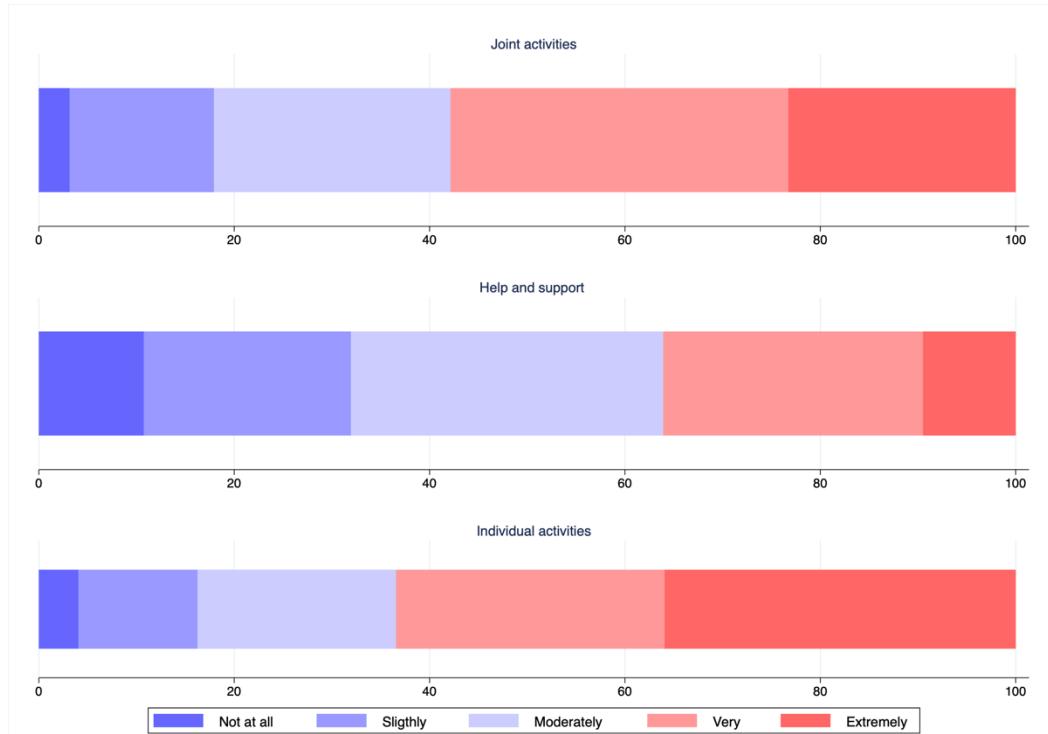


Fig. 3: Summary of the question (in %): To what extent the following learning activities are working for you?
For a breakdown by class and campus, see Appendix A.

2.1 Categorization of responses

Description of how students experience learning activities	# references made
Challenges with video lectures (technical, scheduling, quality etc.)	68
Generally positive comments (flexible days, more time to study, etc.)	61
Positive comments about video lectures (flexibility, option to rewind, etc.)	59
Online learning not the same quality as campus-based learning	36
Lack of information and/or plan from teacher	27
Lack of /slow response from teacher	24
Request for recording of lectures, not just live	23
Challenges with studying at home (lack of study area, distractions, low motivation, etc.)	22
Positive comments about not being tied to a schedule or campus	19
Challenges with communication with teaching assistants	13
Practical work/labs are hard to do online	8
Longing for social interactions	7
Challenges with group/project work	6

2.2 Selected quotes

«Vanskeligere å samarbeide i gruppearbeid om koding etc. når man ikke kan møtes. Veldig ulik håndtering av forelesninger. Noen har lagt ut på Youtube, og noen har Skype. Noen har ingen forelesninger i det hele tatt. Det optimale er om videoforelesninger blir lagt ut så man kan se dem når som helst. Hjelp og veiledning er som regel tilgjengelig via diskusjonsforum, enten på piazza eller på blackboard. Dette fungerer fint, men fag som ikke hadde dette fra før, har heller ikke ordnet det etter at all undervisning ble digital. Om alle fag hadde et sånt forum hadde det vært enklere å forholde seg til, i stedet for å ha mange rare løsninger for hvert fag.»

“A positive outcome is that due to lectures being available online it is possible for me to plan my day to fit my needs better. ”

“Mange fag viser nå til videoer av tidligere forelesninger som er blitt filmet. Mange av disse videoene er i veldig dårlig kvalitet, dårlig lyd eller helt merkelig plassering av kameraet.”

“Praktisk å slippe å møte opp på skolen for å gå i forelesning, men er høyere terskel for å stille spørsmål i forelesningene. Syns forså vidt Collaborate fungerer ok både til undervisning og til gruppearbeid.”

“Jeg synes noen fag har vært utrolig flinke til å tilpasse seg. Andre har bare gitt utvidet frist, noen studasser er lett tilgjengelig mens andre er mer begrenset. Veldig variert.»

«Gjøre det litt mer klart om hva eksakt vi skal jobbe med.»

“They technically work fine, but in such a practical field of study, the quality of education drops significantly.”

“Veldig effektivt å kunne se forelesninger når man vil og kunne spole frem og tilbake. Dumt at det er vanskelig å få hjelp fra studasser. ”

“Forelesninger fungerer godt da det basserer seg på enveiskommunikasjon. Veiledning med studentassisterenter fungerer dårlig da det er vanskelig å få tak i assistentene, og mail og skriftlig kommunikasjon blir ofte kronglete påvansklig og store prosjekter. ”

“Jeg har behov for å diskutere fag og spørre medstudenter om hjelp, noe som oppleves vanskelig over nettet. Noe problemer med Collaborate, men usikker på om det var systemet eller faglærer problemet lå. ”

“I believe the online teaching tools are working well. I have experienced little technical problems. The worst and most challenging part about this "homeschooling" is to keep up the motivation and get to work. Many people struggle with motivation. I am not sure how this can be solved, but some more management and help through this during online class would be valuable. ”

“I find it very helpful to rewind tapes again, which is an improvement from "live" lessons that are not recorded. ”

3 Use and usefulness of new digital tools

- We asked about what new tools students found most useful. The students then mostly referenced different ways to do lecturing. Followed by teamwork, collaboration and meetings with peers. Little to no reference was made to questions, feedback and discussions. In the table below the wordcount for various tools are recorded.
- There seems to be some differences between campuses and study programs when it comes to what tools are used. As there are different cultures and didactical models for various programs in regular campus-based learning, this seems to be translated to the online environment as well.

3.1 Categorization of responses

Word	Count	Similar Words
Teams	125	team, teams
Collaborate	70	collaborate, collaborative
Blackboard	64	blackboard
Zoom	54	zoom
Microsoft	51	microsoft
Discord	45	discord
Google	15	google
Skype	14	skype
Piazza	13	piazza
Ultra	10	ultra
Slack	9	slack
Youtube	9	youtube
Docs	6	docs
Facebook	4	facebook
Collab	3	collab
Gitlab	3	gitlab
Hangouts	3	hangouts
Sharepoint	2	sharepoint
Sheets	2	sheets
Drive	2	drive
Github	2	github
Messenger	2	messenger

3.2 Selected quotes

“Videoforelesninger er svært nyttige. Både de som ligger ute som video på Blackboard og seminarer over "Zoom". I tillegg har jeg hatt en god erfaring med Microsoft Teams som faglig plattform for samarbeid med medstudenter.»

«Videoforelesninger som kan ses når man vil og hvor det går an å pause/spille av på nytt er supert, gir veldig bra utbytte! Teams har blitt nyttig ved hjelp til øvinger og prosjektarbeid. Kan dog føles litt ubekvemt å få hjelp til øvinger på teams.»

«Discord viste seg behjelpeelig i gruppearbeid, Collaborate var bare forstyrrende sammenlignet med discord.»

«Både Teams og Piazza er gode verktøy. Blackboard forums funker også fint egt. Blackboard ellers er fremdeles stygt. Teams er veldig fleksibelt og utvidbart, og har utrolig mye potensiale.»

4 Experiences with getting feedback

- In general, the student experiences with getting feedback on assignments and reports are much the same as before.
- Blackboard and emails seem to be the most common formats for receiving feedback.
- Some students indicate that the online shift has improved this aspect of the education.
- Some students report no feedback at all; however, it is unclear if this was the case before the digital shift or a consequence of online teaching.

4.1 Categorization of responses

Description of how students experience getting feedback	# references made
Same as before, it's OK	149
No feedback	33
Little feedback, or not very good	19
Good feedback, or better than before	14

4.2 Selected quotes

“På samme måte som før. Enkelte emner har ikke tilbakemelding i særlig stor grad underveis.”

«Noen har hatt videosamtaler med direkte godkjenning og tilbakemelding. Andre har bare fortsatt som vanlig.»

«Tilbakemelding har vært bra og forklarende. Tilbudet og tilgjengeligheten har også vært bra eller bedre enn tidligere.»

«Det er heller uvanlig å få noe stort av tilbakemeldinger på øvinger, utenom godkjent/ikke godkjent. Dette har ikke forandret seg. Kan ikke si at jeg har fått noe mer tilbakemeldinger utover det.»

5 Experiences with getting help

- When seeking help, e-mail seems to be the most common medium for asking and getting help. However, many students express a need for more discussion forums and in general a more open and accessible Q&A medium.

- Many students reference getting help, asking questions and the general difficulty of interacting with others as a major drawback with digital learning. Setting up digital spaces for teacher-student, learning assistant-student and student-student communication is very important. In addition, some guidelines for use is helpful. Even if such spaces are available, there seems to be some barriers. Some useful guidelines could include “office hours”, options of anonymity, FAQ, etc.
- Many students report that the response rate from teachers or learning assistants can be low and slow.
- Some students seem discouraged from ask for help stating that “everyone” seems very busy. Some students also report on a higher threshold for asking questions and ask for anonymous options.
- There seems to be many different systems in use, with varying information about when and how to use them. Students report that it is sometimes difficult to get an overview of all the systems. As seen in the table below, some students don’t know where to get help.
- A lot of students seem to rely on peers and friends for help, and the current situation makes that challenging for many.

5.1 Categorization of responses

Description of how students experience getting help	# of references made
Help from peers	63
Help from lecturer, teacher	37
Help from learning assistants	37
Don't know where to get help	12
Harder to ask for help now than before	2
Things are good, better than before	1

Tools used for getting help	Count	Similar Words
Email	77	email, emailing, emails, epost, mail
Teams	43	team, teams
Piazza	36	piazza
Blackboard	28	blackboard
Discord	16	discord
Forum	15	forum, forums
Microsoft	13	microsoft
Google	11	google, googling
Discussion forums	8	diskusjonsforum
Zoom	8	zoom
Collaborate	6	collaborate, collaborative
Books	2	bøker
Facebook	2	facebook

5.2 Selected quotes

"Friends. Nothing else is helpful. When you can't show your work and problems to teachers, they struggle to understand your problems and issues, so I don't even bother trying anymore."

«Stort sett chat/telefon med venner og bekjente. Innimellom studass, men opplever de ikke som veldig tilgjengelige. Inntrykk av at flere benytter studass nå som man ikke har den samme kontakten med studiekameratene ...»

«Jeg vet ikke og skulle ønske jeg visste det.»

"In some courses the lecturers are good at engaging with students and offer QA opportunities on collaborate or the like. Others do not."

"Do not feel like I have much contact with TAs during this time, as I find contacting them online awkward compared to showing to lab sessions or the like."

6 The new study environment

- When asked about how the students experience the new, home-based, study and learning environment, there are some mixed responses. Some students respond that they are studying more, and longer than before, while others indicate the opposite. It seems like the move from campus-based learning to online learning affects students very differently, and perhaps creating a larger difference between those to handle it well and not very well.
- For those who are struggling, it seems like procrastination, distractions, not ideal physical spaces, lack of structure and motivation are underlying causes. A few students indicate severe problems with sleep, loneliness, declining mental health etc.
- On the positive side, some student report on the time saved on transportation and cancellation of activities, means they have more time to focus on studying.
- Many students report on healthy habits such as taking walks and getting physical exercise often.
- Deadlines and assignments seem to be a good driver for getting things done and sticking to a good routine.
- Many students have left their study town and gone to their parents' home. Those who have stayed in their study town are reporting various solutions for workspaces ranging from a home office to studying in their bed.
- As seen in Fig. 4, the students experience the new study environment differently; however, there seems to be similar contentment of joint activities, individual activities and the potential of a home exam.
- 54% the students report that joint and individual activities work very/extremely well. 49% report the same for a home exam.
- On the other side, 21% of the students report that the new study environment does not work at all, or only slightly.

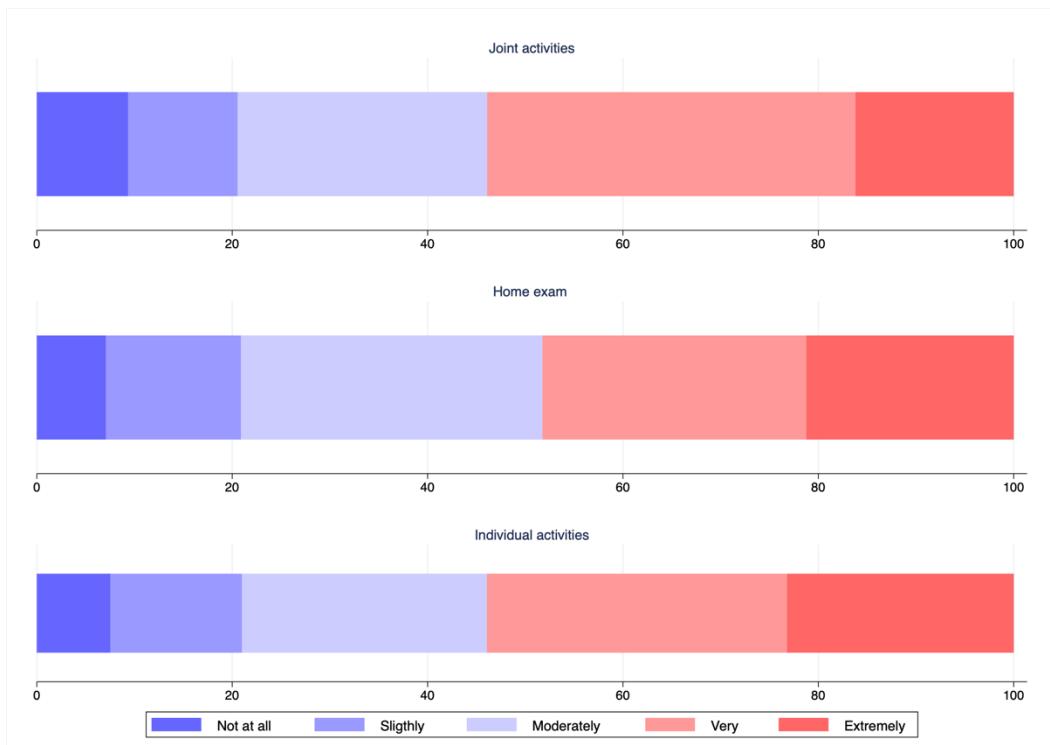


Fig. 4: Summary of the question (in %): To what extent does your current study environment allow for the following activities?
For a breakdown by class and campus, see Appendix A.

6.1 Categorization of responses

Description of how students experience in the new study environment	# of references made
Studying like before, it's working fine	148
Difficult to structure day, focus and/or concentrate	74
Reference to physical activity or taking daily walks	30
Lack of structure, struggling a lot	22
Reference to being alone or feeling lonely	20
Challenges sharing workspace with friends, family, children etc.	10
Current situation is working better than before	1

Area/place for studying	Count	Similar Words
Home	129	Hjemme, home
Parent's house	65	foreldrene, foreldre, hjem
As usual	42	vanlig, vanlige
Desk	40	pult, pulten, desk
Kitchen table	36	kjøkkenbordet
Apartment	25	Leilighet, leiligheten
Lectures	24	forelesninger
Dorm	23	kollektivet
Home office	20	hjemmekontor

Couch	18	sofaen
Room	14	room, rooms
From home	13	hjemmefra
Living room	13	stua
Kitchen	10	kjøkkenet

6.2 Selected quotes

"Jeg måtte dra hjem ettersom det ikke er nok plass til å sette inn en pult i leiligheten jeg bodde i Trondheim. Det hjelper veldig å være hjemme ettersom jeg kan stå opp og spise sammen med familien min og følge deres struktur, omrent hver dag samarbeider jeg med gruppen min over teams, men dette er ikke i nærheten av like effektivt som å møtes fysisk, og jeg merker at det er vanskelig å sette av dedikert tid til å jobbe med gruppe."

"Ensom, sitter ved pulten hele dagen, prøver å komme meg ut på løpe/gåtur."

"På kjøkkenbordet. Har i praksis akkurat samme rutiner som en vanlig hverdag. Spiser lunsj med venner over Zoom. Setter opp egne videomøter for å samarbeid med andre i emner der det er aktuelt. Trener eller er i aktivitet hver dag. (Kjøkkenbordet er rundt, så gjør det ikke helt optimalt.)"

"Arbeider kun hjemmefra og hovedsakelig alene, som regel fra sofaen da tre av fire emner er med digitalt fokus. Prøver å opprettholde samme døgnrytme og jobbe med emner i de periodene forelesning/øvingstime ville vært. Bruker MYE lengre tid på å gå gjennom pensum beregnet på én forelesning for meg selv, men lærer også MYE mer. Begynner å lure på om fysiske forelesninger i seg selv er en effektiv læringsform generelt siden jeg får mye mer ut av å jobbe med fagstoffet alene."

"Arbeider hjemme, forsøker å samarbeide men er føles litt som om jeg er på ferie."

7 Staying in touch and being social

- When it comes to the social aspects, some students report on having very little social activity outside the academic interaction. While others seem to be very active and creative when it comes to social activities online or in their respective dorms. This might be an indication that the social bonds made before the online transformation are being reinforced in the current situation. Meaning that students with strong social ties are upholding these, while students who might struggle socially before are having a harder time now.
- Student organizations are mentioned with positive initiatives.
- Many students report that they miss the informal social interactions connected to lectures, labs and study areas. Some students find it harder to initiate contact online than in-person, especially if the interaction used to be informal. Resulting in some students feeling very lonely.
- The lack of social interaction is reported to affect motivation and concentration in a negative way.

- Some students report being very worried about the exam period, as this is a time where they rely on the social interaction happening at the study areas. It might be a good idea for educators to organize some virtual exam-prep-groups.

7.1 Categorization of responses

Description of how students experience being social	# of references made
Same as before, it's going fine	138
Communication through messages/chat	68
Little contact, less than before	52
Communication through voice-/videocalls	49
Too little contact, feeling alone	22
Interaction through online gaming	20
Little interaction outside learning activities	13
Interaction through exercise or walks	12
Interaction through the student organizations ("linjeforeninger")	7
It's very good, more than before	6
Mostly social with family	5
Interaction through digital lunches	2

7.2 Selected quotes

«Holder kontakten via sosiale medier, men tapet av den fysiske tilstedeværelsen fører til mindre god diskusjon blant medstudentene, da man ikke har mulighet til å feks. gjøre seg forstått/diskutere rundt pensum som f.eks. blir tatt opp i forelesning. Den naturlige, faglige interaksjonen forfaller.»

«Den ikke-faglige kontakten er god. Vi snakker sammen som vanlig via sosiale medier, men har ikke lengre faglig utbytte av hverandre som tidligere.»

«Greit. Det er ikke så mye å glede seg til, så hverdagen blir ganske kjip, men foreløpig trives jeg med å være litt alene og å få en pause i et hektisk semester. Jeg går tur med noen av medstudentene mine og holder kontakt over sosiale medier, men mange har også dratt hjem til der de kommer fra.»

«Faglig via facebookgruppe og facetime. Fungerer best å snakke sammen så vi avtaler å møtes for å diskutere spørsmål på facetime ca ukentlig. Ikke-faglig bruker jeg sosiale medier. Har hatt discordfest:) Hele kollektivet mitt er fremdeles her, og nå har vi jo faktisk begynt å se hverandre siden alle er hjemme hele tiden, det er jo hyggelig. Er faktisk mindre ensom enn jeg var da NTNU var åpent.»

«Vi holder kontakten godt da vi har opprettet en discord server hvor alle som vil kan bli med for å spørre om spørsmål angående skole eller finne andre som de kan spille med/snakke med.»

«Savner MENNESKER, ingen bedre måte å si det på. Går ut over motivasjon og læringsutbytte.»

Appendix B: Learning activities and environment by class and campus

For all students

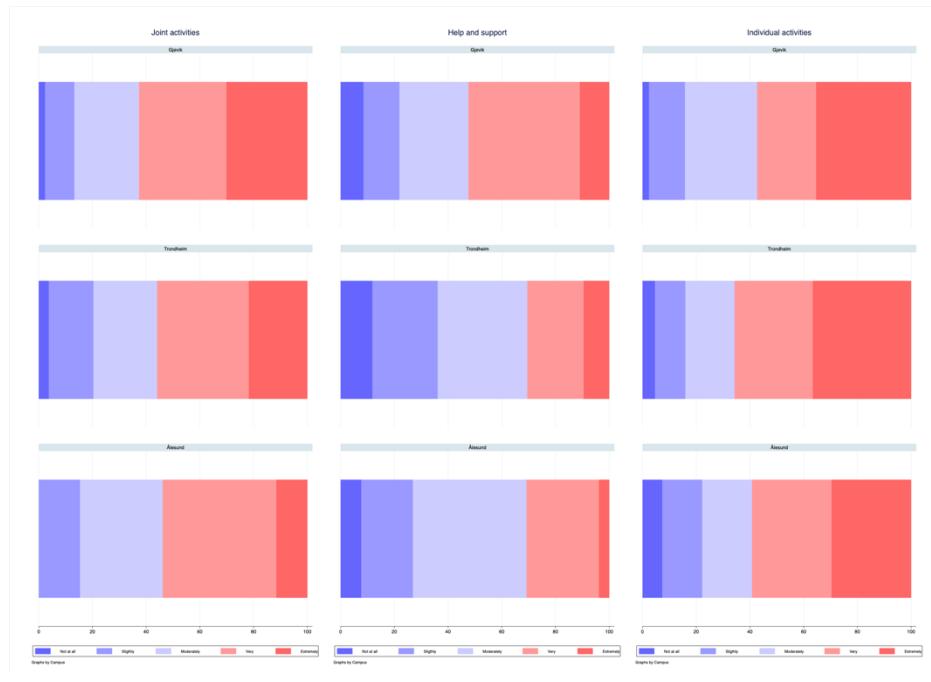


Fig. 5: Satisfaction with learning activities by campus (%)

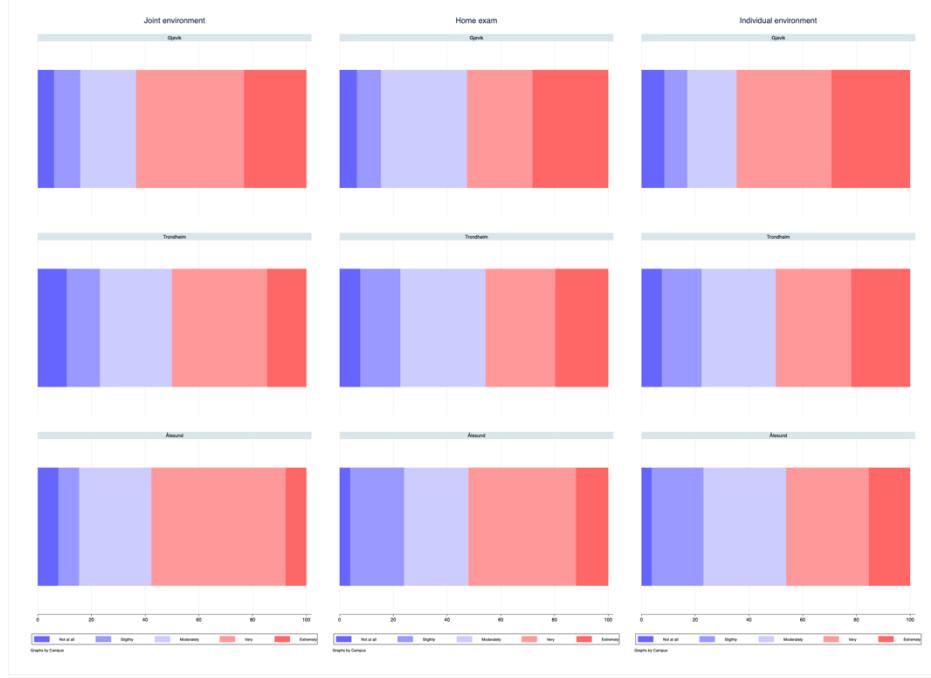


Fig. 6: Satisfaction with the new study environment by campus (%)

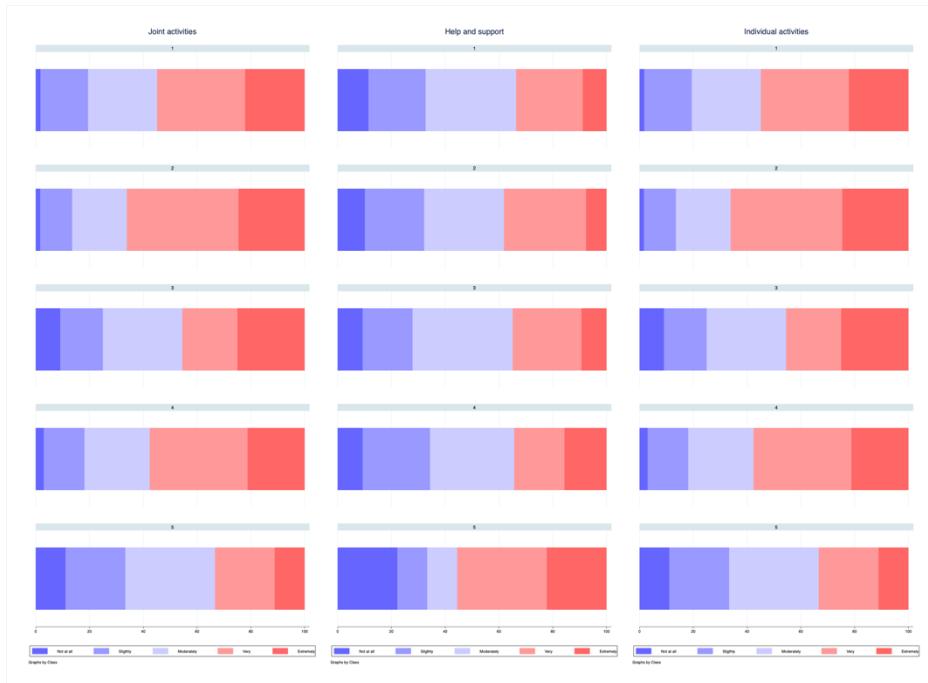


Fig. 8: Satisfaction with learning activities by class (%)

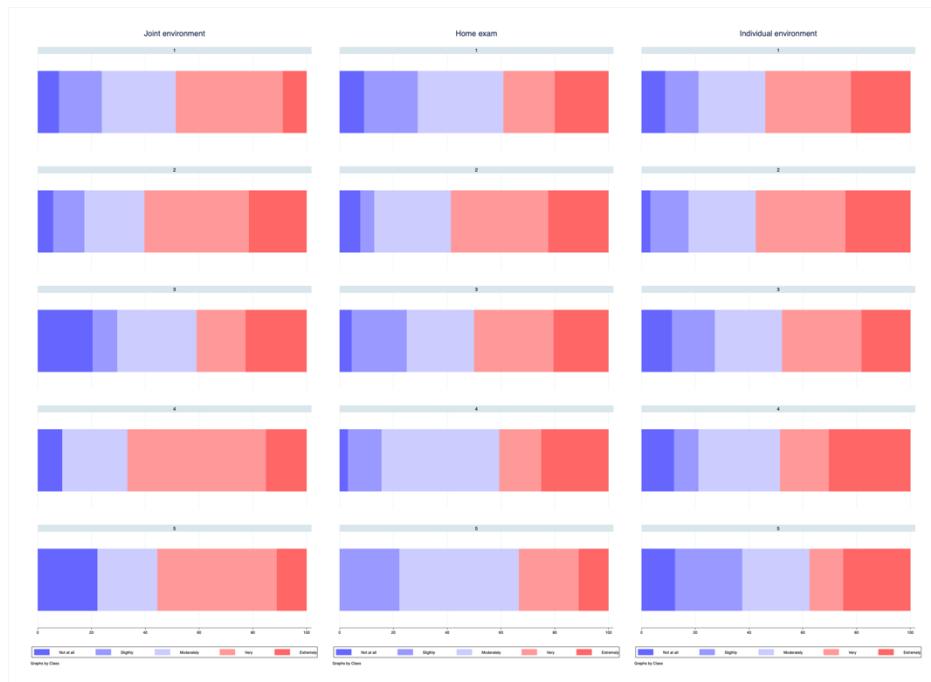


Fig. 7: Satisfaction with the new study environment by class (%)

For students at the Department of Computer Science (IDI)

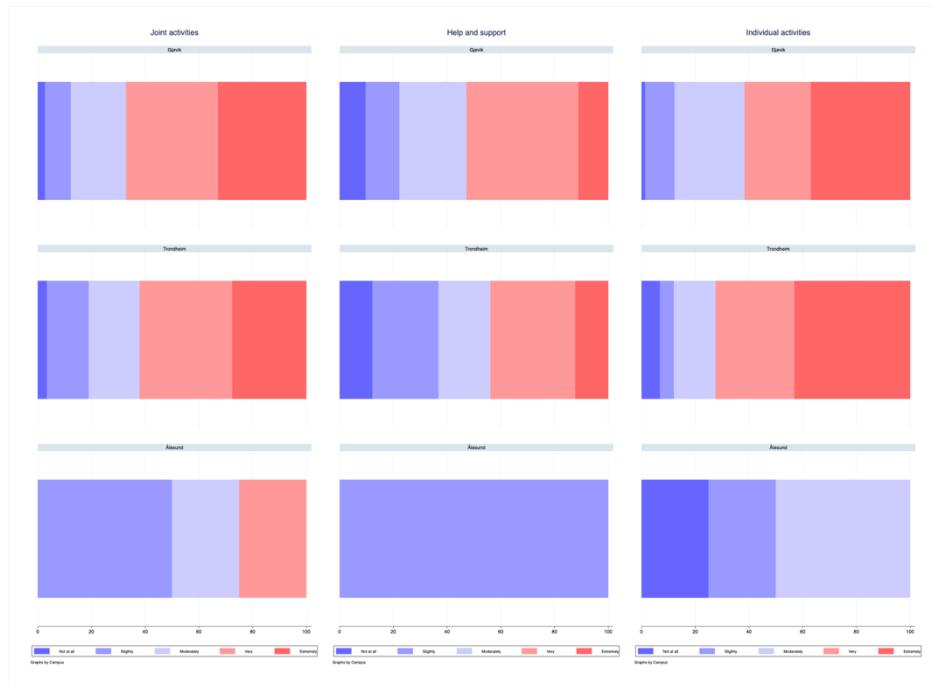


Fig. 9: Satisfaction with learning activities by campus for IDI (%)

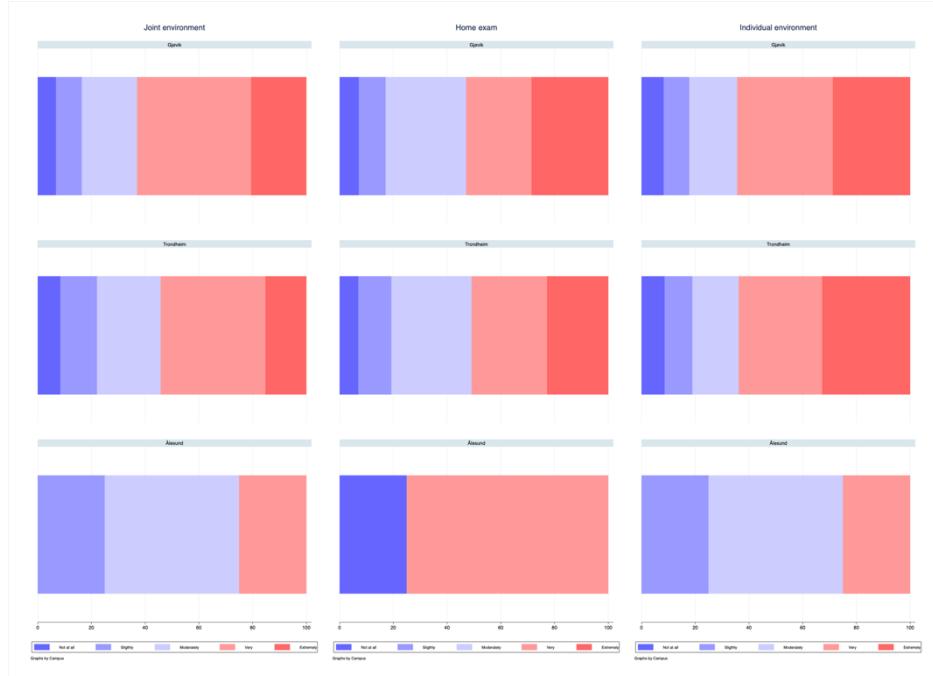


Fig. 10: Satisfaction with the new study environment by campus for IDI (%)

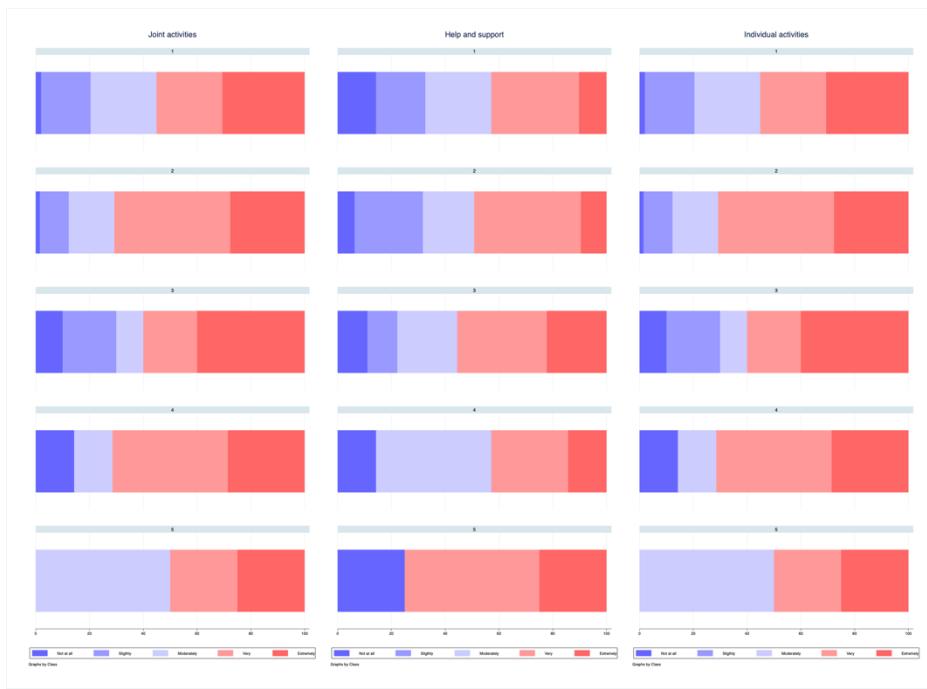


Fig. 12: Satisfaction with learning activities by class for IDI (%)

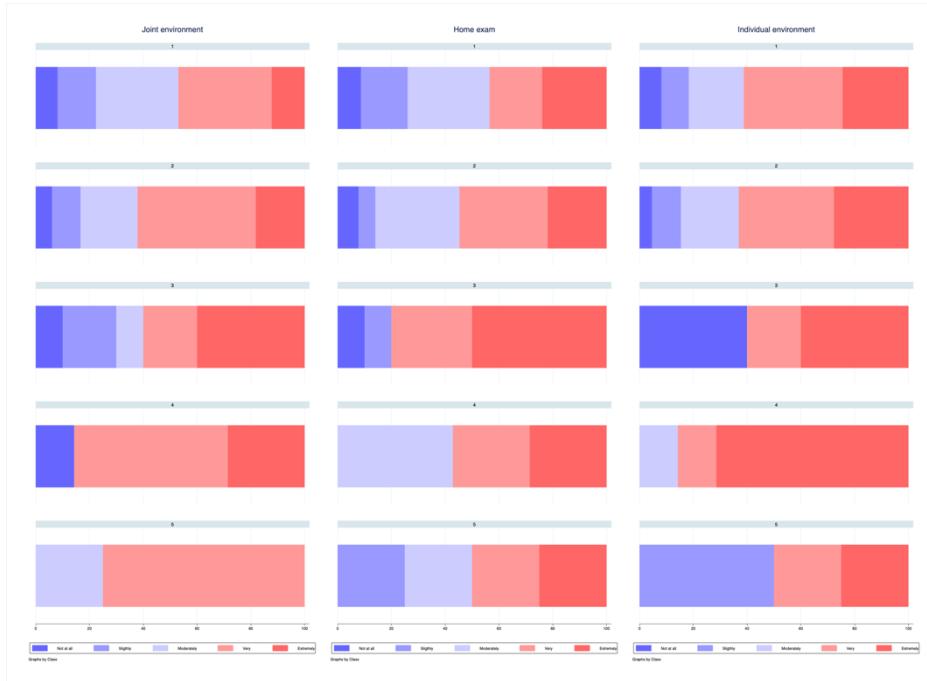


Fig. 11: Satisfaction with the new study environment by class for IDI (%)

Appendix B: Norwegian version of student survey

English version is available online via this link. Change language in the top right corner.

Din tilbakemelding på hvordan vi gjør undervisningen nå er veldig verdifull slik at vi som jobber med undervisning kontinuerlig kan forbedre det vi gjør, samt støtte andre studenter og faglærere. Det er mange ting som er annerledes nå, og vi ønsker å kartlegge effekten og konsekvensene av den nye nettbaserte undervisningen, både med tanke på utdanningskvalitet, forskning og utvikling.

Alle opplysninger om deg og data samlet inn vil bli behandlet konfidensielt. Alt materiale som skrives eller på en annen måte presenteres for andre vil være anonymisert. Ingen av dine svar vil på noen som helst måte brukes i vurderingen av deg., eller brukes til å bedømme deg eller dine ferdigheter. Vi gjør oppmerksom på at innspill i anonymisert form vil kunne leses av din faglærer og andre undervisere.

Spørsmål, kommentarer eller andre innspill til undersøkelsen kan rettes til
Madeleine Lorås (madeleine.loras@ntnu.no) eller Andreas Krokan (andreas.krokan@ntnu.no).

1. Hvilket studieprogram går du på?

For eksempel: DataTeknologi, sivilingeniør, Bachelor i historie etc.

2. Hvilket årstrinn går du? 1-6

3. Hvilket campus tilhører du?

Nettbaserte læringsaktiviteter

4. I hvilken grad syns du følgende nettbaserte læringsaktivitetene fungerer? Likert, 5

Fellesaktiviteter som forelesninger, digitale møter etc.

Hjelp og veiledning fra læringsassisterter, faglærer eller medstudenter

Individuell studieaktivitet som lesing, skriving, regning etc.

5. Beskriv mer utfyllende hvordan du synes de nettbaserte læringsaktivitetene fungerer?

- *Hva kunne vært gjort annerledes for å gi deg bedre utbytte eller mer støtte for din egen læring?*
- *Hvilke positive konsekvenser har denne omleggingen til nettbasert undervisning hatt for din læring?*

6. Hvilke nye nettbaserte verktøy har vært nyttig for deg i denne perioden?

7. Hvordan har du fått tilbakemelding på dine nettbaserte læringsaktiviteter?

Med dette menes hvordan aktiviteter som øvinger, prosjekter eller oppgaver blir evaluert.

8. Hvor går du for å få hjelp og veiledning?

Studiemiljø

9. Beskriv hvordan studieverdagen din er nå?

- *Hvor arbeider du med studiene dine? På kjøkkenbordet, i sofaen, i kollektivet, hjemme hos foreldrene dine etc.*
- *Hvordan legger du opp hverdagen din? Når studerer du, hvordan strukturerer du pauser, samarbeider du med andre fysisk/digitalt etc.*

10. I hvilken grad fungerer din nåværende studieplass til følgende aktiviteter? Likert, 5

Individuell studieaktivitet som lesing, skriving, regning etc.

Fellesaktiviteter som forelesninger, digitale møter etc.

Eventuell hjemmeeksamen

11. Hvordan fungerer det sosiale? Hvordan holder du eventuelt kontakten med medstudenter?

Med dette menes både den faglige og ikke-faglige interaksjonen du har med andre.

Avslutning

- 12. Kunne du tenke deg å være med på en oppfølgingssamtale ved et senere tidspunkt, for eksempel via Teams eller Skype. Hvis ja, bruk dette skjemaet til å fylle inn kontaktinformasjon: <https://s.ntnu.no/blimed>**
- 13. Deltagelse i denne spørreundersøkelsen er frivillig. I det du sender inn dine svar vil det ikke være mulig å identifisere deg. Derfor vil det ikke være mulig for oss å gi deg innsyn, endre eller slette dine svar etter at du sender inn dette skjemaet.**

Samtykker du til at dine svar kan brukes i forskning. JA/NEI