UNCOVER THE CHALLENGES AND SEIZE THE OPPORTUNITIES

A study to acknowledge the problems faced by students in online learning

Navya Baheti

Department of Design

Nirma University

Abstract

The COVID-19 pandemic made students realize that morning alarm of 7, traveling far to attend the college was not that bad! Bunking college and visiting home was cool until this real outbreak happened. The nationwide lock-down gave us an unlimited day vacation. The environment was completely changed and the pandemic has altered the way people work, communicate and lead their daily lives.

The major part of the day in a student's life revolved around friends and faculty, it was 15 hours for a hosteler and 10 hours for a localite. Learning around people who are the same age as you are much easier and more likable to do. Indulging in a discussion happening at your studio in person with faculty and friends makes the learning deeper and clearer with more new ideas floating around, especially in the field like design. This environment was suddenly changed to living with family at home, for 24hours and uncountable days. Coping with education in this situation, where students of 18+ age are matured enough to handle house responsibilities, is little tough and may lead to lack in learnings.
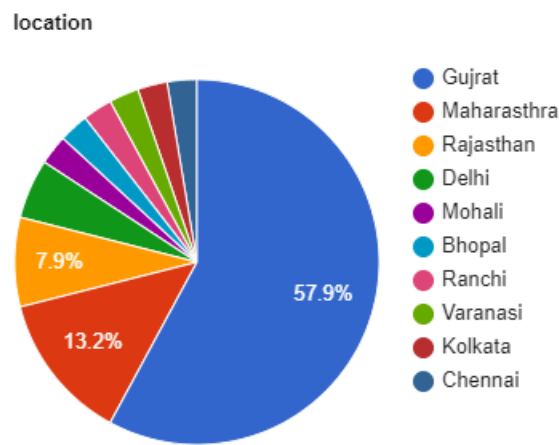
There are many problems faced by students who appear in an online class. When compared to studio based-learning, different activities for learning, dimensions of approach and extremes of the course have impacted the way of learning at home.

A survey conducted to shed the light on the students to know about their learnings with the theme of virtual education. The problems they are dealing with and their perception towards it. The survey was with the students who completed their first year in design education as half studio based and half virtual learning.
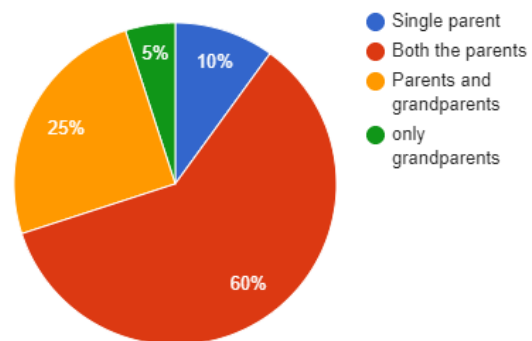
Demographic details of Students

Total number of 40 students surveyed. Out of which 26(65%) were females and 14(35%) males. Out of these 40 students 65% of students were 19 years old, then 32.5% Students were below 19 and 1 student were above 20year.
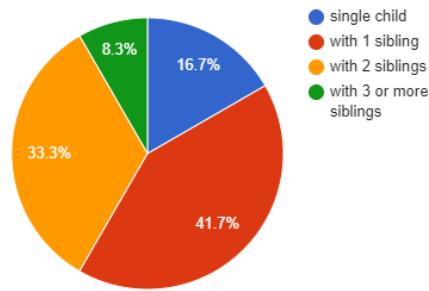
When college called off due to nationwide lockdown, students travelled back to their hometown. From the diversity of India, 72% students reside in the cities of western and South-western states of India namely Gujarat (22-students, Ahmedabad, Surat, Rajkot, Navsari, Vadodara, Gandhinagar and Gandhi Dham), Maharashtra (5-students, Mumbai, Pune, Jalgaon and Hanginghat) and Rajasthan (3-students, Jodhpur, Chittorgarh and Sagwara). Remaining students belong from North, central and southern part of India.

location

- Gujrat
- Maharasthra
- Rajasthan
- Delhi
- Mohali
- Bhopal
- Ranchi
- Varanasi
- Kolkata
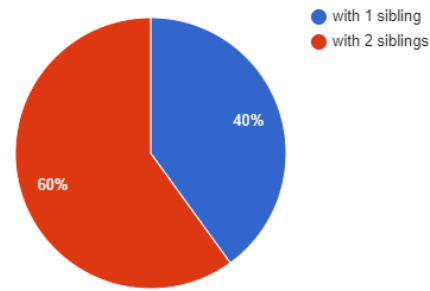- Chennai

57.9%

7.9%

13.2%

When the sudden geographical region is changed, the surrounding is also changed from friends to family. It was found that 60% of the students live in nuclear families including both of the parents. The next 25% students live with parents and grandparents. The rest 10% students live with single parent and 1 sibling and some students who are living with their relatives also.

- Single parent
- Both the parents
- Parents and grandparents
- only grandparents

10%

5%

25%

60%

Nuclear family with both the parents

- single child — 16.7%
- with 1 sibling — 41.7%
- with 2 siblings — 33.3%
- with 3 or more siblings — 8.3%

Family with Parents and Grandparents

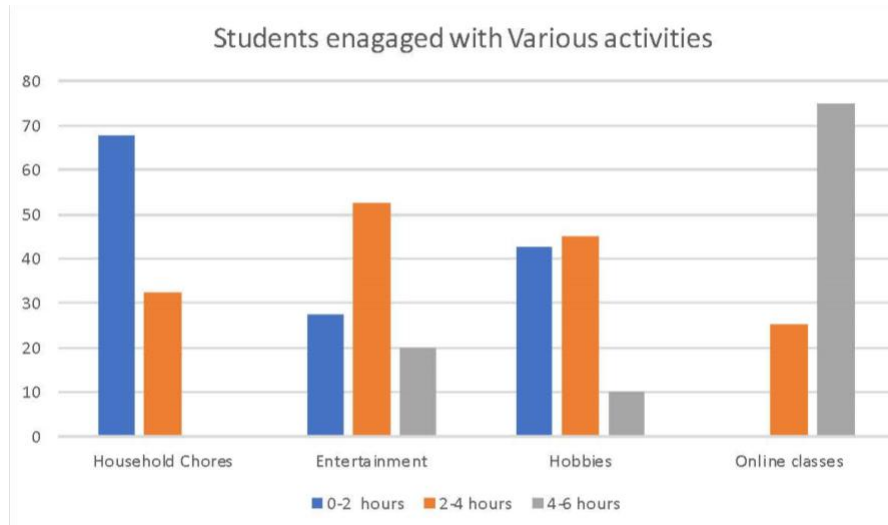- with 1 sibling — 40%
- with 2 siblings — 60%
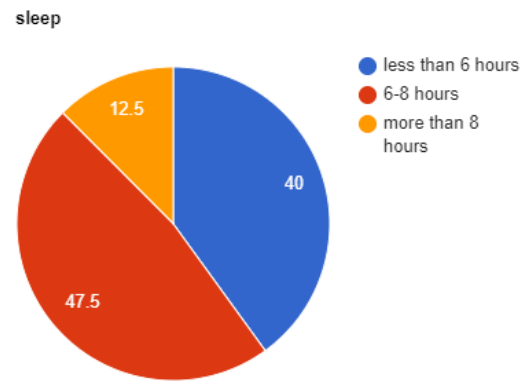
Workspace at Homes

Design field need freedom to explore and work, students need space for working, for multiple projects going on. Studios gave us full space and more coordination with faculty and friends. While at home it is found that 45% of students have their own room where they can comfortably attend the classes and have their own space where they can work whereas 25% of students share the room with their siblings and 35% of the students don't have designated space and explored every room of the house, whichever room is available for the period to attend the class and to work. Since majority part of the student either share the room or occupy the room available to them, this lack of designated space and surrounding changed from friends to family may lead to uneasiness towards their studies and work.

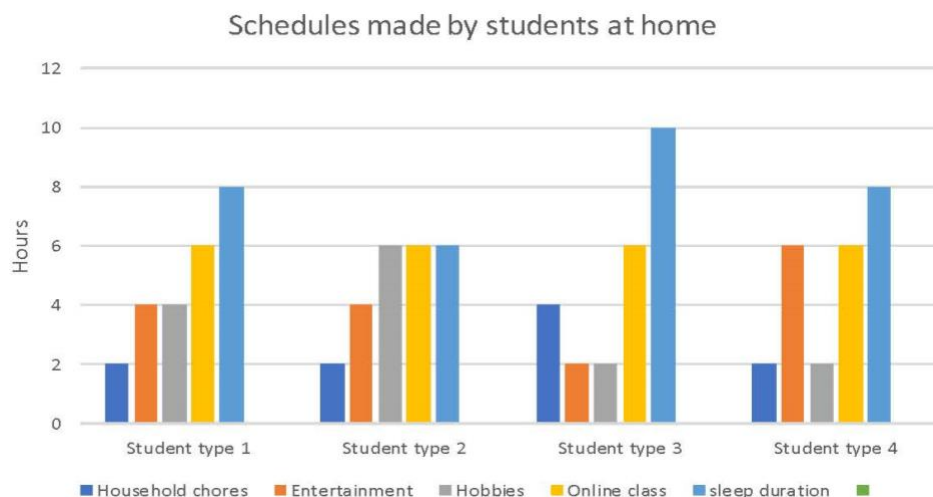## Multifarious Activities and Family Relations

In the time of lockdown when 24 hours need to spend at home only with online classes going on, students were asked about different activities they are indulged in the house which schedules their day, the survey says that 67.5% students do household chores for 0-2 hours a day and 32.5% for 2-4 hours. It was found that female respondents were inescapable from these works. For the entertainment like non-gadgetry games and online streaming it was found that 27.5% students spent 0-2 hours while majority of 52.5% students spent 2-4 hours for online streaming, movies and web series and only about 20% student spent 4-6 hours on entertainment. Since no time is wasted in travelling students have used this time for their hobbies and found out that 45% students spent 2-4 hours on their hobbies, 42.5% spent 0-2 hours and about 10% students spent 4-6 hours. While apart from entertainment, household work and hobbies a big chunk of the day was gone in online classes. 75% students say that online classes took 4-6 hours of screen time.

Students enagaged with Various activities

(Bar chart. Y-axis from 0 to 80. Categories: Household Chores, Entertainment, Hobbies, Online classes)

- Household Chores: 0-2 hours ≈ 68, 2-4 hours ≈ 32
- Entertainment: 0-2 hours ≈ 27, 2-4 hours ≈ 52, 4-6 hours ≈ 20
- Hobbies: 0-2 hours ≈ 43, 2-4 hours ≈ 45, 4-6 hours ≈ 10
- Online classes: 2-4 hours ≈ 25, 4-6 hours ≈ 75

Legend: ■ 0-2 hours ■ 2-4 hours ■ 4-6 hours

While the burden of long sessions and assignments the sleep duration of the students is a bit affected, about 40% of the students sleep less than 6 hours and 47.5% student sleep for 6-8 hours and only around 12.5% students sleep more than 8 hours. The data also says that students who can't escape from the household responsibilities or who are more indulged with their hobbies or reconnected with them only in this lockdown tend to sleep less.

sleep

(Pie chart)
- less than 6 hours: 40
- 6-8 hours: 47.5
- more than 8 hours: 12.5

To know more about division of time in a day for the various activities, below are some categorized student's schedule for a day describing their amount of involvement in various activities.

Schedules made by students at home

(Bar chart. Y-axis: Hours, from 0 to 12. Categories: Student type 1, Student type 2, Student type 3, Student type 4)

- Student type 1: Household chores 2, Entertainment 4, Hobbies 4, Online class 6, sleep duration 8
- Student type 2: Household chores 2, Entertainment 4, Hobbies 6, Online class 6, sleep duration 6
- Student type 3: Household chores 4, Entertainment 2, Hobbies 2, Online class 6, sleep duration 10
- Student type 4: Household chores 2, Entertainment 6, Hobbies 2, Online class 6, sleep duration 8

Legend: ■ Household chores ■ Entertainment ■ Hobbies ■ Online class ■ sleep duration ■
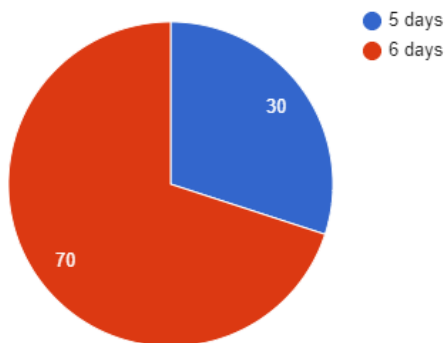
These are the human etiquettes to serve time to the people with whom they are living with and students day packed with their own whole day schedule 50% of students barely get time for their family and 40% students say that they manage to get quality time spend with their family and only about 10% Students fully agreed. While giving time to ourselves for our growth we didn't realize that how these things affect to our elders. They don't have tendency to see their children working and enjoying themselves by whole and not giving time to them, giving due respect to our dreams and personal space, they want time for more togetherism and less individualism.
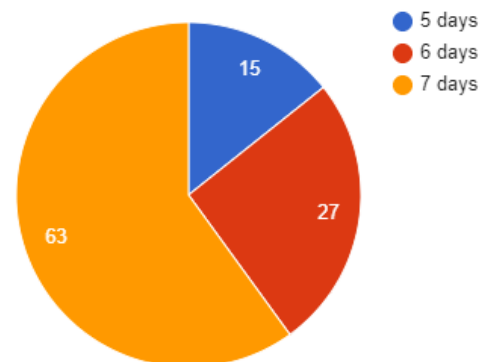
Repercussions by Emergence of home environment

In order to know more about students routine at home, students were asked about the number of days, they have official classes then 70% students said 6 days a week while for the rest of 30%, classes where 5 days a week, but how can this possible for the students who attend same classes, the days can't be different? And when further asked that how much days they are working by their own or self-study, on assignments and projects then 63% students work for 7 days and about 27% for 6 days and 15% students only work for 5 days, again this is not possible for the same batch? maybe one's grasping power is more than other but the difference of 5 days to 7 days is big.
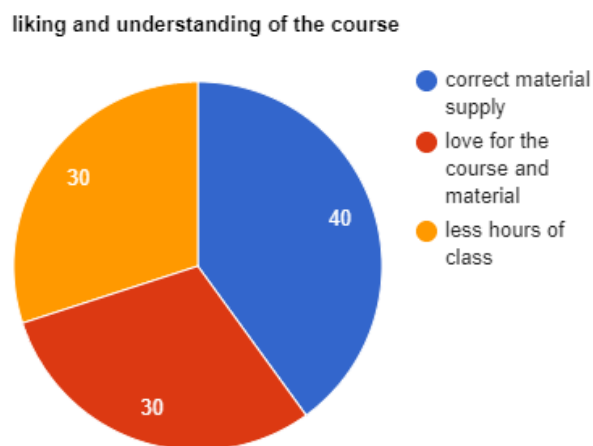

The data says that the people who attend and do assignments for 5 days a week are more indulged into their hobbies and entertainment purposes. For them giving significant time to themselves is more needed rather than involving 7 days to work. And for me also, giving adequate time for your hobbies is a good thing while doing your professional work to balance your mind from low spirit thoughts in situation like pandemic.

Colleges have fixed time for classes from 9 to 4, but in the concept of work from home, the classes may delay by half hour or may extend for 1 hour. The well-structured schedule for a day including the timing of class and the agenda to be done in a day was depended on the faculty who is coordinating and teaching that course, said 80% of the students. It is observed that in one online session of 3 hours with 50 to 100 students in the class, 80% of the students said that 30 to 45 minutes are spent on attendance and coordinating the assignments among teachers, and the rest 2 hours are given for explanation and doubts. According to the situation where we all are adapting this virtual learning; more time slot should be given to explanation part and new methods of attendance should be taken in order to utilize the given class time.

Now in the lockdown when students are at their home with varying developed geographical regions and various guidelines imposing, it's difficult for students to get material or basic stationery for the course. According to 40% of the students, the faculties are sensitive towards the all the courses, material and understood the situation of students, while other 40% students said that it depends on the faculty how they lead the course, as a result it is found that more than 60% of the students just understood the main concepts of the course rather than going for extreme learning and deeper insights for the course and only about 12% of the students understood the whole point of the course.
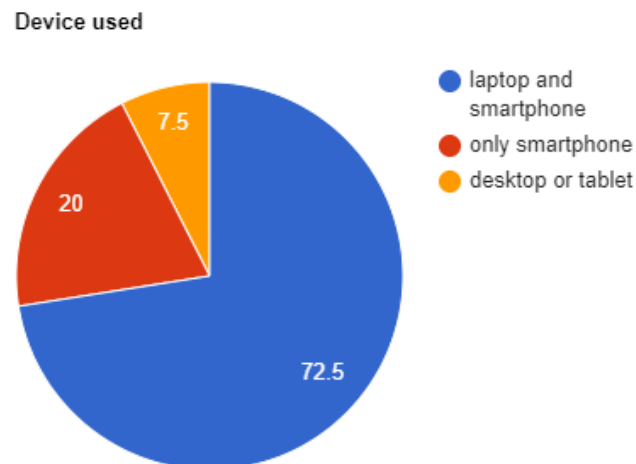
But there are many other reasons for understanding the course also, that 40% students got correct supply of material, 30% students say it's because of their love for that course and material both and for rest 30% it just because it has less hours for attending the class, as it was difficult to attend long sessions without regular breaks.

liking and understanding of the course

Students found that the information about the course and the material was given just 1-2 days prior of the commencement of course which is not sufficient. More than 95% of students need the information about 1 week prior, due to the lockdown, students face difficulty in getting the materials and if they don't get, they need this much before time to find the alternative of the material, also if buying material online it takes time to deliver. It was found that 10% of the students who were living in small cities or in outskirts of the cities have no frequent access to the stationery and can go once in a while according to their respective city lockdown guidelines. Apart from just basic information about the material, students also want the correct quantity of the material to be informed because parents don't allow for periodic visits to stationeries, also specifying the alternative of the material would also help them to discover new thing at home.

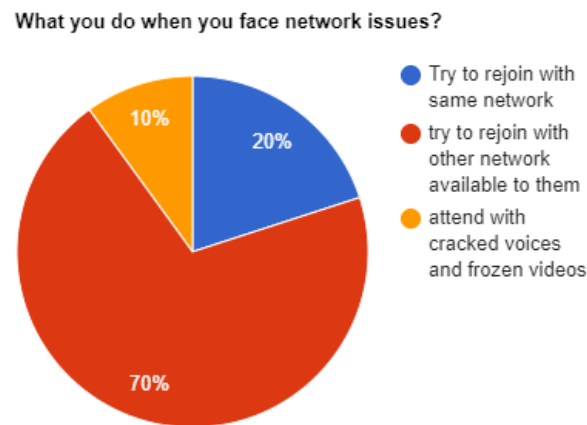## Switching from in-person learning to screen learning

The general question about convenience of device used for attending the online classes says that 60% of students use both laptop and smartphone, and 17.5% students have only smartphones to attend, this again might be the problem that scanty screens of smartphones are insufficient for the classes.

Device used

While having qualities in different platform this is the time when technologies can upgrade themselves and we as designers have good opportunities to do fulfill some basic need of the students like first, the recording option, which is crucial for the online learning in order to avoid the laborious work of explaining the concept after the 2 hour of lecture and students can also refer for detail they may miss during the class, second, platform that consumes less data and third, making notes direct on platform, it very helpful for students for the times when there place of attending the class is changing in the house, student don't need a paper and pen they can directly type the key-points and can save it in their devices.

Not being able to attend the classes due to network issues is mood spoiler for students so as to achieve basic knowledge of the course. It is found that more than 50% of students face network issues 2-3 days a week and about 20% students living in small cities and in outskirts, daily face these issue because of the low connectivity in their region.
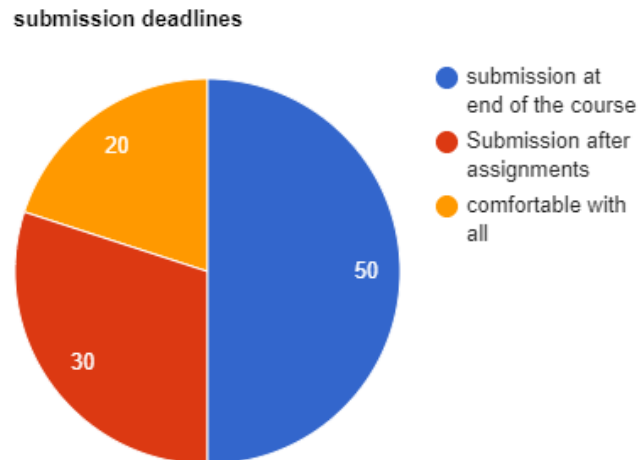
Then what students do when they face such problems? More than 50% of students say that they try to rejoin the class with different network source available to them while there are 10% of students who attend the class with cracked voices and frozen video for the sake of attending the lecture. No doubt that the speed of wi-fi is good than mobile data but the question of using whether wi-fi or hotspot rises later, but what require first is the proper connectivity of network in all small cities, outskirts and village area so that no students have trouble attending the lecture.

What you do when you face network issues?

- Try to rejoin with same network
- try to rejoin with other network available to them
- attend with cracked voices and frozen videos

While the course moves on, doing the assignments at home is bit tough for our own varied reasons. It was found that in 90% of the course, individual assignments were given, and less focus on giving group projects. The students take on this 50-50, giving the merits of individual assignments by 50% of students say that clear performance is seen and noted, contribution of team member given for the project is not seen by faculty in these virtual times, it is time taking to coordinate the work on calls and it is also heavy for some students to speak on call which result of not getting equal chance for contributing their idea, and individual person can more explore by himself with their new work space at home and compiling the whole work for the group is a burden and take huge chunk of time.

While the other 50% take the stakes for group assignments says that this is the time when they will be able to learn both leader-ship and managing skills to coordinate the among group so as to achieve the quality work, in the end when student have to land in industry they have to work in teams, so neglecting group projects don't make such sense and we should not see lockdown as a barrier for this, students somehow will figure out they ways for communicating with each other, group projects in these virtual learning take time but should not be ignored.

In view of completing the assignments, sticking to submissions deadlines is tough task to do. More than 50% of the students agree that there should be a basic deadline by the end of the course to submit their final works, students either with single parent or with large families says that submitting assignments as it's done is not possible for them due to household responsibilities, but about 30% of students also says that without deadline of the assignments they become less serious and are more distracted by the most comforting environment, being at home.
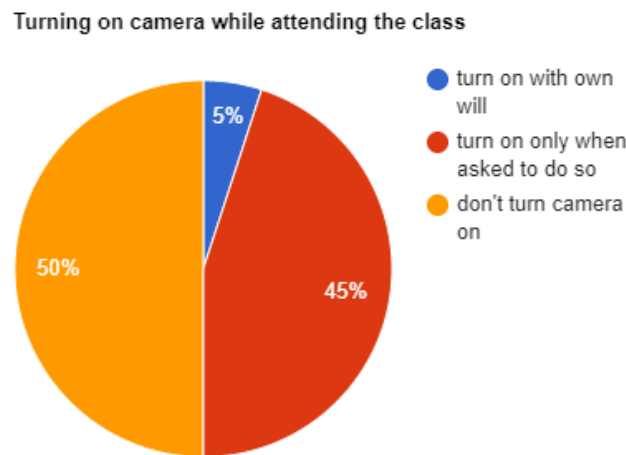
submission deadlines

The students have used different platforms to submit their work including google drive, concept board and pdfs and docs through emails. Students are comfortable with google drive because of its' simple interface, works are easy to upload and accessed easily. While concept board has one best merit that it looks like the boards we used to have in design studios, where we can present our work all labeled up with our own composition and a presentation on our work can be given, it is also easier to see others work on this and inspiring from your batchmates may lead us to do some good quality work.

While presenting the work virtually and having feedback for the same, 60% of the students are less satisfied with the review given here as compared to in studios, the work done on sheets are easier for giving feedback, but when we talk of 3d models and material based exercises, it is difficult to show them from all angles whether on camera or with images. Only 40% of students find the feedback sufficient enough to rework and make their work better.

Interaction with faculty and friends

All the things are manageable in one or the other way, but virtual classes can never beat the involvement of student in a face to face interaction, while in online classes the quality amount of discussion will happen when students are comfortable in keeping their camera on and it was found that 50% of the students are willing to turn their camera on only when asked to do so. Around 25% of students say that it depends on how much data is left, because turning on video consumes a lot data.

About more than 50% students say no to camera because out of those 50% are not in presentable manner or they have not bathed yet or must be lying on bed while attending the lecture, the next 20% students say family interference and they don't want to show their physicality of the house in front of more than 50 students in a lecture and some people are anxious towards the cameras and many more countless reasons for not turning camera.

Turning on camera while attending the class

- turn on with own will
- turn on only when asked to do so
- don't turn camera on

5%
45%
50%

The food schedule of each house is different depending upon the geographical region they belong to or may be some family traditions, while the class starts for all the people at same time it is difficult for some students to have meal at proper time, when saying that camera must be on for quality discussion then eating should be allowed in class, agreed by 75% of the students while 20% strongly disagree to this saying that there should be etiquettes for attending the class whether it's virtual or in real life, focus is lost while eating during the lecture is on.

In order to achieve the amount of discussion used to be in studios only 40% of the students who are loud are comfortable asking queries in the lecture, but the next 10% who are shy in front of more than 50 people ask the same things on whatsApp and emails personally where as 50% students don't ask queries to their faculty and directly approach their friends and batchmates. It is obviously true that asking silly questions and discussing crazy ideas with friends are more comforting than any sort of discussion. This lockdown, away from friends have affected more than 70% of students in good and bad terms both. Out of those 70%, more than 50% of students say that their professional, emotional and intellectual understanding with their friends have increased and many fresh conversations have started with many new students, but also for next 25% students it is decreased.

Conclusion

It is the time when trust, hope, self-introspection, exploring ourselves with various new sources lead us to many fresh paths, and the time for all of us being students, faculty and with family to rejuvenate our relations with each other so to accomplish these harder times with better together. This sudden shift in our environment and learning from each other while sitting 1000 miles away is a challenge for us and we should adapt these changes and should listen to the thing that world around us is trying to tell us, introspecting the problems we face, and making those problems into opportunities will help us to grow.

This theme of virtual learning gave us a new experience to explore, and the opportunities it has given to us as designers to work on the development on certain needs for the fulfillment of virtual learning and better understanding.