# STUDENTS' EXPERIENCES ON DISTANCE LEARNING DURING THE PANDEMIC

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#### Abstract

The ongoing COVID-19 pandemic has changed how we study at all levels of education. The students have had to embrace distance learning methods not by choice but as a necessity for their studies and this comes with its own challenges. In this paper, we observe students' perceptions based on a survey conducted on 133 students in late 2021. The results show that students' perceptions of online learning during the pandemic are mixed, and while others prefer working online, some are having serious difficulties. The detailed results are presented in the paper along with our interpretation and discussion about the further implications.

Keywords: Online learning, remote learning, COVID-19, pandemic, student perception.

## 1. Introduction

The past two years have transformed higher education from hybrid and contact learning to distance learning. As the pandemic doesn't seem to subside soon, we have begun to become accustomed to teaching somewhere between hybrid and distance learning. New recommendations and guidelines have been reinforced. (Toquero, 2020) The new "normal" of learning is here to stay. But all of this is not without its own challenges. The need to adapt quickly has highlighted the deficiencies of distance learning. The lack of distance learning infrastructure, inexperience of teachers, situations at home, solidarity of studnts and many more have been identified since the pandemic began. (Ali, 2020)

Not only is it a tremendous undertaking for all educational institutes on all levels, it also is a new world for the students in it. Distance learning has shown to have come with a wide array of problems that can negatively affect the students' development in higher education learning. Practical example of this as stated in Coman et als (2020) study is that the students can now opt out of engaging in learning, critical thinking, or expression as it is easier not to do these things in a distance learning environment. In another example higher education students are seen more vulnerable to developing mental disorders during the pandemic. (Deng et al, 2021) In the study it was stated that the rate of depression in the higher education population went up nearly 18% (12.9% to 30.6%) compared to pre-pandemic.

While students, especially young adults in the population, are by default more comfortable with communicating through instant messaging and other social platforms, they still have their expectations of student life in higher education set in pre-pandemic times. Some of the students might have just only begun their studies in higher education only to be thrust into a world unlike their expectations. And when presented with the new distance learning curriculum for their studies, they will unsurprisingly be confused, feel lost and even neglected. Not to mention that some studies and curricula during this pandemic had to have been conducted with a mix of strict, hastily concocted contact learning combined with distance learning as some forms of education still require physical interaction, facilities, and equipment. (Peloso, 2020) Similar deductions could be found in the comprehensive global review done by the University of Ljubljana on the effects of pandemic and distance learning in higher education. (Aristovnik et al. 2020)

Hence, it is very understandable that the students might display some worrying signs during their studies and in this study, we survey the higher education students on their experiences on the new normal and how they are coping with change.

### 2. Methodology

To find out about the students' experiences on distance learning we conducted a qualitative survey that included both multichoice and open answers led by basic information questions that were used to categorize some of the results.

First and foremost, we determined it important to include a few informative basic questions about the students that could help us deduce more about the survey. Two of these were the age group and field of study. The age group was used to not only identify the most common age group our participants belonged to but also gauge for possible deviations among them.

The field of study was considered important because the university surveyed had a four-way split faculty between technology, healthcare, business and maritime, of which we expected to see some deviation as well. Now, it is to be noted that the survey used the official Finnish field of education terminology which can leave some interpretation for the choices. (UNESCO, 2022)

The subject questions of this study focused on four key points. Learning during the pandemic versus learning pre-pandemic, digital skills and distance studies, study guidance in distance learning and learning tools and systems in distance learning.

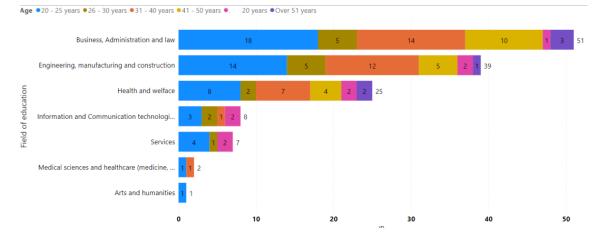
The first one questions the student's opinion on whether pre-pandemic learning or distance learning is preferred, and reasons as to why on either given answer. This question was surveyed only from students that had experienced pre-pandemic studies so first year students of the current academic year were not considered in this answer. The digital skills and study guidance questions were only multiple choice but were deemed nevertheless important to survey as both are important factors. The multiple-choice questions of learning tools and systems are specific to the university the survey was conducted in.

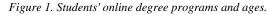
The university surveyed uses the globally common Moodle as their learning management system and nationally known study management system Peppi, both of which provide some tools and feedback to students on their studies. A follow-up open answer question on what kind of tools would help with their studies was asked. This is something we had surveyed before prior to the pandemic in our previous studies on learning analytics (Nevaranta et al, 2020) and could be used as reference to see if something had changed from pre-pandemic.

### 3. Results

There was a total of 133 answers on the survey (n=133). The fields of study were distributed quite evenly with the number of faculties' students in the university. Most students were from the Business, Administration, and law field of study (51). Other fields of study were also well presented in the survey. Only one response from the field of Arts and humanities, so any conclusions about that field can't be done.

Of the students that participated in the survey, the most common age group was 20 - 25 years as expected, but also a large group of age 31-40 years was expected because of online degree programs offered by the university. All age groups from under 20 to over 50 were represented (Figure 1).





In our study it was first asked if students find their digital skill to be sufficient to advance their studies. In the fields of Services 14 %, Health and welfare 16% and Business just 1 % didn't agree with the question. The most negative answer was given by Health and welfare students; 24% of students either disagreed or didn't know whether their digital skills were sufficient. In information and communication technology all students agreed as was expected. Of the age groups the most confident in their digital skills was the 31–40-year group. Surprisingly the under 20 group was almost as positive (Figure 2).

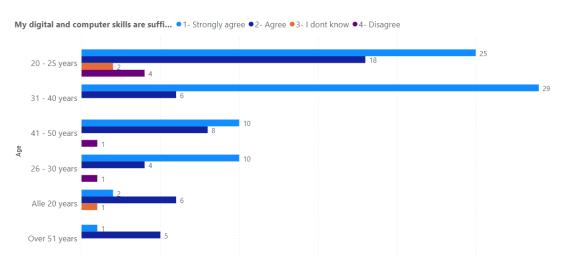
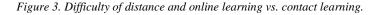
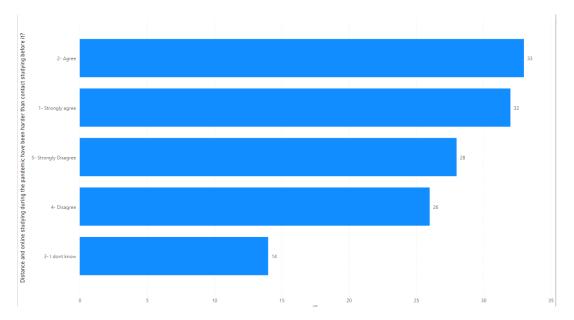


Figure 2. Sufficiency of students digital and computer skills by age groups.

In the question about distance and online learning being harder than contact learning 49% of students agreed or strongly agreed that studying was harder, 10 % could not say and 40% disagreed (Figure 3). This also makes it visible that some students are more familiar with distance and online education, are more self-organizing and like to study by themselves.





Services students (80%) found it most difficult to study online while Business, administration and law students found this less difficult (33%). This may result also from the fact that online degrees are in the Business, administration and law field of studies and students already have skills to study online. In open answers students pointed out that they may have lack of motivation or skills to self-direct in their studies. They may also have some distracting factors in their daily life. Also because of the sudden transformation to distance and online education, the courses were not planned for online realization and some teachers did not have sufficient online teaching skills (pedagogical and technical). On the other hand, some students said that it was easier because you didn't have to spend time traveling to the campus and to some students it is more comfortable to study at home because of the social stress in the classroom and in the campus.

The multi-choice question on study guidance in distance learning had the least favorable reception. While still positive overall there was a substantial amount of deviation and in total almost 25% of students declared they had not gotten enough study guidance during distance learning, but nevertheless 68% of students were satisfied with the guidance (Figure 4).

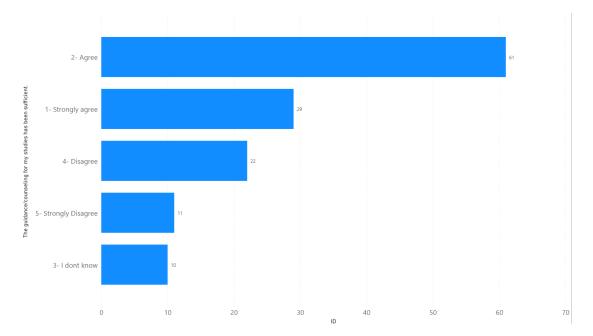


Figure 4. Sufficiency of study guidance and councelling in distance learning.

Biggest groups of satisfied students were in Health and welfare and the most unsatisfied group in the field of Services. Most satisfied students were in the age group of under 20 years (89%), 20 - 25 years (67%) and 31-40 years (68%). Most unsatisfied were at the age groups of 26-30 years (33%) and over 51 years (34%).

The learning management system Moodle comes pre-packed with a time-management tool for students that is called Completion Progress. This tool shows students their current progress in a course and their overall progress in their dashboard with a color-coded bar. (Moodle, 2022) The study management system Peppi also comes pre-packed with a progression graph in the student's desktop that shows similar progression statistics as Moodle's tool. The visual presentation of their activity gives the students a more engaging learning experience. Most satisfied with the Moodle Progress bar were the Services students (100%) and the ICT students (88%), and with Peppi were Information and communication technology students (100%) and Health and welfare students (84%).

In the surveys multiform questions, the students deemed these tools to be generally useful but reflecting on the follow-up question about what they would like to see more we could determine that they hope to have more mobile apps to catch more information about realizations and timetables. Also, an easier to use way to find courses and realizations was needed. Some students claimed that they want less information systems and more connections between different systems.

## 4. Discussion

From the results we could determine a few things. The digital skills of students are generally on a good level and systems used in their studies served their purpose equally as well. It is possible, that the situation could have been at least partially different, as it is likely, that after one year of remote learning all students had gained the necessary skills regardless of whether they had them before.

Most of the students felt that the systems used (such as Moodle and Peppi) were useful. There were some differences depending on the field of study, but regardless of that, most students found learning analytics provided by the systems useful. This seems to be in line with our previous studies (see Nevaranta et al. 2020).

In general, students' opinions about remote learning seem to be quite diverse. While 49% of students agreed with remote learning being harder (or more difficult) than learning in classroom, 40% disagreed with the statement. Based on the division, it seems that while not always feasible, institutes should provide possibility for remote learning, when possible, without making it mandatory. Some kind of hybrid model could the most satisfactory for all students but can be difficult to arrange.

There were some limitations to this study. Since the students could give open answers to topics that could be considered hard to answer without context that would guide them towards a bias, additional insight or a longer study would have been helpful in the analysis of the results. The survey group was similar to our previous studies in size and distribution which provided a base for cross-referencing between similar surveyed themes between them. Regardless, it seems like two years after the start of the pandemic we have already gotten used to distance learning and can now recognize the weaknesses of it.

## 5. Conclusions

The study on the effects of the pandemic on different education levels and groups is still ongoing as is the pandemic. The new normal will be hybrid learning after either the pandemic subsides or is ignored as now that it has been shown that distance learning is viable and even the most reasonable solution in some scenarios. Hybrid learning with the lessons learned from distance learning will open the world to a new more flexible way of learning in higher education that further makes use of the technology and digital tools made during the distance learning. However, this may not always be easy to arrange.

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