

**FROM PLACE TO SPACE: Encountering Design Education Online
27-28-29 August 2020**

THE INTIMATE REVELATIONS OF ONLINE LEARNERS

Paper presented by 9 students of Foundation programme with
Introduction & conclusion by faculty mentor Prof. Sangita Shroff

Anushka Tailor, Ashna Khanna, Navya Baheti, Kriti Maloo, Lipy Patel
Rucha Gavane, Saachi Shah, Sakshi Shrivastava, Samriddhi Shrivastava

About:

Prof. Sangita Shroff heads the Department of Design at the Nirma University, Ahmedabad. An alumna of the National Institute of Design, she also studied design in London as an UNDP Fellow. Her primary area is Visual Communication with specialization in Exhibition and Space Design. 36 years of experience in design education, research, training and professional design praxis, her diverse professional work ranges across communication design, branding, exhibitions, museums, furniture, fashion, accessories and strategy for the Indian craft sector. She has been permanent faculty at NIFT Delhi and Gandhinagar; subsequently was the Director of Indian Institute of Crafts & Design, Jaipur. She has actively worked with industry, central and state governments, UN bodies and craft clusters at the grass-root level. Significant contribution has been in the development of curricula for various design programs and in Institution building.

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The Covid Pandemic perplexed the Indian subcontinent when the Lockdown commenced. The dimensions that were to unfold and the complexities of Covid 19, being a long time or permanent resident were unknown to us all. As the Head of the Design school at Nirma University, students returning home enmasse, felt like everyone was running away with some imaginary Pied Piper. The subsequent Lockdowns 1, 2 and 3 mounted pressure to our mental and physical states as to how we would conclude the academic learning promised to students and their families. Unfinished academic business was like the sword of Damocles hanging over our head.

On the other hand, as April 2020 arrived, looming in front of us was the Admission process for the forthcoming Academic Year. Being part of a large University with all its formal structures of rules, regulations and requisite notifications to be made of changes, we sought permissions to conduct our Admission Tests Online. The marketing and canvassing of our programs, counseling students and their parents, and conducting of Online Situation Tests and Personal Interviews commenced on a war footing amidst the invisible opponent- Covid 19. We declared results as schedules in the first week of May 2020. The Online Admission tests were conducted successfully and we felt we had earned a feather in our cap.

In the meantime, we commenced Online Classes for our senior batches. Faculties across board were hesitant to take design courses. Senior visiting faculties were outraged at my invitation. “How can you teach Exhibition Display Structures Online?” I teach the entire course in the workshop not even a studio, spoke an expert. An Animation expert, who was invited to teach students “Moving Images II- Animation Film Design”, thought I did not understand what it takes to teach newbies animation. He said “Animation is taught to students in a studio environment with visits to locations to draw on inspirations and build illustration skills.” My multiple calls through the lockdowns to convince him that this will be the “norm” for the coming seasons, finally drew a positive response. That was a unique ‘first’, an experiment in teaching a ‘creative design project’ online. 16 students, one external expert and an internal animation faculty, working at 18 different locations, made “*Maasa*” the fish story. They worked in symphonic harmony to storyboard, draw, animate and edit the film with music and commentary. Technology certainly was the catalyst as was the spirit “to do”.

The classes for students swung into full operation mode. Design of Simple Mechanical Device, Toy and Game Design, Materials & Processes III, Environmental Graphics....all conducted online. As academicians, we thumped our chests and each other’s backs in appreciation and decided that we can with conviction commence the teaching of the Design Foundation students now. The courses here were critical—most are skill based, material

based and demonstration based. Critically, they are most significant as they are “Design Foundation” based on which their future academic competencies would be built. We launched onto courses, innovating content, materials, experimenting with various online Platforms. How do you teach “Basic Materials & Workshop Practice”? In the absence of a DIY culture in India, most families do not have a basic tool kit at home. We innovated by getting modeling and substitute materials. Bamboo skewers, Ice- cream sticks and students were taught to make scale down Furniture models. We used dough, papier-mâché to teach molding, shaping and explored properties of these material with various processes to build structures.

Theory classes were the most enjoyable for teachers. You had 40 faces - mostly eager, a few disinterested; there was discussion, participation and rich exchange of ideas.

Success in the online teaching perceived by the faculty members and jurors, as seen in the online semester end Juries was possible only because of the “empathy” of our students. Our senior students though dissatisfied with the lack of physical manifestations of their design solutions as working prototypes, lauded us as “Frontline warriors” as we were all teaching online from the University Campus. But for many of us - Akira Kurosawa’s film “Rashomon” has amply demonstrated in the past, that there are multiple versions to the same reality, rather multiple truths to the same reality. It was time to explore the other truths.

This time it was important to hear the Design Foundation students. We have Summer Apprenticeship/ Internships for all our students. In this year Foundation Students were offered Summer Electives. I offered a course “Scenario Building” with the aim that students and me as their facilitator will write a joint paper. What follows is their story- the story of nine students who have completed their first year in Design. It is completely authored by them and I am stumped by their competencies, insights and experiential reflections.

STUDENTS’ SPEAK

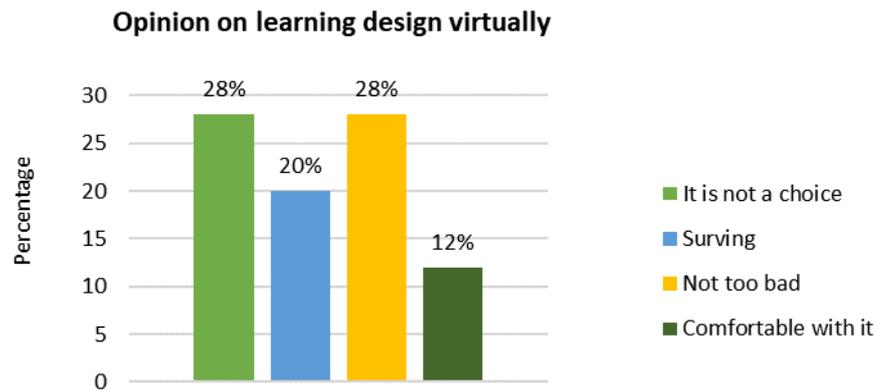
With the uncertainties and the chaos that the world was sinking in, parallely the students also had to resume with their academia on a virtual stage. Design learners were no exception despite design being multi-faceted. Diversified geographical locations, social environments and personalities brought in distinctive parameters. The nine researchers conducted a quantitative survey each, to analyse their distinct circumstances and viewpoints. The survey was sent out to a total of 238 (those who had completed Foundation Year, Second and Third year of Design education) on basis of unbiased selection, out of which 47 respondents were found coincidentally overlapping.

Dispersed Demographics

The survey questionnaire was sent out to design learners belonging to 18 to 22 years of age group. 70% respondents were female and 30% were male. More than 50% of the respondents belonged to Gujarat and 20% to Rajasthan, Maharashtra and Delhi NCR. The remaining 30% belonged to other Indian states. About 75% respondents belong to nuclear families and 17% belong to joint families, living with other relatives. The remaining 8% percent either live with a single parent or in families with more than 10 members.

Accentuating the Altered lifestyle

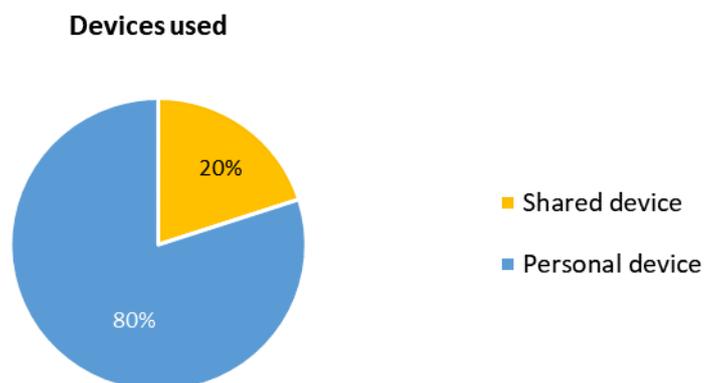
The booming social lives of design students on campus with fellow students, transformed to being with family members only. Only 25% students are comfortable in their home space, having experienced independent living. Due to the pandemic, on an average more than 50% of the students are caught up in household chores for an average of two hours, 30% for 2-4 hours and 6% for more than 4 hours. The remaining 14% have none. Despite these household responsibilities, most spend 2-4 hours on various entertainment platforms. Many have gone back to follow their hobbies giving it their 2-4 hours on a daily basis. Many also took online courses, before official online classes commenced.



Despite being technologically savvy, E-learning was new to 70% of the respondents. Most adapted themselves to this new normal. Already learning design virtually now for more than three months, 12% are comfortable with it, while 28% feel virtually learning design is not too bad. But the other 28% feel there is no choice in the matter. The remaining 20% said they are surviving. These are the ones for whom virtual studio has been very much challenging as it imposed a barrier to express ideas and thoughts effectively.

Learning with shared devices and shifting spaces

85% of the respondents either use laptop or both laptop and smartphone. The remaining 15% use smartphones only. But on the whole, **20% of the students have to share devices.** Interestingly most of foundation students prefer Google meet as a platform. Features like screen sharing and the fact that this platform did not impose time limits for sessions made it more popular amongst the students. However most feel the need to have a **Design-centric App** for virtual studio practices.



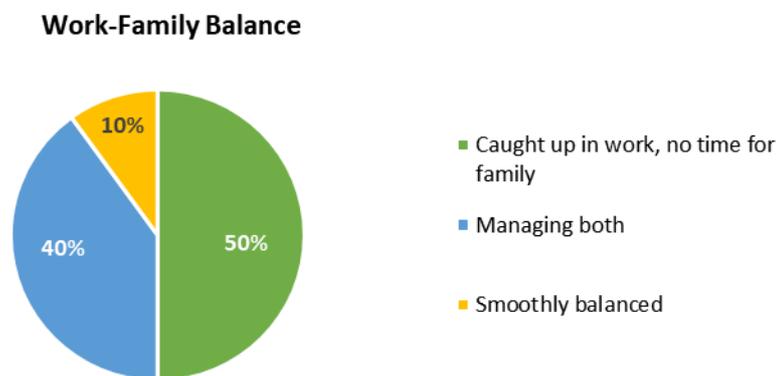
Top Bar-Chart: Survey conducted by Samridhi S.

Bottom Pie-Chart: Survey conducted by Samridhi S. and Saachi S.

83% students strongly prefer **studio-based learning**. Industrial design students, prefer **on-field work and practical experience**. To have that design flavour and feeling most have created their own ‘**studio-space**’ in their homes. Industrial design and foundation students have had less storage area at home for the requisite amount of stationery, models and prototypes. A quarter of the students do not have designated workspaces, as they live in joint families; some had to explore every room of their residence because of bandwidth issues or busy circumstances of having the entire family at home. 68% respondents believe more theory-based-courses and less material-based-courses should be planned and taught online. However, having to learn virtually from morning to noon and then spending hours to understand concepts, do the assignments, students believe sufficient and frequent breaks must be provided.

Interpersonal Relationships

The situation affected relationships both positively and negatively. It had been positive for students who needed a break from the domestic scenarios where business shutdowns and delayed salaries degraded the family’s financial status. Those living in compact spaces with more members led to periodic disputes among overworked individuals. This changed the accommodating nature of family members. 90% of design students’ working patterns created issues amongst the families. Extensive working hours and elaborate projects became an issue. However, family members were amused, getting to know what design students actually do. 50% of students barely got time for their family and 40% students say that they manage to take out time. Only about 10% students are unaffected with the work and family balance. One third of the respondents were comfortable managing chores and work; these days were happier and more productive than ever before due to family support and care.



Top Pie-chart: Survey conducted by Sakshi S. and Navya B.

The Race to Resilience

The pandemic and its repercussions have affected students mentally and/or physically. It did not have a positive impact on majority of 60%. Many were unable to mentally adapt to the change in pattern. This has become a reason for absenteeism, decreased confidence and lack of interest in being productive and creative. Lower confidence levels has raised performance crisis among the millennial. 40% of respondents had a positive outlook on the same. Those who were anxious with the on-going pandemic, found online learning a blessing.

It was great for their mental health, made them calmer as now they were occupied with work and not negative experiences. Physical health turned out to be more positive with home cooked food apart from everything else happening in the background.

Foundation and second year students were keen to work without missing out on lectures. But despite that they were **stressed with the amount of work** and long discussions, cooped up in their rooms. 50% respondents were **sleep deprived**. Average class duration for foundation students were 3-4 hours and after that self-study/work hours. Second year students had fewer working hours and third year students had the least number of working hours.

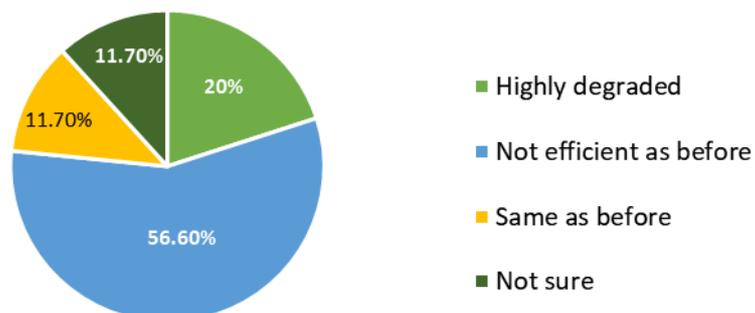
Respondents answered that their **sitting capacity in front of a digital screen** for a single session is around 1-3 hours at a stretch. The capacity to absorb is also challenged by other circumstantial domestic disturbances. Some students with migraine found it impossible to cope with and many students felt exhausted. One of the respondents said, *“It’s like we are living just for giving submissions.”*

The Design Studio

What defines a design studio is its vibrancy, aura of creativity, passion and most importantly the synergy of its dwellers. The relationship of peers makes the studio alive with the mutual experiences they undergo. The environment is one of constant growth forging extensive discussions, spontaneous feedbacks, collaborations and healthy competition. Peer learning leads to interdependent learning which is very crucial for designers. There are no designated posts. Everyone is a learner. Apart from learning comes an emotional support too as all are part of the same experience.

Typically hostelites spend 15 hours a day with peers and localites spend 10 hours. On a virtual platform, 60% students remarked that the entire concept of **peer learning** has suffered. Peer-review systems have not been as efficient and believe it has highly degraded. Degradation in quality discussions is also observed due to which many students have also developed a creative block. *“I believe we need to be in same space for peer reviewed learning. Virtual based learning is a phase, it may work for other fields, design education needs more tangible involvement; Can't replace that.”* The healthy competition is still intact over this platform as work is still produced. Connectivity with peers was established to an extent due to problems and challenges faced in online classes.

How has peer learning been affected?



Top Pie-Chart: Survey conducted by Saachi S. and Samridhi S.

However, this remained subjective. Some mentioned that the social media chats, lack qualitative discussions and focus more on the common laments.

Many students also appreciate the virtual platforms for their ability to make online work available. Concept boards and Google drives are common platforms that retain work. Viewing work has become easier. The concept of inspiration from peer work has been backed up. Unlike a studio, the works can be often referred to and reviewed. This was one of the features that students believe should be retained even after offline college resumes. *“The system of review of work is something which I like because we get to see the work of many students and also get to hear the review and learn more, unlike in a regular class where we are sitting in one corner of the room and the faculty is giving some feedback to an individual at some other room and we don't get to hear and learn from it.”*

Relevance of Online, Offline learning with Course type

Design pedagogy being one of its kind, the curriculum focuses on diverse courses that demands involvement of multiple senses- Material-based courses, courses involving visualization of forms in space, theory-based courses and those involving simultaneous multi-skills. These are either individual or group based. While 45% found them well structured, 41% also found that they lacked planning. Majority believe that this highly depended on the course. The theory-based courses were efficiently carried out. The presentations were convenient to view, well articulated and easy to imbibe.

Two-thirds of the respondents did not find material-based courses efficient enough. Students believe that online courses primarily focused on the final product instead of the process the student underwent. Moreover, material availability was questionable for 80% amidst the pandemic. Insufficient materials, usage of substitutes and space constraints hindered the smooth functioning of these courses. The materials needed were extensive and their availability very less. There were 10% students who lived on the outskirts of cities and found material availability a major issue throughout. Those who resorted to alternate materials, 63% considered it to be manageable while 23% were highly dissatisfied. The mess created was not acceptable in every household; families were not open to the idea, or aware of the messy, artsy disposition of a design student. Industrial Design respondents also mentioned their concern on being robbed off, of a comfortable **studio experience** as they use extensive materials and equipment.

Group projects brought another set of issues involving inability to reach group members- managing clashing opinions and difficulty in keeping track on each member's work. 70% of the respondents found group projects to be manageable but not great. 12% were satisfied with the outputs while 8% strongly believed that these should not be done. Courses involving visualization and deep understanding pose more pressure. However, it brought in a new scope of teaching using 3-D platforms to explain complicated forms and structures, also serving as an element of interest.

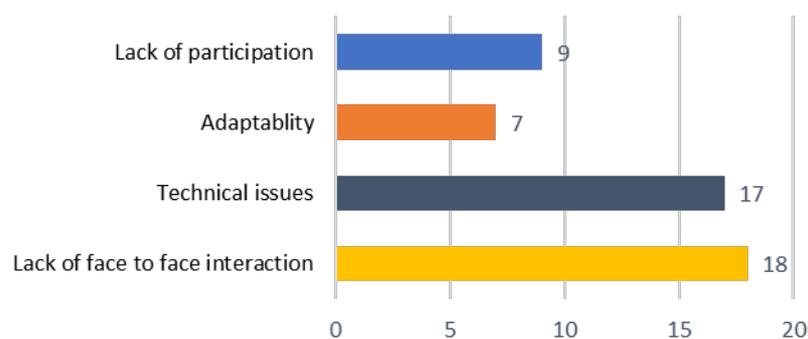
Beyond the curriculum, a designer is also shaped by many soft skills i.e. intangible and non-technical abilities. Skills like effective communication remained subjective. The less approachable became more aloof. There remained no direct connectivity and majority of these refrained from speaking up online. Further, there was no proof of their presence despite being informed to switch on audios and videos. The most important skill of empathizing weakened over distances. This can be directly related to peer communication also.

33.3% respondents seconded this. The level of exposure reduced abundantly. The chances to learn from practical experiences and be exposed to the outside world also got limited to what a screen offered! A student commented “*Is it right to conduct such classes which requires deep understanding of concepts? Is it the time to become innovative or does it make situations worse?*”

Teacher-student relationship

In Design, a positive student-teacher relationship encourages an open learning environment where both are equally engaged. On an online education platform, such an interaction is prioritized, where teacher leads the discussions while keeping an open environment and students participate enthusiastically. Although teacher plays the role of the initiator, both student and teacher try to put constructive efforts. The other aspects to a student-teacher interaction like mutual understanding, trust, motivation and support, when increased, strengthen the relationship contributing to an engaging learning environment.

Problems causing hindrance in online education (bars as per respondents interviewed)

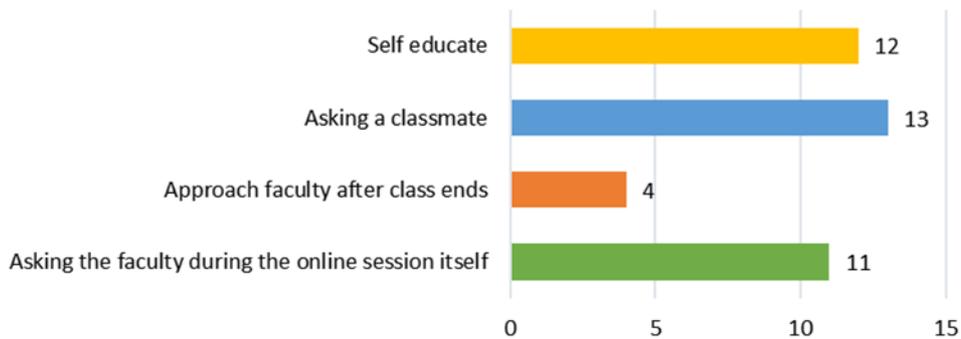


Top Bar-Chart: Survey conducted by Ashna K.

However, the shift to online classes has changed the way a student interacts with faculty. In an online class, teacher would be looking at a screen made of black tile with small grey icons. This trend limits to face-to-face communication; reading non-verbal cues like body language and expressions are non-existent. Ambivalent about the idea of self-disclosure, also shyness are reasons why students prefer to keep video off or turn on only when asked to. Insecurity arising due to class status or not being presentable have also been factors. Technical issues also cause unequal participation. Lack of face-to-face communication along with technical issues is a significant problem faced by 75% students.

Discussions are an effective form of interaction. Asking questions in class adds to the learning process and forges interaction. 55% students found the sessions to be active and helpful. 45% considered sessions to be neutral. Feedback from faculty was important to most respondents and found it to be a good medium for communication and understanding of the concepts. To make the student-teacher interaction more effective, respondents preferred and suggested a more personalised approach to enhance understanding which helps increase quality of work. Many students believe that the support has remained intact and in fact, faculty have become more approachable. Students encourage the idea of resuming **mentor-mentee meetings**. Helpful feedback, intellectually expansive lectures or just showing support adds to the motivation.

Preference to solve doubts during an online session (bars as per respondents interviewed)



Top Bar-Chart: Survey conducted by Ashna K.

Design extensively covers intangible and tangible aspects. Over an online platform design education needs to become more collaborative, effective and efficient to make distance learning easy and feasible. It must become a warm place where ideas are nurtured by collaboration between like-minded, design appreciating individuals.

Interestingly, the tables also turned when this collaboration got a new dimension where the roles were interchanged. The students were now addressing the technological difficulties faced by some senior faculty. The student-teacher relationship has had its own peaks and valleys in this uncertain situation. Self-disclosure will lead to a better online environment and mutual understanding. However, the relationship is interdependent and thus, requires equal efforts from both the sides.

THE SCENARIO AHEAD

The persisting situation has brought to light that the technologically advanced millennial face apprehension when it comes to online learning, especially in a multi-dimensional course such as design. While home is a getaway for most, the fusion of work place and rest, have posed problems on different levels. Compartmentalizing and balancing work and life have become major concerns. Students have had to grow up to this reality of an adult citizen's life. Though the pandemic is a shared experience, the mental and physical issues are varied. Amidst this, online learning will be a paradigm shift for all. We indeed will face a new tomorrow.

We need to meet this “new normal” as a community, which is also Design's ethic and mandate. While the 3D printer will take its position next to the ubiquitous food processor, washing machine, computer etc. in our homes and Video platforms are here to stay; virtual and augmented reality will soon become part of daily life. The issues arising due to the tyrannies of distance, socio-economic circumstances and state of technology can be resolved only being **mindful of the needs and requirements of each stakeholder**. This time maybe the design aspirants staying in poorer, remote destinations will also hopefully benefit. To conclude Universities and Institutions, teachers and thinkers, learners and tinkerers- all need to think anew. The new “elephant” is in the room and we need to perceive it holistically.

20th August 2020