

**The Chinese University of Hong Kong
Centre for Learning Enhancement And Research**

Report for Student Survey on Learning Experience with Zoom

Background

The first ever university-wide synchronous online teaching on Zoom, a cloud platform for video and audio conferencing, started on 17 February 2020. To provide timely support to teachers and students, the Centre for Learning Enhancement And Research conducted two user experience online surveys to collect feedback of teachers and students on using Zoom to teach and learn in the first week of online teaching. This report presents the key findings of the student survey in two parts. Part I includes findings generated from the quantitative data while Part II includes an analysis of the responses to open-ended questions of the survey.

Administration of survey

Period – 19 to 22 February 2020

Means – uReply (Survey link was sent to all current students by mass email. Full survey is available at *Appendix I*)

Part I: Key findings from the quantitative data

Within the survey period, a total of 1,996 responses was received. Multiple responses from the same student was possible.

1. Respondent profile

1.1. Programme of study

Responses were received from students from three types of programmes and the distribution is presented in Table 1.

- Undergraduate programme (UG) – 77.0%
- Taught postgraduate programme (TPg) – 18.6%
- Research postgraduate programme (RPg) - 4.4%

1.2. Faculty

Students from all eight Faculties were represented. Faculty of Business Administration was the biggest group (22.9%), while the Faculty of Law was the smallest group (3.2%).

		Raw number	Valid Percentage
Valid	Arts	369	18.9%
	Business Administration	447	22.9%
	Education	129	6.6%
	Engineering	265	13.6%
	Law	62	3.2%
	Medicine	192	9.8%
	Science	200	10.2%
	Social Science	288	14.8%

	Valid Total	1952	100%
Missing		44	
Grand Total		1996	

1.3. Location

Most of the respondents were in Hong Kong (82.2%), followed by Mainland China (10.8%), and the other countries and regions (7.0%; including UK, US, Australia, The Netherlands, Austria, Malaysia, India, Pakistan, Indonesia, Singapore, South Korea, Sri Lanka, Japan, Thailand, Brunei, Vietnam, Kazakhstan and Kyrgyzstan.)

2. User experience and feedback

In this section, students were asked how their learning experience was like with the use of Zoom. Descriptive findings are summarized below.

2.1. First time Zoom user

Most respondents (85.8%) were first time user.

2.2. Device used

Laptop/notebook computer (76.5%) was the most used device, followed by desktop computer (14.7%), tablet (4.7%), and mobile phone (4.1%).

2.3. Zoom speed

Most students reported that the speed of the Zoom platform as “Very smooth” (14.6%) or “Quite smooth” (55.5%).

How would you describe your experience of the speed of the Zoom platform?	Percentage
Very smooth	14.6%
Quite smooth with only occasional lags	55.5%
Lagged from time to time but was still acceptable	21.1%
Lagged quite a lot	6.7%
Very laggy	2.2%

2.4. Difference in virtual tutorial class size

Over half of the respondents (57.9%) reported that they “do not know” whether there was a difference in tutorial class size; 15.9% reported there was “no difference”; 16.3% reported there were fewer participants in the virtual lessons, whereas only 9.9% reported there were more participants.

2.5. Use of different Zoom functions

“**Chat**” was the most popular Zoom function, which was used by 93.6% of the respondents. The “**Raise hand**” function was used by 34.1% of the respondents. More than half (59.0%) of the respondents have used the “**Breakout room**” function. When asked whether the breakout room was a good learning experience, students’ opinion was about equally divided (Yes, 34.9%; No 36.4%; No View 28.7%).

Zoom functions	% of usage	A good learning experience?
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		Yes	No	No view
Breakout room	59.0%	34.9%	36.4%	28.7%
Chat	93.6%	/	/	/
Raise hand	34.1%	/	/	/

2.6. Level of attention and participation

About a quarter (23.9%) of the respondents reported an increase in level of attention and participation in virtual lessons. More than half (59.8%) responded without increase in level of attention and participation, and 16.3% has no view on the level of attention and participation in the virtual lessons.

2.7. Learning effectiveness

About 1/3 (34.2%) of the respondents agreed that Zoom has enabled them to learn effectively. Close to half (43.5%) reported “No”, and 22.6% reported “No view”.

2.8. Overall satisfaction

About 40% of respondents were “highly satisfied” or “satisfied” with the use of Zoom in online learning. About 30% were “unsatisfied” or “highly unsatisfied”. Another 29.4% were neutral.

Indicate your overall level of satisfaction with the use of Zoom in online learning.	
Highly unsatisfied (1)	9.0%
Unsatisfied (2)	20.6%
Neutral (3)	29.4%
Satisfied (4)	34.3%
Highly satisfied (5)	6.6%

A score of “5” represents “very satisfied”, whereas a “1” indicates “very unsatisfied”.

Part II: Qualitative comments

There were two open ended questions on the good aspects of Zoom, as well as the difficulties faced. See *Appendix II* for detailed breakdown of the comments.

1. Comments on good aspects

A total of 1,210 comments were received. Close to half (45%) of the comments were related to learning incentives (e.g., saving travel time, increased flexibility), followed by learning environment (30%), learning behaviour (13%) and technical features (12%). Some typical comments are:

- **More comfortable to raise questions:** “I was shy to ask questions during face-to-face lectures, and now I could send a private chat to professors and receive immediate responses from them”
- **Active participation in chat box:** “Encouraged instant response (while many may remain silent in face to face meeting due to shyness, in Zoom people seem more actively giving comments as they can just type in the chat box without showing faces or even revealing identity once they heard something interesting along the lecture)”
- **Clear view:** “Can see what professor writing more clearly compared to face-to-face class when I am sitting at the back”
- **Save travel time:** “Save travelling time, can reach similar learning outcomes compared to face to face teaching”

- **Maintain interaction:** “Maintains meaningful teaching in this difficult time. While allowing real time interactions similar to face to face teaching in campus.”

2. Comments on difficulties or support needed

A total of 1,819 comments were received. Most (58%) of the difficulties reported were technical in nature, including basic technical issues answerable by existing guidelines (29%), and more advanced issues that required further support (29%). About a third (34%) were related to pedagogical problems (e.g., reduced interaction and attention). Other issues such as excessive screen time and library support were also mentioned. Some typical comments are:

- **Reimbursement of equipment:** “Zoom is the incompatible software for my laptop. Thus, my laptop turns black or lags a lot from time to time when I use Zoom”. “Need to spend money to buy a webcam and a microphone”, “changing laptop battery service for free”, “Data card for accessing network”.
- **Hard to use:** “It is inconvenient to jot down notes using the same device at the same time.”
- **Technological incompetency:** “problems always arise, and I don't know how to solve it.”, “Network is not stable”
- **Time difference:** “Because the university decided that all classes would occur in their scheduled time as before, I now have to wake up 3:30 AM to attend some classes. My earliest classes are 3:30 AM and my latest are at 9:30AM, with classes happening at every instance in between.”
- **Teachers overrunning classes:** “Some teachers tend to overrun as no one is using the "classroom" or "lecture room" in the coming time but I have to attend another lesson”.
- **Students’ learning environment:** “My flat is small; I cannot freely express my opinion especially when the content is sensitive”. “Someone broke into my room during lessons”

Appendix I: Full student survey

Question number (MC): 1

Indicate your programme of study

- a. Undergraduate programme
- b. Taught Postgraduate programme
- c. Research Postgraduate programme

Question number (MC): 2

Indicate your faculty

- a. Arts
- b. Business Administration
- c. Education
- d. Engineering
- e. Law
- f. Medicine
- g. Science
- h. Social Science

Question number (MC with others): 3

Indicate your current geographical location

- a. Mainland
- b. Hong Kong
- c. Macau
- d. Taiwan

Others: Other parts of the world – please specify

Question number (MC): 4

What types of devices did you use for viewing the virtual lessons?

- a. Desktop computer
- b. Laptop / notebook computer
- c. Tablet
- d. Mobile phone

Question number (MC): 5

How would you describe your experience of the speed of the Zoom platform?

- a. Very smooth
- b. Quite smooth with only occasional lags
- c. Lagged from time to time but was still acceptable
- d. Lagged quite a lot
- e. Very laggy

Question number (MC): 6

Was it your first time to use Zoom for online communication?

- a. Yes
- b. No

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Question number (Value): 7

How many virtual lessons have you attended so far?

Question number (Value): 8

Among these lessons, how many were lectures?

Question number (Value): 9

Among these lessons, how many were tutorial sessions?

Question number (MC): 10

In the case of tutorial sessions, was there a difference in the class size?

- a. More participants in virtual sessions
- b. Fewer participants in the virtual sessions
- c. Do not know
- d. No differences

Question number (MC): 11

Did the teachers in any of these lessons use the 'Breakout Room' function to group participants for group work?

- a. Yes
- b. No

Question number (MC): 12

If so, do you think it was a good learning experience?

- a. Yes
- b. No
- c. No view

Question number (MC): 13

Did the teachers in any of these lessons use the 'Chat' function, i.e. you sent text messages to the teacher and your peer during the lesson?

- a. Yes
- b. No

Question number (MC): 14

Did you use the function 'Raise hand' to initiate a question or a comment?

- a. Yes
- b. No

Question number (MC): 15

Comparing to traditional classes, do you think your level of attention and participation increased in the virtual lessons?

- a. Yes
- b. No
- c. No view

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Question number (MC): 16

Do you think Zoom has enabled you to learn effectively?

- a. Yes
- b. No
- c. No view

Question number (MC): 17

Indicate your overall level of satisfaction with the use of Zoom in online learning.

- 1. Highly unsatisfied
- 2. Unsatisfied
- 3. Neutral
- 4. Satisfied
- 5. Highly satisfied

Question number (Text): 18

List some good aspects of learning online using Zoom.

Question number (Text): 19

List some problems/difficulties you have had in learning online using Zoom.

Question number (Text): 20

List the support you may need in order to enhance learning outcomes using Zoom

Question number (Fill-in the-blanks): 21

If you are interested in sharing your user experience in greater depth, you may leave your contact with us and the Centre for Learning Enhancement And Research will contact you.

Name: _____

Email: _____

Contact phone number: _____

Appendix II – Breakdown of qualitative comments

1. Comments on good aspects of Zoom

A breakdown of the major comment categories is presented below:

Category	Comment	No. of responses	Percentage
Learning behaviour (n=163, 13%)	Easier and more comfortable to ask questions and give responses	100	8.3%
	More focused in class	34	2.8%
	Improve attendance e.g. punctuality, attend to lessons	25	2.1%
	Enhance individual learning	3	<0.5%
	Build up self-confidence	1	<0.5%
Learning environment (n=363, 30%)	Easier to record and review lectures	95	7.9%
	Clearer explanation, notes and lecturing	56	4.6%
	Enhance overall communication and interaction	48	4.0%
	More relaxing and comfortable learning environment	47	3.9%
	Can sustain learning under f2f class suspension	39	3.2%
	Easier to get feedback and responses (from teachers and/or classmates)	29	2.4%
	Safer	24	2.0%
	Easier to share ideas and initiate discussions	16	1.3%
	Easier to take notes	8	0.7%
	More organised (i.e. lecture)	1	<0.5%
	Learning incentives (n=542, 45%)	Save transportation time and/or cost	291
Flexibility in time and location e.g. can have lesson anywhere, better use of time		162	13.4%
Generally convenient		76	6.3%
Interesting and fresh learning experience		9	0.7%
Improve overall engagement and motivation		4	<0.5%

	Specific functions (e.g., chatroom, breakout room, virtual background)	37	1.8%
Technical features (n=142, 12%)	User-friendly	22	1.7%
	Satisfying functions e.g. unique, rich and useful features	20	1.6%
	Screen sharing	19	1.2%
	Smooth operation	15	1.2%
	Easy to access	14	1.1%
	Allow learning similar to f2f class	13	3.1%
	Enable large size classes while maintaining interaction	1	<0.5%
Other (n=1)	More environmentally friendly e.g. switching hardcopy submissions to online	1	<0.5%
Grand Total		1,210	100%

2. Comments on difficulties or support needed

A breakdown of the major comment categories is presented below:

Categories	Comments	No. of Response	Percentage
Basic technical questions (n=529, 29%)	Network connection is not stable	380	20.9%
	Technical difficulties (did not mention specific difficulties)	58	3.2%
	Specific problems on particular functions (e.g., sign-in, chat, share-screen, audio)	52	2.9%
	The app lags	39	2.1%
Advanced technical questions (n=529, 29%)	Lecturers are not well-prepared, both technically and in the manner of teacher (voice not clear or talk too fast, echo in microphones, unclear demonstrations).	109	6.0%
	Don't know how to record the lesson	93	5.1%
	Hardware/financial support: their laptop cannot support fluent zoom experience, they do not have headphones and microphone, they may need to buy extra data usage for Zoom. They may need dual screen/two devices for multitasking in Zoom	82	4.5%

	Learning environment: Students' environment is full of distraction/disturbance, or that their participation may be affected by or affect their family	69	3.8%
	Issues related to share-screen (e.g., laggy when sharing video, illegible handwriting by teacher)	58	3.2%
	Students need tutorials, Q&A, and supporting hotline on using Zoom	25	1.4%
	Issues related to breakout room (e.g., cannot communicate with teacher/TA)	24	1.3%
	Issues related to chat (e.g., difficult to keep up with long chat history)	16	0.9%
	Issues related to virtual background (e.g., lack of guidance, does not work well)	13	0.7%
	Zoom invitations are messy and confused because teachers announce the invitation by different methods. Should have a single platform (i.e. Blackboard or CUSIS) containing all invitations, with reminder or timetable.	12	0.7%
	Issues related to raise hand function (e.g., difficult to find the button, teacher did not notice)	9	<0.5%
	Other technical issues (e.g., can't adjust volume within app, need caption in video)	19	1.0%
Pedagogical problems (n=614, 34%)	Interaction: Reduced genuine interaction with teachers & classmates; reduced interactive activities	238	13.1%
	Attention decrease: students are distracted because they are not in the classroom.	133	7.3%
	Camera and Mute functions: Lecturer should not force to switch on camera or unmute. Not comfortable talking to camera, family reasons, protecting privacy, and too much noise from other classmates	105	5.8%
	Discipline-specific problems: (Art - low quality videos, cannot appreciate 3D artwork, cannot appreciate demonstrations of art skills) (Music - low quality audios) (Sign language - cannot view all classmates' performances) (PE - cannot practice)	47	2.6%
	Assessment: Presentation and group discussion affected. Hard to take quiz on Zoom. Special exam method should be	40	2.2%

	provided. Favor pass/fail grading, assessment changed without students' consent		
	Camera and Mute functions: Lecturer should mute others to prevent noise from other classmates.	31	1.7%
	Camera and Mute functions: Mandatory to turn on camera and unmute so that they can be more concentrate and interact with other classmates.	13	0.7%
	Class disciplinary: Students deliberately make fun of or screenshot those who have opened their camera.	3	<0.5%
Other issues (n=87, 5%)	Health: Looking at the monitor for a long time is harmful.	28	1.5%
	Other support: Library resources/books/ebooks	17	0.9%
	Geographical limitation (e.g., time zone differences, unstable network, VPN access in China)	16	0.9%
	Other support: More detailed lecture notes or PowerPoint slides, printing services	14	0.8%
	Other support: Provide PowerPoint slides or notes before lesson	7	<0.5%
	Refund part of tuition fees	5	<0.5%
Dislike Zoom without a reason.		60	3.3%
Incomprehensible Comments		10	0.5%
Grand Total		1,819	100%