

# The Experience of Online Education. Research Report



**SWPS  
University**



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## Research problem & research methods

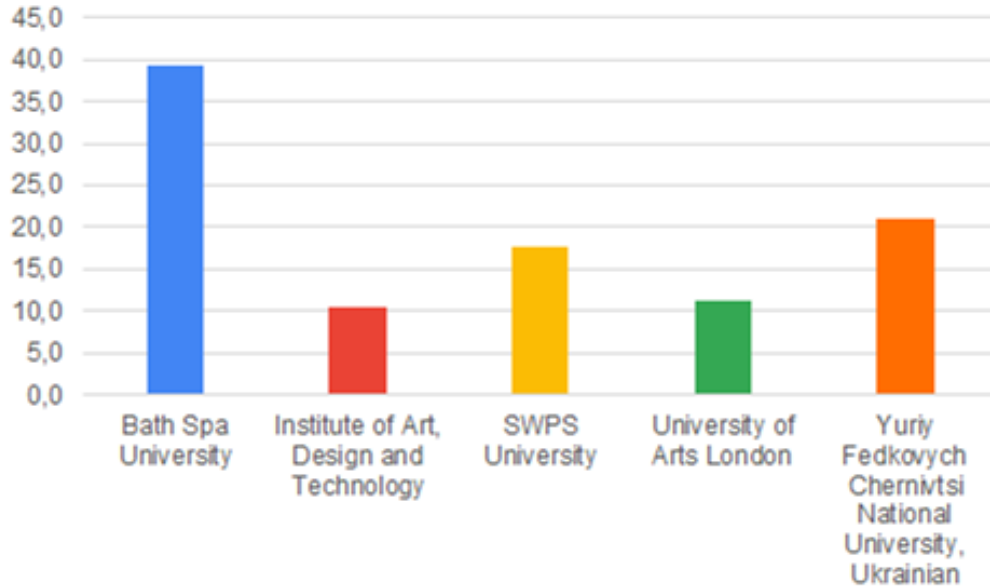
- RESEARCH PROBLEM: to understand the educational expectations and experiences of students, lecturers, and technical staff in art and design.
- RESEARCH METHODS:
  - **Survey.** Research was conducted between December 2021 and January 2022.
  - **Focus Group Interview.** Research was conducted between June and October 2022.

# **The Experience of Online Education**

**1.**

**Survey – STUDENTS & TEACHERS**

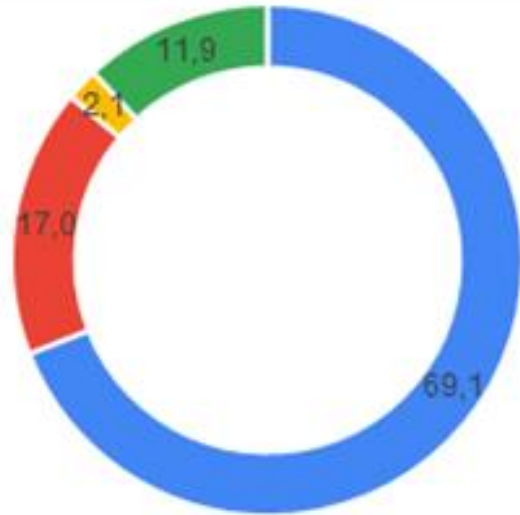
# Characteristics of respondents: STUDENTS



388 students took part in this survey.

Many participants were from the 1st year (almost 40%) and the 2nd year ( $\frac{1}{3}$  respondents) of study. Only 7% of the participants were from the 4th year of study.

# Characteristics of respondents: STUDENTS

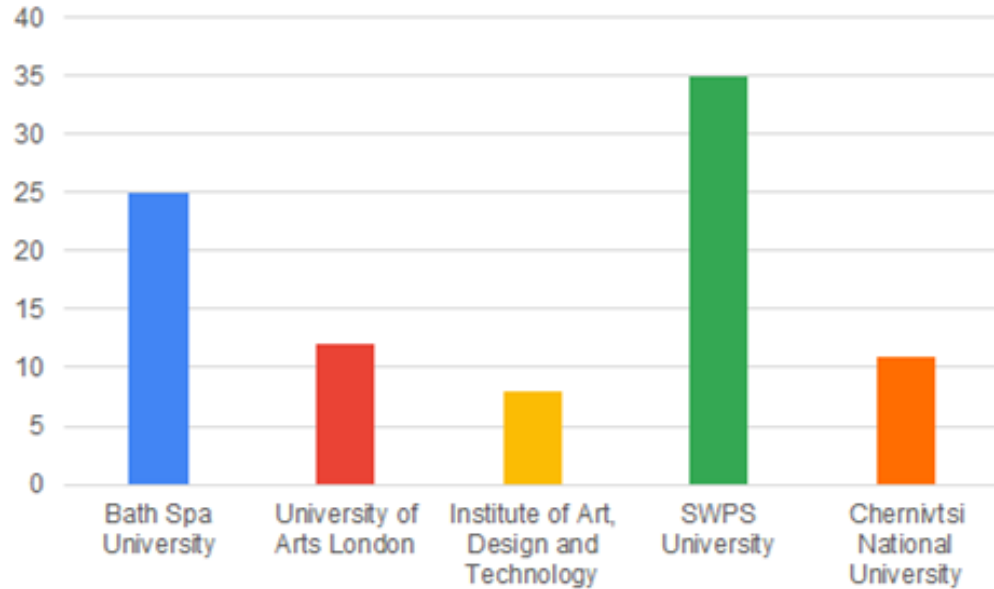


■ Female ■ Male ■ Nonbinary ■ No answer

268 women, 66 men, 8 nonbinary people participated in it, 46 participants did not indicate their sex.

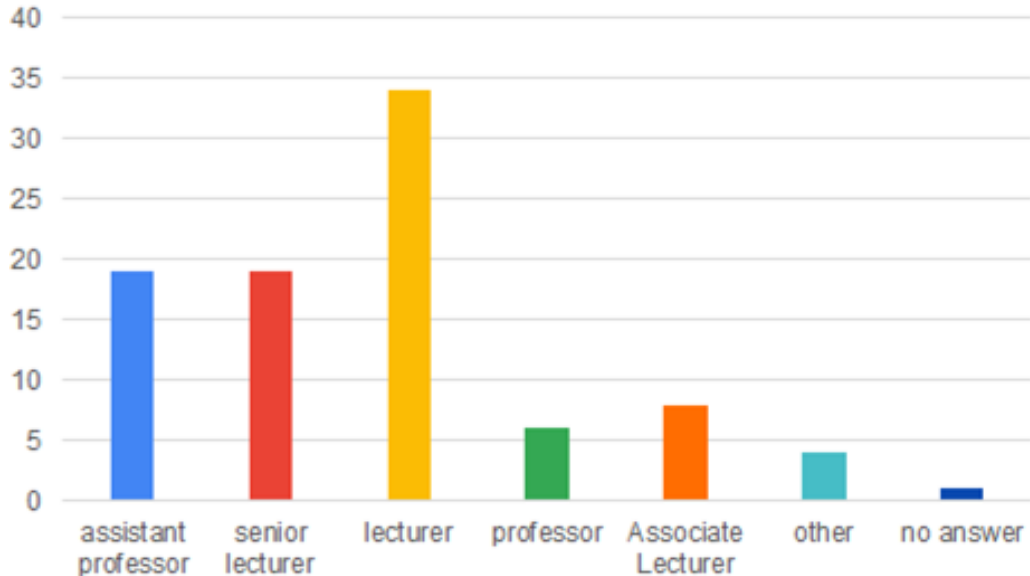
The average age of students was 23, the oldest participant was 68 years old and the youngest was 17 years old. Most of the respondents were 20 years old.

# Characteristics of respondents: TEACHERS



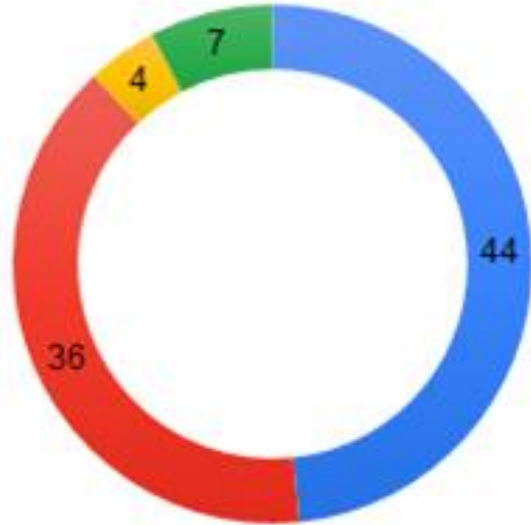
91 teachers took part in this survey.

# Characteristics of respondents: TEACHERS



The average teaching experience is over 15 years. Most of the respondents have 20 years of teaching experience. The shortest teaching experience is 1 year, the longest 45 years.

# Characteristics of respondents: TEACHERS



■ female ■ male ■ other ■ no answer

44 women, 36 men, 4 indicated “other”, and 7 participants did not indicate their sex.



Effectiveness of education in pandemic times

# The most effective education taking into account 1.5 years of experience:

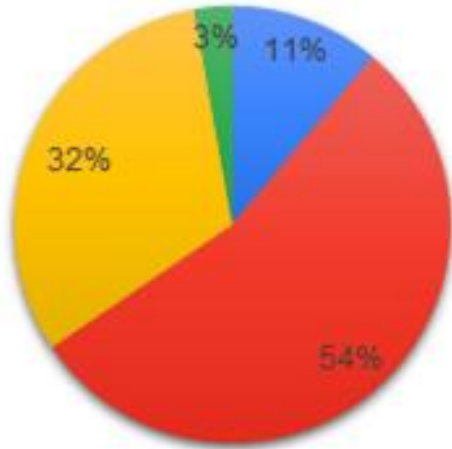
## Students

- Hybrid education: 48%
- In person education: 47%
- Online education : 5%

## Teachers

- Hybrid education: 58%
- In person education: 38%
- Online education : 3%

# The expectations for online education from the perspective of own experience of the past 1.5 years: STUDENTS

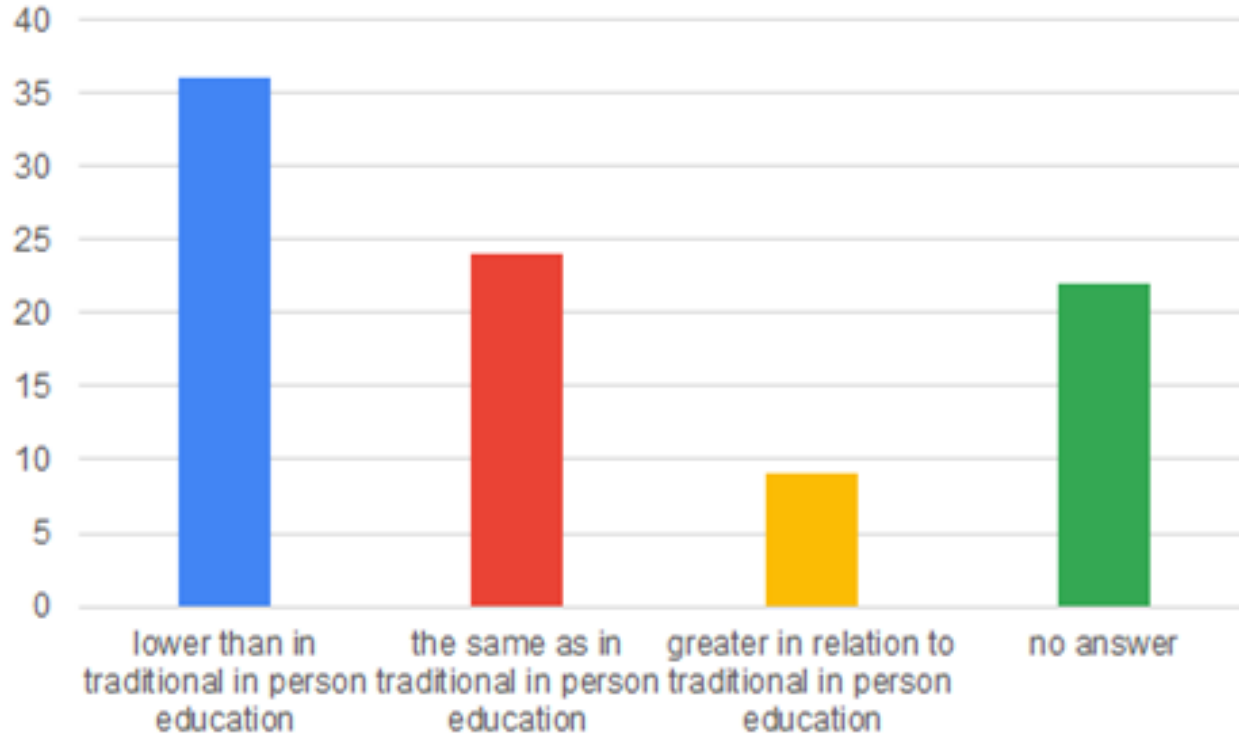


- greater in relation to traditional in person education
- lower than in traditional in person education
- the same as in traditional in person education
- other

Other answers:

- For lectures or in individual projects, where more emphasis is placed on individual work, distance learning definitely prevails, but in the activities requiring group work, in person education is better
- It depends on the course
- The hybrid is the best

# The expectations for online education from the perspective of own experience of the past 1.5 years: TEACHERS



# Rate of motivation to learn/teach online

## Students

- 55% - at the lower level than in the case of traditional in person education
- 36% - at the same level as in the case of traditional in person education
- 9% - at a higher level than in the case of traditional in person education

## Teachers

- 59% at the same level as in the case of traditional in person education
- 34% - at a lower level than in the case of traditional in person education
- 4% - at a higher level than in the case of traditional in person education

Advantages & disadvantages of online education

# Advantages of online learning: STUDENTS

Advantages of online education	Percentage
comfort of studying from home / or anywhere else (no need to commute)	29,1%
possibility of performing other activities at the same time	15,3%
virtual learning environment, e.g. access to materials, written assignments, everything in one place, easy contact	13,6%
time efficiency	13,5%
flexible form of participation in classes	10,0%
flexible time management	9,9%
expanding digital competences	4,6%
wider and more open access to knowledge (family members, friends could take part in the classes)	1,7%
other	2,3%
total	100,0%

# Advantages of online teaching:TEACHERS

Advantages of online education	Percentage
comfort of working from home / or anywhere else (no need to commute)	26,9%
virtual learning environment, e.g. access to materials, written assignments, everything in one place, easy contact	18,2%
expanding digital competences	12,0%
flexibility of contact with students / form of conducting classes	14,0%
time efficiency	12,8%
flexible time management	5,8%
possibility of performing other activities at the same time	4,1%
other	6,2%
Total	100,0%



# Advantages of online education

## STUDENTS:

The most important positive characteristics of online education is **comfort of studying from home** ( $\frac{3}{4}$  respondents).

The second most important advantages of online education were different in different universities:

- **virtual learning environment, e.g. access to materials, written assignments, everything in one place, easy contact** at BSU, UAL, IADT
- **time efficiency** at SWPS University
- **possibility of performing other activities at the same time** at CHNU

## TEACHERS:

The most important was **comfort of working from home / or anywhere else (no need to commute)** (at BSU, SWPS, CHNU) and **virtual learning environment, e.g. access to materials, written assignments, everything in one place, easy contact** (at SWPS and UAL).

One of the most important advantages of online learning was:

- **expanding digital competences** (CHNU and IADT)
- **flexibility of contact with students / form of conducting classes** (IADT)

NO INDICATION: **wider and more open access to knowledge (family members, friends could take part in the classes)**

# Advantages of online education

## STUDENTS:

### health and well-being:

- Accessibility for mental health sufferers and chronic illness sufferers
- Benefits of access to people with disabilities

### technical & organizational

- It's amazing having recorded sessions and being able to rewatch the more heavy content.
- Don't not have to travel to and from college (finance efficiency, fuel economy and time efficiency) as important advantages of online education.

## TEACHERS:

### health and well-being:

- some students feel more comfortable participating in an online space than in person.
- Safety
- opportunity to flatten hierarchy of mode of delivery
- less distracting than in-studio teaching

### technical & organizational

- not committing to travel to meetings that are then cancelled by the other party / parties

### online work as a significant form of designers' work

- consistent with the realities of the designer's work, at present designers use the online form a lot and students should learn to find themselves also in this form of work;

# Disadvantages of online learning: STUDENTS

Disadvantages of online education	Percentage
no direct contact with other students and with the lecturers	22,6%
difficulties with concentration	17,1%
lack of motivation to work/study	16,1%
no or limited access to specialized workshops, studios and materials	12%
“zoom fatigue” resulting from excessive use of the computer and online contacts	10%
difficulties with teamwork	7,5%
troubles finding the work-life balance	5,7%
limited feedback from lecturers and other students	5,5%
poor time management / no control over time	2,6%
other	0,8%
total	100,0%

# Disadvantages of online teaching:TEACHERS

Disadvantages of online education	Percentage
no direct contact with students	27,6%
“zoom fatigue” resulting from excessive use of the computer and online contacts	19,3%
noticeable lack of concentration among students	15,4%
difficulties with conducting teamwork projects	9,8%
no or limited access to specialised workshops, studios and materials	9,8%
troubles finding the work-life balance	8,3%
lack of motivation to work	5,1%
other	4,7%
total	100,0%

# Disadvantages of online education

## STUDENTS:

In all universities **no direct contact with other students and with the lecturers** was indicated as the most important disadvantage of online education.

3 students answered “No disadvantage for me”.

## TEACHERS:

Most (27%) respondents selected **no direct contact with students** and 19% of respondents – “**zoom fatigue**” **resulting from excessive use of the computer and online contacts**

Nobody selected **poor time management / no control over time**.

# Disadvantages of online education

## STUDENTS:

### technical and organizational

- Not all teachers are ready to work remotely /The lecturers not being prepared for online teaching and not knowing how to use google classrooms etc.

### health and well-being:

- Affects on my mental health and my overall attitude towards the course.

## TEACHERS:

### physical aspects of teaching & learning

- Discipline needs space for making and exhibiting
- No contact with the physical model

### cooperation with students

- Students are hesitant to share work in progress before they have it to a finished level. This makes it difficult to pinpoint any errors or inefficiencies in their process.
- You don't have any insight to what the student is experiencing or doing at the same time.

### meaning of work

- Students refusing to use cameras and microphones – so removal of interaction – feeling like you were talking to yourself.
- Lack of feedback from the lecture listeners means that you lose the sense of purposefulness of your own actions.

Difficulties of online education

# The greatest difficulties experienced with online teamwork projects

## STUDENTS:

### Technological/technical problems

- Relying on a bad internet connection means information is often delayed/missed entirely. I feel less able to participate.
- (...) some have one computer that needs to be shared with more people who also have online classes

### Using camera and microphone

- (...) other participants without a webcam and muted like ghosts (...)
- people don't participate because they can get away with turning up but making excuses like their camera or mic not working.

## TEACHERS:

### Technological/technical problems

- Encourage students to show their faces so that we can get to know each other.
- Poor Internet access; no control over this aspect; some students fail to turn on the cameras; lack of knowledge of the tools (platforms dedicated to classes), difficulties with joining



# The greatest difficulties experienced with online teamwork projects

## STUDENTS:

### Collaboration & Engagement

- bad connections and crossing over when talking is irritating. Not as natural as in person where conversation flows more readily
- (...) non-engaging, sitting at the same desk (no social/walking around) for hours making me sluggish. Some lectures were so long that there's less time for practical work unless you work with class running in the background. (missing details)
- Because you can't be seen on a zoom call, people usually don't participate in things like breakout groups or team working activities.
- difficulties with cooperation/ difficulties with teamwork
- Lack of live contact weakens cooperation

## TEACHERS:

### Collaboration & Engagement

- Students feeling isolated and so not interacting with people online
- Students are disengaged, they leave the workshops, they don't engage, they 'ghost'. Some are too shy to speak/turn camera on.
- I am not sure if running breakout groups constitutes "online teamwork projects", but the main problem with breakout groups is that about a third of the students leave the room when sent in to them, and choose not to participate.
- Inconsistent attendance and engagement; poor communication between students who had never met in person; decreased confidence; reduced enthusiasm and interest in exploring new ideas.

# The greatest difficulties experienced with online teamwork projects

## STUDENTS:

### Physical aspects of work

- It is difficult to show the physical work.
- No access to physical work space/studio/material

### Work and life at the same place

- It's much harder to get motivated. I also find it difficult to take a break, as my desk is in the same room as my TV so I'm confined to the same walls for work and relaxing
- (...) some students don't have the right space or technology to have online classes - some live with a lot of people.

## TEACHERS:

### Physical aspects of work

- The need to show miniaturized works, difficulty with understanding and pointing to a small model.
- The translation of a discipline built around analogue processes.

### Preparation to classes/ Work and life at the same place

- Bigger prep workload
- Adaptation of the technological and design workshop to home conditions

# The greatest difficulties experienced by the respondents with online teamwork projects: ONLY STUDENTS

## Health condition & lifestyle

- Discomfort
- Getting annoyed at the tinny sound. Not enough consideration of my needs as an autistic person.
- The awkwardness of being on call with people you haven't spoken to before
- Sometimes I had to go ahead and try to involve others. Thanks to this, I had to overcome my own barriers
- Classes are usually too long and there is too many classes in a row, what prevents students from a healthy lifestyle (no time to prepare meals, no movement for long periods of time, no fresh air, sitting alone in a room for that long makes me crazy.
- No support/ completely overburdened with extra tasks or responsibilities/ lack of clearly defined working space.

## Social contact / social life problems

- I didn't know anyone on my course until second year because nobody wanted to talk online last year
- loneliness
- no student community, no names to faces, just a non profile pics and texts rather than expressions

An exemplary online learning course.

# An exemplary online learning course.

## STUDENTS:

### Organization of classes:

- interactive classes
- using digital tools
- using break-out rooms to create small working teams

### Implementation of classes:

- 1:1 tutorials
- Work in teams,
- Space to learn and develop (allowing students to question and explore as well as giving them their own space to learn and develop)

## TEACHERS:

### Organization of classes:

- Organising workshop or studio at student's home
- Hybrid classes
- Using VR during classes

### Implementation of classes:

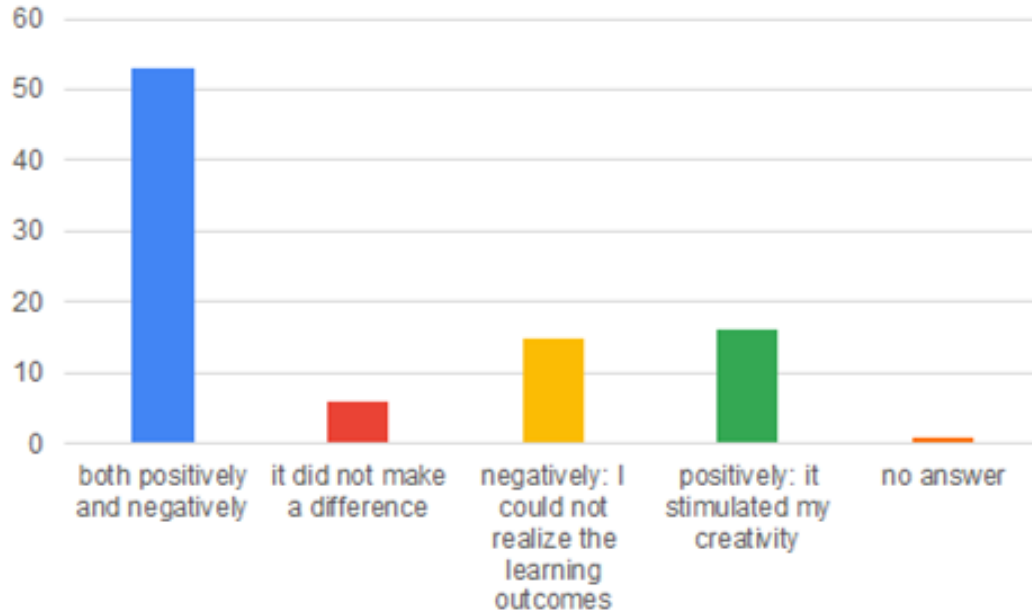
- Using various formats during classes e.g. lecture as introduction to class, individual or in groups work and discussion.
- Classes based on collaborative/group project;
- Classes based only on conversation or discussion online.
- Guest speakers during classes

Affection of online education on....

# Affection of lack or limited access to specialist workshop:STUDENTS

Affection of lack or limited access to specialist workshop	Percentage
negatively: I could not develop the projects correctly	35,1
both positively and negatively	31,2
it did not make a difference	15,5
no answer	12,4
positively: it stimulated my creativity	5,7
negatively: I could not develop and finish projects properly which lowered my motivation	0,3
Total	100,0

# Affection of online education on the content of classes:TEACHERS



Respondents who had higher expectations for online education saw more positive effects of it.



**Digital tools**

# Digital tools used in online education

- Google Apps, Google docs
- Audio notetaker
- Blackboard Collaborate
- Padlet
- Discord
- Miro
- Adobe
- Minerva
- Gleen
- iMovie, Procreate
- Instagram
- Library online
- Microsoft teams, MS Office
- Wooclap
- Kahoot
- Forest - management app
- Notion
- OBS
- Viber
- Sketchup
- Visme
- Vimeo
- Slack
- DataCamp, CodeCademy
- Siso
- Cecalt

Students

- Miro
- Google Apps, Google Meet, Jamboard
- Mural
- Blackboard Cooperation
- Zoom
- Mentimeter
- Microsoft Teams
- Padlet
- OBS
- Canvas
- VR (gravity sketch, framevr)
- Slack
- Milanote
- Mozilla Hubs
- Slido,
- Loom,
- GitHub,
- Unity Hubs
- Retrotool.io
- Worldwall
- Panopto
- webXR - framevr.io, engagevr.io via PC
- Oculus Quest 2
- TeamViewer

Teachers

# Missing functionalities of digital tools

## STUDENTS:

- **Functionalities of tools:** (calendar, no easy way to save records of the chat)
- **Only virtual** (lack of tactility, materiality; Being able to look at other people's studio spaces for inspiration)
- **Cooperation & feedback** (Not enough feedback from the group and from the teacher)
- **Virtual Reality** (VR (...)) I think it is more engaging than being in online meeting rooms.

## TEACHERS

- **Functionalities of tools:** better coordination across breakout groups; recording controls; Breakout rooms, wipe boards, sharing video more easily with better sound)
- **Only virtual:** I don't think any functionality could be developed to allow me to handle and manipulate the objects that the students are making?
- **Hybrid teaching:** Lack of workable structures and technological solutions for hybrid teaching

**using immersive technologies in education**

# Frequencies of using immersive technologies in online teaching

## Students

- 90% never used immersive technologies
- 4% used these technologies

## Teachers

- 86% never used immersive technologies
- 13% used these technologies

# The experience with using immersive technologies: STUDENTS

## Positive

- It's a new way and a good way to learn. Easy to review and the sound is more clear than in person. I really like this method. And when I join the 1 to 1 tutorials it's easy to see more people's design work clearly on the screen and I have got more inspiration from that.
- (...) It would have been nice to be taught about creating virtual exhibitions, or rather virtual spaces for exhibitions.
- Creativity, excitement, willingness to create
- Surprisingly fun and engaging
- It was quite the learning experience but I got the hang of it and now it is quite relaxing.

## Negative or rather negative

- Can't focus at all no matter how hard I try
- Boring, shallow
- May be more efficient

# The experience with using immersive technologies: TEACHERS

## Tools they used:

- I have had several experiences with AR using headsets, Google boxes, etc. I've also worked with binaural audio.
- I have taught many VR courses – both theoretical and practical both about VR and using VR
- A mix of XR solutions
- I have used EngageVR a virtual lecture room and met students there/made presentations
- Worked with students and alumni in WebXR on laptops/PCs and some fully immersed in VR – they all appreciated the new approach and different mode of interaction as many did not want to use Zoom.
- Using AR to visualize projects.
- In 'exhibition' settings

# The experience with using immersive technologies: TEACHERS

## The characteristics of these technologies and how and when they used them:

- Exploratory, interesting and engaging on a personal level. The applications for teaching are less clear.
- I use it for collaborative and self reflection, and currently looking at how to use it to innovate tutorial models.
- Communication with students, colleagues, staff, and professionals external to the university
- It only covered basics of AR and was difficult to demonstrate potential or find cross platform options that require minimal hardware setup initially. Opted for A-Frame in the end. Similar issues of how to troubleshoot individual setup needs as you have in-person though. Made more complex by only being able to access what a student screen shares.



# The experience with using immersive technologies: TEACHERS

For 2 teachers, their experience **with immersive technologies is not sufficient:**

- I'm still waiting to see a VR 'killer app' for teaching. VR does very nice online exhibition spaces but not much else.
- When we did the demos of the 3D web platforms I found it difficult to think of applications of the technology in my teaching practice. It felt more like finding a purpose for these technologies was a new problem to solve rather than a solution to a problem.

# Using new digital tools in the future (post-Covid reality)

Only 7 teachers **will not use new digital tools in the future or will not use VR**

3 respondents **do not know or they do not know the purpose of using them yet** (“Maybe! I'm open to it, but I haven't a clear idea of how or to what purpose I would use them”).

But 81 teachers **will use digital tools in the future.**

# The Experience of Online Education

3.

**FGI with ALSA**

“I really think online learning is the future.  
I really want to see it go forward  
and I really want to see it expand”.  
(Bath Spa University)

# Characteristics of respondents

University	Number of respondents	Specialities	Year of study
SWPS University	9	Communication Design (4 respondents) Domestic Design (1) Industrial design (1) 1st year (3)	3rd year (4) 2 year (2) 1 year (3)
Chernivtsi National University	8	Artistic woodwork (3) Artistic metalwork (2) Artistic painting (3)	4th year (2) 3rd year (2) 2nd year (1) 1st year (3)
Bath Spa University	3	Graphic Communication Fine Art Games Development	1st year (2) 2nd year (1)
University of Arts London	5	Curating and Collections Illustration B.A. Hons Illustration B.A. Hons Illustration B.A Fine Art	MA, 2nd year (1) BA, 2nd year (1) BA, 3rd year (3)
Institute of Art, Design and Technology	3	Animation Creative Music Production	2nd year (2) 3rd year (1)

# Advantages of online education

## ALSA FGI

- Distance learning allows students to work in their comfort zone without getting distracted by anything else.
- Possibility to combine studying with work
- It's often recorded so you can see it whenever it's good for you.
- I sometimes struggle with in-person.
- Possibilities of collaboration within different groups of students (random selection in breakout rooms): "(...) you work with those, whom you never work in traditional education. (...) You think this person is interesting and you can work with her/him and it can give interesting results (...) It is an interesting experience" (SWPS)

# Disadvantages of online education

## ALSA FGI

- Isolation
- No involvement. They just watch a recording later
- No pre-meet with the colleagues. Online is more formal in a way
- If you have everything online you don't need to go anywhere. You don't mix with people in the real world.
- That actually causes anxiety in the long term
- Lack of live consultations with teachers: “If you didn't know how to do something, there was no such physical contact that the lecturer would just come up and show - no, here you have to bend it, pin it this way - you just had to explain everything how to do what. And a lot of things you just had to do such research on your own” (SWPS)
- Lack of healthy competition among students, live communication, self-organization, distracting factors. You do not always have access to tools available in the workshop/ studio that need to be used to physically execute a work.

## ALSA FGI

“When I listen to stories from the previous year of people who have classes with the same lecturer that we had online with, and now they have live classes, I regret so much how they go about it that sometimes I even joke that I would not pass specifically to experience it. This is something, well, sadness that these relations have not been established ”

–SWPS University

# Challenges of online education

## ALSA FGI

- One of the biggest challenges was accessibility to technology.
- Self-discipline and self-control
- Finding the common ground between what needs to be done, what you aim to achieve and what your teacher sees in your work, point of contact to reach the result.
- “I didn't feel part of the university community anymore. I felt isolated from it.” (BSU)
- Physical aspects of our work: “(...) *we had just about plants, well, to feel these smells, because..., I don't know, this plant has a sweet smell, so what does it actually mean?* (SWPS)



# Future of online education

## ALSA FGI

“I want to be very clear, that's online learning as is, right now, two out of ten, as I've experienced it. But if there were changes with VR tech and everything that sounds awesome. I'm here for it, that'd skyrocket.”

—Bath Spa University

# Future of online education

## ALSA FGI

- Online learning should be more interactive.
- Hybrid form could be most optimal, but it is impossible to move everything online, in this specialization at least some classes need to be in person.
- Yeah, I guess VR stuff would be a game changer.
- I think that the idea of bringing VR to online learning is really, really good, if a bit inaccessible right now because of how much tech it needs.
- It's more the fact about how inaccessible VR is at the moment, that's holding that back.
- Online should absolutely be a part of future learning
- Hybridization and combining different things give more opportunities (“To daje po prostu no więcej możliwości te hybrydowanie i kombinowanie różnych rzeczy”)(SWPS)

## **Key findings**

## Key findings

- The pandemic has shown that online education is possible and effective, but:
  - Teaching methods should not simply be transferred from in-person education to online education. Need to develop ways of conducting classes and cooperation between students and teachers and between students in online education;
  - Both teachers and students should know how to use digital tools and online platforms;
  - The art and design education need specific digital tools to use during classes.

# Key findings

- Good practices:
  - 1:1 tutorials,
  - hybridised teaching (some online, some in-person),
  - lectures with elements of discussion,
  - work in smaller groups,
  - giving space to learn and develop (allow to ask questions and explore issues),
  - creative warm-up (e.g. simple task to stimulate with the possibility of connecting and interaction),
  - constant feedback from lectures and students (e.g. written critical feedback to presentation of students),
  - using various format during classes (lecture, individual or group task and discussion),
  - using VR during class.

## Key findings

- The most critical problems and difficulties were:
  - motivation to work,
  - student engagement,
  - teamwork,
  - feedback and commenting on each other's projects,
  - class discussion,
  - building and establishing social relationships,
  - well-being, finding work-life balance
  - creativity during online education.

## Key findings

- The comfort of studying/working at home and the accessibility of classes (e.g. for disabled people, introverted people) and materials (e.g. lectures recorded) were advantages of online education.
- In-person education and hybrid education were the most effective.
- We should use the tools and opportunities offered by modern technology in order to make education as accessible as possible.
- Art and design education are about materiality, contact with the physical model/ piece of art, and presentation of projects.
- Lack or limited access to workshops/studios, materials, technology, and opportunities for experimenting were described as serious difficulties during online education.

## Key findings

- Research shows also that immersive technologies can be a valuable tool in the future of online education in the field of art & design.
- VR and AR provide immersive and interactive experiences to e.g. better visualize and test designs and interact with art in new ways. (“We are able to see objects with many different perspectives through VR and also I can change the class environment to be more effective”)



**Thank you for your attention**