ANALYSIS OF 2021 DIFFERING PERCEPTIONS OF QUALITY OF LEARNING

QAA collaborative project | Report











Analysis of 2021 Differing Perceptions of Quality of Learning (final report)

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Introduction

Differing Perceptions of Quality of Learning is a collaborative, QAA-funded project about students' perceptions of the quality of learning and teaching in the context of the COVID-19 pandemic. The 2020/21 academic year has not been a typical one, and the project team wanted to understand to what extent students have been able to have the university experience they may have expected or wanted. This project gathered evidence from undergraduate students of their perceptions of the quality of learning and teaching in the context of the COVID-19 pandemic, with a focus on how these perceptions differ by ethnicity.

By focussing on ethnicity, the study will help add evidence to the sector regarding tackling the awarding gap, and it will contribute to strengthening the voice of students of different ethnicities. With this focus, the project team intended to ensure that approaches taken to the delivery of blended learning do not disproportionately adversely affect any group(s) of students. Furthermore, this project is expected to add to evidence being collected by partners in their existing institutional projects. Additionally, this project explored how student perceptions of quality of learning differ between different subject areas. Participation in the research required participants to complete a survey questionnaire and/or attend an online focus group.

This collaborative project is funded by the Quality Assurance Agency for Higher Education in the UK. To provide comparability for the data analysis, four universities participated in this project: the University of Portsmouth (UoP), Manchester Metropolitan University, Solent University, and the University of Nottingham.

Occasionally, early in this report, we refer to Black, Asian and Minority Ethnicity (BAME) students, although our analysis is actually much more granular. We recognise the need to move away from this general terminology, but occasionally use it when referencing relevant literature, or to give context by using terminology that is likely to be more familiar to a wider audience.

1. Methodology

1.1. Justification

The 2020/21 academic year has not been a typical one, and we would like to understand to what extent students have been able to have the university experience they may have expected or wanted. Research carried out before the COVID-19 pandemic shows us that the student experience at university can vary significantly. We know, for example, that certain student groups disproportionately miss out on being awarded certain degree classifications, and that there are students who never really feel as though they 'belong' to their university community. When it comes to higher education, a discrepancy has been observed between White and BAME students regarding the awarding of certain degree classifications (OFFA, 2015; Zwysen & Longhi, 2016; Richardson, 2012; Singh, 2011; Richardson, 2008; Broecke & Nicholls, 2007). We want to understand more about this area through this project.

While there is much progress still to be made by universities in terms of increasing diversity and representation from minority groups, as well as ensuring they have equality (Runnymede Trust, 2015), higher education institutions (HEIs) should be careful not to make assumptions about correlations between awarding gaps and BAME student engagement with academic support, as there may not always be a causal relationship, and there may be multiple causal factors (Panesar,

2017). Furthermore, internal data analysis (UoP, 2020) has shown that students have differing expectations of higher education outcomes, depending on their ethnicity. This project will put an emphasis on the concept of differing perceptions (and expectations), in order to investigate whether students have other expectations, related to their learning experience during the 2020/21 academic year, which also differ by ethnicity.

In 2020 researchers argued that 'the attainment gap in Higher Education outcomes between under-represented ethnic minority groups and the white student body is a problem at a variety of institutions around the UK, requiring immediate and sustained interventions and actions' (Peterson & Ramsay, 2020, p. 34). Research typically focused on, for example, 'low confidence, classroom and placement experience, curricular content, reading lists and delivery' (Smith & Beckett, 2017). If the awarding gap was a problem prior to the 2020/21 academic year, given that the pandemic has made the 2020/21 academic year highly atypical, it may be hypothesised that the new circumstances and different methods of delivering teaching may have become additional factors that affect the awarding gap. Such factors include blended learning, active online learning, and accessibility. All of these factors will be viewed under a different lens, depending on an individual student's differing perceptions and expectations in these new learning environments. Differing perceptions of quality of learning and quality of teaching will be explored, together with any perceived facilitating factors and/ or barriers to learning in the new environment.

Recent research findings (Armellini, Antunes & Howe, 2021) indicate that while a quality learning experience is needed for a quality student experience, it is not enough on its own; staff-student relationships — particularly with personal tutors — are also a major influencing factor which encourages students to engage with their courses and the university community. Students emphasise the value of both independent and group learning, which can be achieved through well-designed courses and the effective use of technology. An emphasis on employability, by providing activities and assessments establishing a connection between learnt theory and how this can be put into practice in the workplace, is also valued by students. When it comes to student support, a holistic approach is valued by students, with a balance between academic and pastoral support (Armellini et al., 2021).

It is important that through this project we investigate whether findings correlate with students of different ethnic backgrounds. By exploring different perceptions of quality of learning and teaching between students of different ethnic backgrounds, this project primarily adds to the evidence base in the sector related to tackling the awarding gap. It also strengthens the voice of students of different ethnicities. Finally, it enables staff to improve teaching methods and student engagement for the 2021/22 academic year, it informs curriculum development for the 2022/23 academic year, and it informs the development of relevant policies at the institutional level and across the sector.

1.2 Objectives

The primary objective of this project was to understand differing student perceptions of the quality of learning and teaching in the context of blended learning during the COVID-19 pandemic, with a focus on how these perceptions differ by ethnicity and subject area. Secondary objectives include the following:

- to help add evidence to the sector regarding tackling the awarding gap and help strengthen the voice of students of different ethnicities
- to add to evidence being collected by partners in their existing institutional projects, which draw on BAME student networks and will be a valuable channel for student engagement

- to enable staff to adjust mechanisms for engaging and teaching for the 2021/22 academic year
- to identify staff development needs
- to inform curriculum development for the academic year 2022/23
- to inform policy, notably institutional work related to Access and Participation Plans (APPs).

In addition to demographic questions, students were asked questions from across the following sections: Learning and Teaching; Accessibility; Engagement and Expectations; and Assessment and Feedback.

1.3 Research methods

Participation in the research required participants to complete a survey questionnaire and/or attend an online focus group. Ethical approval was sought from the Faculty of Humanities and Social Sciences at the UoP; approval was granted on 10th May 2021.

1.3.1 Survey

The survey items were developed by the team at the UoP, with input from the whole partnership. The survey was designed to complement existing tools in use at partnership institutions and to collect a demographically stratified sample. It probed students' perceptions of the quality of the learning and teaching they have experienced, drawing on and learning from the pulse surveys that were undertaken by some of the partners and the partners' students' unions in recent months. The UoP engaged their students or student representatives with a pilot survey to ensure that the survey tool had been appropriately designed to capture the student voice. The pilot test survey was completed by 12 students/BAME ambassadors. Their feedback was positive and did not result in major structure or content changes; the main point of criticism was the lack of choice when selecting year of study — the options given were first/second/other, and a number of the pilot participants were third-year students (although the survey was not going to be delivered to third-year students).

The questionnaire for each partner was designed on the JISC online surveys platform (formerly BOS). The UoP research team sent generic links for the survey to participating UoP course leaders and the main contacts for collaborative partners, with a timeframe of a few weeks for completion. Different links were generated for different partners and different courses, to help with the analysis of the data. They then sent the links primarily to their first-year and second-year students of the participating courses, along with an email invitation. The email invited students to voluntarily participate in the project by completing the online questionnaire, which would allow them to have their voice heard. Each institution organised the provision of incentives to students for their engagement with the survey.

The survey comprises 32 questions covering the following themes: demographic information; Teaching and Learning; Accessibility; Engagement and Expectations; Assessment and Feedback; and general questions about learning. It was designed by the project, and the version that was used to collect the data can be found in the appendices. Completing the survey took approximately 20 minutes.



Figure 1: Core themes in the survey questionnaire

To summarise, the structure of the core questionnaire explores students' experiences over the past year and expectations/preferences for the coming academic year regarding the quality of teaching and quality of learning.

The overall questions that were examined were the following:

- 1. How was the students' learning experience during the academic year 2020-21?
- 2. What are students' teaching and learning expectations for next year?
- 3. Are there any statistically significant differences in the answers of students of different subject areas?
- 4. Are there any statistically significant differences in the answers of students of different ethnicities?

Following the completion of the questionnaires and cleaning of the data, the questionnaire data were: (i) presented to each participating university in summary reports, as produced on JISC online surveys, for a flavour of the results, and (ii) analysed using SPSS and Python (quantitative data) and NVivo (qualitative data) by the UoP research team for all partners, for a more in-depth analysis.

The survey was open from 10th May to 1st June 2021. Two courses started with a delay, and their closing date was 9th June.

1.3.2 Focus groups

Follow-up focus groups were conducted during June 2021 to gain a deeper understanding of the survey results. The survey questionnaire asked students if they would like to participate in the focus

groups. Even though the process was random, the final distribution of participants was representative of the different courses and ethnicities/backgrounds, so there was good diversity. Nine focus groups and one interview were conducted across the four universities, and one set of responses was submitted as typed answers. There were 33 focus group participants in total (see section 1.3.3.2 for more detail).

The focus groups were semi-structured, with a minimum of two and a maximum of six people. There were some initial questions regarding assessment and feedback that the facilitator/researcher asked, but the direction of the discussion was permitted to change, depending on what issues were raised by the students during the session. Given in the appendices are the questions which were used to initiate discussion. Each focus group lasted 45-60 minutes. The focus groups were run by institutions locally, and data was fed to the UoP team. The collected data were: (i) transcribed by someone external to the project and professionally unrelated to those involved (a sample was checked by the research team for accuracy), (ii) fully anonymised and (iii) then analysed on NVivo with thematic content analysis. Figure 2 shows the core themes in the main focus group questions:

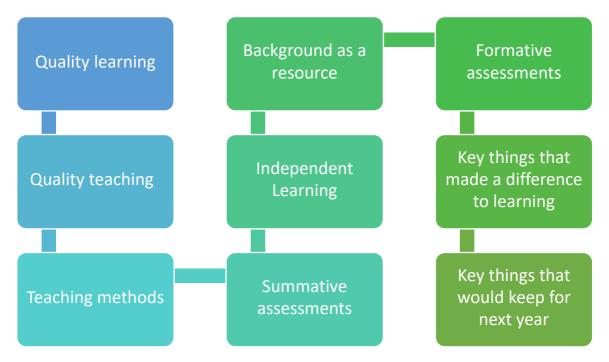


Figure 2: Core themes in the focus group questions

1.3.3 Population

We invited L4 and L5 students enrolled on the following courses (which were/are intended to be campus-based) to participate in the survey and the focus groups:

Courses that participated in the project	
University of Portsmouth BA (Hons) Accounting with Finance BA (Hons) Business and Management BEng (Hons) Civil Engineering BEng (Hons) Mechanical Engineering BN (Hons) Nursing (Adult) BSc (Hons) Computer Science MPharm (Hons) Pharmacy	University of Nottingham BSc (Hons) Management BSc (Hons) Finance, Accounting and Management BSc (Hons) Industrial Economics BSc (Hons) Computer Science BSc (Hons) Nursing (Adult)
Manchester Metropolitan University BEng (Hons) Mechanical Engineering BSc (Hons) Computer Science BA (Hons) Business Management BSc (Hons) Adult Nursing	Solent University BEng (Hons) Mechanical Engineering BSc (Hons) Adult Nursing BA (Hons) Business Management

Table 1: Participating courses in the project

The rationale behind choosing these courses was that they are courses with comparatively good diversity in student ethnic backgrounds, and they are also courses that could be compared between the participating collaborative partners (this factor is necessary for data comparability purposes).

Analysis highlighted trends for the whole sample overall, by ethnicity, and by subject area. The three subject areas were: (i) Health Sciences (Pharmacy and Adult Nursing courses), (ii) Business Studies (Management, Accounting, Finance, Business etc., plus various permutations/combinations), and (iii) Other Sciences (Civil Engineering, Mechanical Engineering, and Computer Science).

1.3.3.1 Survey sample

Eight hundred and thirty-five (835) undergraduate students (98% first- and second- year students) from the four universities that participated in this project completed the survey. The following table (Table 2) shows the demographics of the sample.

Characteristic	Group	N=	% of total
Gender	Man	431	52
	Woman	395	47
	Non-binary	3	0.4
	Preferred not to say	6	1
Year	First-year	409	49
	Second-year	411	49
	Other	15	2
Fee status	ик	636	76
	EU	59	7
	International	98	12
	Preferred not to say	42	5
Ethnicity two-way	BAME	385	46
	White	432	52
	Preferred not to say	18	2
Ethnicity six-way	Arab	47	6 (12% of BAME)
	Asian	201	24 (52% of BAME)
	Black	92	11 (24% of BAME)
	Mixed	31	4 (8% of BAME)
	White	432	52
	Other	14	2
	Preferred not to say	18	2
Subject area	Health	236	28
	Business	252	30
	Other sciences	347	42

Table 2: Survey sample distribution

The sample demographics show a fairly even distribution of the sample regarding gender, first/second year of study, and BAME/White students. Students with Home (UK) fee status are significantly greater in number than students with other status. Among BAME students, 52% are Asian, 24% are Black, 12% are Arab, and 8% are Mixed.

1.3.3.2 Focus groups sample

The table below gives the focus group participants' ethnicities and subject areas:

Ethnicity	Business Studies	Other Sciences	Health Sciences	N =
Arab	0	1	0	1
Asian British	2	0	0	2
Asian Chinese	0	1	1	2
Asian Indian	2	0	0	2
Asian Other	1	0	0	1
Asian Pakistani	0	0	2	2
Black African	0	1	1	2
Black Other	0	0	1	1
British	1	0	0	1
East African/Cypriot	0	0	1	1
Eastern European	2	0	0	2
Not given/Not known	2	2	2	6
White	2	6	2	10
Total	12	11	10	33

Table 3: Focus groups sample distribution

2. Results

This section will present results from the analysis of the survey data. Presentation of results by subject area will be followed by results by ethnicity. For results of the overall sample, see Appendices C, D & E (Appendix C includes Figures 3-17).

2.1 Statistical testing methodology

The data in the Likert scale questions are ordinal. We used the Cronbach's alpha coefficient as an internal consistency reliability assessment tool for each scale. All the values of Cronbach's alpha were found to be greater than 0.7, showing internal consistency. Spearman's rho, chi-squared, Kruskal-Wallis and Dunn's tests were used, among other statistical tests, depending on the nature of the question, for comparisons of answers to certain questions between different groups.

When testing for significant differences between grouped responder means for question groups, statistical testing was done as follows: The responder means for each question/question group were grouped by ethnicity (or subject area), and each group of means was tested for normality using the Shapiro-Wilk test. P-values were generally less than 0.05, and there were no questions for which all ethnicity p-values were greater than 0.05; therefore, the data was deemed to be non-normally distributed. Bartlett's test was also applied to test for homo-scedasticity, and where this was confirmed, the Kruskal-Wallis test was used. Where statistically significant differences were found between medians (of responder means, grouped by ethnicity), Dunn's test was applied – with

Bonferroni's correction – to determine which groups' medians were statistically different from each other.

2.2 Results by subject area

236 (28%) Health Sciences students (pharmacy and adult nursing), 252 (30%) Business Studies students (including management and accounting), and 347 (42%) Other Sciences students (including computer science, mechanical engineering, and civil engineering) completed the survey.

Teaching and learning in 2020/2021

Perception of value of elements of teaching (Figure 18)

Health Sciences students were the most positive students regarding the value of most elements of teaching on their programme/course during 2020/2021 (Figure 18); they were followed by students of Other Sciences, and finally Business Studies. This was the trend for most elements of teaching, with the exception of personal tutorials, face-to-face sessions on campus, and formal individual tasks. For the latter, more Other Sciences students found them valuable than any other subject area. With the exception of recordings of teaching materials, formal individual tasks and activities, and opportunities to ask questions, Health Sciences students were statistically significantly different in their responses regarding all other elements, with highly significant differences for online streaming of live lectures, lecture engagement sessions, individual feedback, and personal tutorial sessions.

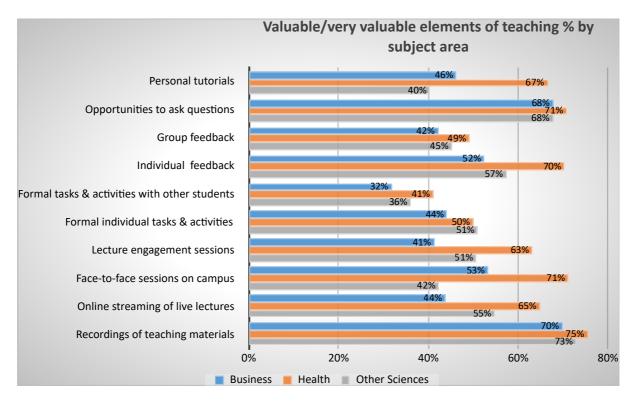


Figure 18: Valuable/very valuable elements of teaching % by subject area

Recordings of teaching materials were reported as the most valuable teaching element for students of all three subject areas. Opportunities to ask questions and individual feedback were also highly valued by students of all subject areas.

Students from all subject areas mentioned the benefits of recorded material, which allowed them to study at their own pace and review content at will. Recorded material was also useful for revision purposes.

"For me personally that [recorded material] was extremely helpful, and to be honest if they didn't do that, I probably wouldn't have made it through first year. People like me and maybe other people who have any type of mental disability, being able to go back and learn things at our own pace and put it on our own schedule is very helpful."

#student H (Black Other, Health Sciences)

Open question: Q29

Q29 asked students what quality teaching means to them. There were 196 Business Studies, 253 Other Sciences and 196 Health Sciences responses.

All subject areas

There was general agreement between **all subject areas** on what constitutes quality teaching. For all subject areas, quality teaching is frequently identified as teaching that:

- is engaging or passionately delivered
- develops, ensures and/or facilitates understanding (esp. Health Sciences)
- is conducive to learning, knowledge retention, and/or achieving goals
- is clear, comprehensible and concise (words like "effective" and "efficient" were used)
- provides support and guidance
- prepares students for assessments (esp. Business Studies)
- gives opportunities for interaction with staff (esp. Business Studies)
- is personalised or tailored to student requirements, preferences or ability (esp. Health Sciences).

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In relation to quality teaching and learning, students highlighted the importance of having access to resources, and the need to appreciate that different students have different learning requirements and preferences. In the context of quality learning, acknowledging that different students have different learning requirements and preferences might mean students being given the opportunity to play to their strengths – this might take the form of a variety of learning materials or a broad variety of assessments.

"If there could be differentiation in teaching, so being able to understand and know and acknowledge that there [are] different students and there [are] different ways that people learn. If you can [...] cater to different ways of being able to convey the information, I think that's quality teaching."

#student J (Black African, Health Sciences)

"It means delivering the information to students in a number of ways to allow everyone with different learning styles and needs to access the information. Along with open dialogue regarding schedules etc., so we can actually get hold of someone when we need them!!"

"Listening to the students' problems and finding [...] way[s] to teach differently to them so that they understand."

Business Studies students somewhat frequently associated quality teaching with:

- motivation and encouragement (also Other Sciences)
- on-campus teaching.

"Interaction with the students so that they are motivated to work hard and achieve high marks."

FOCUS GROUP

Business Studies students highlighted the need for tutorials and other live sessions to be more interactive and less like lectures. The perception was that lecture-style material could be delivered in a pre-recorded format, but the tutorial or seminar should be more of a discussion of the material in the pre-recorded lecture. Related to this, these students also relatively frequently raised the issue of staff just reading off slides and delivering rather stale powerpoint presentations with little engagement with students. These students also highlighted the importance of having accessible, available and approachable members of staff.

"Increase [in the] number of seminars and a decrease in having notes on slides and having lecturers reading from them. It is hard to keep focusing when content is being read off the slides. It is more engaging when there are questions as it keeps us challenged and active."

#student D (Asian British, Business Studies)

Teaching staff that answer questions effectively; teach students, rather than lecture at them; facilitate understanding; and deliver content that is clear, comprehensible and relevant were all seen as elements of quality teaching by Business Studies students.

Other Sciences students also associated quality teaching with:

- motivation and encouragement (also Business Studies)
- in-depth and high-quality explanations.

"Lecturers explaining how to do stuff in detail and not just droning on for an hour."

"Good explanations, tailoring to students needs, makes the session enjoyable yet very informative."

Health Sciences students also associated quality teaching with:

- the provision of high-quality and relevant information and material (much more vs other two subject areas)
- being of paramount importance.

"...It means providing clear resources and feedback, making sure that all content that will be included in assessments is covered in lectures, as this is a common problem."

Experience of impact of teaching (Figure 19)

Students were asked to what extent they agreed with a number of statements about their experience of teaching on their programme/course in the 2020/21 academic year (Figure 19). Health Sciences students were the most positive again, especially regarding motivation to seek learning opportunities beyond the course, and their background being valued as an enriching resource for learning. Students from Business Studies or Other Sciences reported similar scores to each other for most statements in this question.

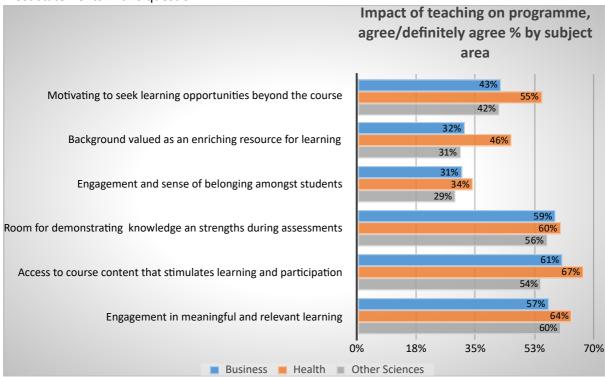


Figure 19 (above): Impact of teaching on programme, agree/definitely agree % by subject area

Students of all three subject areas reported similar agreement rates. The majority of students from each subject area agreed that teaching on their courses (i) engaged them in learning that is meaningful and relevant to them, (ii) enabled them to access course content that stimulates learning and allows participation in learning activities, and (iii) allowed them to demonstrate their knowledge and strengths during assessments. Other Sciences students expressed the least agreement concerning all areas listed for this question regarding the impact of teaching, with the exception of

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Interactive and practical elements were also seen as an integral part of quality learning, while engaging and motivating teaching, and interaction with staff were all seen as essential parts of quality teaching.

"So say with one of my modules, they will have two-hour lectures - which is quite a long time - and they will just be talking through it, which usually wouldn't really work for most students. Other lecturers will be more interactive and go through questions alongside you and ask questions, which would be more useful for students, I think."

#student O (Asian Other, Business Studies)

engagement in meaningful and relevant learning, where more Other Sciences than Business Studies students agreed with this statement. Yet again Health Sciences students reported the most positive scores, especially for teaching that motivated students to seek learning opportunities beyond their course, and teaching that valued their background as an enriching resource for learning, with highly significant differences compared to students from other subject areas.

Impact of assessment and feedback on learning (Figure 20)

The aforementioned, largely positive experience of *room for demonstrating knowledge and strengths during assessments* is in accordance with the satisfaction expressed with various relevant aspects of assessment, as presented in Figure 20.

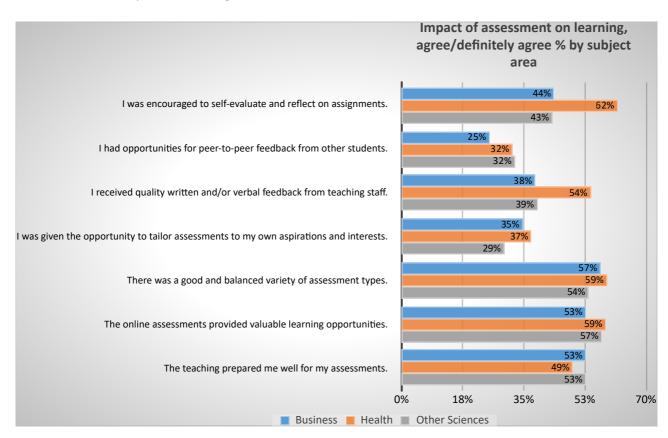


Figure 20 Impact of assessment on learning, agree/definitely agree % by subject area

Significantly more Health Sciences students agreed that they were encouraged to self-evaluate and reflect on assignments, and that they received quality written and/or verbal feedback from teaching staff. Health Sciences students reported the most positive results for all the listed elements of assessment impact, with the exception of how well teaching prepared students for their assessment and the opportunities they had for peer-to-peer feedback from other students.

Furthermore, even though students from all subject areas reported low scores for opportunities to tailor assessments to their own aspirations and interests, only 29% of Other Sciences students agreed that they were given this opportunity. Similarly, while students from all three subject areas reported low scores for peer-to-peer feedback opportunities, Business Studies students reported the lowest score (25%). Variety of assessment types, valuable learning opportunities with online assessments, and preparation for assessment all reported similar scores from all three subject areas, with moderate agreement overall for these three elements (range: 49-59%).

Open question: Q27

Q27 asked students what assessments they felt worked particularly well, and what kinds of assessments they would like to have more frequently in the coming year. There were 161 Business Studies, 215 Other Sciences and 154 Health Sciences responses.

Students across all subject areas frequently expressed a preference for:

- exams
- essays/assignments
- smaller, more regular (or weekly) assessments.

Business Studies students mentioned:

- essays/assignments (most preferred)
- group assessments
- coursework
- multiple-choice tests (although to a lesser degree).

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For Business Studies students, opinions were mixed towards online exams. However, despite the dominant negative view of online exams among Business Studies students, their positive references to online exams were more frequent compared to other subject areas.

"I really like open book exams and I think I am learning from them. I feel like because it is online, I have more time to learn more and improve my answers."

#student C (Asian British, Business Studies)

"I think open book is good as it gives us more time to understand the question and go through it in detail. If however, it is timed, a lot of people feel the pressure. They therefore do answer the question but not how they would want to answer it as they are under the time pressure. With open book exams you are able to add all the points you want to. It is less time pressure."

#student D (Asian British, Business Studies)

Presentations and group work were also mentioned positively a number of times, although the difficulties of coordinating group work online were highlighted by a couple of students. Business Studies students were also in favour of assessments that allow practical application of skills and knowledge, as well as assessments that simulated the sort of work they might be doing in their future careers.

Other Sciences students mentioned:

- coursework (most preferred)
- exams
- online assessments
- group assessments
- essays/assignments (less than Business Studies)
- creative projects with design elements.

Coursework was the preferred method of assessment for Other Sciences students. There were a small number of positive references to group work, although some highlighted the difficulties of effective communication in online group work. For next year, some of these students would like to see more group work. In general, online exams were not viewed favourably; scepticism was expressed about their credibility, and that they were of an inappropriate length or poorly implemented.

"I have got to agree, with the take home exams I feel they're just a bit silly. I do not understand how they are credible. I do not understand how my degree can be just as good as anyone else has had before, because [...] open book means open book. You can pretty much Google anything, you can look back at your notes [...] I do not feel like I have ever walked out of one of those take home exams feeling like I have learnt a lot [...] I just felt like I blagged the whole thing really."

#student Y (White, Other Sciences)

Health Sciences students mentioned:

- essays/assignments (most preferred)
- practical assessments (e.g., OSCE)
- multiple-choice tests
- online assessments
- exams
- mock exams or formative assessments.

FOCUS GROUP

For Health Sciences students, it was particularly important that courses had a well-thought out assessment timetable, were taught at an appropriate pace, or were well structured. Some students referred to assignments being due while they were busy with placements, which made things difficult for them. One student referred to unrealistic restructuring of modules into later years of the course, to catch up material that it was not possible to deliver during the pandemic.

Open question: Q28

Q28 asked students what the most useful way for them to receive feedback in the coming academic year would be. There were 153 Business Studies, 205 Other Sciences and 150 Health Sciences responses.

In all subject areas, students mentioned:

- a preference for online (not live) feedback (via email, Moodle, Turnitin, or similar platform) (most mentioned)
- opportunities to discuss feedback with staff (e.g., an appointment)
- in-person or face-to-face feedback.

"Written, in-depth feedback and maybe the opportunity for a meeting with the tutor to discuss."

While a number of differences between the most frequently mentioned aspects of feedback are given below, it should be noted that these points were mentioned by all subject areas, at least to some extent. Overall, the themes raised were very similar between subject areas.

Business Studies students in particular mentioned having detailed and high-quality feedback.

"...given more detailed feedback on individual coursework, as only [a] score for essay or essay-type questions could not help [me] improve."

For **Other Sciences** students, having feedback that tells them how to improve was particularly important.

"One-to-one verbal or written feedback would be best because we can then understand where we [went] wrong and how to improve."

Health Sciences students in particular expressed a preference for written feedback or a feedback report.

"When failing [an] assignment, the marker [...] should give extensive written points that are in language that students understand, and face-to-face feedback should also be given to check understanding."

FOCUS GROUP

Preparation for assessments and for future careers was particularly important to Health Sciences students. This is to be expected, given that the courses in Health Sciences are very career orientated.

"...the pharmacy practice was really good. We had a lot of actual experience of stuff we would actually be doing in real life, so that was nice. Aside from that, I also liked the labs, because the theory is all good and well, but if you can't really apply it and aren't doing hands-on stuff with labs, it's kind of difficult to grasp. I appreciated that we had so many throughout the year."

#student H (Black Other, Health Sciences)

Preparation for assessments was also related to formative assessment, an aspect of their courses that Health Sciences students were particularly positive about; regular quizzes were viewed positively by students at MMU, and particularly at the UoP. Additionally, practice questions and mock exams were very favourably thought of by Health Sciences students, whereas for other subject areas this was rarely mentioned.

"I believe that formative assessment for pharmacists is like paradise, because it gives us a simulation of the summative assessment. It's like, okay, so this is how the exam is going to be tested. Giving the real exam vibes, because that's what's good about formative assessment, so that we can be prepared for the exam and we can know what we are going to have in our exam."

#student L (Asian Chinese, Health Sciences)

"...we were able to do formative exams as well [...] so if we get something wrong, we would be able to [...] practise [...] it [and] we [are] reflecting on it and also getting [...] better. And yeah, it was actually really helpful when I then did my summative exams."

#student AF (Asian Pakistani, Health Sciences)

As mentioned above, the practical application of theory is important to Health Sciences students. This is also the case when it comes to their assessments; they expressed a preference for workplace-based assessments, or assessments that were relevant to the workplace.

Assessments that involve the practical application of skills were preferred by Other Sciences students. Programming assignments were viewed favourably in terms of engagement and interest. These types of assessments were thought to be challenging, but they were engaging because of that level of challenge.

"If the assignment required me to do things more actively, for example like a coding game, then I find myself spending a lot more time on that compared to like writing essay. Doing tasks like that makes you feel more motivated..."

#student AA (White, Other Sciences)

Some thought that while content needed to be challenging to stimulate learning, there was a balance to be struck.

"There has to be a balance between it, there's no black and white[...]. It's a very grey area, there has to be a level of challenge so that students are able to learn their material to a greater level. But it also has to be [at] a point where it's not too difficult [so that] a student just gives up completely on what they're learning."

#student W (Not known, Other Sciences)

Programming assignments were also associated with elements of the course that students might not necessarily enjoy, but they know are valuable to their learning; some highlighted that it is not the process of doing this type of work that is enjoyable, but the feeling of satisfaction at the end, once it is complete, that makes it all worthwhile.

"...about programming, when you can't solve something you're just banging your head on the table, but the feeling when you solve it, it's something awesome."

#student S (Black African, Other Sciences)

"I don't like programming, but I like sitting there and going, 'That was useful. I did something cool there,' but the actual process is awful."

#student U (White, Other Sciences)

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Other Sciences students tended to have a negative view of formative assessments; they were seen as a distraction and in some cases not particularly relevant, because in general they didn't relate to other areas of the course or subsequent assessments. Even when formative assessment was viewed favourably it was still criticised for superficial feedback and lack of opportunities to properly discuss feedback with staff:

"Yes, more quality feedback and more time to have that back and forth with the lecturer, because of the ratio of students to lecturers, and the fact there was only an hour or two to do it. It just feels impossible. It wasn't their fault. It was just impossible for them to do."

#student R (White, Other Sciences)

It seems that it is not formative assessment per se that is the issue, but rather its effective implementation.

For Business Studies students, formative assessment was seen as particularly useful in helping them learn and improve:

"Yes, I think they [formative assessments] help my learning. I like that we had regular assessments such as seminar sessions as it made sure that I was constantly learning."

#student C (Asian British, Business Studies)

"I did prefer the short questions we had. It allowed me to identify where I was going wrong. During lectures, you do not always know what you do not know and where your weaknesses are. Having short questions helps you identify your weaknesses and strong points. This allows you to ask more questions as well."

#student D (Asian British, Business Studies)

Compared to other subject areas (especially Other Sciences), preparation for assessment was mentioned particularly frequently as an important aspect of the teaching and learning experience of Business Studies students.

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In terms of feedback, for Health Sciences students, getting more and better-quality feedback was particularly important, compared to other subject areas.

"The most I've learnt from would always [be the] elements where [it's] more practical, or something [from which] you can actually get timely feedback."

#student AG (Black African, Health Sciences)

"I think I would really appreciate if we could get the written feedback as well, apart from just verbal feedback, because we didn't get any feedback to say where we could improve, especially on presentation[s] as well."

#student J (Black African, Health Sciences)

Impact of learning in the 2020/21 academic year (Figure 21)

The learning experience of students was explored further with the next question (Figure 21). Most students were comfortable using technology, yet Other Sciences students were the most confident. Health Sciences students were the most positive regarding how motivated they felt to complement their learning through further resources beyond what was provided, how well they are learning, and how inspired they felt to join a professional network/community or an open course. Furthermore, nearly 60% of Health Sciences students agreed that they are enjoying their learning experience, while only approximately 45% of students from the other subject areas agreed with this statement.

Even though a high percentage of students from all subject areas feel comfortable using technology for their online study, the majority of students (67-71%) from all three subject areas would prefer, and feel more comfortable, in a primarily face-to-face learning environment; they feel they are missing out as a result of studying online. Business Studies students were the least positive about studying online and its various aspects regarding: contributions to online discussions, having their

voice/feedback heard, and complementing learning with further resources beyond what is provided by their courses.

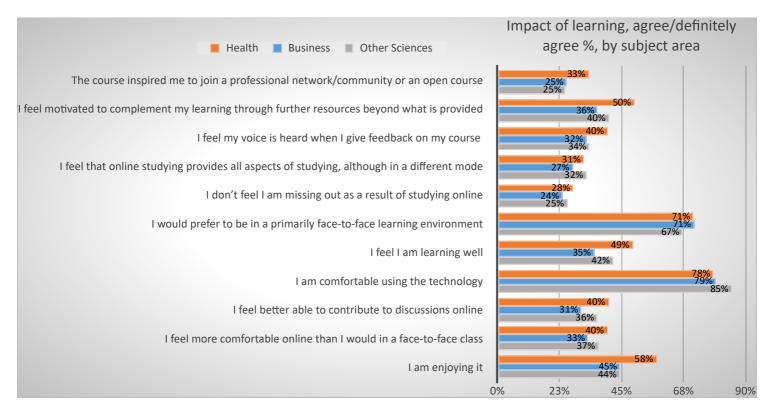


Figure 21 Impact of learning, agree/ definitely agree %, by subject area

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Despite the volume of positive references by Health Sciences students concerning support and good communication with their universities, there were a number of comments in which students either highlighted the importance of the university listening to students, or in which they specifically said they had not been listened to.

Frequency of use when needed and confidence using certain resources (Figure 22)

Furthermore, students were asked to indicate how frequently they have had access when needed during the 2020/21 academic year to various resources when studying remotely, and how confident they were in using them. Figure 22 compares frequency of use when needed with confidence by subject area, and it is interesting to see whether confidence is related to frequency for the three subject areas.

Overall, Other Sciences students seem to be the least confident students. For these students, the greatest discrepancies between frequency and confidence (implying even lower confidence than the frequency requires) were reported for a reliable internet connection, the library online resources, and the software required to complete work. With the exception of using resources for independent learning, Health Sciences students were the most confident in their use of the other resources mentioned in the question; they were also the most frequent users. For Health Sciences students, the biggest discrepancies between frequency and confidence were reported for a reliable internet

connection and the virtual learning environment (VLE). Business Studies students were the least confident students in their use of adequate computing devices and the VLE, and the biggest discrepancies between frequency and confidence were reported for the VLE and online library resources.

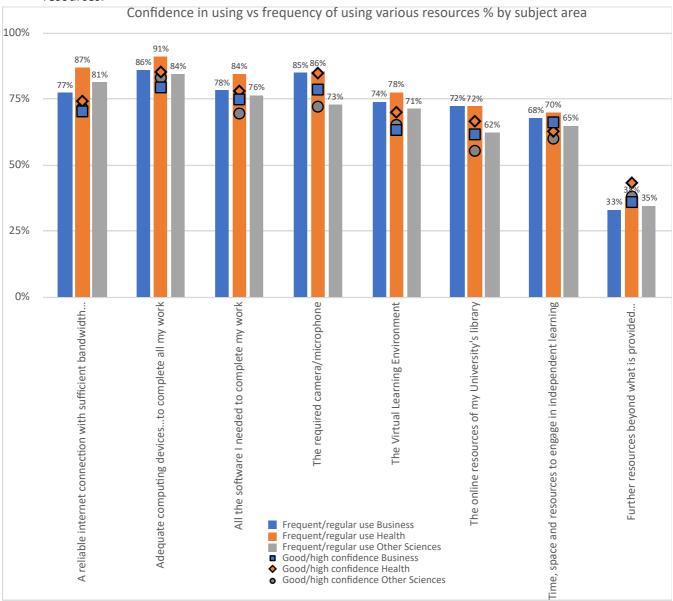


Figure 22: Confidence in using vs frequency of using various resources % by subject area

Correlations

As with the overall sample, positive correlations exist for all subject areas for all the resources listed in Figure 22. The vast majority of correlations are moderate and positive (0.417 < rho < 0.556, p = 0.000).

There are strong positive correlations for all three subject areas for *further resources beyond what is* provided by the university (Health Sciences, rho = 0.712; Other Sciences, rho = 0.670; Business Studies, rho = 0.681; all p = 0.000).

Regarding independent learning, students from Other Sciences made references to the importance of getting help with the transition from school to the university way of learning; students from other subject areas hardly mentioned this.

"I think also a lot of people came straight from doing their A-Level exams to going back to learning again, [and it] was quite a big transition for a lot of people, and an even bigger transition when you go from doing everything in person to doing everything online and not being able to communicate that easily with their lecturers."

#student V (Not known, Other Sciences)

Other Sciences students also thought that teaching staff should be a catalyst for independent learning.

"I feel like in first year especially, it needs to be a lot more guided, because in first year you are not [...] used to the idea of having to read around the subject, because you do not have to do that in A-Level."

#student AC (White, Other Sciences)

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For Business Studies students in particular, working alone, outside timetabled hours, or revision were associated with independent learning. As well as Other Sciences students, they also frequently mentioned self-development, focus, and self-motivation in relation to independent learning. Business Studies students in particular also highlighted the role of research and coursework in independent learning. They also frequently associated independent learning, and learning in general, with preparation for the workplace.

"Independent learning is a skill, and it is important as when we go into the workplace there are projects [where] we would need to learn independently. It is all about working alone and getting information on your own."

#student C (Asian British, Business Studies)

"...it is not something you can learn all at once, but it's something that you develop, especially at university [where there's] a big gap between university and college, of course. This is where you start to develop your independent learning on your own."

#student A (Not known, Business Studies)

While the difficulties of transitioning from school to university working practices were raised a few times, it was relatively infrequently.

For Other Sciences, there is a strong positive correlation for the *time*, space and resources to engage in independent learning (rho = 0.618, p = 0.000), and a weak positive correlation for adequate computing devices or other hardware to complete all my work (rho = 0.367, p = 0.000).

For Health Sciences, there are weak positive correlations for the required camera/microphone (rho = 0.397, p = 0.000) and adequate computing devices or other hardware to complete all my work (rho = 0.300, p = 0.000).

For Business Studies, there is a strong positive correlation for all the software I needed to complete my work (rho = 0.604, p = 0.000).

Business studies students in particular highlighted the issue of access to IT resources and software — particularly operating system-specific software which is incompatible with some students' computers. One student raised issues with accessing financial help due to a stringent means-testing system. They proposed that required software for the course should not be limited to a specific operating system. The student's experience is given below.

"My friend, we told her to reach out to the uni to get some support because I know obviously they have a lot of spare computers. They basically just said, 'Because your parents earn over this much, we won't give it to you.' Obviously she's a bit older than me-I'm only in second year - but I think she's 22. For her, it's quite embarrassing to have to go and ask your parents to buy you a laptop. Even though maybe they earn over a certain amount, it doesn't meant that they have disposable [funds] straightaway just to buy a laptop....

...So I think that was quite unfair, and if she didn't [buy a Windows laptop], then she wouldn't be able to do the coursework - which I think is quite crazy. Yes, that's something that I would try and stop. Just [use] software that is accessible to everyone, or change the coursework to something that doesn't rely on that type of software. Also I had access to the software and it wasn't even good! It was really bad..."

#student Q (White, Business Studies)

Business Studies students, like Other Sciences students, also highlighted the importance of access to online course material, possibly due to most of their teaching and learning being online over the past academic year, making access to these resources critical for their studies.

Open question: Q19a

Q19a asked students what resources, if any, they had used beyond those which the university provides. There were 42 Business Studies, 62 Other Sciences and 47 Health Sciences responses.

Between **all subject areas**, there were no significant similarities in the use of resources (although there were between pairs). Whereas for ethnicity there are general similarities between ethnicity groups, the types of resources accessed seems to be more related to subject area.

Business Studies students in particular used:

- Google (docs, scholar, the search engine generally, etc.)
- news articles (frequent cf. Other and Health Sciences)
- books both hard copies and e-books not acquired through university (also Health Sciences).

Other Sciences students used:

- Youtube (frequent cf. Business Studies and Health Sciences)
- internet research or other websites for information.

Other Sciences students' use of libraries was very low compared to the other two subject areas.

Health Sciences students used:

- books both hard copies and e-books not acquired through university (also Business Studies)
- Youtube
- a workplace, hospital, or other physical library (i.e., not online).

Open question: Q21

Q21 asked students what their university could do in terms of helping them better access the resources they need for their learning. There were 65 Business Studies, 81 Other Sciences and 70 Health Sciences responses.

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Health Sciences students associated independent learning with using material outside of the course material, as well as doing further research (or research tasks), coursework, and work for formative assessments.

"Independent learning gives me time to reflect on the module, research and collate evidence that allows me to produce work for assessment. Without independent learning I would not have the necessary time to research or to recap on learning to make sure that I have fully understood the concept at hand. Independent learning allows me to explore in detail the subjects that are being taught."

#student X (Not known, Health Sciences), written response

They also thought that guidance from staff was a way in which the university could help with their independent learning.

"I believe that [the university can help us by] having our lecturers [...] tell us what further reading we can do, and then also give us some case studies for us to study so that we can consolidate our knowledge during our consolidation week, and give us some real-life, real-world issues and news so that we can apply the knowledge that we have learned from the lecture in real life."

#student L (Asian Chinese, Health Sciences)

Similarly to learning in general, Health Sciences students also associated independent learning with preparation for their future careers.

"I believe that we have our own learning techniques and this stuff, and I also believe that independent learning will help us in the future, especially for us as pharmacists. We are on a very professional course, so I believe that independent learning will give us an advantage [in] our future profession when we graduate from the university."

#student L (Asian Chinese, Health Sciences)

All subject areas frequently mentioned:

- the restructuring of online resources or the VLE (including Moodle), to improve clarity and user-friendliness (esp. Other Sciences most frequent)
- that the university was doing a good job in the provision of resources (less so Health Sciences).

"Moodle needs to be laid out better. It's not very easy to see everything laid out very well."

"Nothing really. It seems the university does quite well at making sure we have what we need."

Business Studies students highlighted needing:

- access to the university library building
- more accessible, or more online resources
- how-to videos or extra classes and workshops to demonstrate how to access resources or software (also Health Studies; less so Other Sciences)
- to expand online library content and resources, such as providing subscription-only material which is usually behind a pay-wall (also Health Sciences)

"A lot of the books I was interested in using were not available via the online library (only hard copies in the actual building to which I didn't have access)."

"Explain how to use certain resources such as the library better."

"I felt my University did this very well. However, perhaps sessions on how to download software we need would be useful. For example, for my econometrics module we use Gretl [statistics package], but never was given a session on how to install and use it."

Other Sciences students highlighted:

• financial help for better WiFi, laptops or other resources.

"Survey before start of year to assess if students have materials required (a laptop, printer, WiFi etc.), and offering financial help to students to ensure they have what they need, or changing course to allow for students who do not have state-of-the-art university resources at home. Student loan simply does not allow any slack to assume students have all of these items by [start of first semester] - or at all."

Health Sciences students highlighted needing:

- how-to videos or extra classes and workshops to demonstrate how to access resources or software (also Business Studies)
- to expand online library content and resources
- to improve university and library websites for clarity and ease of navigation (by providing links and signposting to resources).

"Put more books online. Provide references and further reading links in all PowerPoints to help with writing assignments."

"Teaching how to access the resources properly or in separate sessions, especially the online library, or refreshers as we know little bits but I feel I don't have the skills to use what could be available. Maybe a pop-up chat or text service, or an app even would help for instant help on things."

Experience compared to perceptions/expectations (Figure 23)

Students' satisfaction is often influenced by the expectations they had and their perceptions of how important a number of factors are for their learning. When students were asked to evaluate how important some factors related to quality of learning are/can be, Health Sciences students were the

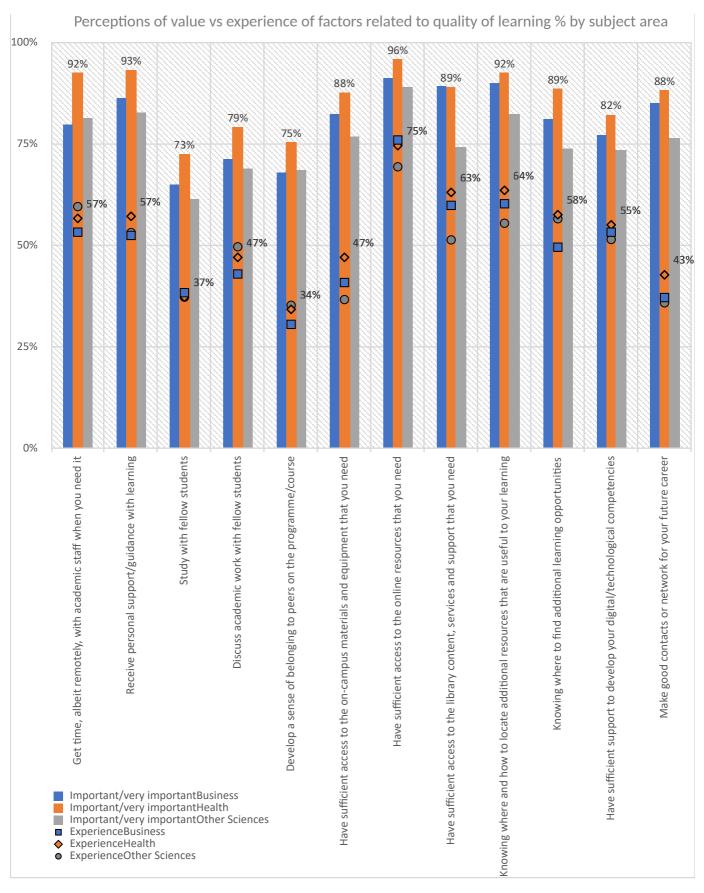


Figure 23: Perceptions of value vs experience of factors related to quality of learning % by subject area. Percentages for Health Sciences students' perceptions and experience are indicated on the figure

most positive about the importance of all listed factors related to their learning (with statistically significant differences), followed by Business Studies students, who were more appreciative of most factors compared to Other Sciences students, with the exception of getting time, albeit remotely, with academic staff when needed and developing a sense of belonging to peers on the programme/ course.

When students were asked to evaluate the relevant experience they had regarding the various listed elements, results were more spread across the three subject areas. Figure 23 shows how perceptions and experiences of important factors related to quality of learning varied by subject area. They are analysed according to what students think about their value, and what the students' experience was in relation to them.

All listed factors in Figure 23 seem important to students, yet their experience gave them fewer opportunities for experiencing all those things they regard as important or very important. When comparing students from the different subject areas, there were some minor differences. Business Studies students felt they had more opportunities for studying with fellow students, and a greater proportion felt they had sufficient access to the online resources they needed. A greater proportion of Health Sciences students agreed that they had opportunities for: personal support/guidance with learning; sufficient access to library content, services and support; access to additional resources that are useful to their learning; additional learning opportunities; and more opportunities for making good contacts or networking for their future careers.

Compared to other subject areas, more Other Sciences students agreed that they had opportunities for: time, albeit remotely, with academic staff when they needed; discussion of academic work with fellow students; and developing a sense of belonging to peers on the programme/course.

The biggest discrepancies between perception of importance and experience ratings were reported for making good contacts for students' future careers (for all three subject areas, with the greatest discrepancy for Business Studies students). Having sufficient access to the on-campus materials and equipment that students need reported a large discrepancy between perception of importance and experience ratings; however, this may be expected, as on-campus access was limited in the past year. Finally, developing a sense of belonging to peers on the programme/course reported a large discrepancy between perception and experience for all three subject areas, with Health Sciences students reporting the greatest difference (41%); Other Sciences students reported the lowest difference (33%).

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Business Studies students uniquely identified the benefit of having opportunities to be members of external, professional bodies, such as the CMI. One student highlighted the appeal of being able to incorporate professional accreditation, related to such external bodies, into their course. This student also mentioned the benefits of being able to access resources provided by the CMI. Students also highlighted the benefits of opportunities to network professionally and get feedback on their CVs from those currently working in industry. This had been valuable, even though it had been remote and online over the past academic year.

Open question: Q30

Q30 asked students what quality learning means to them. There were 180 Business Studies, 233 Other Sciences and 184 Health Sciences responses.

Similarly to quality teaching, there was broad agreement between subject areas on what constitutes quality learning. For **all subject areas**, quality learning was associated with:

- understanding the content being taught (clearly the most frequently mentioned)
- application of theory in a practical context, or a context relevant for future use
- retention of skills and knowledge
- access to, or being provided with, sufficient resources and materials
- preparation for assessments (preparation for assessments was also mentioned in relation to quality teaching, and has been a recurring theme in answers to the open questions)
- quality teaching: quality learning is not a substitute for quality teaching, or quality learning is dependent on quality teaching.

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For Health Sciences students, the practical application of theory was strongly emphasised.

"...I find more supervised learning, instead of demonstrating or just showing, is [a] bit [...] more enjoyable and more beneficial."

#student AG (East African/Cypriot, Health Sciences)

"...quality learning is being able to apply knowledge in a certain situation to make sure you fully understand it and can use it in practice. It doesn't have to be physical practice, it could be you're given a dilemma and [have to use] the knowledge that you have just gained."

#student I (White, Health Sciences)

"Knowledge gained applicable in real life as well as for the module, and attained for the future."

"A good understanding of theory and application to give me the skills I need for the future."

"Taking my own initiate to build upon the the teaching and areas that interest me, however it should not be done in replacement [of] poor teaching."

Business Studies students in particular highlighted:

- a significant time or effort investment
- the importance of efficiency, effectiveness, or maximising the potential of the time spent on learning.

Other Sciences in particular highlighted:

- needing to feel motivated and wanting to learn more
- independent learning (cf. low frequency of references by Business Studies and Health Sciences)
- the importance of high-quality, meaningful, relevant and accurate course material (also Health Sciences).

[&]quot;Putting in the time and the effort and being motivated."

"Knowing that I am not being hindered by the resources provided to me and that I am solely relying on my own knowledge of the course rather than having to worry about if the resources are good enough or not."

"A unit which has been taught with strong foundations to implement my own study."

"Having the interest and motivation to explore a subject beyond what is in lecture slides."

Health Sciences students mentioned:

- the importance of high-quality, meaningful, relevant and accurate course material (also Other Sciences)
- that quality learning involves recognising that different people learn in different ways, and that students should play to their strengths in terms of their learning; it was felt that courses should allow students to do this by providing a variety of resources, materials, and assessment types.

"Wide range of interesting topics delivered in various ways. Good amount of resources which help learning in different ways."

"Able to navigate and understand; variety, [and] appreciation for different learning styles."

"Being able to choose online or face-face lectures. Being able to opt out of group work if we feel we can work better alone."

Quality learning was also thought by Health Sciences students to be associated with access to help and support when needed, as well as teaching staff who are accessible, available and approachable.

"Having the resources available but still having staff to contact and respond in good time to questions I may have."

Quality of teaching and learning: meeting expectations (Figures 24 & 25)

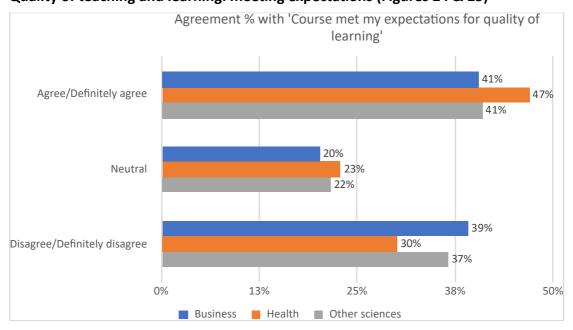


Figure 24: Overall satisfaction with quality of learning

Health Sciences students were the most positive students about their course meeting expectations for quality of learning (significantly more positively), while Business Studies students were the most negative, closely followed by Other Sciences students (Figure 24).

Similar results were reported (Figure 25) for the course meeting the expectations of Health Sciences students for quality of teaching (although the difference was less significant). Business Studies students were slightly less positive about the course meeting their expectations for quality of teaching, when compared to quality of learning, while Other Sciences students were slightly less negative about quality of teaching.

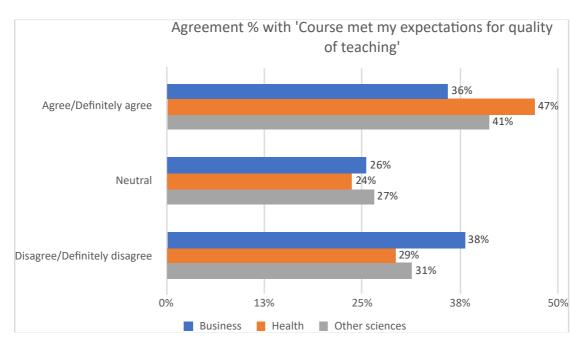


Figure 25: Overall satisfaction with quality of teaching

Perceptions and experience of factors related to wellbeing (Figure 26)

While most students think that the experiences in Figure 26 are/can be important to their wellbeing, Health Sciences students valued the importance of mental wellbeing support the most, and Business Studies students valued the importance of making university friends and feeling like a member of a university community the most.

With reference to their experience, Health Sciences students were more appreciative of the support they received for their mental wellbeing, and Business Studies students were more appreciative of the opportunities they had to make university friends.

FOCUS GROUP

Although for all subject areas there were more positive references to support and good communication with their universities than negative references, for Health Sciences students there were many more positive references than negative.

"I found the support from lecturers and fellow students was outstanding this year, we all experienced such changes to our lives but managed to give encouragement and help whenever it was needed. We all proved we can do it, [we] really need to keep that going."

#student X (Not known, Health Sciences), written response

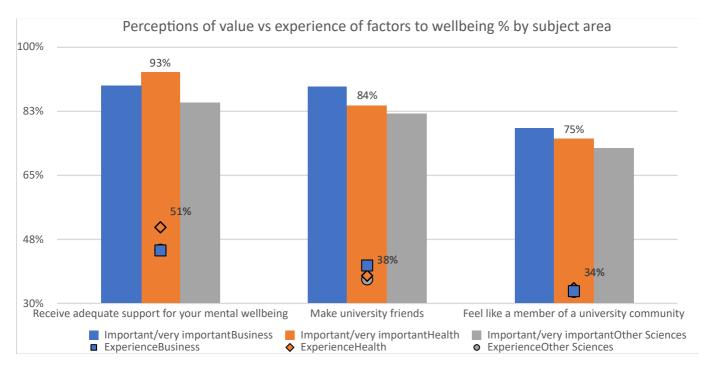


Figure 26: Perceptions of value vs experience of factors to wellbeing % by subject area. Percentages for Health

Sciences students are indicated

"I know a lot of people, it's really [...] affected their mental health quite badly, and their physical health, because obviously it's not related to their learning but they're still sitting inside all day not getting up, not doing anything."

#student R (White, Other Sciences)

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A number of students in Other Sciences mentioned lack of social contact more than those in the other two subject areas. The need for a quality learning environment or the separation of university and home environments was also highlighted. Some Other Sciences students also mentioned the impact that the past academic year has had on the mental health of students; however, it was highlighted that effective support was there when needed, although the student did have to wait:

"I feel like the university has done quite well with the support of mental health as well, although I had to wait quite a while to use that support, but when I did get it, they actually gave the mentor as well which you can have appointments with and they can give you advice. So I haven't had really that many issues with [...] lacking [support] from the university itself."

#student T (Arab, Other Sciences)

Q17 Preference for teaching mode (Figure 27)

When students were asked which teaching delivery methods they prefer (given the ongoing coronavirus situation and the likely safety measures), face-to-face teaching on campus was preferred by most of the students of all three subject areas. However, Business Studies students expressed a preference for face-to-face teaching more than the students of the other two subject areas (68% vs 57%), while Health Sciences students were the students who preferred online teaching more than the students of the other two subject areas (29% vs 18% for Business Studies and 25% for Other Sciences).

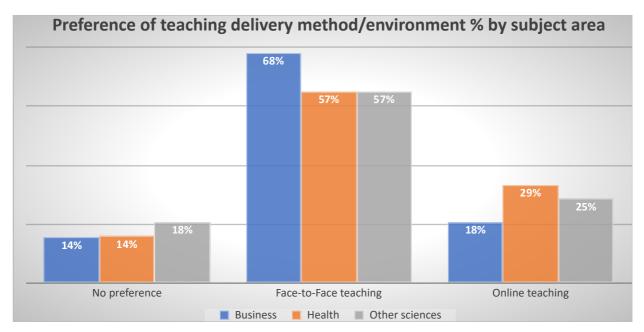


Figure 27 (above): Preference of teaching delivery method/environment % by subject area

Open question: Q17a

Q17a asked students whether there was anything in their opinion that works particularly well, or that they particularly enjoy, about online or face-to-face teaching (if they had no preference in response to Q17). There were 23 Business Studies, 42 Other Sciences and 27 Health Sciences responses.

Students from all three subject areas highlighted the following:

- a blended approach to teaching
- engagement and interaction (face-to-face)
- recorded material, or the ability to review such material at will or at one's own pace
- the convenience, time economy, flexibility or comfort of online learning.

Business Studies students most frequently mentioned:

- engagement and interaction (face-to-face)
- recorded material (or the ability to review such material at will or at one's own pace)
- the convenience, time economy, flexibility or comfort of online learning
- that face-to-face studying is generally a better learning experience
- making contributions is easier (online).

Other Sciences students most frequently mentioned:

• recorded material (or the ability to review such material at will or at one's own pace)

• that face-to-face provided a better learning experience.

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For Other Sciences students, the awkwardness of contributing in classes or getting answers to questions during periods of online learning was frequently mentioned. However, support was generally thought to be there when needed, and some students even felt it was more convenient being able to email teaching staff whenever they needed.

"Not that they weren't available, you could always email, but it's quite intimidating being in a Zoom call with 100, 200 people and feeling like you can individually go to talk to your lecturer..."

#student V (Not known, Other Sciences)

"I think the accessibility of lecturers was great this year, the fact that you can message them at anytime in the day and they could help you..."

#student Y (White, Other Sciences)

Health Sciences students most frequently mentioned:

- the convenience, time economy, flexibility or comfort of online learning
- that face-to-face teaching give them better opportunities to ask questions and get help.

Open question: Q17b

Q17b asked students what they had enjoyed, or most valued, about online activities (if they gave this response to Q17). There were 38 Business Studies, 78 Other Sciences and 63 Health Sciences responses. The low response rates to this question, compared to Q17c, are reflected in the preferences expressed in Q17, regarding the preferred mode of teaching.

Students from all three subject areas highlighted:

- travelling less, saving time, and being more efficient
- convenience and flexibility in student schedules
- the ability to review content at will, study at one's own pace, or study under less pressure;
- the utility of recorded material both live and pre-recorded.

"I have enjoyed being able to re-watch tricky lectures or lectures that have a lot of information in as I can go through them slowly or again, making sure I fully understand everything."

"Not commuting to uni, having time to take children to/from school rather than be in uni, enjoy[ing a] peaceful study environment at home. Online resources were very good quality."

Recorded material was highlighted in 58 of the 179 responses. Of those 58, the benefit of having recordings or recorded lectures accounted for 39; the benefits specifically of recordings of live material accounted for 12; the benefits specifically of pre-recorded lectures accounted for seven, of which two made explicit references to live follow-up sessions. The ubiquity of recorded material has been invaluable to certain students with learning difficulties and certain disabilities.

Business Studies students most frequently mentioned:

- convenience and flexibility
- the utility of recordings
- the privacy of online learning and being able to learn in a comfortable environment.

"It can be done from the comfort of your own home. Less anxiety and can learnt at a nicer pace with less pressure."

Other Sciences students most frequently mentioned:

- the utility of recorded material both live and pre-recorded
- the privacy of online learning and being able to learn in a comfortable environment.

"I really liked the flexibility of this course. I liked being able to access info anytime of the day and to watch the pre-recorded lectures whenever I feel like I have missed out on anything."

"I enjoyed that all lectures are recorded, not just a few."

"I can go over course material at my own pace and have felt more comfortable contributing to lessons online."

"I feel more comfortable at home."

FOCUS GROUP

Other Sciences students highlighted the utility of online course material and recorded lectures for those with mental health issues or other additional needs, but it was a general comment and not specific to the individual concerned.

"I was going to say, [for] neuro-divergent people or people with mental health issues, that [recordings and online resources] would have been massively motivating for them to say, 'Oh, I'm having a really crap day today I cannot get out of bed,' but all of the stuff they're learning, all the stuff they're paying for, they're not going to miss it because they can go back and do it. That must have been invaluable to some people."

#student U (White, Other Sciences)

Health Sciences students most frequently mentioned:

- being able to review content at will, work at one's own pace and under less pressure
- the availability and accessibility of resources online.

"The resources have been more organised by being in weeks – this allows you to work at your own speed and return for revision or work ahead to maintain understanding."

Open question: Q17c

Q17c asked students what they enjoy, or what they feel works particularly well, about face-to-face teaching (if they gave this response to Q17). There were 136 Business Studies, 159 Other Sciences and 109 Health Sciences responses. The increased response rates to this question, compared to Q17b, are reflected in the preferences expressed in Q17, regarding preferred mode of teaching.

In all subject areas, students frequently highlighted:

increased motivation, engagement, and focus in face-to-face teaching

- opportunities to interact with peers and lecturers
- feeling socially connected.
- the ease of asking questions or getting help face-to-face (esp. Health Sciences)
- the importance of a learning environment
- the sense of belonging to a university community when face-to-face
- having an improved understanding, when taught face-to-face.

"Being able to do the working out with course mates. See how everything is calculated. Also the tutorials are better when I can ask the teacher individually without feeling embarrassed or scared to ask a question."

"Just the fact can feel more confident asking teachers questions after lessons."

Business Studies and Other Sciences students mentioned more frequently than Health Sciences:

- the importance of a learning environment
- the sense of belonging to a university community.

This may be because Health Sciences had elements of face-to-face/blended learning throughout the year, as permitted by UK government regulations, whereas for the other two subject areas their experience of face-to-face/blended learning was much more limited. It may be that the absence of these on-campus elements has resulted in an increase in the strength of feeling surrounding the issue of belonging or community, especially for Business Studies and Other Sciences students.

"You feel more engaged, rather than staring at the same screen all day, it also helps get you into a routine of going into campus to work rather than both working and relaxing in the same environment."

"It would've been a better experience to go to campus. Be in a class surrounded with your friends and fellows. I would have learned more. Also I would have made a lot of friends and worked in groups. Which I couldn't."

"By physically going to campus you are going with the mindset that you are there to learn and you can focus. At home you are easily distracted. I also like being able to ask a question without the whole group knowing what I'm saying [which is not really possible in online live sessions]. [I also like] putting names to faces, not just a name on a screen in teams. It's hard to feel part of a community when you don't know anyone in your class."

Open question: Q18

Q18 asked students what aspect of the way in which staff had taught them in the year 2020/21, if any, had prevented them from fully engaging in, and benefitting from, their study experience. There were 152 Business Studies, 224 Other Sciences and 178 Health Sciences responses.

In all subject areas, students most frequently mentioned that:

- there was insufficient face-to-face teaching (overwhelmingly the most frequently mentioned)
- lectures had not been motivating or engaging (very frequently)
- support had been lacking
- lecturers had not been accessible

• students had encountered difficulties getting help when needed.

On the positive side, students across all subject areas thought – at least to some extent – that staff had done well despite the circumstances.

"No face-to-face lessons because the course is not essential.... online learning is demotivating."

"Though it's not anyone's fault due to the pandemic, the sole thing that has prevented me from fully engaging and benefitting from my study experience is the lack of face-to-face learning, which makes me feel less connected and belonging as a university student."

FOCUS GROUP

Students in Other Sciences emphasised the importance of having more face-to-face teaching. For these students in particular, online learning has not been engaging. However, there were frequent references to the appeal of blended learning, and two students mentioned the benefit of a truly hybrid approach in which students could choose whether to engage online or face-to-face. For teaching done online, they highlighted the importance of staff adapting to the new way of teaching; some students mentioned that virtual classroom management was poor, or that teaching staff were unfamiliar with the technology:

"...the lecturer didn't really know how to use Zoom. Most people were just talking and stuff and he didn't know how to mute them and stuff like that. So I feel like if things were going to be online things should have been prepared properly, so that affected the quality of teaching I feel."

#student T (Arab, Other Sciences)

"It's a completely different skill than managing a group of people in person, because of the anonymity of all the people. They're going to behave completely differently than if you could see their faces and hear their voices and they'd have responsibility for their actions." #student U (White, Other Sciences)

References were made to staff having inadequate hardware or poor internet connections, which was a barrier to effective teaching.

"...the teacher we had for computer science doing the maths was literally streaming it off an iPad. So the facilities weren't given to the teachers to be able to give the quality learning. He was streaming it off an iPad. He was streaming it off 4G rather than actual Wi-Fi, so it was cutting out all the time."

#student U (White, Other Sciences)

Business Studies students in particular thought that:

- teachers had shown a lack of effort in delivery of content
- teaching had lacked passion
- asking questions or contributing had been difficult or awkward (more than other subject areas)
- the lack of an environment conducive to learning.

"They just read off of slides. They don't explain answers to questions fully, they just read out the answer."

"Hard to join in the the conversations online as everyone is talking at once, poor internet connection, lack of enthusiasm in teaching from lecturers, too many distractions at home!"

Other Sciences students in particular mentioned that:

- communication had been poor or lacking from staff (both in and out of lectures)
- teaching had been poor quality (or online was not an adequate substitute for face-to-face)
- they had technical or IT issues (either themselves or teaching staff) (also Health Sciences).

"The teaching was abysmal, some teachers were ok, others didn't provide additional support or communicate properly with us to assist our learning."

Health Sciences mentioned:

- technical or IT issues (either encountered by themselves or by teaching staff) (also Other Sciences)
- lacking an environment conducive to learning (also Business Studies)
- a lack of live sessions, too much pre-recorded material, or pre-recorded material being too long (very frequently, esp. Health Sciences).

FOCUS GROUP

Health Sciences students made a few references to the need for a quality learning environment, or the separation of university and work life:

"I like getting out of my room. [Another student's] case I understand because she has commitments, but because I'm just a student most of the time, so I like to get out of my room, go for my lectures, workshops, so I prefer the physical face-to-face."

#student J (Black African, Health Sciences)

"Online lectures have been variable, sometimes super chaotic, this can be frustrating when it's staff with bad connection/unreliable internet when their job is online for now, and that as a student I have had to budget for expensive internet as it is essential, I don't think it's outrageous to expect the same from my teachers. Being self-motivated and keen to do well has made me pretty resilient and adaptable, but there are essential clinical [skills] that the university needs to teach me in order for me to qualify and these need to be completed in a face-to-face environment."

Importance of communication (Figure 28)

When students were asked how important to their quality of learning the ways in which they spend their time are, the majority agreed that all the ways of spending time mentioned in Figure 28 were quite/very important. However, Other Sciences students appreciated time spent engaging with staff and peers significantly less than the other two subject areas, either online or on campus. Health Sciences students appreciated, more than other students, the time spent on campus speaking to other students on their course, and the time spent communicating with academic staff online. Business Studies students are more appreciative of the time spent communicating on campus with academic staff, and with others outside the course/university in networks and communities.

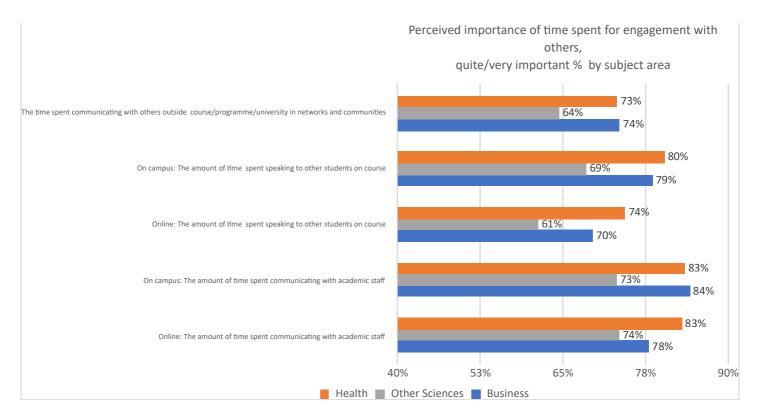


Figure 28: Perceived importance of time spent for engagement with others

Importance of feeling connected (Figure 29)

While in the previous question students were asked about the importance of communication, the next question (Figure 29) explored the idea of feeling connected. Health Sciences students reported higher appreciation (than students in other subject areas) of the importance of feeling connected to students, and especially staff (90% vs 83% and 82%).

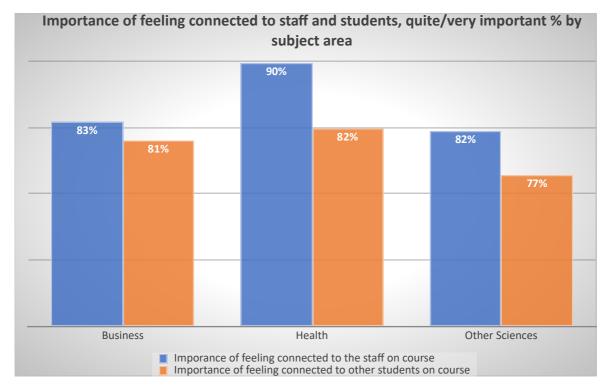


Figure 29: Importance of feeling connected to staff and students, quite/very important % by subject

area 38

Expectations of how time will be spent online or on campus (Figures 30 & 31)

Figures 30 & 31 show students' responses when they were asked to be more specific about their expectations for next year, about how they would spend their time, depending on whether they were in a face-to-face or online environment. Time spent engaged in these activities on campus is generally greater than online, except for independent personal study, for which online time spent is higher than on campus for the three subject areas.

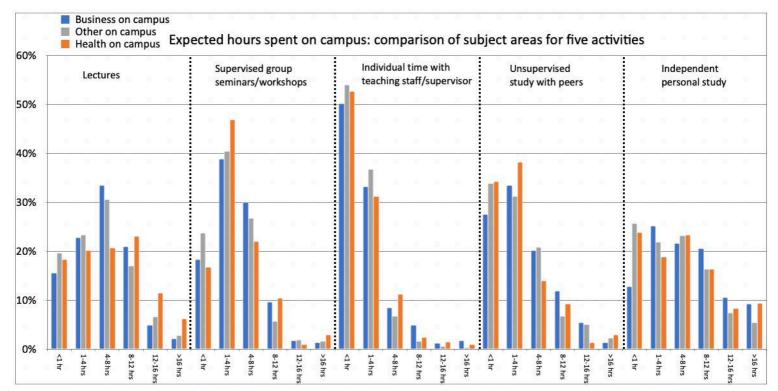


Figure 30: Proportions of students who indicated they expected to spend the above amounts of time each week on the above five activities, on campus

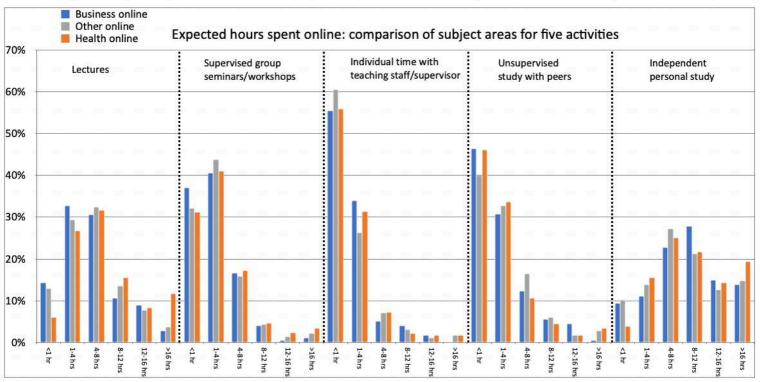


Figure 31: Proportions of students who indicated they expected to spend the above amounts of time each week on the above five activities, online

Expectations for spending time engaged in various activities online vs on campus in the coming academic year (Figure 32)

When looking at the whole picture of 'engagement' and various ways for students to be engaged, again their expectations differ depending on the environment (online or face-to-face on campus). Figure 32 shows a comparison.

Comparisons between the two rows for each activity show a trend for more frequent engagement face-to-face/on campus. The exception to this trend is *explaining course material to one or more students* for Business Studies students, for which they expect to spend more time online than on campus. However, Business Studies students in general show higher engagement on campus than online, and significantly so for *asking questions in taught sessions or contributing to discussions about course material in taught sessions*.

Open question: Q32

Q32 asked students if they had any additional comments about their overall experience of learning and teaching in the context of the COVID-19 pandemic. There were 79 Business Studies, 112 Other Sciences and 91 Health Sciences responses.

A variety of major trends emerged in the responses to this question, with only a few areas of agreement between subject areas. Generally, there were more areas of common ground between Business Studies and Other Sciences, possibly due to both subject areas having experienced more online learning over the past academic year, compared to Health Sciences.

Students from all subject areas frequently mentioned:

- having encountered difficulties with learning over the past academic year
- having encountered difficulties with their experience of teaching (esp. Other Sciences and Business Studies)
- either having preferred or benefitted from being online
- needing to return to face-to-face teaching (esp. Business Studies and Health Sciences)
- support is lacking or poorly advertised.

"I felt really quite forgotten about sometimes, and you could feel that SOME of the lecturers really couldn't be bothered to put effort into the teaching."

"Face-to-face teaching must [come] back [...] but have more coursework [as] I feel under-prepared for any in-person tests, as I haven't experienced any at uni due to covid."

"The negative of online learning is, in my opinion, the reduction of learning that comes from [the lack of] informal discussion with staff and peers. However, [...] learning online enables better time management and greater depth of topics being understood, at my pace."

Both **Business Studies** and **Other Sciences** students frequently said that:

- this academic year had not met their expectations (most frequent theme for Other Sciences)
- the 2020/21 academic year had been a negative experience
- they had had poor value for money
- they were hopeful that next year would be better.



Figure 32 Expectations of frequency of activities online vs on campus % by subject area

"I feel like there was no way to adequately deliver a good teaching or learning experience during covid. I might [as] well have been doing a course on Udemy or something but with [...] additional extra support."

"Student experience was poor, might as well [have] been given a set of PowerPoints and then a deadline for exams. Hardly worth the £9250 and feel like, for value of money, the Open University would [have] provided a better learning environment. Hoping 2021/22 will provide a much higher quality of learning."

Business Studies students in particular frequently mentioned:

- feeling overwhelmed, exhausted, stressed, or that their mental health had suffered.
- online learning being boring and not engaging or motivating.
- that some staff do not seem to care.

"The amount of time spent on computers has increased and has taken its toll on everyone's mental health. The changes in term 2 timetable has meant being housebound and not having any free time at all. This has been a painful experience thus far."

Both **Business Studies** and **Health Sciences** students said that:

- there could be more communication, or clearer and more consistent communication, from faculties and teaching staff
- they felt ignored or requested that their feedback be listened to. Despite this, almost as many references were made to the university having done well, considering the circumstances.

"I am really shocked by the way students have been treated this year. We are still paying an extortionate amount of money for what we receive. Students haven't been listened to and are expected to produce the same quality of work [as] if they [had] received a normal education. I am aware of times [when] lecturers have told students to do the work with more of a 'can-do attitude'. I don't think this is appropriate, especially when we are not receiving the quality of education that we should be."

"I think it's been handled about as well as could have been expected. For something so unprecedented, the uni responded well and tried to do their best. That's all you can ask for."

Health Sciences students most frequently mentioned:

- teaching staff have been supportive or done well, despite the circumstances
- support was present or clearly advertised
- there had been a lack of response to some questions and a lack of communication.

"Some members of staff were not understanding of the difficulty students faced this year with the covid-19 pandemic and didn't listen to our concerns, however a lot were very helpful and did their best to [make] our learning as useful and engaging as possible, given the current situation."

"Considering we all have been working from home mostly I find it frustrating how EVERY time I have emailed a module leader within a week or two before an assignment is due or an exam, the teacher is always on annual leave. Is it fair to have the assignment due when the teacher is off..."

Gaps were identified in the support given to those with additional educational needs.

"There have been issues specifically surrounding myself and some other students who are with ASDAC [Additional Support and Disability Advice Centre], where there's no preparation. There is absolutely no preparation from the teachers. We're meant to be getting teaching materials in advance to help get our heads around things, and they do not provide it despite being asked, because they don't have it. They've not prepared it, so because they haven't prepared it we can't have it, therefore we're at a loss even though ASDAC and other [...] support systems have said [...] these particular students need this."

#student K (White, Health Sciences)

Summary and statistical significance

Overall, the perceptions, experiences, and expectations of students of different subject areas often differed significantly. For example, Health Sciences students were more likely to give positive responses or express agreement throughout the survey, when compared to Business Studies and Other Sciences students. The Kruskal-Wallis test that was conducted on the median values of responder means grouped by subject area indicated that statistically significant differences exist when comparing certain question groups. The results indicated a significant difference between subject areas in the median scores of: teaching elements that are valuable to learning (Q10; p=0.0000), experience of aspects of learning (Q11; p=0.0058), experience of aspects of teaching (Q12; p=0.0075), frequency of access to resources when needed (Q19; p=0.0218), importance of communication (Q22; p = 0.0002), and expected frequency of engagement — online vs on campus (Q24; p=0.0058). When considering the data alongside post-hoc tests (Dunn's test, with Bonferroni's correction), it is clear that students who are enrolled on Health Sciences courses had a better experience, when compared to those on Business Studies or Other Sciences courses. It is worth noting that Health Sciences students are those who experienced the most actual blended learning during the 2020/21 academic year, as they were allowed by government regulations to return to campus in January, while other students had to continue only online.

Dunn's test identified the following statistically significant differences for the aforementioned questions specifically between the following subject areas:

- Q10 (teaching elements that are valuable to learning) between Health Sciences and Business Studies (p = 0.0000), and Health Sciences and Other Sciences (p = 0.0003)
- Q11 (experience of aspects of learning, excluding *I would prefer to be in a primarily face-to-face learning environment*) between Health Sciences and Business Studies (p = 0.0046)
- Q12 (experience of aspects of teaching) between Health Sciences and Business Studies (p = 0.0252), and Health Sciences and Other Sciences (p = 0.0127)
- Q19 (frequency of access to resources when needed) between Health Sciences and Other Sciences (p = 0.0174)
- Q22 (importance of communication) between Health Sciences and Other Sciences (p = 0.0002), and Other Sciences and Business Studies (p = 0.0140). For the latter, it is Business Studies students who attributed significantly more importance than Other Sciences students to aspects of communication
- Q24 (expected frequency of engagement, online vs on campus) between Health Sciences and Other Sciences (p = 0.0290).

Despite the differences described above, there is no statistically significant difference in the responses regarding the overall experience of teaching and learning this year (Q31) of students of different subject areas. This result essentially shows that while experiences and perceptions of

elements related to various aspects of teaching and learning were in general better for Health Sciences students, their experience of this year was comparable to Other Sciences and Business Studies students, that is, somewhat unsatisfactory. This would indicate that in its current form remote teaching cannot fully replace face-to-face learning effectively.

2.4 Results by ethnicity groups

This section of the report presents results of the data, analysed by categorising the respondents into six ethnicity groups. In total, 47 Arab, 201 Asian, 92 Black, 31 Mixed, 432 White, and 14 Other students completed the survey; 18 students preferred not to select their ethnicity.

Further categorisation of Asian students

At selected stages in the analysis, Asian students are further split into two categories for direct comparison. One category encompasses *Asian: Chinese* and *Asian: Indian* students (from here referred to as CHN/IND students), the other category encompasses *Asian: Bangladeshi, Asian: Pakistani*, and *Asian: Any other Asian background* students (from here referred to as BAN/PAK/OTH students). The rationale for this approach is based on prior evidence that there tends to be a difference between the two groups regarding the proportion of certain degrees that are awarded (Atherton & Mazhari, n.d.), and for this study – with practical considerations in mind – the groups were large enough for useful analysis and approximately equal in size (105 BAN/PAK/OTH and 96 CHN/IND students). It is clearly indicated when the analysis is according to this two-way split.

Teaching and learning in 2020/2021

Perception of value of elements of teaching (Figure 33)

For the majority of the elements in Figure 33, Arab students and Black students are those with the greatest proportion who thought they were valuable/very valuable, with Arab students frequently attributing the most value among all ethnicity groups. Notable exceptions to this general trend are for *lecture engagement sessions* and *personal tutorials*. For the former, Other students attribute the most value (followed by Arab students); for the latter, it is Black students who attribute the most value — much more than other ethnicity groups (followed by Asian students). *Recordings of teaching materials* are highly valued by all ethnicity groups, while students perceive that *formal tasks & activities with other students* contributed the least value. Mixed, Other and White students typically had lower perceptions of value for the elements of teaching in Figure 33.

FOCUS GROUP

"I agree that the recording is the most precious, important thing for us as students, because we can come back and see which points we are missing. Also, not everyone can wake up very early in the morning, we all are living in different time zones. We can watch it any time, anywhere, whenever we go. I also feel that the recording itself, it's not the only thing that's very precious. I believe that whatever the lecturer gave us is most precious as well, like some workshop stuff and laboratory stuff. Even though we are doing it online, that's still very precious as well to be honest, besides the recording."

#student L (Asian Chinese, Health Sciences)

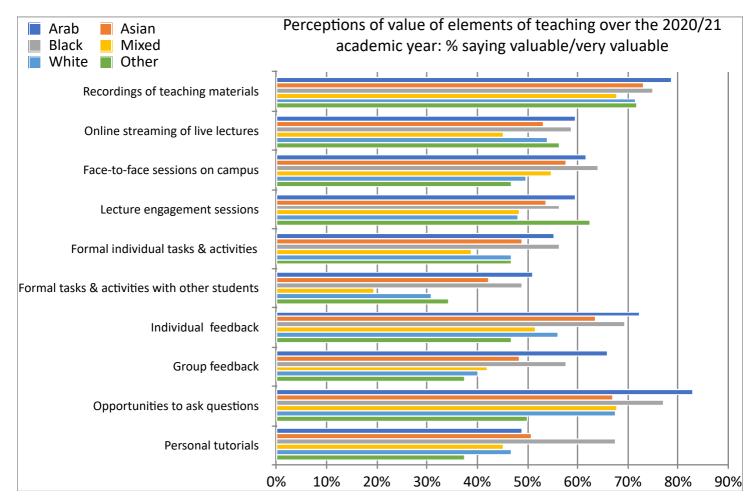


Figure 33: Percentage of students from each ethnicity group who thought that the above elements had been valuable or very valuable

Open question: Q29

Q29 asked students what quality teaching means to them. There were 79 Black, 130 Asian (60 CHN/IND, 70 BAN/PAK/OTH), 29 Arab, 24 Mixed, 24 Other and 359 White responses.

All/most ethnicities associated quality teaching with teaching that:

- develops, ensures, or facilitates understanding
- is engaging or delivered with passion (esp. Black, Arab and Mixed students)

"Quality teaching to me is the standard of teaching where the person teaching it is not only passionate about the subject, but also ensures that what is being taught is understandable or made understandable."

- is conducive to learning, knowledge acquisition or retention, or achievement was
- is clear, comprehensible and concise (esp. Arab, Other and White students).
- is personalised and tailored to the individual learning requirements, needs and preferences of students (esp. Black students)

FOCUS GROUP

"Quality teaching is presented well for all levels of the audience. It will be delivered by tutors who have enthusiasm for the subject and a sound knowledge to engage the learning process. It would be delivered in various mediums such as PowerPoint, videos and should contain interactive sections to underpin that understanding has been achieved. There would be opportunities to discuss any part of the subject that has not been understood or that inspires debate. At degree level there should definitely be elements that both challenge and encourage participants to research and discover the subject outside of the [timetable]."

#student X (Not known, Health Sciences), written response

"...where the teacher is passionate about what they are teaching and [is] adaptable to other ways of teaching if they are unable to communicate their point."

"Being supportive and remembering that not everyone takes things in the same way, so being flexible in the way you teach/explain things."

• prepares students for assessments (esp. Asian and Arab students).

"Teaching that prepares you [for] both exams and careers, with approachable teachers who care & find what they teach genuinely interesting."

Black students, among other ethnicities, characterised quality teaching as teaching that:

- motivates or encourages
- is inclusive of all student abilities
- gives worked examples or teaches students how to put theory into practice
- provides opportunities to interact with staff.

They also frequently expressed the paramount importance of quality teaching.

"Teaching that allows students of varying levels to adequately understand the subject."

For **Black students** in particular, quality teaching:

- instils confidence in students about taught material
- embodies good communication and makes students feel listened to.

"Quality teaching means the teacher has the patience to individualise their learning to fit the student's needs. Listening is key and without this, the teacher wouldn't be able to understand what it is the student is struggling with, preventing them [from] open[ing] up."

Asian students, among others ethnicities, characterised quality teaching as teaching that:

- motivates or encourages
- conveys quality and relevant information and material
- provides support and guidance (among the most frequently mentioned).

For **Asian students** in particular, quality teaching:

• provides the necessary resources.

"Teachers always ready to help and directing students to the best and most recent resources."

"That I am provided with enough support and resources to achieve the best grade to my ability."

Differences between CHN/IND and BAN/PAK/OTH students

BAN/PAK/OTH students accounted for the vast majority of references (made by Asian students) to quality teaching needing to adapt to individual student needs or learning preferences. Compared to CHN/IND students, the need for on-campus or face-to-face teaching, as well as the need for opportunities to interact with staff, was a more significant theme for BAN/PAK/OTH students.

"As a first year, I didn't have the best experience...doing [lectures] online [...]. [Going] back to uni, it would be a lot [...] better for me to [be able to] ask questions as well to the lecturers and also I'd understand a lot more, because it's quite annoying [...] [to] keep going back and forward [by email]. [In] lectures [...] I can just ask them face-to-face if I had any concerns or anything, instead of just emailing."

#student AF (Asian Pakistani, Health Sciences)

CHN/IND students accounted for the vast majority of references made to clear, comprehensible and concise delivery. Preparation for assessments was also mentioned by CHN/IND students. Other aspects of quality teaching somewhat frequently mentioned by CHN/IND students include: staff having a genuine interest in their subject; providing content that is relevant to assessments and with a real-world or practical application; getting quality feedback from staff; opportunities for discussion; and feeling listened to.

Arab students, among other ethnicity groups, characterised quality teaching as teaching that:

- occurs face-to-face or on campus (no Arab students who preferred online teaching gave this response, as expected)
- conveys quality and relevant information and material
- provides support and guidance (among the most frequently mentioned)

Arab students also frequently highlighted the paramount importance of quality teaching.

Arab students in particular mentioned that quality teaching:

- is professional teaching that uses an established and proven methodology
- is delivered by staff who have a genuine interest in their subject and the material
- provides them with both quality feedback and mental health support.

FOCUS GROUP

"I agree with [#student R] with that, but personally I haven't had that many issues. I kind of like the convenience of being able to just wake up and do things at home, but then at the same time having to do everything in the same room in terms of sleeping, eating and then also university, it's not very motivating. So I feel like being able to wake up and go somewhere else like to the campus and have everything face-to-face it would be a lot more motivating. I feel like I would have performed better as well. So, it's not the same."

#student T (Arab, Other Sciences)

"A teacher who is willing to make sure that the students understand the work and is able to provide support, not only in learning but also mentally."

"Able to communicate with the teacher, receive any individual support, instead of getting discouraged when asked a question [or for] feedback, as asking for feedback is purely to understand what went wrong/how to fix it/[how] is it justified etc., which is very important for future learning, and asking for feedback should not be taken [...] as challenging the grade/teacher."

Mixed students, among other ethnicity groups, characterised quality teaching as teaching that:

- occurs face-to-face or on campus
- is inclusive of all student abilities and needs
- provides support and guidance
- gives opportunities for questions to be answered, especially live.

They also frequently expressed the paramount importance of quality teaching.

"Teaching that is of high quality and includes all students with each of their varying needs."

Mixed students in particular highlighted the need for:

- quality teaching to simplify complex concepts
- teaching staff to show they are genuinely invested in their students' success.

"Staff supporting you and wanting you to do well, not just giving you the material and that's it."

FOCUS GROUP

"I don't really think the teaching method is that relevant [for] the quality of teaching. It's more the content and how the teacher communicates it, because[...] if they're using [...] difficult language or they're not really explaining it well, or [...] if they know it's a very difficult subject and they can't really answer [...] a question, [...] then [it doesn't] matter what kind of method methods you use. It's not gonna [...] be very good teaching, [and] won't be a good lecture, because I mean, the key point is for the person to understand and delivery is I think secondary — it's more about the content and how you communicate."

#student AG (East African/Cypriot, Health Sciences)

Other students, among other ethnicity groups, characterised quality teaching as teaching that:

- motivates or encourages (among the most frequently mentioned)
- is inclusive of all students
- provides in-depth, high-quality explanations
- conveys quality and relevant information or material
- gives worked examples or teaches students how to put theory into practice
- gives opportunities for questions to be answered, especially live (among the most frequently mentioned).

"Making sure that all the relevant questions and solutions to those questions are available for everyone."

Other students in particular highlighted that quality teaching:

- is enjoyable
- encourages independent thinking, and is a catalyst for independent learning
- gives direct responses when help is sought
- provides opportunities for discussion
- provides of a good learning environment with effective classroom management (or removes distractions in the classroom).

White students, among other ethnicity groups, characterised quality teaching as teaching that:

- occurs face-to-face or on campus
- provides in-depth, high-quality explanations
- provides support and guidance (among the most frequently mentioned)
- gives students opportunities to interact with staff.

"Engaging with students, explaining clear[ly] what things mean. Willing to help all students without judgement."

Experience of impact of teaching (Figure 34)

A similar trend emerges between ethnicities for the impact of teaching on students' courses or programmes. For five of the six elements related to the impact of teaching, more Arab students than any other ethnicity group agreed that they had experienced the corresponding element over the past academic year. Black students were frequently the second most positive towards elements related to the impact of teaching. Notable exceptions include: background valued as an enriching resource for learning, which was the least positive element for Black students, and for which Black students were the third most positive; and access to course content that stimulates learning and participation, for which Asian students were the most positive.

Mixed students were the least positive about having experienced the impact of teaching, with two exceptions (room for demonstrating knowledge and strengths during assessments and motivating to seek learning opportunities beyond the course); however, even for these two exceptions, Mixed students were still the second most negative. Mixed students have a particularly negative view of the teaching on their course regarding engagement and sense of belonging amongst students (10% agree/definitely agree with the statement, 58% disagree/definitely disagree). As with perceptions of value of elements of teaching, White students and Other students are rarely positive about their experience of the impact of teaching. With reference to students' backgrounds being valued as a resource, significant proportions of Asian (33%), Black (41%), Mixed (39%), White (34%) and Other students (44%) were neutral (neither agreeing nor disagreeing), possibly indicating that the sense or intended meaning of the question was not clear.

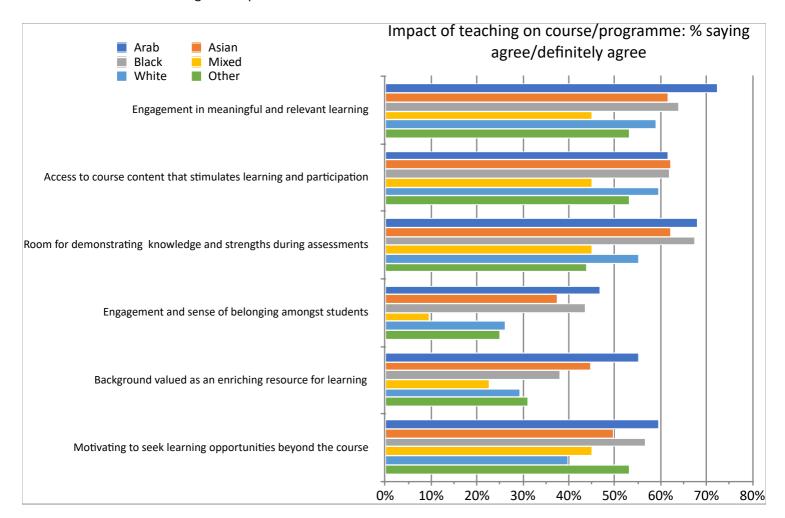


Figure 34: Percentage of students from each ethnicity group who said that they agree/definitely agree that their course/ programme has provided or done the above 49

"Quality of delivery is obviously good given the current restrictions that you have but I think there is scope for improvement...I feel like if there is a little more importance given to that transition [from school to university] in terms of delivery of content, in terms of professors carrying out lectures, maybe additional support, maybe not recording all lectures, maybe having some of them a zoom call or teams meeting and not as an engagement session, but actually sitting and teaching the whole lecture as you would do it in a classroom. I feel like that would help students engage in the lecture a lot more, because right now it is just you watch them on a screen, but you cannot ask questions because it is a video playing. At the end of the day it is as good as watching something on YouTube. If you change that up a little in terms of delivery, I feel like engagement would go up, but I think given the current restrictions they are doing whatever they can at the end of the day for such a big class group.

#student E (Asian Indian, Business Studies)

Impact of assessment and feedback on learning (Figure 35)

When asked about the impact of assessment and feedback on their learning, more Arab students than any other ethnicity group agreed or definitely agreed with the following: the online assessments provided valuable learning opportunities, there was a good and balanced variety of assessment types, and I had opportunities for peer-to-peer feedback from other students. Arab students consistently had higher levels of agreement with many of the statements, compared to other ethnicity groups. For I received quality written and/or verbal feedback from teaching staff, Black students had the best experience (54%). Asian students felt the best-prepared for assessments, but

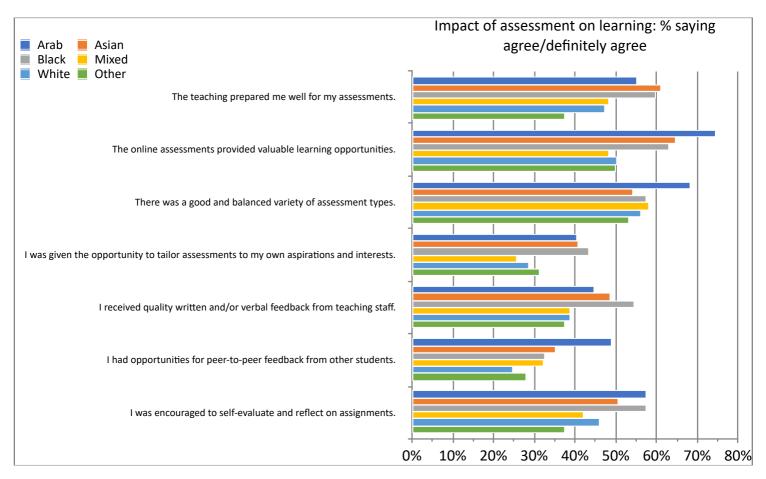


Figure 35: Percentage of students from each ethnicity group who said that they agree/definitely agree with the above statements in relation to assessments

were among the least positive about the variety of assessments. White, Other and Mixed students consistently reported having a relatively negative experience of the impact of assessment on learning (compared to other ethnicity groups); the exception was concerning the balance and variety of assessments, for which Mixed and White students expressed levels of agreement comparable to other ethnicity groups (except for Arab students, who had a much better experience).

Open question: Q27

Q27 asked students what assessments they felt worked particularly well, and what kinds of assessments they would like to have more frequently in the coming year. There were 63 Black, 105 Asian (49 CHN/IND, 56 BAN/PAK/OTH), 21 Arab, 23 Mixed, 19 Other and 299 White responses. Table 4 shows the most frequently highlighted responses regarding preferred assessment type for each ethnicity group.

All ethnicities

It should be noted that for responses across all ethnicity groups, when exams are mentioned positively, it is almost always in the context of an online and/or open-book exam, rather than a traditional on-campus exam. There were more mixed responses concerning exams in the focus groups.

Additionally:

- Among some Other students, reports, assignments and exams were identified as their *least* preferred assessment types.
- A number of Arab students expressed that no assessments had worked well, or that assessment type was not the main issue with the 2020/21 academic year.

Differences between CHN/IND and BAN/PAK/OTH students

There were general similarities between the responses of CHN/IND and BAN/PAK/OTH students. However, CHN/IND students accounted for most of the references to open-book or take-home assessments, while BAN/PAK/OTH students accounted for most of those related to online assessment.

Additionally, for BAN/PAK/OTH students, frequent positive references were made to multiple-choice tests, whereas for CHN/IND students this was a less significant theme; however, BAN/PAK/OTH students also criticised these tests occasionally, while CHN/IND students made no negative references to them.

For CHN/IND students, compared to BAN/PAK/OTH students, a prominent theme was assessments that are either not timed, or loosely timed, such as having 24+ hours in which to complete an assessment. This may indicate more of a preference among BAN/PAK/OTH students for timed, online, multiple-choice tests, whereas CHN/IND students tend to prefer less strict time limits and open-book assessments.

"All assessments seemed to work well but the online timed tests seemed to be very beneficial." (a BAN/PAK/OTH student)

"24-hour exams worked well to ensure that all content was covered and answers were to my best ability." (a CHN/IND student)

Black	Asian	Arab	Mixed	White	Other
coursework	coursework	coursework	coursework	coursework	
group	group		group	group	group
		individual	individual		
essays/ assignments	essays/ assignments	essays/ assignments	essays/ assignments	essays/ assignments	
multiple-choice	multiple-choice		multiple-choice	multiple-choice	
regular, smaller	regular, smaller		regular, smaller		regular, smaller
online	online		online	online	online
	exam (specifically take-home)		exam	exam	exam
		practical	practical		
			customisable		customisable
		relevant to module content			
		having variety			
			creative/design elements		
					report writing
					formative/ mock exams calculation/ excel-based
					critical thinking/ evaluation skills

Table 4: Most frequently mentioned types of assessment by ethnicities groups. The single most frequently mentioned theme within each ethnicity group is highlighted in **bold**

"...going on placements is really good. But also when doing assignments at the same time [...] it's really hard, you know, [to] balance both of them, and especially when travelling very far.."

#student AF (Asian Pakistani, Health Sciences)

"Initially when I heard the idea of open book exams, I had a slightly different outlook because I thought that [...] everything will be in the textbook, but when I actually [did] an open book exam for the first time, [my] mind [was] blown. Not because of the level of difficulty, but because it expects much more of you. There was [...] nothing related to [the] textbooks, as in you did not actually use your textbook, but you [did] have to do an analysis on different companies, and then you had apply all the concepts that you used in the module and analyse that company. [...] I felt like someone who was not [taking] an exam, but more like applying what I have learnt into an analysis or research paper, which could then possibly be taken up for further study. So I feel like it really helps you collate all your thoughts and everything that you have learned in the module and actually use it in real life examples . [...] You do not even need to get an opportunity in your life to apply those concepts because they are asking you to do that [in the exam]"

#student E (Asian Indian, Business Studies)

FOCUS GROUP

"...the literature review was very boring to do but I learnt a lot from it. For example, we did a video essay where we had a lot of topics to choose from and I chose one that I already knew a lot about. So it was fun to do but I didn't learn a lot from that because I already knew most of the stuff as opposed to the literature review. I didn't know anything and it was my first time writing such a long essay in English especially. So that was interesting as well. It was another learning experience. So yes, there is certainly a correlation between learning and fun, but they're not always together in the same essay for example."

#student S (Black African, Other Sciences)

Open question: Q28

Q28 asked students what the most useful way for them to receive feedback in the coming academic year would be. There were 57 Black, 93 Asian (46 CHN/IND, 47 BAN/PAK/OTH), 22 Arab, 22 Mixed, 17 Other and 297 White responses.

FOCUS GROUP

"I feel like having reports and case studies beforehand for coursework would be way more relevant than just having some question and answers where it's just right or wrong. I feel like with reports you do get way more effective criticism and feedback compared to if it was just an online test. Also it would be way more relevant outside of uni. When we're actually working, it's going to be more helpful because we're just more... What's the word? It's more like how we would work after university."

#student O (Asian Other, Business Studies)

Students in all ethnicity groups mentioned the following in relation to feedback:

- preference for online (not live) format (via email, Moodle, Turnitin, or similar platform) (most frequently mentioned by all except Black students)
- having opportunities to discuss feedback with staff (e.g., an appointment) (most frequently mentioned theme for Black students)
- some preference for face-to-face feedback (less so for Asian students).

Black students and **White students** in particular mentioned receiving feedback in a written form, such as a feedback report.

FOCUS GROUP

"I hate exams in all ways and forms because I don't see how it's relevant to our teaching. Of course it tests what you learned, but on the other hand, also you can forget everything that you just learned in the exam and move on. Also you don't get much feedback during the exam because it's, 'Oh, you did this, this and this wrong', but what? Why? I prefer and I know a lot of people in the university do prefer - other forms of assessment like, for example, essays or case study work. This is where we actually can present our abilities and not just knowledge. I think especially in business, presenting abilities - so for example formal writing or understanding the market when creating some sort of work or essay or whatever - is the most important. Actually feedback is much better during the [other] assessments rather than exams - in my opinion at least."

#student N (Eastern European, Business Studies)

Asian students highlighted the importance of having feedback that:

- is detailed and high quality
- is personalised
- guides students how to improve.

Differences between CHN/IND students and BAN/PAK/OTH students:

- BAN/PAK/OTH students were much more in favour of face-to-face feedback compared to CHN/IND students.
- While both ethnicity groups expressed a preference for opportunities to discuss feedback, this was a more significant aspect for BAN/PAK/OTH students.
- For CHN/IND students, a much more prominent theme was the need for detailed or high-quality feedback.
- Online feedback was more important for CHN/IND students.

Arab students mentioned that feedback should:

- be detailed and high quality
- be personalised
- provide clarity and explanation of errors
- tell students how to improve.
- be available for summative exams. They highlighted that the lack of feedback on exams reduced their usefulness as a tool for learning.

Mixed students in particular highlighted receiving feedback online, in a live meeting, such as via MS Teams, Zoom, or other video call.

Other students frequently highlighted a preference for feedback that:

- is detailed and high quality
- shows students how to improve
- is delivered face-to-face, or via a mix of face-to-face and online.
- is written and/or verbal
- is available for exams. Students criticised the lack of feedback received for exams.

Impact of learning in the 2020/21 academic year (Figure 36)

The learning experience of students was further explored; the results are shown in Figure 36. Again, more Arab students than any other ethnicity group were in agreement with most of the statements, except for *I would prefer to be in primarily a face-to-face learning environment*, for which they were the ethnicity group the least in agreement. For the aforementioned statement, more Mixed students than any other group were in agreement. This is consistent with the results seen so far, in that Arab students have generally expressed having a good experience of the past academic year, which has been taught largely via remote learning; on the other hand, Mixed students have generally expressed having a poor experience, and this is also reflected in their preference for a face-to-face environment in this question. Based on this observation, as might be expected, the opposite trend is seen for *I don't feel I am missing out as a result of studying online*. Most students from all ethnicity groups are comfortable using technology, especially Arab and White students. Other, White and Mixed students feel that their voice is heard the least when they give feedback on their course. These same three ethnicity groups also feel the least that studying online provides all aspects of studying, but in a different mode.

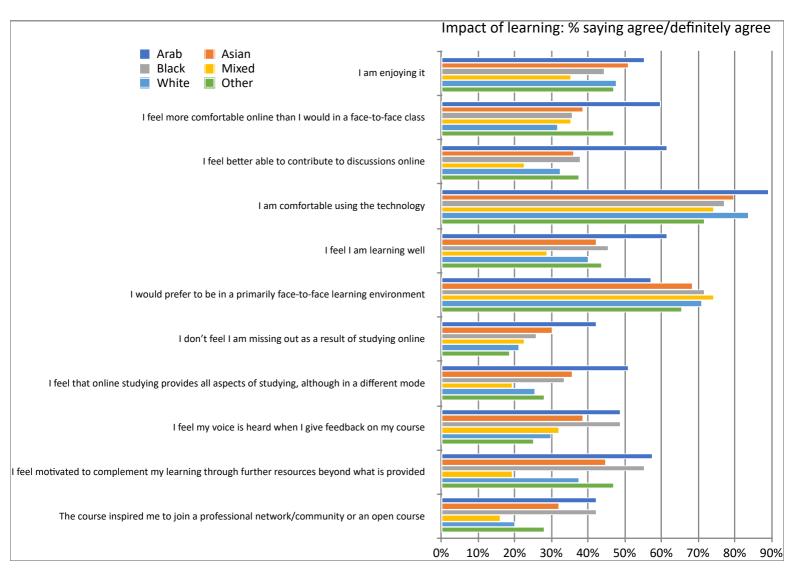


Figure 36: Percentage of students from each ethnicity group who said that they agree/definitely agree with the above statements in relation to their learning

"I think the online lectures are not as good as face-to-face lectures, however they are definitely useful. I do prefer them because everyone gets a chance to talk, including the people who do not normally talk or ask questions during face-to-face lectures; [they] are able to ask questions over the chat."

#student D (Asian British, Business Studies)

FOCUS GROUP

"...we haven't missed out on that much being online. I'd say maybe the personal interactions of some of the tutorials where we would have had to use pieces of equipment we've missed out on, but that wasn't particularly interesting to me in the first place. So I've felt that this year has been pretty much ideal for me as an introvert who doesn't tend to really get on with other people very well. I've just got to roll out of bed, do my work, get everything done when I want to get everything done and then go on about my day. Ample time to relax, ample time to study. It's worked pretty much ideally for me."

#student U (White, Other Sciences)

FOCUS GROUP

"...there's a really big difference in how much I was engaged when I went to university in real life versus when I was online. There's something about being able to see your bed whilst you're in lectures [...] It's just like I'm just getting this over with just to go back to bed rather than [...] actually trying to learn something. I think [...] there's something really valuable about having your learning and your relaxing in separate places for me, because it really helps me separate those two parts of my life in a way that my brain compartmentalises [...] what I'm doing basically."

#student V (Not known, Other Sciences)

Frequency of use when needed and confidence using certain resources (Figure 37)

The proportion of all ethnicity groups who had the time, space and resources to engage in independent learning was approximately the same, except for Other students, who had a lower proportion who frequently did this. Arab and Mixed students were the two ethnicity groups who most frequently used their university's online library resources. However, in terms of using the time, space and resources to engage in independent learning. Mixed students were the least confident of all ethnicity groups, while Black students were the most confident. Mixed students were also the least confident using the Virtual Learning Environment and a reliable and adequate internet connection. Compared to other ethnicity groups, Black students consistently expressed a good degree of confidence using many of the listed resources, especially those related to independent learning, online library resources, the Virtual Learning Environment, adequate computing hardware, and the required microphone or camera. However, they were less confident using the required software. Asian students, while not the least confident in the use of any one resource, were consistently among the least confident ethnicity groups for many of the resources. White students most frequently have use of a reliable internet connection, adequate software, and the required camera or microphone. For all ethnicity groups, frequency of using further resources is low, although highest for Black and Arab students, who also have the highest confidence.

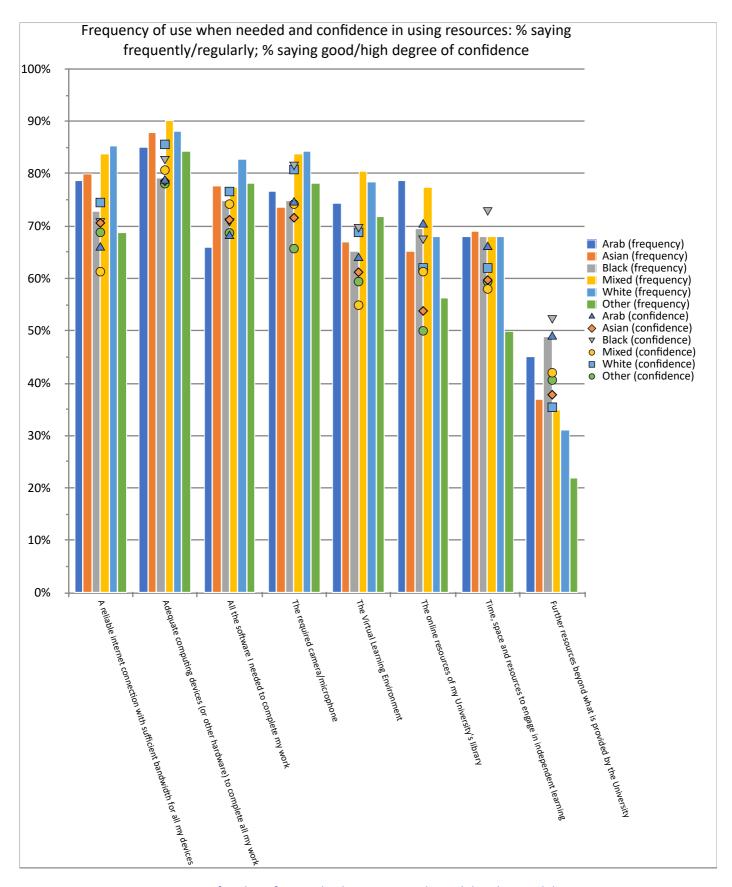


Figure 37: Percentage of students from each ethnicity group who said that they used the above resources frequently/regularly (bar chart); percentage of students who said they had a good/high degree of confidence using the above resources (plotted shapes)

"The resources that I was using [weren't] actually available at the university. [There were] books [that] I had to purchase myself, because when I did ask, 'can you borrow this book', which [was] in one of the other libraries, they said due to the pandemic we can't actually borrow any books. And obviously due to COVID [...] we can't rent out [...] e-books either. So of course, I was lucky because I live with my parents, so I was able to purchase those books. But they are expensive, you know, £40, £50 there. And it totals up very quickly. And the other thing that I was trying to get access to — and I really did try to push [it] but wasn't able to — [there's] a lot of articles [in] the Financial Times [that] are really, really beneficial, and really helpful when incorporated [...] in essays."

#student B (British, Business Studies)

Correlations

For most aspects and most ethnicities, correlations between responses to 'frequency of use when needed' and 'confidence when using' were moderate and positive, with a few exceptions where correlations were strong, weak or didn't meet the threshold for statistical significance. The correlations are given below.

For a reliable internet connection with sufficient bandwidth for all my devices, a strong positive correlation exists for Other students (rho = 0.625, p = 0.000). The significance threshold was not met for Mixed students, and all other ethnicity groups show a moderate positive correlation.

For adequate computing devices or other hardware to complete all my work, a weak positive correlation exists for BAN/PAK/OTH students (rho = 0.300, p = 0.002). The significance threshold was not met for Arab students, and other ethnicity groups show moderate positive correlations.

FOCUS GROUP

"It's not a perspective that I've thought of before, but looking back on it, yes, I wouldn't know where to get any of these resources [laptops] either. The university website is there, but I find it's kind of hard to navigate to find the bits of information that you need to get from it. Even sometimes getting through Moodle was difficult, but that's down to different layouts that each teacher used, so there was no consistency on it. Yes, I agree there should have been a little bit more communication on if you do need help with stuff here's where you can get it."

#student U (White, Other Sciences)

For all the software I needed to complete my work, a strong positive correlation exists for BAN/PAK/ OTH students (rho = 0.610, p = 0.000). For Other students, the significance threshold was not met, and all other ethnicity groups show moderate positive correlations.

For the required camera/microphone, a weak positive correlation exists for Arab students (rho = 0.372, p = 0.011). For Other students, the significance threshold was not met, and all other ethnicity groups show moderate positive correlations.

For the Virtual Learning Environment, strong positive correlations exist for Mixed (rho = 0.610, p = 0.000), CHN/IND (rho = 0.633, p = 0.000), and BAN/PAK/OTH students (rho = 0.624, p = 0.000). All other ethnicity groups show moderate positive correlations.

For the online resources of my university library, a strong positive correlation exists for Other students (rho = 0.651, p = 0.000); a weak positive correlation exists for Arab students (rho = 0.350, p = 0.017). All other ethnicity groups show moderate positive correlations.

For the time, space and resources to engage in independent learning, strong positive correlations exist for Other (rho = 0.761, p = 0.000), Mixed (rho = 0.743, p = 0.000), and BAN/PAK/OTH students (rho = 0.639, p = 0.000). All other ethnicity groups show moderate positive correlations.

For further resources beyond what is provided by the university, strong positive correlations exist for Arab (rho = 0.758, p = 0.000), CHN/IND (rho = 0.691, p = 0.000), BAN/PAK/OTH (rho = 0.623, p = 0.000), White (rho = 0.728, p = 0.000) and Other students (rho = 0.616, p = 0.002). Moderate positive correlations exist for Black (rho = 0.551, p = 0.000) and Mixed students (rho = 0.552, p = 0.014).

FOCUS GROUP

"So [if] we're given, [...] a hint or [...] guidance into where to get the resources, or even given the resources — that's even 10 times better. [...] If we have the resources [...] and we're given, like, assurance that if we need help, we can contact lectures — because I have had lecturers who have been irritated and agitated that [...] I am contacting them. I should be more independent, but sometimes you just [...] genuinely need help. [...] I remember even in my first year, when I was [new to doing an] assignment, [...] I was emailing lecturers, they would tell me to be more independent. But I'm so new to doing assignments. I did A-levels at college, so I never, ever did any assignments. And when I started uni that was the first time I did an assignment, and I had no guidance, I had no friends, I had nothing. And when I was emailing the lecturers, they weren't even helpful, no one was helpful, so I was thrown too much into the deep end."

#student AD (Asian Pakistani, Health Sciences)

FOCUS GROUP

"This year has been entirely independent learning, more or less, effectively. I feel like in first year especially, it needs to be a lot more guided because in first year [...] you are not used to the idea of having to read around the subject, because you do not have to do that in A-level. [At] A-level you can just go into all the lessons and you will be fine."

#student AC (White, Other Sciences)

Further resources beyond what the university provides is clearly the aspect of using resources that has the strongest positive correlations. While moderate correlations exist for all aspects and most ethnicity groups, a reliable internet connection, adequate computing devices, the required camera/microphone, and to some extent the resources of the online university library, are the resources with the weakest (of the moderate) correlations.

Open question: Q19a

Q19a asked students what resources, if any, they had used beyond those which the university provides. There were 28 Black, 28 Asian (15 CHN/IND, 13 BAN/PAK/OTH), 6 Arab, 7 Mixed, 6 Other, and 76 White responses. While some differences are indicated below, they are minor; the main differences regarding use of resources occur between subject areas, rather than ethnicities.

Students in **all/most ethnicity groups** frequently mentioned using:

- Youtube (except Other students)
- internet research or other general websites (except Other students)
- books not acquired through university either hard copies or e-books (except Arab students)
- Google (except Arab and Other students).

"I bought books from Amazon/E-bay because [the] university library did not have them or was closed..."

In addition to the resources above, **Black students** used:

- textbooks
- resources for further reading
- journals
- web courses
- web tutorials (other than Youtube).

Similarly, **Arab students** mentioned using:

- resources for further reading
- web tutorials (other than Youtube)
- web courses.
- a study space provided by the student's accommodation
- alternative software (specific to the student's operating system)
- accessing mental health support

Asian students mentioned using:

- news articles
- resources for further reading
- a non-specific library
- other online resources (such as programming language documentation and the British National Formulary).

Differences between CHN/IND and BAN/PAK/OTH students

For BAN/PAK/OTH students, the most frequently accessed resources were:

- internet research (or general websites for information)
- other online resources
- unspecified libraries.

CHN/IND students were more consistent with several other ethnicity groups; the most accessed resources were:

- Youtube (by far the most frequent)
- Google
- news articles.

Mixed students also accessed the following resources:

- a non-specific library
- online journals (with both open-access and paid-for content)
- course-specific sites (e.g., NHS website).

White students mentioned using:

- hospital or workplace libraries
- online databases or archives
- web tutorials (other than Youtube).

Open question: Q21

Q21 asked students what the university could do in terms of helping them better access the resources they need for their learning. There were 28 Black, 36 Asian (16 CHN/IND, 20 BAN/PAK/OTH), 8 Arab, 12 Mixed, 7 Other, and 125 White responses.

All ethnicities, frequently mentioned:

- the restructuring of online resources or the VLE (including Moodle), to improve clarity and user-friendliness (esp. Other Sciences most frequent)
- the need for how-to videos, or extra workshops and classes detailing how to access and use online resources (less so for Black students)
- more, or more easily accessible online resources (except White and Other students).

Black students, among other ethnicity groups, mentioned:

• financial help for the provision of adequate WiFi, laptops and other similar resources

"I applied for a laptop however wouldn't be granted one. No financial aid. Very stressful."

- increased access to the library building
- increased clarity on university and library websites.

Asian students, among other ethnicity groups, mentioned:

• financial help for the provision of adequate WiFi, laptops and other similar resources.

"I know it is not possible but maybe help students pay for better WiFi, as I live in a house with 5 people and it is so hard to get a good connection when everyone is using it."

For **Asian students** in particular, the following was identified:

• a summary of trusted and reliable online sources available for students.

Differences between CHN/IND and BAN/PAK/OTH students

Both **CHN/IND** and **BAN/PAK/OTH** students highlighted the need for how-to videos or classes on how and where to access certain resources or software; for CHN/IND students this was one of two most frequently highlighted points.

"I do business management and I have to use SPSS [statistical analysis software] for one of [my] modules and it has been very difficult to access this resource."

However, **CHN/IND** students in particular wanted:

- help with accessing IT and work spaces on campus
- increased availability of online resources (the other most frequently mentioned point for CHN/IND students)
- a summary of trusted online sources
- increased clarity of university and library websites.

[&]quot;Maybe provide some quidance, like the reliable ones [resources] for improving our knowledge."

On the other hand, BAN/PAK/OTH students most frequently mentioned:

- needing to restructure the VLE (this was much less frequently raised by CHN/IND students)
- the need for better communication and signposting of resources by email
- provision of laptops, devices, or certain software.

"Give help and support for different modules when some software isn't working on particular platforms."

"Provide devices."

Arab students in particular highlighted:

- the ability to download recorded lectures
- extra support in general
- greater leniency or sympathy from teaching staff
- having an anonymous chat feature in live sessions.

Mixed students in particular mentioned:

- increased variety of, or alternative resources
- having online material uploaded well ahead of live sessions
- listing references of sources used in lectures
- having more face-to-face teaching
- the utility of having access to hard copies of books and course materials, such as workbooks.

Other students mentioned:

- virtual classroom management
- increased clarity on university and library websites.

"University library website is extremely out of date and disjointed."

One Other student mentioned that, as a result of poor virtual classroom management, hurtful remarks had been directed at them by other students. The same student also mentioned the over-reliance on Windows software.

White students in particular mentioned:

• expanding online library resources (e.g., increasing the availability of subscription journals or other material behind a pay-wall).

Positive comments

On a positive note, some Black, Arab, Other and White students expressed the sentiment that the university was doing a good job concerning the provision of resources, or they thought nothing more could be done.

Perceptions of importance and experience of opportunities (Figure 38)

With the exception of one element (*get time, albeit remotely, with academic staff when you need it*), more Black students attributed importance to all of the elements in Figure 38, compared to any other ethnicity group. Additionally, Black students reported having either the best experience of these elements, or being among those ethnicity groups having the best experience. For the aforementioned exception, it is Arab students who attribute the most importance. Arab students and

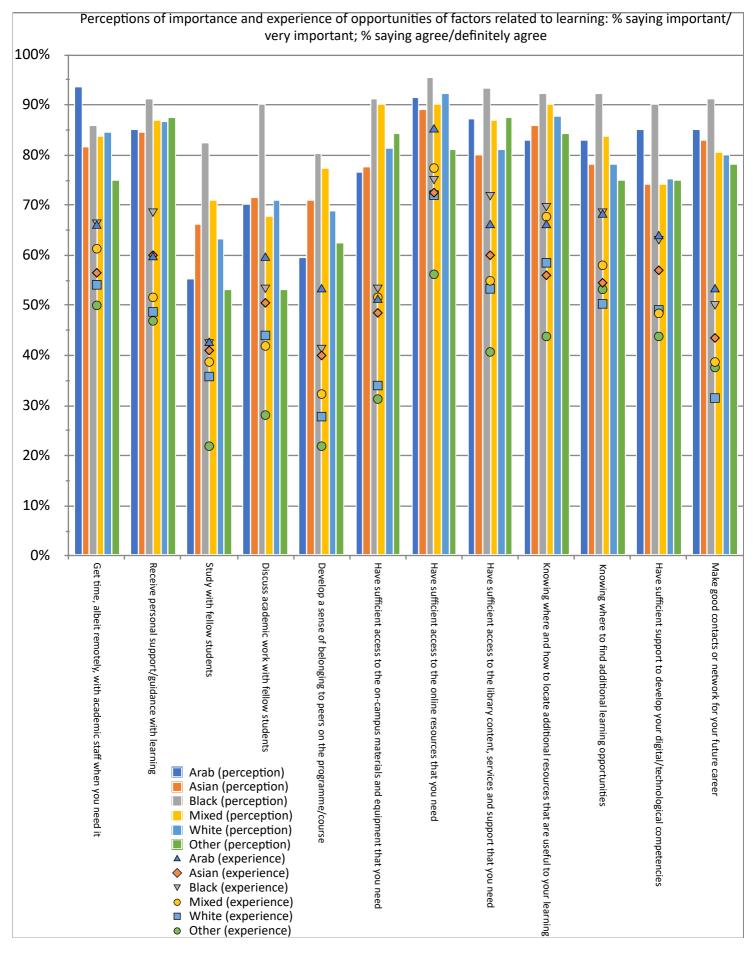


Figure 38: Percentage of students from each ethnicity group who said that the above factors were important/very important to their quality of learning (bar chart); percentage of students from each ethnicity group who said that they agree/definitely agree that their study experience gave them the opportunity to do the above (plotted shapes)

Other students are among those who attribute the least importance to studying with their peers and developing a sense of belonging. Other students consistently report having the least positive experience for many of the elements, except for *knowing where to find additional learning opportunities* and *make good contacts or network for your future career*, for which White students expressed having the fewest opportunities. Despite attributing the least importance to developing a sense of belonging, Arab students reported having the best experience of this. The vast majority of Arab students (85%) also agreed that they had sufficient opportunities to access the required online resources, while only 58% of Other students agreed.

FOCUS GROUP

"I really struggled with groups this year, but that is literally because my group mates just didn't communicate at all. I do think trying to put people in groups is really important because most of the time when I was struggling, it was other people on my course that helped me. Not that my lecturers didn't help, but it's obviously a lot easier to talk to your peers."

#student V (Not known, Other Sciences)

Open question: Q30

Q30 asked students what quality learning means to them. There were 79 Black, 118 Asian (53 CHN/IND, 65 BAN/PAK/OTH), 24 Arab, 24 Mixed, 22 Other and 337 White responses.

For all ethnicities, the following themes were mentioned in relation to quality learning:

- knowledge/skills retention (esp. White students)
- independent learning (esp. Arab and Mixed students)
- not a suitable substitute for quality teaching, or quality learning depends on quality teaching — despite the emphasis on independent learning (esp. Asian, Mixed and Other students)

"Taking my own initiative to build upon the teaching and areas that interest me, however it should not be done [as a] replacement [for] poor teaching."

- the application of theory often in a practical context or context relevant for future use (esp. Black, Asian, Mixed and White students)
- understanding material (less so Other students)
- preparation for assessments (esp. Asian students; except Arab students, who associated preparation for assessments with quality teaching).

FOCUS GROUP

"Independent learning is meant to be preparing us for after uni, where we're actually working on our own, because we won't be... Obviously teamwork and working with other people is just as important, but the point is that you're meant to understand the content yourself and be able to do it."

#student O (Asian Other, Business Studies)

Black students, among other ethnicity groups, frequently mentioned:

- preparation for a future career, improving employability, or learning life skills
- feeling engaged, both in and out of lectures
- being effective or efficient, and maximising the potential of time spent
- improving or developing skills and knowledge.

Asian students, among other ethnicity groups, frequently mentioned:

- preparation for a future career, improving employability, or learning life skills
- an investment of time or effort
- use of quality, relevant and accurate course material
- sufficient access to such material, as well as other resources and learning platforms
- interactive learning (particular to Asian students).

Differences between CHN/IND and BAN/PAK/OTH students

For **CHN/IND** students the following themes were comparatively significant:

- independent learning
- high-quality and accurate course material
- preparation for assessments.

FOCUS GROUP

"I come from an Indian school, and I come from an international background. When we were studying in our education system, we were slightly spoon fed and pampered. Everything was just given to us. When I came into university during my first semester, I was like okay no one is going to ask me if I need anything. I am just to have to do it myself and if I need clarification, I am going to have to ask them. It is just when you come from such different backgrounds and when you come from a different level of education and a different culture, the university really helps put you into a more independent and mature position because then you learn how to do things by yourself."

#student E (Asian Indian, Business Studies)

For **BAN/PAK/OTH students**, the following were comparatively significant:

- practice exams or past papers
- learning that is enjoyable, productive and fun
- feeling engaged
- investing time in quality learning
- quality learning is not a substitute for quality teaching.

Arab students, among other ethnicity groups, frequently mentioned:

- feeling engaged, both in and out of lectures (among the most frequently mentioned for Arab students)
- feeling motivated and wanting to learn more
- sufficient access to course material, other resources and learning platforms
- the paramount importance of quality learning.

Mixed students, among other ethnicity groups, frequently mentioned:

- an investment of time or effort
- having the opportunity to ask questions

[&]quot;Best preparation towards my career after university."

- teaching staff who are available, accessible and approachable
- sufficient access to course material, other resources and learning platforms
- the paramount importance of quality learning
- having a clear understanding of what needs to be done, with clear aims and purposes (particularly Mixed students, compared to other groups)
- learning that is enjoyable, fun, and/or productive.

"Not just reading material or attending lectures but fully understanding the course, and enjoying the work you're doing. And taking an interest in it beyond what is provided by the university."

Other students, among other ethnicity groups, frequently mentioned:

- feeling engaged, both in and out of lectures (very frequently mentioned for Other students)
- feeling motivated and wanting to learn more
- having the opportunity to ask questions
- being effective or efficient, and maximising the potential of time spent
- teaching staff who are available, accessible and approachable
- the use of, and access to, quality, relevant and accurate course material.
- a student being able to learn in their own way that plays to their strengths (esp. Other students)
- learning that occurs at a student's own pace and in their own time (esp. Other students)
- having an organised and structured approach (esp. Other students).

FOCUS GROUP

"Quality learning for me means that I have gained knowledge from teaching/simulation that I have not had before. It may challenge previous learning and inspire [me] to take up new challenges. It will allow me to take this new knowledge into the workplace to practice and to enhance my future. Quality learning may also contain elements that can be passed to others to encourage them to learn too."

#student X (Not known, Health Sciences), written response

White students, among other ethnicity groups, frequently mentioned:

feeling engaged, both in and out of lectures

FOCUS GROUP

"For me I think definitely a big part of it [quality learning] is being engaged in tutorials where we have question and answer, and it's back and forth between the tutors and the pupils. I know we had things online this year to do that, but we personally in this house [had a] very poor internet connection, and so it's constantly breaking up. I only heard about half of what the lecturers were saying, and then they only heard about half of what I was saying, and there's only so long you can go back and forth before you give up. I think there's just something about being able to be face-to-face and looking someone in the face when you're speaking to them. I think that can't really be replaced for me personally. That's what I feel about it.

#student R (White, Other Sciences)

• being effective or efficient, and maximising the potential of time spent

[&]quot;Learning in a way that suits your learning style."

- the use of quality, relevant and accurate course material (esp. White students)
- sufficient access to such material, other resources and learning platforms (esp. White students)
- access to help and support when needed (esp. White students).

"It means being able to enjoy what you are learning, and although it is sometimes hard you have the right support there to ask help for."

Quality of teaching and learning: meeting expectations (Figures 39 & 40)

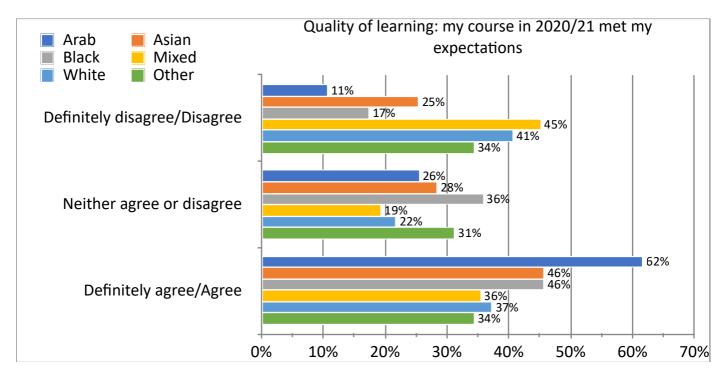


Figure 39: Percentages of each ethnicity group who gave the above responses, when asked whether the quality of learning on their course in 2020/21 had met their expectations

Arab students were the most positive about having their expectations of learning and teaching met; 62% and 60% of Arab students, respectively, agreed or definitely agreed that their expectations had been met. Mixed students were the most negative about learning and teaching; 45% and 55%, respectively, of Mixed students, disagreed or definitely disagreed that their expectations had been met. After Mixed students, White students were the second most negative. Students in the Other ethnicity group were fairly evenly distributed between positive, neutral and negative responses for both learning and teaching. Black and Asian students were moderately positive about their expectations being met for both aspects. White and Mixed students are the most polarised, with only 19% and 10%, respectively, expressing a neutral opinion.

FOCUS GROUP

"I think for me it did meet expectations and I actually did not mind it, because at the end of the day I feel like my grades were not impacted, and university is firstly about grades and secondly about socialising. I feel it was fine."

#student AB (Asian Chinese, Other Sciences)

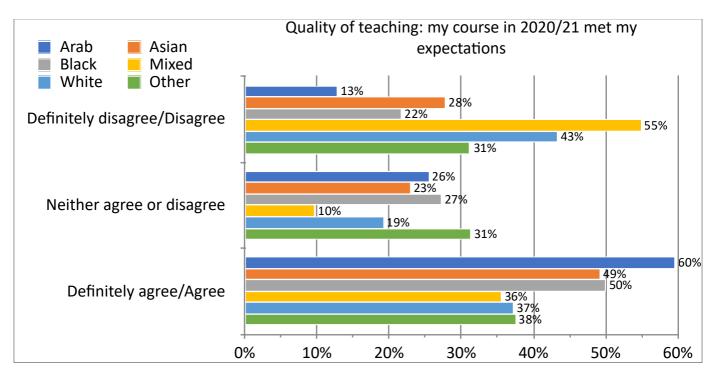


Figure 40: Percentages of each ethnicity group who gave the above responses, when asked whether the quality of teaching on their course in 2020/21 had met their expectations

"I think availability of the teachers [was] really good at this point in time. I remember in my first semester this year I emailed my teacher because I was having a question [about] past papers. I just had one question and emailed her right before the exam, I guess like three hours before my exam, and I really was not expecting any email from her, but she had replied and even gave me like a proper understanding, step-by-step instructions of how they got the answer, so it was really good because I do not think I had that in the first year [in] pre-COVID times. I did not have any interaction [pre-COVID]; the teachers took longer time to reply to queries. The availability at this point was really good, the support was really amazing at this [...] time."

#student F (Asian Indian, Business Studies)

FOCUS GROUP

"It definitely did not meet expectations, because prior to coming to university I knew there were going to be some changes because of COVID, and that it was not going to be normal. But we were told it was going to be a blend of online and in person. What a blend of online and in person meant was 90% online, sometimes you can come in for a lab in person and that is what a blend of online and in person meant. That is not really a blend. During the October/November period, people were allowed to come in occasionally for labs and then it was completely online. I will not say it met expectations at all."

#student AC (White, Other Sciences)

Perceptions and experience of factors related to wellbeing (Figure 41)

More Black students than any other ethnicity group attribute importance to all three factors related to wellbeing. Receiving adequate support for mental wellbeing was significant to all ethnicity groups,

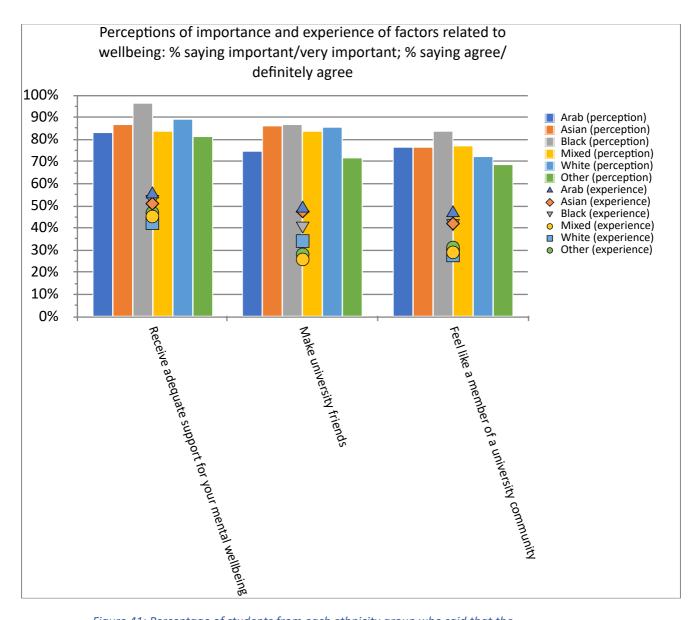


Figure 41: Percentage of students from each ethnicity group who said that the above factors are important/very important to their wellbeing (bar chart); percentage of students from each ethnicity group who said that they agree/definitely agree that their study experience has given them the opportunity to do the above (plotted shapes)

"...it's just knowing that's really poor on not only your physical and mental health, just sitting in the same room all day, and then on top of that you're not actually doing what you're here to do at university. The whole point is learning, but you're not able to do that properly. So a lot of people have been saying, 'Well, what is the point of me being here doing this?' Then that protracted over a whole year, especially when these are supposed to be the best, most exciting years of your life, when you're young, and you're just sitting feeling you're wasting it."

#student R (White, Other Sciences)

with over 80% of all groups feeling this factor was important or very important. Indeed, 97% of Black students and 90% of White students felt this way. While perceptions of importance were high for all ethnicity groups, experiences over the past academic year fell short, particularly for White, Other and Mixed students. Although Arab students were among those attributing the least importance to

these three factors related to wellbeing, they nonetheless reported having the best experience of all three factors. However, while this represented a relatively good experience compared to other ethnicity groups, in absolute terms this was still poor.

FOCUS GROUP

"...there has been a lot of mental like mental support. I've had lecturers and the university staff emailing the whole cohort about if they want to talk to anybody, if they need any mental health [support], if they want to come in. [...] I think mentally it's been quite good [...], the university has been quite supportive and understanding of quite a lot of things....

...I did speak to the counsellor from MMU and [...] the counsellor I spoke to was really nice and it just kind of helped, because I didn't go out for many months [during the pandemic] and it just was nice to talk to someone else apart from my family."

#student AF (Asian Pakistani, Health Sciences)

Q17 Preference for teaching mode (Figure 42)

Students were asked what their preferred mode of teaching was (face-to-face/online/no preference), considering the context of the ongoing coronavirus pandemic. All 835 participants responded to this question. There were 92 Black, 201 Asian (96 CHN/IND; 105 BAN/PAK/OTH), 47 Arab, 31 Mixed, 14 Other, and 432 White responses. There were 18 responses from those who preferred not to select their ethnicity.

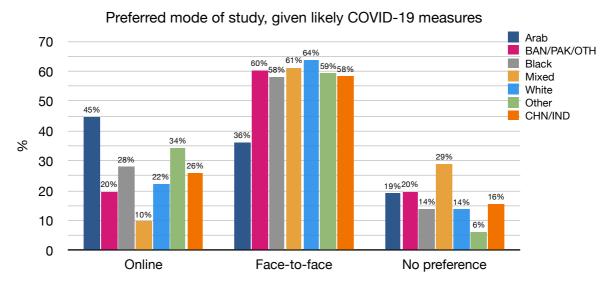


Figure 42: Percentage of each ethnicity expressing a preference for each mode of study. Asian students have been split into two groups: CHN/IND and BAN/PAK/OTH students

Analysis on individual ethnicity groups shows that the majority of students in most ethnicity groups prefer face-to-face teaching; the majority of Black (58%), CHN/IND (58%), PAK/BAN/OTH (60%), Mixed (61%), White (64%) and Other (59%) students prefer face-to-face teaching. The exception to the trend are Arab students, of whom only 36% prefer face-to-face teaching. In contrast, among Arab students the most popular teaching mode is online (45%); this is significantly greater than any other ethnicity group, although 34% of Other, 28% of Black and 26% of CHN/IND students expressed a

preference for online teaching, as did 20% of BAN/PAK/OTH students and 22% of White students. The students who prefer online teaching the least are Mixed students (10%). A greater proportion of Mixed students (29%) have no preference between online and face-to-face teaching, compared to all other ethnicity groups – all of which, except Other students (6%), have relatively similar proportions expressing no preference (Black, 14%; Arab, 19%; White, 14%; CHN/IND, 16%; and BAN/PAK/OTH, 20%).

Pearson's chi-squared test was done on the data for each ethnicity compared to all other ethnicities (with all other ethnicities as one category for the purposes of the test; e.g., Arab vs non-Arab, White vs non-White, etc.), to determine if the distribution of teaching mode preference was independent of ethnicity group. Statistically significant differences at the p < 0.05 level were found for Arab students (χ^2 = 14.4582, p = 0.0007) and Mixed students (χ^2 = 6.7462, p = 0.0343). While the Pearson's chi-squared test results given here for Arab students are sound, the result for Mixed students should be interpreted with care, as one expectation value was small enough – albeit marginally so – that the validity of applying the test for these students could be questioned.

Open question: Q17a

Q17a asked students whether there was anything in their opinion that works particularly well, or that they particularly enjoy, about online or face-to-face teaching (if they had no preference in response to Q17). There were 7 Black, 21 Asian (9 CHN/IND, 12 BAN/PAK/OTH), 5 Arab, 7 Mixed, 0 Other, and 52 White responses.

Mutual themes raised for all ethnicity groups, except for Other students (0 responses), were:

- the appeal of blended learning
- opportunities to engage and interact with others (face-to-face)
- recorded material
- the availability of online resources
- the ability to review material at will, and the ability to learn at one's own pace
- the convenience, comfort, flexibility and time-economy of online teaching.

FOCUS GROUP

"Well, for one, the online lectures, while great because the recorded information can be archived for later use, it's just not the same as in person teaching. But the online exams were great, in my opinion, because I was in an environment where I was comfortable, I didn't have to sit in a big, cold exam hall with loads of people coughing all over the place. So being able to perform exams in an environment I was familiar with, was very, very helpful. And having everything online was great. Again, I say it would have been great to have face-to-face lectures as well, because that's part of the student experience — going and sitting in a lecture hall and listening to the teaching material. But unfortunately, that wasn't really possible. So I would I would keep elements of the online teaching, and see if there was a method of combining the two methods into one."

#student W (Not known, Other Sciences)

"I liked the mixture of both online and face-to-face. The online saved time in terms of travel to and from university [which is] approx. 2 hours. However, the face-to-face was good for group discussions and having debates. After the pandemic and going forward, it would be beneficial to students and teachers to continue with both teaching methods."

Black students identified:

- opportunities to ask questions (face-to-face)
- getting help and assistance (face-to-face)
- a face-to-face environment providing generally a better teaching experience.

"I feel like the lessons are [...] stricter and taught very well when it's online, however I prefer the support and help aspect from [...] face-to-face."

Asian students identified:

- opportunities to ask questions (face-to-face)
- getting help and assistance (face-to-face).

Differences between CHN/IND and BAN/PAK/OTH students

- CHN/IND students accounted for the majority of those Asian students who highlighted the benefits of recorded material
- BAN/PAK/OTH students accounted for the majority of those who identified the convenience, comfort, flexibility and time-economy of online teaching.

Arab students identified:

- opportunities to ask questions (face-to-face)
- getting help and assistance (face-to-face)
- a face-to-face environment providing generally a better teaching experience.
- it is easier to concentrate (face-to-face)
- motivation and engagement is better (face-to-face)
- practical applications of learning are better (face-to-face)
- online being a safer environment in the context of the coronavirus pandemic
- online course forums working well.

Mixed students, like Black and Asian students, also identified:

- opportunities to ask questions (face-to-face)
- getting help and assistance (face-to-face).

"You can ask questions when you need them answering, online sometimes you have to wait until the end, and by that time you may have forgotten."

White students, like Arab and Black students, felt that face-to-face teaching provides a better experience.

"I find face-to-face a lot more effective as a learning method. However I also really enjoy the freedom that online offers."

Open question: Q17b

Q17b asked students what they had enjoyed, or most valued, about online activities.

There were 21 Black, 36 Asian (18 CHN/IND, 18 BAN/PAK/OTH), 15 Arab, 3 Mixed, 10 Other, and 94 White respondents.

Students from all ethnicity groups identified:

• the pace of online learning, less pressure and the ability to review content at will

- the utility of recorded material (except Mixed and Other students)
- the convenience and flexibility of online activities (except Mixed students).

FOCUS GROUP

"...for me it [the key factor of the year] was the huge amount of information and lecture recordings and tasks and quizzes and material for study. The availability of it. It was all online so I could access anything I wanted, whenever I wanted, so it was fairly easy to get access to study materials."

#student S (Black African, Other Sciences)

Black students frequently identified:

• a more comfortable learning environment when online

"Working from a familiar environment."

- the ability to engage in extracurricular activities when online (had they been attending university face-to-face, they would not have had the time)
- the ease of asking questions or contributing when online (one student cited anonymity as a specific benefit; others cited increased confidence).

Asian students, among other ethnicity groups, frequently highlighted the benefits of the following:

- saving time by not having to travel
- the efficiency of online teaching and learning
- a more comfortable learning environment when online
- having course materials and online resources readily available.

FOCUS GROUP

"...with recordings I can pause it and I can write notes and I can reflect, I can rewind, there's so many things; [it's] ten times better. When I was in lectures, I remember there was — I'm in a class where there's more than 250 students — and in one lecture hall there's so many people talking, I can barely hear the lecture. When it's a recording, I can hear directly, first of all, because there's no other background noise, no other students talking at the same time. [...] It's [...] only the lecturer, so the voice is 100% clear and [...] I can pause and reflect. I can watch it in my own time later on, a time more suitable to me in the evening."

#student AD (Asian Pakistani, Health Sciences)

"The ease of access and the low costs it brings, for example not having to pay for transport."

Differences between CHN/IND and BAN/PAK/OTH students

• For BAN/PAK/OTH students, the convenience and flexibility of online learning was more more significant than for CHN/IND students.

"Additionally the time saved having to travel which can now be used on learning instead."

[&]quot;Feeling confident in asking questions when confused."

• CHN/IND students more frequently highlighted feeling safer and more confident to contribute and ask questions online.

"The ease it brings and gives people more confidence to speak."

Arab students frequently identified:

- a more comfortable learning environment when online
- the ease of asking questions or contributing when online.

"Being at home with family and relatives and also continue my course normally."

"[Having the] confidence to ask questions via chat on live sessions."

Mixed students frequently highlighted:

- having course materials and online resources readily available
- a more comfortable learning environment when online

"Doing [it] from my own personal space, [I] feel less pressure."

• the structure of online teaching and learning.

"The breakdown of the learning objectives and clear structure."

Other students frequently highlighted:

- saving time by not having to travel
- the efficiency of online teaching and learning
- feeling less anxious online
- the ease of contributing or asking questions.

"Time management and being able to participate and ask questions in an online session, rather than in a classroom where I would [be] shy to ask a question and stay confused about the topic."

White students frequently identified:

- having course materials and online resources readily available
- saving time by not having to travel
- the efficiency of online teaching and learning.

"In the past I used to spend a lot of time travelling to University, and this year I was able to put this time into my work instead, which was really beneficial."

Open question: Q17c

Q17c asked students what they enjoy, or what they feel works particularly well, about face-to-face teaching. There were 47 Black, 85 Asian (38 CHN/IND, 47 BAN/PAK/OTH), 14 Arab, 15 Mixed, 12 Other, and 231 White responses.

Students from all ethnicity groups frequently highlighted:

- the motivating and engaging aspects of face-to-face teaching and learning
- the improved ability to focus
- being part of a university environment and having a sense of community and belonging

• interacting with peers and lecturers (except for Mixed students).

"It's hard to feel part of a community when you don't know anyone in your class."

"It's just a much more engaging experience than sitting alone in a room staring at a screen all day."

• the ability to ask questions face-to-face (except Asian and Other students).

While the benefits of asking questions online was associated with increased confidence, in the face-to-face environment it was associated with convenience and faster response times.

"The engagement [and] sense of support, from academics and fellow students. The opportunity to have a question answered immediately."

Black students, among others, felt that face-to-face teaching and learning gives them an improved understanding of course content.

Among other students, **Asian students** felt that they are better able to understand content when learning face-to-face. They also highlighted live seminars and elements of interactive learning.

Differences between CHN/IND and BAN/PAK/OTH students

- BAN/PAK/OTH students highlighted interacting with peers or lecturers and feeling connected with others more frequently than CHN/IND students.
- A few BAN/PAK/OTH students also mentioned the benefits of having discussions, whereas CHN/IND students did not.

"...having peers and being able to actually have a proper discussion instead of text based Q&A online."

Arab students thought that face-to-face learning gives them an improved understanding of taught material.

Mixed students, among other ethnicities, frequently highlighted:

- live seminars
- elements of interactive learning
- that the quality of teaching is better face-to-face.

Other students frequently highlighted:

- the practical elements of face-to-face learning
- live seminars
- elements of interactive learning
- that a face-to-face environment is better for those with certain disabilities, such as ADD.

"Because I have ADD I get easily distracted from online lectures and tutorial sessions. I feel face-to-face would be better for my learning needs."

White students, like Asian and Mixed students, highlighted:

- live seminars
- elements of interactive learning.

Open question: Q18

Q18 asked students what aspect of the way in which staff had taught them in the year 2020/21, if any, had prevented them from fully engaging in, and benefitting from, their study experience. There were 57 Black, 109 Asian (48 CHN/IND, 61 BAN/PAK/OTH), 21 Arab, 25 Mixed, 18 Other, and 324 White responses.

Students in all ethnicity groups thought that:

- there was too much online content
- there was not enough face-to-face teaching
- lectures were not sufficiently engaging or motivating.

"The online element is a shambles. Students struggle to interact and so the online sessions tend to become very very dull."

FOCUS GROUP

"The one thing that I think really needs to be improved upon is how some lecturers seem to just read through the slides. They don't expand on anything, so if you are like myself, a first-year student, and you're from a non-medical background, all of a sudden this tutor is reading a slide to you and yes, there is an element of expectation where we have to go and do our own research and find out our own things and that's great, but they're just reading a slide in a very monotone voice. It's very difficult to follow, and then you end up having more questions saying, okay, so I have this knowledge, I've listened to you read this slide which I could have read, what does it mean? I really appreciate the lecturers who take the time to expand on it in their recordings. That is precious. It's those who just read it off the slide and don't annotate, they don't expand, that needs work."

#student K (White, Health Sciences)

Black students in particular thought that:

- there was a lack of live sessions
- there was too much pre-recorded material (or that pre-recorded material was too long)
- online resources were unclear or of poor quality.

"Some modules were simply too heavy on content and didn't give us what we needed to know for the exams. I feel like if we had face-to-face lectures that are interactive after going through the pre-recorded content, we would be able to grasp it better. However, some modules really did just feel unbearably overwhelming with content to the point where learning wasn't enjoyable and hence significantly harder to retain."

Asian students in particular thought that:

- teaching style and delivery was passionless and not engaging
- there was a general lack of effort by teaching staff (towards delivering content).

"Most of the lecturers only try to read out their slides from PowerPoints and [they were]n't really try[ing] to have any activities that can engage the attention of the students."

Differences between CHN/IND and BAN/PAK/OTH students

Generally the responses given by CHN/IND and BAN/PAK/OTH students were thematically similar. However, **CHN/IND students** somewhat frequently mentioned:

- issues with poor-quality teaching
- feeling awkward about asking questions online
- lacking support or having difficulties getting help
- lacking an environment conducive to learning.

"Online lectures are awkward. It's hard to ask questions or be engaged when [you're] not so familiar with people."

"Not being able to attend face-to-face lectures/seminars. Leaving students to their own devices, to an extent, in completing assignments."

Arab students in particular highlighted:

- the need for more formative assessment or practice questions
- a lack of feedback
- an over-reliance on independent learning.

For **Mixed students** in particular, the lecture, course or module structure was unclear.

"The topics and delivery should have followed the portfolio requirements as opposed to dipping in and out of all topics. It had the largest Marking and Assessment Criteria I have ever come across, which meant it made very ambiguous what was actually required/being asked."

Other students in particular highlighted:

- long response times, lack of responses, or lack of detail in responses
- old recorded material being re-used from previous years
- having difficulties accessing and engaging with online resources
- issues with timetabling.

"Timetable was not adhered to by staff on most of my modules. I felt uninspired and unengaged with most of my online course content."

Across multiple ethnicity groups, various other themes were highlighted in this question, including:

- the lack of group work and other opportunities to interact with and learn from peers (raised by Black and Asian students)
- poor communication and interaction from staff (raised by Mixed, Other and White students)
- poor quality teaching, or expressing that online teaching is not a suitable substitute for faceto-face teaching (raised by Black, Arab and White students)
- the lack of one-to-one sessions with staff (raised by Mixed and Other students)
- the lack of an environment conducive to learning (raised by Mixed and White students)
- technical or IT issues for both staff and students (raised by Black, Mixed and White students).
- feeling isolated, lonely and suffering from lack of interaction with others (raised by Asian, Arab and Other students).

More positively, a number of students from all ethnicity groups made positive comments regarding their experience of the 2020/21 academic year, such as that staff have done well despite the circumstances (although these comments were proportionally less from Mixed students).

Importance of communication (Figure 43)

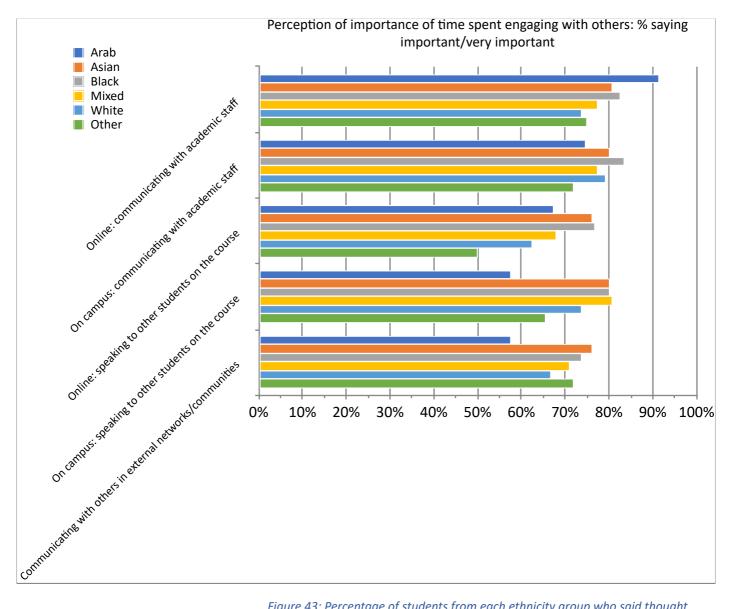


Figure 43: Percentage of students from each ethnicity group who said thought that the above factors related to engagement with others were important/very important

The vast majority of Arab students thought that time spent communicating with academic staff online was either important or very important, whereas for the same factor on campus this was much lower (92% vs 75%). Black students were those who attributed the most importance to time spent on campus communicating with academic staff (84%); they attributed similar importance to

FOCUS GROUP

"I do feel sorry for you guys [first-year students], because what they told us on our first day was make friends and do work in small groups for everything. That is what they told us as that is the way to get through the subject. I think that is important, but I do not understand how you can do that on Microsoft Teams. I do not understand how you can meet people. You can ask some questions in the chat but it is difficult to actually connect with people and get to that sort of relationship."

#student Y (White, Other Sciences)

the same factor online (83%). Arab students, compared to all other ethnicity groups, attributed the least importance to the time spent communicating with others outside course/programme/university in networks and communities and on campus: the amount of time spent speaking to other students on the course. The former factor was important to Asian (76%) and Black (74%) students, while the latter was important to Mixed (81%), Black (80%) and Asian (80%) students. Online factors were the least important to White and Other students.

FOCUS GROUP

"I attended — it was called CIPS. It's [the] Chartered Institute of Procurement and Supply [...] I had a membership with them and I attended different types of conferences. Of course, [...] it had to be online due to COVID, I networked with a lot of people. And so I obviously came from the background where I didn't have much experience [...] and the people that were there had loads of experience. So when it came to networking, it really helped [my] understanding [about] where [...] I [wanted] to navigate to."

#student B (British, Business Studies)

Importance of feeling connected (Figure 44)

The vast majority of students in all ethnicity groups thought that feeling connected to the staff on their course was either important or very important; however, the greatest proportions attributing importance to this factor were from Arab students and White students (87% and 86%, respectively).

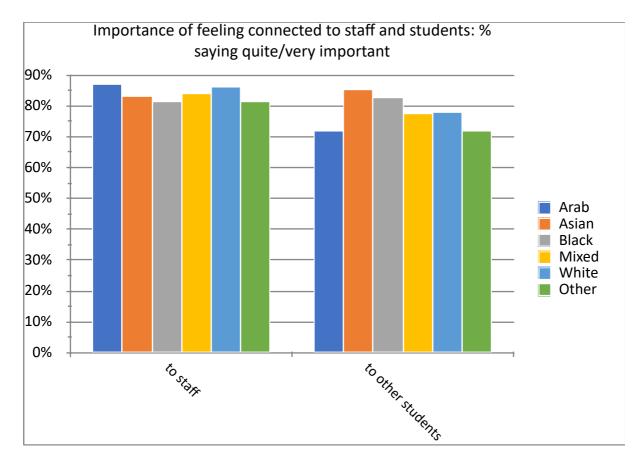


Figure 44: Percentage of students from each ethnicity group who thought that the above factors related to feeling connected to staff and students were quite/very important

Among other ethnicity groups, a similar proportion of students attributed importance to this factor (Mixed 84%; Asian 83%; Black 82%; Other 81%).

While the vast majority of students in all ethnicity groups also thought that feeling connected to other students on their course was either important or very important, this was a less important factor for all groups except for Black and Asian students. For Black students, 83% thought that feeling connected to other students was important or very important, compared to 82% for feeling connected to staff; for Asian students, it was 85% and 83%, respectively. Arab and Other students had the lowest proportion who attributed importance to feeling connected to other students (72% for both groups).

FOCUS GROUP

"...the lecturers themselves have always been available by email, or if they're in the building, you can go talk to them. They're always available to contact. And that has been a massive help, at least to me personally, because, as I said my maths ability is rubbish. So having the maths lecturer more or less on tap on a consistent basis has been exceptionally helpful for my learning this year."

#student W (Not known, Other Sciences)

Expectations of how time will be spent online or on campus (Figures 45 & 46)

The bar charts in Figures 45 & 46 show how much time students from different ethnicity groups expect to spend in a typical week on various activities, both on campus (Figure 45) and online (Figure 46), as government regulations permit.

The expected time to be spent on independent personal study is generally greater for all ethnicities for online, compared to on campus. When considering time spent greater than 8 hours, the increase is particularly large for Asian, Mixed and White students.

For lectures, notable results include Other students, 31% of whom expect to spend less than 1 hour on campus in lectures, but 7% expect to spend less than 1 hour in online lectures. For Mixed students, 17% expect to spend less than 1 hour in on-campus lectures, but 29% expect to spend this amount of time in online lectures.

FOCUS GROUP

"...when I was learning this year, the general structure was: I had a recorded lecture and then they gave us reading or seminar work to do. Then we'd have a live seminar, so having that structure, I guess it encouraged me to do the reading and the seminar work because [I] knew it was coming up. Obviously, that's what the seminar would be about, so I think that encouraged me to do online learning because if it was all recorded I think then it's easy to just say, 'Oh, I'll do that whenever', and then not - [I'd] kind of forget about it."

#student Q (White, Business Studies)

For most ethnicity groups, expectations of individual time spent with teaching staff is very similar for online and on campus. The vast majority of each ethnicity group expect to spend less than 4 hours engaged in individual time with teaching staff, regardless of whether the setting is online or on campus. Particularly high proportions of Mixed and White students expect to spend less than 1 hour

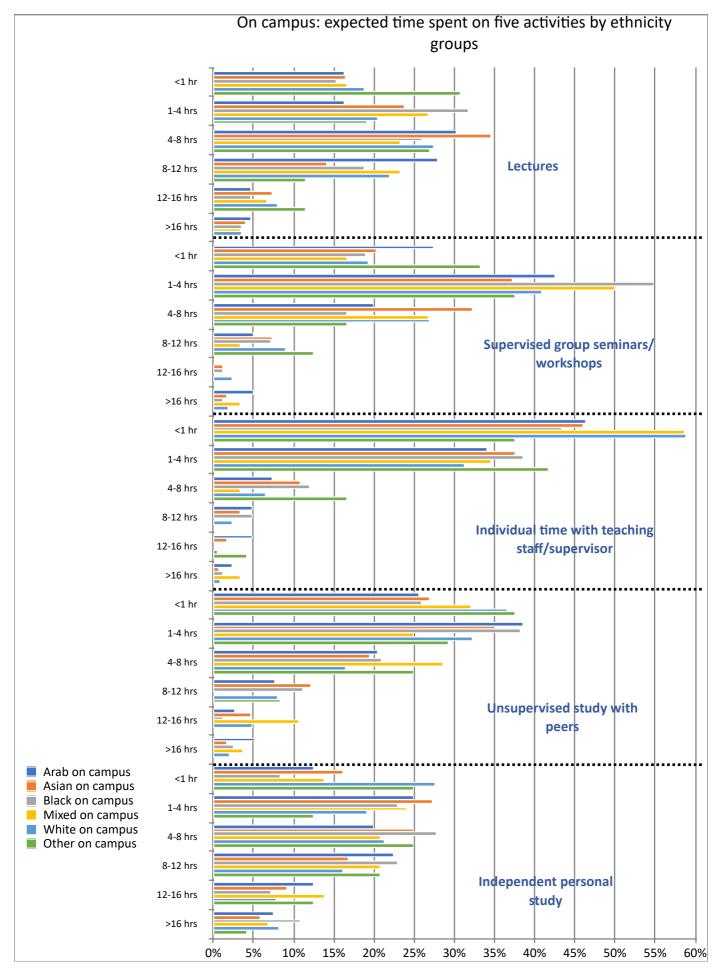


Figure 45: Percentage of each ethnicity group that expected to spend the above amounts of time on the above five activities, on campus

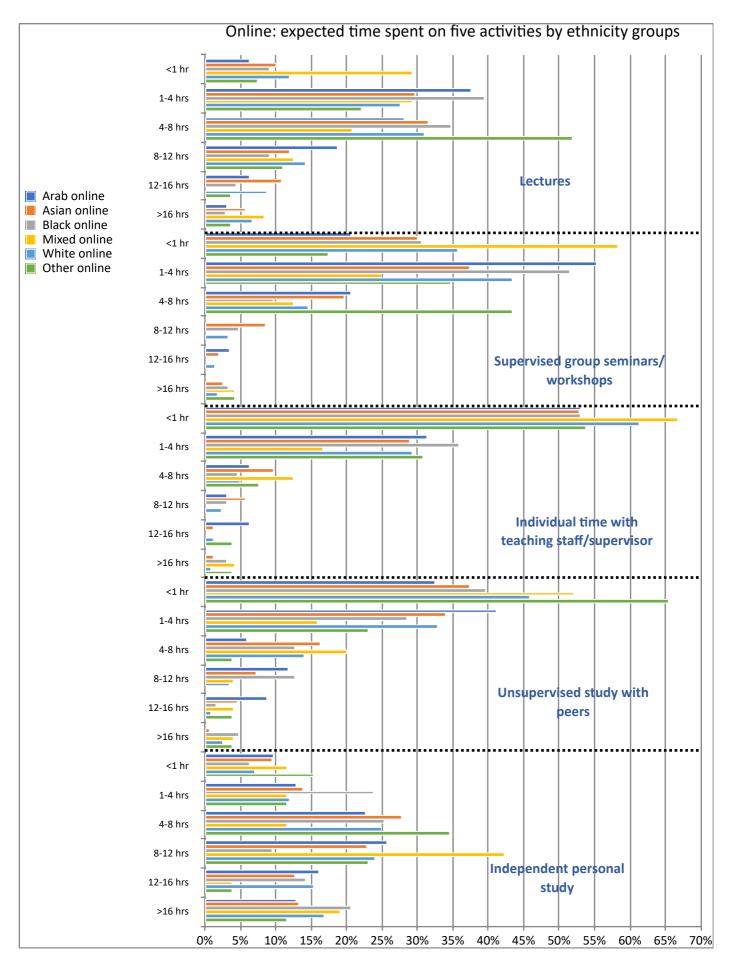


Figure 46: Percentage of each ethnicity group that expected to spend the above amounts of time on the above five activities, online

engaged in individual time with teaching staff (Mixed: 59% on campus, 67% online; White: 59% on campus, 61% online).

For supervised group seminars and workshops, Mixed students in particular, compared to other ethnicity groups, expect to spend much less time online than on campus engaged in these sessions.

When comparing time spent on campus and online, Mixed, White and Other students, have a much greater drop in expectation of the time they would spend in unsupervised study with peers, compared to other ethnicity groups.

Selected focus group comments on independent learning (also see pp. 65-66)

FOCUS GROUP

"It's been pretty good in terms of encouraging us in self-teaching. I think a lot of people who maybe disagreed on the survey forget that at university you're supposed to be more independent [...and] they don't get everything spoon fed to them, because that's definitely how I felt in my first year. I was wondering why I was struggling, and when I reflected, it was literally because I wasn't doing anything by myself, because I was so used to in my A-Levels basically being hand-held across the finish line. So I think maybe right at the beginning, especially in first year, really hammering on the importance of: at the end of the day it's your degree and you have to put in the work to get the results that you want. A lot of people won't understand that, and maybe it won't be til it's maybe too late and they'll think oh, I actually had to put in the work myself as well. That's not really the responsibility of the university staff and more like an individual decision you have to make yourself in terms of your relationship with your learning."

#student V (Not known, Other Sciences)

FOCUS GROUP

"I think [independent learning] is super important. It is because it is in your time, it is flexible, and you know how you want to manage your time, at the end of the day. I think it helps you facilitate that learning, because you are not under pressure. If you just study the module today, and you have like 10 minutes to spare, you can still go over your notes whenever you want because that is outside your classroom. You can do [it] whenever as it is not a fixed schedule, and [the] same goes [for] exam preparation. If you have [...] study leave and you have an exam tomorrow, but you are ready for that exam, then you can study something else that day. This is because it is your time and that is devoted to you, you can do whatever you want with it, so I feel like independent learning is really important, and over the course of your degree you sort of understand how to utilise that so that you can get the most out of it."

#student E (Asian Indian, Business Studies)

FOCUS GROUP

"In India we live in a joint family, so everything has been done for us, and even at school everything is already done for us, and we just have to learn it. In university it becomes more of your choice that teachers are giving you work and lectures. It depends on you. If you want to perform well, you have to be independent. You have to learn more, you have to [do] your reading hours, you have to be doing your readings on time, you have to cover the lectures [ahead of time] if you want to. It does not depend on the teacher. The teachers are not going to force you to do anything, and it becomes more of your choice. It becomes more about your perspective in terms of what you want to do in your life. I believe that with independent learning it is all on you now. Once you get to university, whether or not you study is up to you, and if you do not, then that is reflected via your grades. Therefore yes, I think independent learning is important."

#student F (Asian Indian, Business Studies)

FOCUS GROUP

"Independent learning is a skill, and it is important as when we go into the workplace there are projects whereby we would need to learn independently. It is all about working alone and getting information on your own."

#student C (Asian British, Business Studies)

"It is quite different from college in that we do not get as much help/support from lecturers. It is through emails mostly, especially nowadays, so we have to learn a lot of the content ourselves. Not just using the resources that we get from university, but we would learn using YouTube, our own research a lot of times, and it does help when considered in the context of the workplace as well. A lot of times we will have to make our own decisions and university does help us with that....

...I think for me, the gap between university and college was quite big. You think you would get the same amount of help as college, but it is very different. I think they could make smaller groups and teach each group. Putting everyone in smaller groups would help. They should try teaching people based on their preferred method. For example, they could say we are going to teach this way and everyone who wants to attend that can do so. They could have one session to go over slides and one session to go over worksheets so that students can then choose which one they prefer and attend that particular session."

#student D (Asian British, Business Studies)

Expectations for spending time engaged in various activities online vs on campus in the coming academic year (Figures 47-52)

These figures show how different ethnicity groups expect to spend their time, comparing online and on-campus settings for the same activities. Expected engagement was typically higher on campus than online. For all ethnicity groups, working with teaching staff, not on coursework, online; participating in networks/communities/open courses external to programme, online; and discussing career plans with staff/advisors, online, have particularly low expectations for frequency of engagement. Black and Arab students had the best expectations for engagement in discussing academic performance or feedback with staff, both online and on campus. Mixed, White and Other students had the lowest levels of expected engagement overall. The low engagement across all ethnicity groups for discussing career plans with staff/advisors is surprising, given the importance expressed in the open questions and focus groups by students about preparing for their future careers; however, the vast majority of students are first- and second-year students, and so it might be expected that engagement would currently be low, but increase in subsequent years.

Arab students (Figure 47) generally expect greater engagement on campus rather than online; there are a number of marginal cases with little difference between on-campus and online engagement. Compared to other ethnicities, a significant proportion of Arab students expressed that they would regularly or frequently engage in many of the activities, whether online or on campus. For Arab students, the lowest levels of expectations for engagement are for: working with teaching staff, not on coursework, online (42% rarely/never); participating in networks/communities/open courses external to programme, online (38% rarely or never); and discussing career plans with staff/advisors, online (35% rarely/never).

Asian students (Figure 48) also generally expect to spend more time engaged on campus. These students, like Arab students, have the lowest levels of expectations for engagement for: working with teaching staff, not on coursework, online (43% rarely/never); participating in networks/communities/open courses external to programme, online (43% rarely/never); and discussing career plans with staff/advisors, online (45% rarely/never).

Similarly, for Black students (Figure 49), on-campus engagement is consistently higher than online. For Black students, compared to other activities, there are high expectations for engagement in: asking questions/contributing in taught sessions, on campus (60% regularly/frequently); working with students on course projects/assignments, on campus (59% regularly/frequently); asking another student to help you understand course, on campus (58% regularly/frequently); discussing with staff outside timetabled hours, on campus (57% regularly/frequently); and using learning resources external to programme, on campus (60% regularly/frequently). Expectations for engagement are particularly low, compared to other activities, for working with teaching staff; not on coursework, online (44% rarely/never).

For Mixed students (Figure 50), there are overwhelmingly higher expectations for engaging on campus compared to online. For these students, the difference between on-campus and online expectations is particularly marked for: asking questions/contributing in taught sessions (regularly/frequently: on campus 57% vs 16% online); working with students on course projects/assignments (regularly/frequently: on campus 69% vs 33% online); participating in networks/communities/open courses external to programme (regularly/frequently: on campus 50% vs 12% online); and discussing career plans with staff/advisors (regularly/frequently: on campus 50% vs 8% online).

For White students (Figure 51), expectations for either occasional or regular engagement are relatively high for activities, both online and on campus. However, compared to other activities, White students have lower expectations of engagement for a number of online activities: working with teaching staff, not on coursework, online (59% rarely/never); discussing career plans with staff/advisors, online (58% rarely/never); participating in networks/communities/open courses external to programme, online (59% rarely/never).

For Other students (Figure 52), expectations for time spent engaging in activities are generally low, and are lower online compared to on campus, except for *asking questions/contributing in taught sessions*, for which online expectations are higher. Expectations for time spent engaging in *using learning resources external to programme*, on campus, are particularly high (55% regularly/ frequently), compared to other activities for Other students.

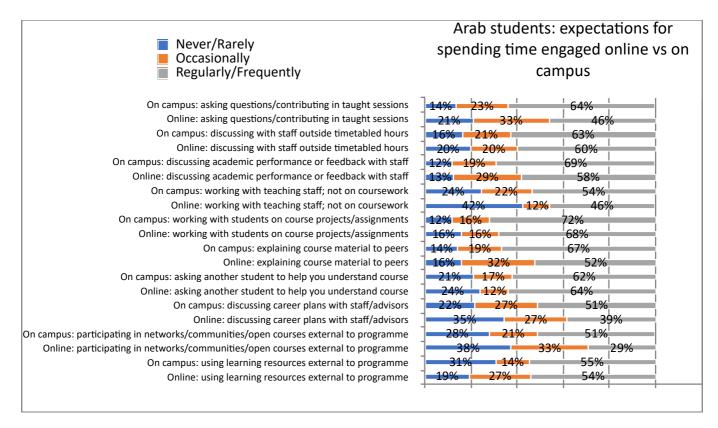


Figure 47: Comparison between online and oncampus expectations of Arab students for time spent engaged in various activities

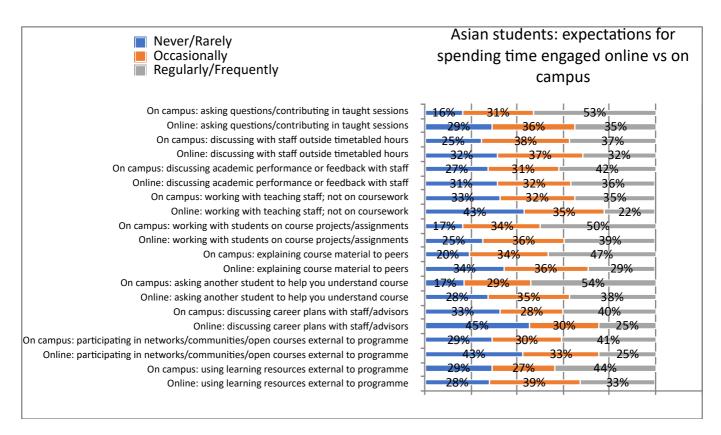


Figure 48: Comparison between online and oncampus expectations for Asian students for time spent engaged in various activities

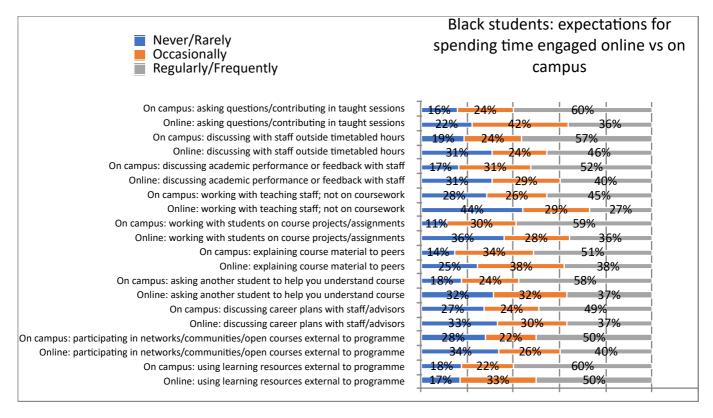


Figure 49: Comparison between online and oncampus expectations for Black students for time spent engaged in various activities

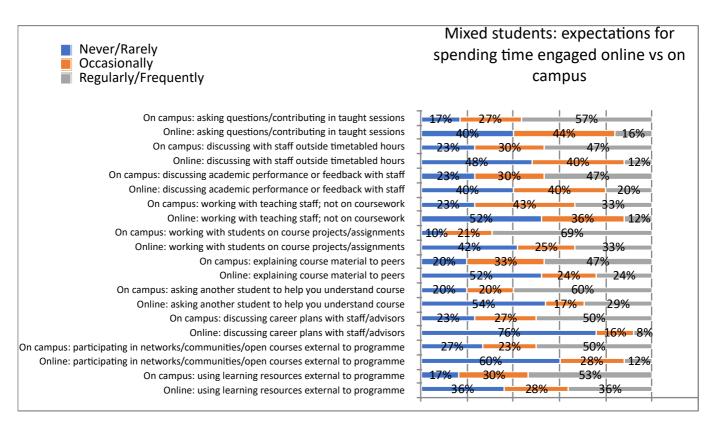


Figure 50: Comparison between online and oncampus expectations for Mixed students for time spent engaged in various activities

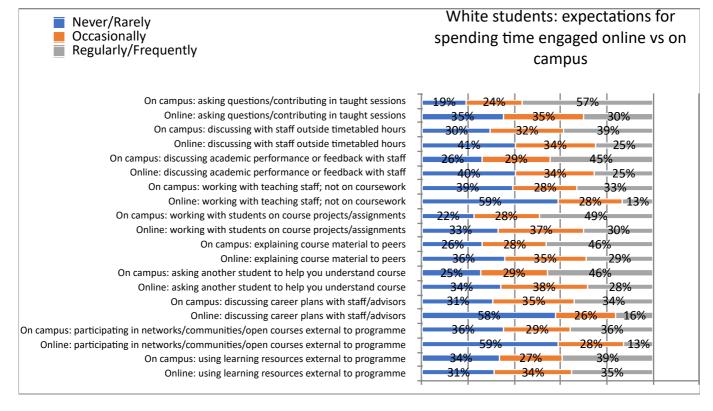


Figure 51: Comparison between online and oncampus expectations for White students for time spent engaged in various activities

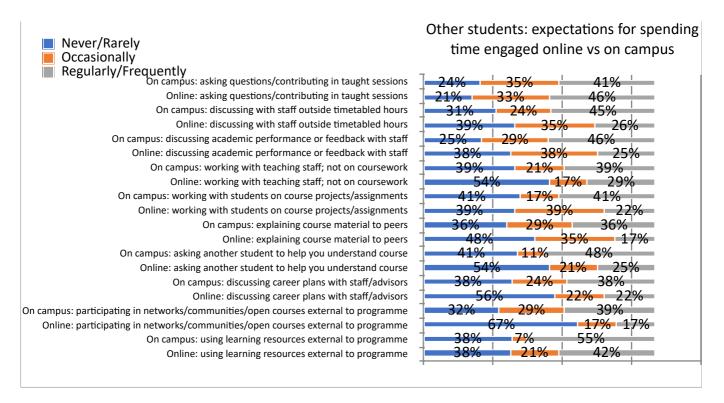


Figure 52: Comparison between online and oncampus expectations for Other students for time spent engaged in various activities

Open question: Q32

Q32 asked students if they had any additional comments about their overall experience of learning and teaching in the context of the COVID-19 pandemic. There were 36 Black, 42 Asian (22 CHN/IND, 20 BAN/PAK/OTH), 8 Arab, 9 Mixed, 16 Other and 171 White responses.

Black students most frequently made references to:

- needing to return to face-to-face teaching and learning
- feeling overwhelmed or having suffered in terms of mental health
- having encountered difficulties or barriers to learning during the 2020/21 academic year
- staff having done well, despite the circumstances.

"My social skills have tanked, and it has greatly hindered my mental health feeling alone, as we're all first years and have no one we really know as we haven't met anyone really."

"Through countless panic attacks and other problems my course leader [...] and also advisor [...] helped me out a lot with [everything] going on in the year. Online exams are not nice and being stuck isolating made things much harder." (staff names redacted)

Asian students most frequently made references to:

- needing to return to face-to-face teaching and learning
- having encountered difficulties or barriers to learning over the 2020/21 academic year

A few Asian students mentioned:

- having experienced difficulties with teaching, or issues with the quality of teaching
- that this year had not met their expectations
- needing better and clearer communication from staff and faculties
- feeling that independent learning should not be relied upon to replace quality teaching
- that the 2020/21 academic year had not been value for money, and that trying to learn online had generally been a bad experience.

"Students should have been made aware that all teaching was going to be online. I was told we would have at least an hour or two face-to-face weekly, but instead I've had 5-6 hours of face to face teaching all year and wasted over £8000 on accommodation and living costs. Terrible communication."

Differences between CHN/IND and BAN/PAK/OTH students

CHN/IND students most frequently mentioned:

- encountering difficulties with learning
- needing a return to face-to-face teaching
- a lack of value for money
- that the past academic year had not met their expectations.

BAN/PAK/OTH students most frequently mentioned:

- encountering difficulties with learning
- having had a negative experience of teaching
- generally expressing negative sentiments about the past year
- feeling overwhelmed, exhausted, or having suffered in terms of mental health.

"I feel overall the uni experience has been a difficult one for me and other students. I feel a lot of us have had anxiety and some kind of depression, including me. I feel as [though] I have not achieved

enough, and I am worried as to how this will affect my grades, however I know that the uni will take this into consideration and be kind on grades, as this year a lot of people have been affected physically and mentally."

Arab students most frequently made references to two themes:

- support was present and clearly signposted
- there was insufficient revision time or insufficient time between assessments.

One Arab student raised the lack of value for money during the past year. Comments from Arab students generally indicated that while there had been issues with this year and students had had a mixed experience, the move to online learning had worked well for some. A hybrid approach to teaching (with students learning concurrently live and online) was suggested by one of the students. One Arab student also mentioned that staff had done well, or been supportive, despite the circumstances surrounding the coronavirus pandemic (although for this student the experience was mixed).

"Some members of staff were not understanding of the difficulty students faced this year with the covid-19 pandemic and didn't listen to our concerns, however a lot were very helpful and did their best to [make] our learning as useful and engaging as possible, given the current situation."

Mixed students most frequently mentioned:

- support was lacking or poorly signposted
- the benefits of block teaching

"Block teaching worked really well for me, I believe focusing on one unit at a time allowed me to achieve better grades and [I] felt more confident going into each assessment, and after speaking to friends from other universities who don't use block teaching, they seemed extremely stressed and worried about their grades."

- that the past year had not met their expectations
- that at times they felt ignored

"I feel as though staff are reluctant to reach out and actually provide proper help and support for students who are really struggling, which only makes students less inclined to ask for help when every time I have been ignored."

"I feel [that] as students we [were] unfairly left to fend for themselves. At the beginning there [were] a lot of mix ups but also a lot of support; towards the end the support started to fade away."

• that staff had done well, or been supportive, despite the circumstances surrounding the coronavirus pandemic.

Other students most frequently mentioned:

- not feeling part of a university community
- the demotivating aspect of online studying
- the negative impact on students' social lives
- the need for one-to-one sessions with staff
- that this past year has generally been a negative experience
- having benefitted from studying online, or having preferred it to face-to-face.

The last two of the above points paint a mixed picture in terms of students' experiences, as do the following two responses from Other students.

"I feel the year has been very difficult. I have not felt motivated. Online learning is clearly not a substitute for actual classes. I could have learned online without paying anything. Moving to [university] for the academic year to study exclusively online was expensive and pointless..."

"I look forward to studying through online only, in the next academic year 2021/2022, as this way of studying suits me the best."

White students most frequently mentioned:

- needing to return to face-to-face teaching and learning
- that the past year had not met their expectations
- having experienced difficulties with teaching, or issues with quality of teaching
- having encountered difficulties or barriers to learning over the 2020/21 academic year
- that staff had done well, or been supportive, despite the circumstances surrounding the coronavirus pandemic.

"I feel like the teachers did everything they could to be effective at teaching online. Because it is online there are many things that affect the experience, from timezones to internet quality or home environment which might not be the best for learning. Overall I think the teachers did their best and succeeded at teaching their students during this unique year."

"I know this has been a tough year for everyone, and there are positives to teaching online, but honestly, it feels like a bit of a write-off overall. I really appreciate the work put in by staff but it's impossible to teach properly online. It works for work, but not for learning. Some staff members have gone above and beyond and it shows in our understanding, others have treated the teaching this year as an inconvenience to them, which has impacted their quality of teaching and our learning."

2.4.1 Highlighted survey results for Asian students (CHN/IND & BAN/PAK/OTH students)

Summary of section:

- Expectations for online engagement are better among CHN/IND students: expectations of frequency of engagement with peers online was greater for CHN/IND students, and a greater proportion of CHN/IND students had access to the library resources, services and support that they needed. CHN/IND students would also expect to discuss feedback more frequently with staff online. CHN/IND students also more frequently had use of the time, space and resources to engage in independent learning than BAN/PAK/OTH students.
- Expectations for on-campus engagement are better among BAN/PAK/OTH students: when on campus, they expect to spend more time working with staff on non-coursework activities; they also expect to more frequently use external learning resources on campus.
- The learning (and teaching) expectations were met for a greater proportion of CHN/IND students. CHN/IND students also expressed a slightly greater preference for online studying, compared to BAN/PAK/OTH students (26% vs 20%, respectively).

• Results are generally consistent with answers to open questions.

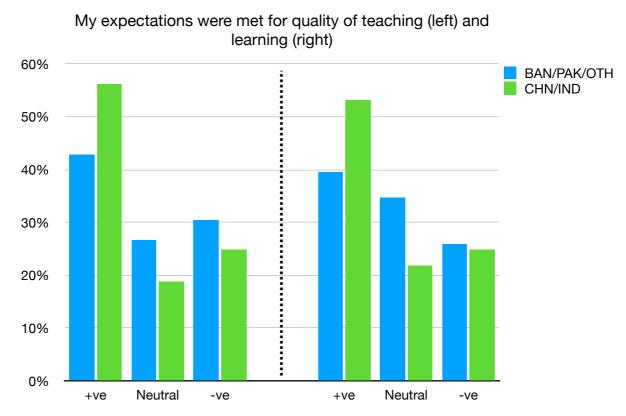


Figure 53: Percentage of BAN/PAK/OTH and CHN/IND students who said they agreed/definitely agreed (+ve), neither agreed nor disagreed (Neutral), or disagreed/definitely disagreed (-ve) that teaching (left) and learning (right) had met their expectations over the past academic year

Chi-squared tests were used to identify the most prominent differences between the two groups of students in their responses (Likert scale responses aggregated into three categories: positive, neutral, and negative), with a less stringent p < 0.1 standard. While the relaxed significance level means that these results should be treated with care, they do indicate potential areas of divergence that may become more statistically significant for a larger sample size. Statistically significant differences were found for the following questions/sub-questions:

The course inspired me to join a professional network/community or an open course (χ^2 = 5.0902, p = 0.0785). For both groups, many students neither agreed nor disagreed, but for BAN/PAK/OTH students there were fewer students expressing neutrality (i.e., more BAN/PAK/OTH students either agreed or disagreed to some extent).

Have sufficient access to the library content, services and support that you need (χ^2 = 5.1016, p = 0.0780). A slightly greater proportion of CHN/IND students agreed that their study experience had allowed them to do this, or were neutral, while a slightly greater proportion of BAN/PAK/OTH students disagreed.

Discuss your academic performance and/or feedback with teaching staff, online (χ^2 = 4.8966, p = 0.0864). A slightly greater proportion of CHN/IND students said they would frequently/regularly or

occasionally do this; a greater proportion of BAN/PAK/OTH students said they would never/rarely do this.

Work with teaching staff on activities other than coursework, on campus (χ^2 = 6.8882, p = 0.0319). A greater proportion of CHN/IND students said they would occasionally do this; a greater proportion of BAN/PAK/OTH students said they would frequently/regularly do this.

Work with other students on course projects/assignments, online (χ^2 = 5.3527, p = 0.0688). A slightly greater proportion of BAN/PAK/OTH students said they would never/rarely or occasionally do this; a greater proportion of CHN/IND students said they would frequently/regularly do this.

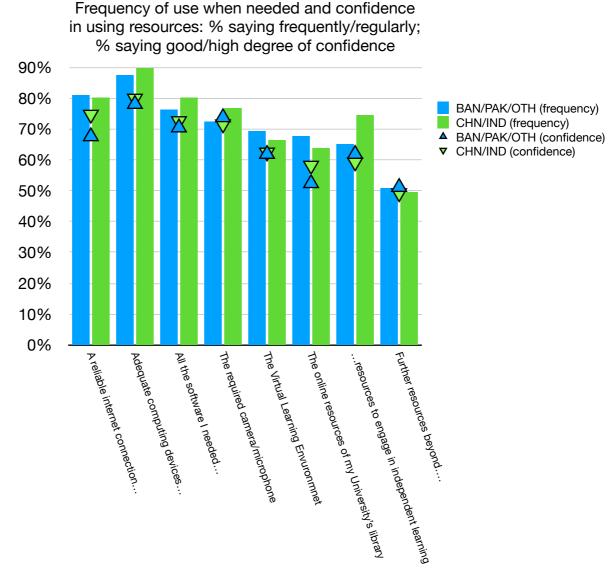


Figure 54: Percentage of students from the BAN/PAK/OTH and CHN/IND ethnicity groups who said that they had access to the above resources when needed frequently/regularly (bar chart); percentage of students who said they had a good/high degree of confidence using the above resources (plotted shapes)

Explaining course material to one or more students, online (χ^2 = 10.7373, p = 0.0047). A greater proportion of BAN/PAK/OTH students said they would never/rarely or occasionally do this; a much greater proportion of CHN/IND students said they would frequently/regularly do this.

Use learning resources external to the programme/course, on campus (χ^2 = 4.6164, p = 0.0994). A greater proportion of BAN/PAK/OTH students said they would frequently/regularly do this; a slightly greater proportion of CHN/IND students said they would rarely/never do this.

Met my expectations for quality of learning (χ^2 = 4.8986, p = 0.0864) (Figure 53). A slightly greater proportion of CHN/IND students agreed that their expectations had been met for quality of learning (and teaching); a slightly greater proportion of BAN/PAK/OTH students neither agreed nor disagreed.

Additionally, while not a statistically significant result, it can be seen in Figure 54 that frequency of use when needed of *the time, space and resources to engage in independent learning* when needed is greater for CHN/IND students than for BAN/PAK/OTH students.

The above results are consistent with answers to the open questions; CHN/IND students emphasised independent learning in relation to quality learning. They also expressed a preference for online feedback more than BAN/PAK/OTH students; BAN/PAK/OTH students emphasised face-to-face feedback more, as well as opportunities to discuss feedback.

FOCUS GROUP

"The recorded lectures is the number one thing that should continue, because like I said, it's a very, very, very valuable thing for us. The second thing is that you can keep the most is [...] independent learning, because by posting pre-recorded lectures and some hands-on materials we can consolidate our knowledge, especially during consolidation week and Christmas and Easter holidays. The third thing I personally would say, some formative assessment, especially during this pandemic, because the formative assessment is also very good and is also very precious to us as well."

#student L (Asian Chinese, Health Sciences)

2.4.2 Selected analysis of ethnicity within subject areas

Summary of section:

- The positive experience of Arab students this year, and the associated preference for online teaching, is largely due to the views of Arab students in Other Sciences.
- White Business Studies students are peculiar, in that even those who had a positive overall
 experience of teaching and learning over the past academic year still prefer face-to-face teaching,
 whereas in other subject areas, White students with a positive overall experience tend to prefer
 online studying. Black and Asian students show a similar trend (to White Business Studies
 students), but for both Health Sciences and Business Studies.
- Black students are most positive and least negative about learning and teaching on Health Sciences courses. They were least positive about Other Sciences.

Note: some percentages will not sum to 100% due to a number of students who preferred not to give an answer, or due to rounding.

Teaching met my expectations

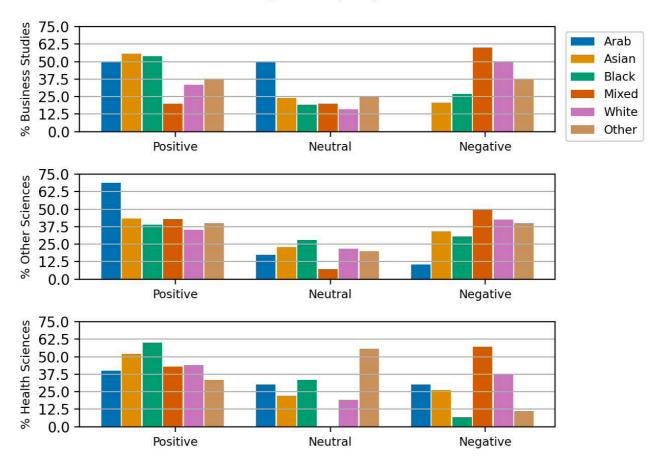


Figure 55 (above): percentage of each ethnicity group within each subject area who gave a positive, negative or neutral response to the statement "My overall experience of my programme/course in 2020/21 met my expectations for quality of teaching."

Further analysis was done to establish if the trends seen between ethnicity groups were also seen within subject areas. From Figures 55 & 56 it can be seen that a large proportion of the Arab students who felt that their expectations for teaching and learning were met are from Other Sciences. There are 29 Arab students in Other Sciences, 69% and 66% of whom agreed/definitely agreed that teaching and learning, respectively, had met their expectations, accounting for 43% and 40% of the 47 Arab students from all subject areas. Put another way, there were 28 Arab students from across all subject areas whose expectations of teaching had been met, and of those 20 (71%) were in Other Sciences. Similarly, there were 29 Arab students whose expectations of learning had been met; 19 (66%) were in Other Sciences. In contrast, expectations concerning teaching had only been met for 40% of Arab Health Sciences students, and 50% of Arab Business Studies students.

Asian and Mixed students are more consistent across all subject areas in their views of teaching; they are consistent with their respective aggregated populations from the wider sample population. However, Asian students are slightly more positive about the teaching delivered on Business Studies courses than other courses, and slightly more negative about Other Sciences. Mixed students are particularly negative about the teaching delivered on Business Studies courses.

Learning met my expectations

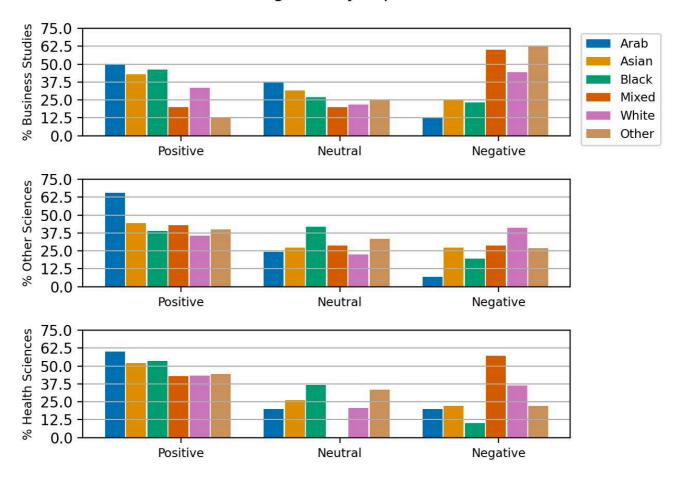


Figure 56 (above): percentage of each ethnicity group within each subject area who gave a positive, negative or neutral response to the statement "My overall experience of my programme/course in 2020/21 met my expectations for quality of learning."

For Black students, 60% agreed or definitely agreed that the teaching on Health Sciences had met their expectations; there were very few negative views of Health Sciences. While for aggregated Black students there were more neutral responses than negative (see Figure 40), when looking at Black students in each subject area this is only the case for Health Sciences; for the other two subject areas there were more negative than neutral responses. Black students were particularly negative (31% vs 27% and 7%), and much less positive (39% vs 54% and 60%), about the teaching on Other Sciences, compared to Black students in other subject areas.

Among White students on their respective courses, the teaching on Business Studies was viewed particularly negatively (50%), while Health Sciences was viewed particularly positively (44%). Other students were the least positive (33%) about teaching on Health Sciences courses, although they were not particularly negative; most Other students in Health Sciences (56%) were neutral towards the teaching on their courses.

The positive view of Other Sciences among Arab students is not shared by other ethnicity groups. Significantly lower proportions of all other ethnicity groups on Other Sciences courses agreed that the teaching on their course met their expectations (Arab students: 69% vs 43%, 39%, 43%, 35%, and 40% for Asian, Black, Mixed, White, and Other students, respectively).

Preferred teaching mode

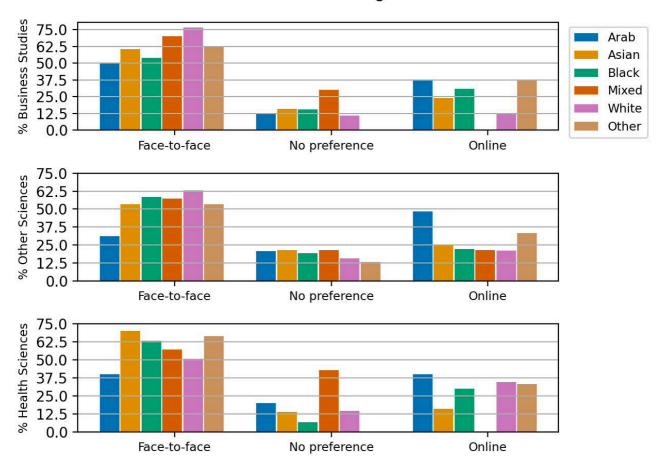


Figure 57 (above): percentage of each ethnicity group within each subject area who gave the above responses to: "Given the ongoing coronavirus situation and the likely safety measures required for face-to-face teaching (social distancing, etc.), which of the following teaching delivery methods do you prefer?"

In terms of learning, Figure 56 shows that the generally positive view among aggregated Health Sciences students of their courses (Figures 24 & 25: 47% agreed or definitely agreed that their expectations had been met for both teaching and learning) may be driven by the positive view among each ethnicity group concerning quality of learning. Among Arab students in Health Sciences, views of learning are inconsistent with views of teaching; 40% agreed or definitely agreed that the teaching on their course had met their expectations, while 60% said the same of learning.

When it comes to their preferred teaching mode (Figure 57), the propensity for Arab students overall to prefer online teaching is largely due to Arab students in Other Sciences; 48% (14 students) of Arab students from Other Sciences preferred online teaching and learning, 21% (6 students) had no preference, and 31% (9 students) preferred face-to-face. Of the 47 Arab students from across all subject areas, 26 had a positive overall view of both teaching and learning, 20 of whom were from Other Sciences, and of those 13 preferred online teaching (the one student, who preferred online but did not have a positive experience of learning and teaching, had a neutral experience overall, scoring 3 on both). For Arab students in Business Studies, the trend is slightly more consistent with other ethnicity groups (Figure 57): 37.5% preferred online, 12.5% had no preference, and 50% preferred face-to-face. For Arab students in Health Sciences, opinion was split; 40% preferred online,

Overall experience (average of learning and teaching)

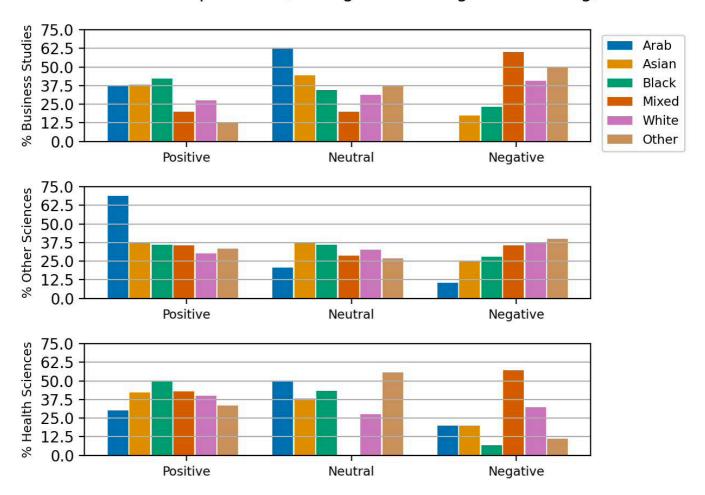


Figure 58 (above): percentage of each ethnicity group within each subject area whose average response to both questions detailed in Figures 55 & 56 was positive, negative, or neutral.

	Face-to- face	No pref	Online
Business (38)	60.5%	23.7%	15.8%
Other (50)	34.0%	20.0%	46.0%
Health (52)	26.9%	13.5%	59.6%

Figure 59: cross tabulation by subject area and study mode preference for White students who had a positive experience of teaching and learning

20% had no preference, and 40% preferred face-to-face.

Among White students in Business Studies, cross-tabulation (Figure 59) shows that even when students had their overall expectations met for learning and teaching, they still tended to prefer face-to-face studying (23 of 38, or 61% preferred face-to-face). On the other hand, for White students in Other Sciences and Health Sciences, those who had a better overall experience over the past year tended to prefer online teaching and learning. This distribution for White Business Studies students was found to be statistically significantly different from White students of the other two subject areas ($\chi^2 = 16.1685$, p = 0.0003). Expectation values were too small to do this test for other ethnicities.

Similar trends are seen for Black and Asian Business Studies and Black and Asian Health Sciences students. Among Black and Asian Health Sciences students who had an overall positive view of teaching and learning, 8/15 and 13/21, respectively, would still prefer a face-to-face environment, and 6/11 and 11/24, respectively, would still prefer a face-to-face environment in Business Studies. As a comparison with the overall sample of 835 students, of the 302 students whose overall expectations had been met, 126 (42%) preferred online, 126 (42%) preferred face-to-face, and 50 (16%) had no preference.

2.4.3 Satisfaction & expected frequency of online engagement

Correlations were tested between the average scores for expected frequency of online engagement and the average score of expectations having been met for teaching and learning, to see if there was a correlation between expected online engagement and satisfaction with teaching and learning overall. While some weak and moderate correlations do exist, they are far from overwhelming, and they do not necessarily imply causation.

For Q24 and Q31 (relating to Figures 47-52 and Figures 39 & 40, respectively), a moderate positive correlation was found for Other (rho = 0.449, p = 0.024) and BAN/PAK/OTH students (rho = 0.556, p = 0.000) between online engagement and overall satisfaction with teaching and learning; a weak correlation was found for Black (rho = 0.316, p = 0.018) and White students (rho = 0.282, p = 0.000).

When the whole sample is considered, there is a weak positive correlation between expected frequency of engagement online (Figure 17, Appendix C)) and overall satisfaction (Figure 9, Appendix C) (rho = 0.338, p = 0.000). The strength of the correlation varies within subject areas (Business Studies: rho = 0.294, p = 0.000; Other Sciences: rho = 0.433, p = 0.000); Health Sciences: rho = 0.219, p = 0.007).

In terms of the number of hours spent in various activities (Q23, Figure 15, Appendix C), there is also a weak positive correlation between expected number of hours spent on online activities and overall satisfaction for the whole sample (rho = 0.244, p = 0.000), and similar strength correlations exist between subject areas (Business Studies: rho = 0.244, p = 0.001; Other Sciences: rho = 0.213, p = 0.000); Health Sciences: rho = 0.283, p = 0.000).

However, at the level of ethnicity groups, there is no overall emerging trend in the correlations between expected online hours spent and satisfaction. There is a moderate positive correlation for Mixed students (rho = 0.539, p = 0.005), and weak positive correlations for BAN/PAK/OTH (rho = 0.286, p = 0.010) and White students (rho = 0.269, p = 0.000). For all other ethnicity groups, reportable correlations do not exist.

2.4.4 Summary of ethnicity groups and question group statistical tests

Statistical tests

The responder means for each question/question group were grouped by ethnicity, and each group of means was tested for normality using the Shapiro-Wilk test. P-values were generally less than 0.05, and there were no questions for which all ethnicity p-values were greater than 0.05; therefore, the data was deemed to be non-normally distributed. Bartlett's test was also applied to test for homo-scedasticity, and where this was confirmed, the Kruskal-Wallis test was used. Where statistically significant differences were found between medians (of responder means, grouped by ethnicity), Dunn's test was applied – with Bonferroni's correction – to determine which groups' medians were statistically significantly different from each other.

Statistically significant differences (at the p < 0.05 level) were found for the following question groups:

- Q10 (perception of value of teaching elements, Figure 33) between the following ethnicity groups: White students against Black students (p = 0.0132)
- Q11 (impact of learning, Figure 36, excluding *I would prefer to be in a primarily face-to-face learning environment*) between the following ethnicity groups: White students against Arab (p = 0.0000), Asian (p = 0.0033), and Black students (p = 0.0445); and Mixed students against Arab students (p = 0.0003)
- Q12 (impact of teaching, Figure 34) between the following ethnicity groups: White students against Arab (p = 0.0262), Asian (p = 0.0054), and Black students (p = 0.0060)
- Q13 (perceptions of importance of opportunities, Figure 39) between the following ethnicity groups: Black students against Asian (p = 0.0014), White (p = 0.0001), and Other students (p = 0.0152)
- Q15 (experience of opportunities, Figure 38) between the following ethnicity groups: White students against Arab (p = 0.0010), Asian (p = 0.0078), and Black students (p = 0.0003)
- Q16 (experience of factors related to wellbeing, Figure 41) between the following ethnicity groups: White students against Asian students (p = 0.0006)
- Q24 (expectations of frequency of engagement in activities, online vs on campus, Figures 47-52) between the following ethnicity groups: White students against Arab (p = 0.0004) and Black students (p = 0.0002); and Other students against Arab students (p = 0.0186)
- Q26 (impact of assessments, Figure 35) between the following ethnicity groups: White students against Arab (p = 0.0072), Asian (p = 0.0004), and Black students (p = 0.0002)
- Q31 (meeting overall expectations for learning and teaching, combination of Figures 39 & 40) between the following ethnicity groups: White students against Arab (p = 0.0009), Asian (p = 0.0131), and Black students (p = 0.0025); and Mixed students against Arab students (p = 0.0153).

These statistical tests show an extra subtlety to the data, as many of the figures typically show only the proportions of each ethnicity group that gave positive responses (a 4 or 5 on the Likert Scale). These tests also confirm the general trends seen in the data: that the experience of Arab, Black, and – to some extent – Asian students has been significantly different from White, Mixed and Other students. Mixed and Other students feature less frequently than White students in the above analysis; this may be due to the Bonferroni correction being conservative: it tends to under-report statistical significance when the null hypothesis is false (higher type-II error rate).

Ethnicity group summaries

Careful consideration of ethnicity group sample size is required when attempting to extrapolate results to larger populations. This is particularly the case for Other and Mixed students, and to a lesser extent Arab students.

Arab students

- Arab students had a good experience in terms of teaching and learning, better than all other ethnicity groups.
- The role of staff is important: getting time (even if remotely) with, feeling connected to, and communicating with staff are all highly valued, as is the opportunity to ask questions and discuss feedback with staff. Individual feedback was somewhat lacking from staff, and Arab students criticised the lack of feedback on summative exams.
- Online teaching/learning seems to work well for many Arab students: online is the most popular mode (45%) for Arab students, recordings are valued, access to resources when needed has been good, and they feel better able to contribute to discussions online. Many of the Arab students who prefer online studying are in Other Sciences.
- More Arab students have been able to develop a sense of belonging, while other ethnicity groups have generally not. More also had opportunities for peer-to-peer feedback.
- Frequency of use of resources when needed is not particularly high, neither is confidence, except for use of the online library.
- Expected frequency of engagement online and on campus is generally very high, and any cases that are low are consistent with other ethnicity groups.
- Wellbeing is considered important by many, although compared to other ethnicities this importance is relatively low. Despite lower perceptions of importance, experience of aspects related to wellbeing is the highest among ethnicity groups (although still low in absolute terms).

Asian students

- Asian students had a moderate experience of teaching and learning (CHN/IND better than BAN/ PAK/OTH students).
- Communicating with and feeling connected to staff and students is important, although the emphasis is on the importance of students over staff. Asian students particularly value making university friends. They also value opportunities to ask questions and discuss feedback with staff. Asian students had a better experience of staff feedback than most, but this was still poor in absolute terms. They highlighted the need for personalised and high-quality feedback that shows them how to improve.
- Face-to-face teaching is preferred, like other ethnicity groups (except for Arab students). Elements
 of teaching and learning this year are moderately valued, and experience of teaching and learning
 opportunities has been moderate, compared to other ethnicities. Having sufficient access to online
 resources was highly valued.
- Asian students had a good experience of assessments, often comparable with Black and Arab students.

- Frequency of use of resources when needed is not particularly high, neither is confidence. These are comparable to other ethnicity groups.
- Expectations of time spent engaging in activities on campus and online is moderate. Activities in which they would never or rarely engage are consistent with other ethnicities. For independent personal study, Asian students expect to spend much more time online than on campus. Independent learning was highlighted as a characteristic of quality learning (particularly for CHN/IND students), although it was felt that it should not replace quality teaching.
- Wellbeing is considered important by many, and compared to other ethnicities this importance is moderate/high. Experience of these factors compared to other ethnicity groups is moderate, but low in absolute terms.

Black students

- Black students had a moderate-to-good experience of learning and teaching.
- Communicating with staff on campus and with students online are particularly important to Black students; feeling connected to students is highly valued, while feeling connected to staff is moderately valued. Despite their emphasis on the value of communicating with students, opportunities for peer-to-peer feedback have been poor. The opportunity to ask questions is also important. Opportunities to discuss feedback with staff were highlighted most frequently in relation to feedback in the open questions. Experience of assessments and feedback was generally good, compared to other ethnicity groups, especially for individual feedback from staff.
- Teaching elements are also highly valued particularly personal tutorials (compared to other ethnicities), as are opportunities related to learning. Experience of teaching has been comparable to Arab students, with the exception of Black students' backgrounds being valued as an enriching resource for learning, the experience of which is worse than for Arab students.
- Experience of learning opportunities has been particularly good, relative to other ethnicities, for
 receiving personal support/guidance with learning, as well as having sufficient access to library
 content, services and support; however, increased access to university library buildings, and
 increased clarity of their university's library website were both highlighted in the open questions as
 things that could be improved.
- Expected engagement was generally high for on-campus activities and moderate for online activities. Expected engagement was lower than Asian and Arab students for working with students on course projects/assignments, despite the emphasis by Black students on the value of communicating with other students.
- Black students value wellbeing the most among the ethnicity groups, but experience of opportunities related to wellbeing is only moderate/high in relative terms, and low in absolute terms.

Mixed students

• Mixed students had a poor experience of learning and teaching – the worst among all ethnicity groups, and statistically significantly different from Arab students. Mixed students are particularly against online learning without face-to-face elements (only 10% prefer online).

- Importance of on-campus and online communication is high for Mixed students, although moderate compared to other ethnicity groups. This is also the case for the importance of feeling connected to students and staff.
- The value of teaching elements to Mixed students is low or moderate, as is their experience of other factors related to teaching. For Mixed students, quality teaching is engaging and facilitates understanding; however, they were often the lowest scoring ethnicity for impact of aspects related to teaching. Proportions of Mixed students experiencing engagement and a sense of belonging amongst students was extremely low (10% agreed they experienced this), and for all other factors related to teaching, fewer than half agreed they had experienced them.
- The value and experience of opportunities related to learning was moderate. Having sufficient access to both the online and on-campus resources that they need was highly valued by Mixed students, as well as knowing where and how to locate additional resources that are useful to their learning. Despite the relatively high value placed on developing a sense of belonging to peers on the programme/course, their experience was particularly poor for this factor. The experience of other factors related to learning was also particularly low (and again, statistically significantly different from Arab students); Mixed students were particularly uninspired or unmotivated to seek out material and learning opportunities beyond their courses.
- Expected engagement is much higher on campus compared to online, and the proportion of Mixed students expecting to never or rarely engage in online activities is particularly large, both in absolute terms and compared to other ethnicity groups. For independent personal study, Mixed students expect to spend much more time online than on campus. Mixed students expect to engage much less in unsupervised study with peers and supervised group seminars/workshops when online, compared to on campus.
- Compared to other ethnicity groups, moderate importance is attributed to factors related to wellbeing (although this is still high in absolute terms). Experience, however, is very poor both in relative and absolute terms especially for making university friends and feeling like a member of a university community.

White students

- White students had a poor experience of learning and teaching comparable to, although not as bad as, Mixed students. White students' overall experience of teaching and learning was statistically significantly different from Arab, Asian and Black students. 64% of White students would prefer a face-to-face study mode, while 22% would prefer online.
- Online communication is less important than on campus, and feeling connected to staff is more important than feeling connected to students. Feeling connected to staff is very important to White students, compared to most other ethnicities.
- The value of teaching elements to White students is low or moderate, and is statistically significantly different from Black students. White students' experience of other factors related to teaching is also low or moderate, and is statistically significantly different from Arab, Asian and Black students. Among ethnicity groups, White students were the least motivated to seek learning opportunities beyond their course. For White students, responses to open questions identified quality teaching as teaching that provides support and guidance; however, their experience of receiving personal support/guidance with their learning was low.

- For the impact of learning, responses from White students were again statistically significantly different from Arab, Asian and Black students.
- The value of opportunities related to learning was moderate, but statistically significantly different from Black students. Having sufficient access to the online resources that they need was highly valued by White students. Their experience of these same opportunities was low, and statistically significantly different from Arab, Asian and Black students.
- Experience of assessment and feedback was poor, and comparable to Other and Mixed students. Again, White students' responses were statistically significantly different from those of Arab, Asian and Black students.
- Despite their generally negative experience, frequency of use of resources when needed and confidence in using them is generally high, particularly for computing hardware and software; however, notable exceptions are: the time, space and resources to engage in independent learning; further resources beyond what the university provides; and the online resources of the university library.
- Expected engagement frequency is higher on campus compared to online. Additionally, the activities in which White students expect to never or rarely engage are consistent with most other ethnicity groups. Expected engagement frequency is statistically significantly different from Arab and Black students. For independent personal study, White students expect to spend much more time online than on campus.
- Compared to other ethnicity groups, high importance is attributed to factors related to wellbeing (moderate for feeling like a member of a university community). Experience, however, is poor both in relative and absolute terms.

Other students

- Other students had a moderate-to-poor experience of teaching and learning. 59% of Other students would prefer a face-to-face study mode, while 34% would prefer online.
- The importance of on-campus communication with students is more important than online. The value of time spent communicating with others in external networks and communities is high (similar to Black and Asian students). Communicating with and feeling connected to staff is more important than students.
- The value of teaching elements is moderate. The most valued elements are recordings of teaching materials, online streaming of live lectures, and lecture engagement sessions. Experience of other factors related to teaching is also moderate. Engagement and a sense of belonging amongst students, and background being valued as an enriching resource for learning were the two worst factors in terms of experience for Other students.
- Opportunities related to learning were of moderate importance, except for those related to
 interacting with other students, for which importance was low. For the importance of these
 opportunities, Other students were statistically significantly different from Black students.
 Experience of these opportunities was generally very low Other students had the least positive
 experience of all but one of these opportunities.
- Other students are the least comfortable of all ethnicity groups using the technology, and they are the most polarised when it comes to feeling more comfortable online than in a face-to-face class.
- Experience of assessment and feedback was poor, and comparable to White and Mixed students.

- Frequency of use when needed and confidence using resources is generally low. Frequency of use when needed is particularly low for online library resources; resources beyond what is provided by their university; and the time, space and resources to engage in independent learning. Confidence is often lower than, although comparable to, other ethnicity groups.
- For Other students, expected engagement frequency is similar to White students. It is higher on campus than online. Like White students, expected engagement frequency is statistically significantly different from Arab and Black students. Other students expect to spend much less time engaged in lectures, and much more time in unsupervised study with peers, on campus compared to online.
- Although still moderate/high in absolute terms, the importance attributed to wellbeing was the lowest among ethnicity groups for Other students. Experience of factors related to wellbeing is very poor; it is comparable to that of Mixed and White students.

3. Background

3.1 Intended meaning of background

In the survey questionnaire, students were asked to what extent they agreed with the statement: The teaching on my course this year has valued my background and recognises it as a resource that enriches my learning experience. Focus group participants were also posed the question: Just over a third of students agreed that, based on their experience of teaching on their course, their background is valued and recognised as a resource that enriches their learning experience. If you agree, how do they do this? If not, how do you feel your background could be better valued and recognised as a resource that enriches your learning experience?

Intended meaning

The initial focus group question was left intentionally broad and non-specific, so as not to lead students to a particular answer through the wording of the question. Researchers expected that students might reflect on socio-economic background, ethnicity, nationality, gender, etc.; however, when the meaning was not immediately clear to students, further, more leading questions were sometimes required to elicit answers.

Student interpretations

(More detail can be found in section 3.2.)

Occasionally students required clarification as to what the researchers were looking for, and after researchers gave examples relevant to themselves, some students gave examples of how they thought their background might be better recognised in teaching. Often the first response of many students was that their background was not relevant to teaching, or that it was impossible to accommodate, given the size of some cohorts. Lack of recognition was not seen as an issue by many.

When no clarification was needed, the majority of answers tended to focus on educational background, but this tended to be in relation to students' own learning (i.e. how easy/hard they found some parts of the course, depending on whether they had covered the material before, or what types of assessments they had been exposed to in secondary education, particularly assessments that involved a research element), rather than necessarily the teaching they received at university.

Aside from educational background, some ideas raised by students included: incorporating more material related to international economies in Business Studies courses, drawing on the professional backgrounds of some of those in the Health Sciences cohort, or universities taking into account that not all students would have the same access to education due to differing socio-economic backgrounds. Diversity of student backgrounds was also seen as advantageous for learning from peers and during group work, rather than necessarily as a resource in teaching.

Reflections

Considering that in the survey question over a third of students said that they neither agreed nor disagreed with the statement, it is possible that the intended meaning was unclear to some students. This speculation is also supported by the clarification required in some focus groups regarding background.

It should perhaps be considered in hindsight that, despite being anonymous in the report, students may not have always felt comfortable discussing their background openly among their peers, even in the context of a focus group, and focus groups may not have allowed students the space to discuss potentially sensitive issues.

3.2 Focus group responses

Health Sciences

Health Sciences students in particular identified the importance of recognising students' background in learning and teaching. They also identified diversity as a way to learn from their peers.

"I feel that students' background is very valuable. It enriches [...] learning by acknowledging that at university level there is a diversity of backgrounds, education and work experience, and these can be called upon to give true insight into [a] real life situation."

#student X (Not known, Health Sciences)

Students thought that diversity is relevant and their backgrounds are sometimes recognised. One example given concerned the ethnicity-specific risk and treatment associated with hypertension.

"I've seen in our second year [...] in pharmacy there's some medication [...], for example [to treat] hypertension. If [the patient is of] Black ethnicity, it means that they should have this certain sort of medication that other ethnicities do not have...we know [...] Black, [...] Asian, and some other ethnic minorities are more susceptible to other sorts of conditions that the Caucasians [...] are not susceptible to."

#student J (Black African, Health Sciences)

One student highlighted being able to relate more to, or have increased empathy for, minority ethnicity patients when on placement.

"I'm from a diverse background [...], if I was the patient, [...] I know how I would [...] want to be treated, which is why when we are learning, we [...] were always taught to remember [...] the patient's background and then [give] them the best care."

#student AD (Asian Pakistani, Health Sciences)

However, there is scope for improving the recognition of student backgrounds, as some aspects are not well recognised and utilised, particularly professional experiences.

"I'm a support worker, so I'm sort of hoping that because there are some drugs that I used to help administer [that it might be relevant to the teaching], but the teacher never really would ask for things like that."

#student J (Black African, Health Sciences)

Other Sciences

The background of students from Other Sciences was generally not seen as relevant to their teaching.

"...but it is an applied Math subject, and essentially everything comes down to you working with machines that do things in a particular way and you have to think like that. But people still spot different things and think about it differently. I have never really thought it was that important."

#student Y (White, Other Sciences)

Educational background was occasionally mentioned in relation to certain advantages that students might have with course material that had already been covered at school or college.

"...my background has never really been brought up this past year. So I'm not really sure. I would imagine it would be because I came from doing a diploma in Engineering at college, but some of my peers have come from doing Maths or Physics A levels. So at least I've always, at least personally, I've always thought that having that whole year of doing a diploma in a specialised subjects for Engineering, and then going to a degree, where I'm already relatively familiar with at least some of the concepts and some of the modules has kind of always given me a bit of an edge in understanding the new topics. So I guess I think having a background in the chosen field is definitely a valuable resource."

#student W (Not known, Other Sciences)

The content of their courses was generally perceived to be independent of factors such as student backgrounds. However, there was one reference to the wider relevance of diversity beyond university.

"There are a few things, for example, Google have changed their AI to take better photos of people with darker skin. There are a few real examples of it, but again it [computer science] is not really a subject about interacting with humans [....] so it is just not really relevant."

#student Y (White, Other Sciences)

Additionally, the same student identified the benefits of having greater diversity among students.

"We did a group project this year where we were in second year, so we had a group for the whole year and our group was really diverse. People from lots of different backgrounds and that was great. You could see that made a great difference as there was [...] a real diversity of thought."

#student Y (White, Other Sciences)

Others highlighted the relevance of students' educational and socio-economic backgrounds to their access to education, especially during the pandemic when access to some resources, such as university libraries, has been limited.

"...depending on your class background you might not have access to those sorts of things if you're studying from home. Again, then with COVID things like libraries weren't ever accessible. So I think that's the only other thing. Anybody's background I think should have been maybe considered a little bit more. I know they did as much as they can because it's so hard when you have so many students with such a range of different accessibilities to learning."

#student V (Not known, Other Sciences)

Business Studies

Many students did not see the relevance of background to their teaching, unless it was related to the head start that some students' educational background can give them in their first year. Some thought that the lack of recognition of their background was not really an issue, while others thought that it would be almost impossible to recognise and utilise the backgrounds of students in lectures, due to the large number of students.

"I do not know. It is not like college where everyone knows everyone. During lectures there are a lot of people, so we do not know everyone's background and story. In college and school however, you would know this. Even if it was someone I had not spoken to, I would know this, even if it means having heard about it from someone else. I would say that in college they [the staff] knew everyone as well. In university, [...] there are a lot of students in one class, so it is hard for everyone to know everyone."

#student D (Asian British, Business Studies)

"I don't agree [that background is valued], but at the same time I don't see how my background would be relevant to my teaching experience or my learning experience."

#student M (Not known, Business Studies)

"Exactly, I think the same: that background is not very important when it comes to teaching. Maybe I'm missing something, but I don't see how your background — for example where you're from or whatever — can enhance the teaching you get. The knowledge is universal so it doesn't matter if you're from Europe, Asia or whatever; the teaching stays the same because the knowledge is the same. So I don't see how it would enrich the teaching process. Of course [with] student life or whatever, it would matter, but when it comes to teaching in classes I don't think that's important at all, to be honest."

#student N (Eastern European, Business Studies)

However, it was frequently mentioned – especially compared to other subject areas – that there was scope for having a greater appreciation for either professional or international backgrounds.

"In the first year we were just very much concerned about the UK. I had the same clear concern [that content was too UK-centric] because everything was in pounds and everything was related to [the] UK economy, but in second year, the background shifted and became more global."

#student F (Asian Indian, Business Studies)

"...but this global approach should be incorporated from the start... our courses are not five years long. You only have three years."

#student E (Asian Indian, Business Studies)

"...in first year I was just focusing on UK government. It had me thinking, what if I do not want to stay in [the] UK and I want to go back to my country or I want to go to another country and explore more. Like you said, it should be like, involved from the first year."

#student F (Asian Indian, Business Studies)

"I would say for international students, they are learning how to prepare accounts based on UK accounting standards and perhaps they might want to become an accountant in their own country. This is probably not maximising their learning."

#student C (Asian British, Business Studies)

Diversity was also seen as a good way to learn from peers.

"I was in a seminar recently about international business, talking about business ethics. There were some international students and it was interesting because their countries have a different view on business ethics. So it's interesting to have that, [to] listen to them."

#student Q (White, Business Studies)

However, there were one or two students who had come to the UK specifically for the UK experience; they had no expectation for their background to be recognised, and did not see the lack of recognition as an issue:

"I absolutely understand that...because I'm moving to a foreign country, they don't have to explain everything to me. They of course taught me the basics of some UK grading, etc., but I don't expect them to also explain everything to me. I'm not a child any more, and I don't find it problematic, for example, that they don't take my background into account because I didn't want them to take my background into account, to be completely honest with you. I just don't care where everyone is from or whatever. It wasn't taken into account - and I didn't expect them to take it into account."

#student N (Eastern European, Business Studies)

"...when we moved to the country, we're coming for an international education and we're coming into the UK to study [the] UK. If you are coming to do accounts, you're coming to study the UK tax system..."

#student M (Not known, Business Studies)

One student highlighted that the lack of recognition of their educational background had allowed them to develop in their approach to independent learning.

"I come from an Indian school, and I come from an international background. When we were studying in our education system, we were slightly spoon-fed and pampered. Everything was just given to us. When I came into university during my first semester, I was like, okay, no one is going to ask me if I need anything. I am just to have to do it myself and if I need clarification, I am going to have to ask them. It is just when you come from such different backgrounds and when you come from a different level of

education and a different culture, the university really helps put you into a more independent and mature position because then you learn how to do things by yourself .You learn how to take initiative. You know if you mess up, if you are not on a good time management schedule and you are not able to sort of prioritise your work very well, eventually the workload becomes such that it forces you to get the hang of it. Even if you do not like it at some point, you know that you are going to have to change the way you work because that is going to help you eventually. If I compare how I was when I joined back in September 2020 and how I am now, I think I am so different. I was really dependant on a lot of things before and now I am super independent. If I need something I can ask someone myself. It changes you a lot for the better, and it teaches you how you would be in the corporate world, how you would be when you would really go out there because not everyone is going to hold your hand therefore you just going to have to learn to do it yourself."

#student E (Asian Indian, Business Studies)

One student highlighted the importance to them of knowing that there were others from a similar background to them in the university community, so that they felt as though they belonged there.

"So I finish school when I was obviously 16. Average grades, you know, nothing high or low. Same in college. But I [...] was quite unsure if I wanted to go into full-time education, meaning university. And I think especially with my school that I went to, it was really rare. And especially the postcode that I lived at, very few, very, very few young people would actually attend university. So [...] I was very hesitant. So obviously receiving any kind of like appreciation or being included in these, you know, whether seminars or lectures, [...] it was really, really important for me to stay because [in] my first year I was very hesitant. Did I want to continue? Did I not? And obviously I did work full-time on top of that in case that, you know, if I choose to stop education. But I didn't [stop], and I did carry on and I didn't regret it. And I think how we can improve feeling [...] included is [important], because it's very, very hard, especially when everything has gone online."

#student B (British, Business Studies)

4. Reflections

This section presents a collection of the reflections of a number of members of the research team from the universities in the collaborative partnership.

(i) Reflections on the project and initiatives and practices at the University of Portsmouth:

Research showed that students of different ethnicities had different expectations of university prior to the pandemic at the University of Portsmouth, and so we asked ourselves the question, would this be the same of their expectations during the pandemic? And then what would their perceptions of their experiences be? Some students had not expected to work so hard and independently for good degree outcomes pre-COVID-19. What surprised us in this research was how so many students were uncomfortable with the self-directed, independent learning process, which in our 'Blended and Connected' model at Portsmouth was of a flipped learning approach, when it was mediated through more online processes. However, the students, who in the previous research had expected to easily gain good degree outcomes without much independent learning, were not necessarily from the same ethnic backgrounds as those who struggled with self-directed learning in this research.

It would be a useful exercise to spend some time working with students to gain a shared understanding of what exactly 'Blended and Connected Learning' and independent, self-directed learning are, and embedding that in our induction and transition processes.

Having spent much time and effort to develop a 'Blended and Connected' approach to teaching, learning and assessment, where a real focus was on creating a sense of belonging and 'connectedness' for our students — whether they were on campus or online as part of the blend — it was disappointing to find that students did not perceive that 'connectedness' in terms of feeling like a member of a university community. They did not value as much the opportunities to work with their peers or perceive that this worked well when undertaken online. In the future we still have work to do to develop this sense of belonging, both online and face-to-face, which is something that we are working on in our Being, Belonging, Becoming working group, which will be charged with the task of taking forward actions from this project by our Student Experience Committee.

The importance attributed to personal tutoring by the students was good to see, as we introduced a new Personal Tutoring and Development Framework during the pandemic, which already planned for a blended approach to tutoring sessions; however, the results show that we still have work to do to ensure that staff and students fully embrace it. Personal tutors are at the heart of the student experience, and they are best placed to respond to students in a personalised way about their experience and to understand their background and requirements. We have developed a Personal Tutoring Curriculum which should be used more, to ensure timely, focused and flexible communication with students.

(ii) Reflections on the project and granularity of analysis and action:

In designing and carrying out this collaborative project, the four partners have reflected not only on the experiences of our students, but also on our own experiences as University leaders equipped to act on the data. As a project team, we do not reflect the ethnic diversity of our student populations. While we acknowledge this on the project webpage, we need to give greater thought to how we deal with the disconnect that this creates in our use of the project data. This may be a small study, but it has captured voices by ethnicity and discipline across four different institutions — there is a recipe to be constructed from this. From the starting point of the current culture of each partner, we need to use the intelligence from the project to advocate for granular-level interventions that focus not solely on ethnicity, but upon ethnicity in a disciplinary context, to better understand effective support measures — for example, for Black students in Business Studies, or Asian students in Health Sciences. A key step is for institutions to equip their subject areas to be proactive and responsive at the cohort level. But there is more too. If the project had been larger and longer, we might have explored the impact of institutional cultures and investigated how student perceptions differed, not only by ethnicity and discipline, but also by institution. How are our institutional cultures and values, our staffing profiles, our policy norms, intersecting with ethnicity and discipline to affect the perceptions and experiences of our students, and hence their educational outcomes.

We design our courses to enable collaborative working amongst our students, positioning this as a key professional competence. This small partnership, brought together for this QAA-funded project, has enabled us as a staff group to hone our own collaborative working skills, and in so doing to better understand the strengths and limitations of our own networks by ethnicity in particular — this in itself has been an invaluable insight into the additional barriers that stand in front of the ambitions of many of our students.

(iii) Reflections on the project, connectedness, recordings and the dangers of putting people in boxes:

For the members of the research partnership, studying differing perceptions of learning and teaching of ethnically diverse students has been a truly fascinating and insightful experience. Engaging in this type of research has always been about embracing and maximising the potential that the diversity of others can bring to our individual and collective experiences, with the aim of fostering a collaborative approach to an enriching education.

Collaboration and togetherness also seem to be important for the students who participated in this project. Our findings suggest that wanting to be and feel well, make friends and be part of something bigger, such as a community, are at the forefront of what our ethnically diverse first- and second-year undergraduate students see as the most important enabling factors on their higher education journey; a wish-list that probably is not very different from what we all value as human beings — things that help us survive and thrive.

In terms of resources for learning and teaching, we had perhaps underestimated the value and potential of videos and recorded material. Students transformed something that could be seen as a passive way of learning into a resource for active learning. Some of us may have seen our own children growing up fully immersed in the digital world and watching videos for hours. We may have been concerned that this was far too passive. However, the resourcefulness and inventiveness of students' learning with and from the recordings (as shared during our focus groups) was surprising. Students described how they routinely sped up sections and transformed the recordings into flexible and valuable resources for active learning. Their strategies are certainly worth exploring further, also in the context of flipped and peer-assisted learning and the opportunities these bring. EVOLI, a video tagging tool, for example, may open up new opportunities for engaging with video resources in a more focused and interactive way with peers and tutors. Furthermore, students, not just staff, can also be makers of recordings. This can be utilised more for authentic learning through a combination of a range of authentic, active, collaborative and inquiry-based learning strategies, including problem-based learning, for example. Additionally, the type of recorded material will affect the way that it is used, for example, pre-recorded material is likely to be used differently by students compared to recordings of live material (the former more likely in flipped learning, the latter more likely for revision or for accommodating a busy schedule). However, regardless of the type of recording, it is important that they are produced to a high standard, both in terms of digital quality and content. There is certainly a lot to think about and consider.

Students, while recognising the value of professional networks and communities, noted that they don't seem to have harnessed these fully for their learning and development. The same applies for the opportunities that open learning presents. Both of these approaches help students to build bridges to others, including those in industry and communities that stretch beyond the boundaries of their courses. It may be useful for educators to identify ways to connect a course and its modules with internal and external networks and communities, bring in elements of open learning, and scaffold and support such opportunities within the curriculum. Such approaches could boost students' confidence and highlight the importance of self-organised learning and the opportunities these present, both within and beyond their courses, to help them develop as professionals and become life-wide and lifelong learners. Furthermore, it will also create a path that leads progressively to greater autonomy, increased connection with peers within and beyond their courses, and reduce over-reliance or dependency on their tutors.

This study also reminds us of the dangers of adding labels or categories to individuals, by putting them into specific boxes. In this case students' learning styles come to mind. We all have the capacity to learn in different ways and get better at the strategies and tactics we use. That also applies to ethnically diverse students. It is of course extremely valuable to be aware of and alert to learning differences, including of ethnically diverse students; we must design varied and flexible approaches to learning, teaching, support and assessment that help all students engage meaningfully in their learning, feel stimulated, motivated and connected with themselves, others, the subject and the world around them. Exploring such opportunities with students has the power to transform current students' experiences. There is a proverb that says "variety is the spice of life." The same can be said for learning and teaching.

(iv) Reflections on the perception of quality vs quality itself, and balancing the demand for both:

While the NSS results for the sector show lower satisfaction for non-White ethnicity groups compared to White students, this project has shown a broadly different trend. Therefore certain practices in place at the four collaborative partner universities participating in the project can serve as examples of good practice regarding non-white ethnicity groups. Recommendations and suggested actions have emerged from the positive trends among these students, several of which have been discussed in the reflections above. While many focus on differences in experience, the reflections below focus on the concept of perceptions.

Not every experience described by students was positive, and indeed it was a difficult year for students, academics and other university staff. Consequently, students expressed some additional criticism towards various teaching and learning practices. While we need to encourage students to be partners in collaborative learning (and research), and student-centred approaches are a necessity, it is worth wondering whether the 'novice' (i.e., the student) should be regarded as the 'expert' when it comes to assessing academic and pedagogical practices (Ball, 2012; Holligan & Shah, 2017; Staddon & Standish, 2012). Such an approach may undermine the professionalism of academics and promote the 'mechanisation of knowledge' (Lyotard, 1984). It also reflects a higher education that is not confident in what it offers, and whose aims are merely externally orientated (Staddon & Standish, 2012, p. 639). Recent research clearly argues that academics often struggle to do what is best for students' education, while at the same time keeping them satisfied (Sidiropoulou, 2020). As Luke (2005) argues, the invisible power of the manufacture of consent can empower or disempower academics, regardless of (a) the ethical implications of a misalignment of approaches that may exist between different stakeholders, and (b) the battle of core and external values.

For example, when students participating in this project valued their experience of 'formal tasks and activities with other students' less than other ways of learning, it does not mean that formal group learning practices do not have pedagogic value, or that we should stop doing what students do not value. Maybe the message here would be to aim to keep students satisfied and appreciating their constructive feedback, but staff should maintain their pedagogical vision and teaching and learning principles, while adapting carefully to new situations. Yes, we should use tools better, yet with the aim of making students satisfied *and* educated. Perhaps the ideal situation would be one in which students develop more positive perceptions, even if the quality remains the same, because they would better understand the pedagogical value of certain practices (where practices are of good quality, of course). Universities have a mission to convey the right messages to students, and even though better quality and experience are at the centre of this, perception of quality should not be regarded as synonymous with quality. They are closely linked, but they are not the same, and therefore academics should perhaps not only change what they do (if they need to change), but also

how they do these things. They should aim to help their students understand more about the way in which they are taught.

5. Recommendations

The recommendations below were synthesised through a combination of the data analysis given in the extended version of this report and the reflections of the members of the research partnership (see section 4).

Summary of key recommendations:

- 1. Conduct further research that is sufficiently granular in its analysis to identify the subtle differences and similarities between groups of students of different ethnicities, as well as between ethnicities within academic disciplines.
- 2. Investigate possible causative links between observations made in this research and variables within the student experience (e.g., student domicile status, whether students are in employment while studying, or whether they commute to campus, etc.).
- 3. Integrate external networking and community opportunities into course programmes from the start, in order to increase students' feelings of connectedness and sense of community, while giving them opportunities to develop skills and contacts they may need in the future.
- **4. Encourage student participation in policy and co-creation activities**, as well as collaborative research with other stakeholders.
- **5. Develop flexible approaches to provision of personal tutorials** to reflect the changing nature of the needs of students as they engage in blended learning.
- 6. Improve the delivery/implementation of remote/online formal group activities and assessments, as well as giving students the skills they need to effectively engage with these activities.
- **7. Further explore the potential of utilising recorded material**, including the role of students as both users and creators of recorded material.

(i) Considerations for further research

• A post-focus group evaluation was filled in by eight students from the UoP. Feedback from students about their experience of participating in the project was mostly very positive, with some positive, and occasional neutral sentiments expressed. Most students appreciated the chance to have their voice heard, as well as the opportunity to hear the opinions of other students. They also improved their understanding of certain aspects of their courses through their participation. In light of this, as well as other responses to open questions indicating that students appreciate opportunities such as these to have their voice heard, it is clear that this type of project is a valuable endeavour. Universities should continue in their efforts to gather student views and opinions, group them in meaningful ways, and take meaningful steps to benefit from the information and subsequent analysis.

- We chose courses to maximise BAME response rates. When adopting this approach, it may be useful to cross-reference to literature on disciplinary cultures/pedagogies to understand 'norms', expectations and characteristics, in order to deepen understanding of differences surfaced by ethnicity.
- How does stage of study affect results? We did not target final-year undergraduates due to the NSS and because they were focusing on their final exams. Independent learning and 'background as a resource' are themes that may have particular resonance with final-year students completing capstone projects.
- Data analysis by ethnicity should be sufficiently granular to enable understanding of the expectations and experiences of students of different Asian and Black heritages. While this was possible for certain groups of Asian students in this research, sample sizes meant this was not feasible for Black students in our sample. Careful experimental design is required to ensure that sample sizes of different ethnicity groups are large enough for meaningful data analysis, while at the same time ensuring that sampling is sufficiently random to be considered representative.
- It is important to understand shared as well as different perspectives.
- It is worth doing a detailed unpicking of attitudes towards recordings. Do the Arab, Asian and Black students value recordings most for reasons of confidence, convenience (perhaps because they are more likely to be in paid employment?), study patterns (watching again alone or with peers?), or language/accent barriers? This may involve conducting more specific focus groups.
- The greater satisfaction of Arab students is worth further research, to understand if this is about career plans, domicile status (i.e., international or home students), or being on a vocational course. Additionally, we need to understand why Arab students have been more satisfied with teaching and learning, and why 45% prefer online. Is this about international students on remote study last year? Is this because the alternative was deferral? Or is it about combining study and employment?

(ii) Considerations for policy

- We should be careful not to over-categorise student views by 'forcing them into boxes'. This is
 particularly the case regarding so-called 'learning styles'; while it is important to implement varied
 and flexible approaches to learning, teaching, support and assessment that help all students
 engage meaningfully in their learning, we should also recognise that all students have the capacity
 to learn in different ways, and they have the capacity to improve at the strategies that are used.
- Findings seem to suggest that students want to receive support for their wellbeing, make friends and be part of a university community, but with an over-reliance on the course/module to provide this. There is perhaps a great opportunity to rethink teaching strategies to incorporate networking and communities etc. outside the programme. In this way, there are opportunities for peer-to-peer learning beyond the course boundaries, but not as an add-on rather a more integrated approach. Modelling such approaches in academic development programmes etc. would be helpful so that colleagues experience this. The value of these external opportunities would need to be explained to students at the outset.
- Universities should recognise the part that academic discipline (i.e., course) plays in student perspectives of teaching and learning, and design both services and approaches to teaching that respect these.
- Value for money concerns may be addressed by a relentless focus upon enabling strong relationships between students and staff.

• Students should be encouraged to become partners in policy and contributors to co-creation activities. We should also encourage them to engage in collaborative research activities with other stakeholders in the future. Their contributions would be credited. Through these activities we can show their feedback matters and how it is making a valuable contribution.

(iii) Considerations for practice

- Both staff and students need support to develop skills for online engagement.
- Recordings of teaching materials are valuable to students, but the potential of this resource is still
 to be maximised. The inventive and resourceful strategies identified in focus groups in relation to
 recordings are worth exploring further. EVOLI, a video tagging tool, for example, may open up new
 opportunities for students to engage with video resources in a more focussed and interactive way
 with peers and tutors. The role of students, not just staff, as makers of recordings could also be
 utilised more for authentic learning, through a range of authentic, active, collaborative and inquirybased learning strategies including problem-based learning, for example.
- With an emphasis on staff-student relationships, universities should consider how students are allocated to staff, and if there is merit in deliberate matching to facilitate relationship-building (e.g., shared heritage) where staff diversity does not match student diversity.
- Students felt that formal tasks and activities with other students were among the aspects of teaching over the 2020/21 academic year that have contributed the least to their experience. This finding is worrying, considering that collaborative group work is a key professional activity. Might this feed forward into graduate outcomes? Focus group and open question analysis indicates that the negative view of group work is mainly associated with the difficulty of conducting it remotely and online. Given the changing nature of the workplace, the way in which universities implement remote collaborative working, and the way in which students engage with it, may be aspects that need addressing.
- Disseminate the report to interested students and staff who participated in the project. Some focus group participants specifically requested to be informed of the results, and we would like student and staff feedback on the report.
- It is evident that personal tutorials have not played as important a role as they could or should have over the 2020/21 academic year. Universities should focus on providing personal tutorials that encourage resilience, emotional intelligence, and emphasise the health and wellbeing of students. In a blended learning environment, it is necessary for personal tutorials and other pastoral care services to be equally as flexible in terms of delivery. Universities still have a duty of care for their students, even when they are not on campus. Students may be away from campus, either due to reasons of choice or necessity (such as self-isolation, visa conditions, etc.). Regardless, flexible personal tutoring should be a valuable resource for all students, and should appropriately focus on distance learners.
- Organise regular department- or course-level virtual social events to help remote students feel more connected.
- Have the option during remote lectures for anonymous questions to be asked in the session chat. This will increase engagement for students who feel embarrassed or intimidated asking questions when they are identifiable.
- Ask students about how we can value their backgrounds in teaching to get their ideas to use in the classroom. These ideas could be gathered anonymously online.

• We need to better explain to students what blended learning is exactly, especially that it is not all online learning. We also need to explain to students about independent and self-guided learning, both in our induction and transition processes.

6. Concluding remarks

During this collaborative, QAA-funded research project, we investigated the differing student perceptions and experiences of teaching and learning in the 2020/21 academic year, in the context of blended learning during the COVID-19 pandemic. Our aims included: gaining a deeper understanding of these perceptions and experiences; adding evidence to the sector regarding tackling the awarding gap; giving an opportunity for students to have their voices heard; and identifying areas of staff, curriculum, and policy development for subsequent academic years. We used surveys and focus groups to gather the data, and analysed it according to ethnicity group and subject area.

Analysis revealed both differences and similarities between ethnicities and subject areas — some have been more surprising than others. Most notably we found that Black, Arab and certain groups of Asian students had a significantly different experience of the 2020/21 academic year compared to White, Mixed and Other students. Black, Arab and Asian students typically had a better experience, and for Arab students the most popular mode of study was online (unlike all other ethnicity groups, the majority of whom preferred face-to-face studying). Additionally, we found that students who were enrolled on courses in Health Sciences (one of the three subject areas) also had a better experience. The causes of these differences require further investigation, although we would hypothesise that for Health Sciences students, the greater on-campus time compared to other subject areas (as permitted by government regulations) may be a significant contributing factor. It is interesting to note that there are differences by ethnicity within subject areas; for example, the positive experience of the academic year and preference for online studying among Arab students is largely due to those on Other Sciences courses (not Health Sciences, as might be expected from the above analysis).

Recordings of teaching materials were found to be particularly valuable to the majority of students over the 2020/21 academic year, and we believe that there is further scope for maximising the potential of this resource in the future. However, students felt that formal group work did not contribute as much to their experience of the year as it could have. Focus groups and open question responses indicate that this is largely due to the difficulties of conducting such work remotely and online. The implementation of group activities is something that universities need to improve, and students need to be equipped with the skills required to engage effectively. This is especially so, in light of the evolving nature of the workplace towards a more flexible, work-from-home format, as well as the benefit that engaging in group work can have on students' wellbeing.

Student experience of factors related to wellbeing was poor in the 2020/21 academic year, especially compared to the value that students put on aspects such as making friends, developing a sense of community, and receiving adequate mental health support. By taking a flexible approach to delivering personal tutorials and other pastoral care services (reflecting the flexible or blended nature of teaching delivery), as well as integrating external networking opportunities and communities into course programmes from the start, this gap between expectations and experiences of wellbeing may be narrowed.

While our results have provided fertile ground for a number of recommendations, our findings have been thought-provoking; they have raised more questions and identified further areas for research and exploration. Our hope is that by presenting our findings and highlighting some of the more surprising results, other institutions will realise the value of this type of research, and they will be encouraged to conduct similar research of their own.

7. References

Armellini, A., Teixeira Antunes, V. & Howe, R. (2021). Student Perspectives on Learning Experiences in a Higher Education Active Blended Learning Context. *TechTrends.* https://doi.org/10.1007/s11528-021-00593-w

Atherton, G. & Mazhari, T. (n.d.). *Higher Education awarding gaps and ethnicity in London: Going beyond BAME*. AccessHE. https://www.accesshe.ac.uk/yYdIx0u7/SBT2331-AccessHE-Going-beyond-BAME-Report-v4.pdf [Accessed September 2021]

Ball, S. J. (2017). Laboring to Relate: Neoliberalism, Embodied Policy, and Network Dynamics. *Peabody Journal of Education*, *92*(1), 29-4. https://doi.org/10.1080/0161956X.2016.1264802

Banerjee, P. A. & Lamb, S. (2016). A systematic review of factors linked to poor academic performance of disadvantaged students in science and maths in schools. *Cogent Education 3* (1): 1-17.

Bhattacharyya, G., Ison, L. & Blair, M. (2003). Minority Ethnic Attainment and Participation in Education and Training: The Evidence. *DfES (Research Topic Paper RTP01-03)*. London: DfES.

Braun, V., Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology,* 3, 77–101.

Broeke, S. & Nicholls, T. (2007). *Ethnicity and Degree Attainment*. (Research Report RW9). London: DfES.

Buckley-Irvine, N. (2017). *Universities' shame – unpicking the black attainment gap.* Online: https://wonkhe.com/blogs/ analysis-universities-shame-black-attainment-gap/ [Accessed April 21]

Connor, H., Tyers, C., Davis, S. & Tackey, N. D. (2003). *Minority Ethnic Students in Higher Education: Interim Report, Institute for Employment Studies.* DfES Report RR448. London: DfES.

Holligan, C., & Shah, Q. (2017). Global capitalism's Trojan Horse: Consumer power and the National Student Survey in England. *Power and Education*, *9*(2), 114–128. https://doi.org/10.1177/1757743817701159

Office for Fair Access (OFFA) (2015). OFFA Topic Briefing: BME Students –OFFA. Online: https://www.offa.org.uk/universitiesand-colleges/guidance-and-useful-information/topic-briefings/ offatopic-briefing-bme-students/ [Accessed April 19]

Lo Lancono, V., Symonds, P., & Brown, D.H.K. (2016). Skype as a Tool for Qualitative Research. Sociological Research Online 21(2) 12 Retrieved from; https://warwick.ac.uk/fac/soc/al/people/mann/interviews/paul_symonds_-_skype-research-method.pdf

Lukes, S. (2005). Power: A Radical View. New York: Palgrave Macmillan.

Lyotard, J. (1984). *Postmodern Condition: A Report on Knowledge*. Manchester: Manchester University Press.

Newton, P. M. (2015). The Learning Styles Myth is Thriving in Higher Education. *Front. Psychol.* 6:1908. doi: 10.3389/fpsyg.2015.01908

Panesar, L. (2017). Academic support and the BAME attainment gap: Using data to challenge assumptions. *Spark: UAL Creative Teaching and Learning Journal*, *2* (1). pp. 45-49

Peterson, C. & Ramsay D. (2021). Reducing the gap! Reciprocal mentoring between Black, Asian and minority ethnic (BAME) students and senior leaders at the University of Gloucestershire, Perspectives: *Policy and Practice in Higher Education*, 25:1, 34-39, DOI: 10.1080/13603108.2020.1738583

Richardson, J. T. E. (2008). The attainment of ethnic minority students in UK higher education. *Studies in Higher Education 33*(1): 33-48

Richardson, J. T. E. (2012). The attainment of white and ethnic minority students in distance learning. *Assessment and Evaluation in Higher Education 37(4):* 393-408

Runnymede Trust (2015). Aiming Higher Race, Inequality and Diversity in the Academy. Online: http://www.runnymedetrust.org/uploads/Aiming Higher.pdf [Accessed April 21]

Sidiropoulou, P. (2020). *An Exploration of Benefits of, and Challenges Associated with Student Experience Surveys, as Perceived by Course Leaders at the University of Portsmouth*. Portsmouth: University of Portsmouth, Department for Curriculum and Quality Enhancement.

Singh, G. (2011). *Black and minority ethnic students' participation and success in higher education: improving retention and success.* A synthesis of research evidence. York: Higher Education Academy

Smith, SV (2017). Exploring the BME student attainment gap: What Did It Tell Us? Actions to Address Home Black and Minority Ethnic (BME) Undergraduate Students' Degree Attainment. *Journal of Perspectives in Applied Academic Practice*, *5* (1). pp. 48-57. ISSN 2051-9788 DOI: https://doi.org/10.14297/jpaap.v5i1.239

Staddon, E., & Standish, P. (2012). Improving the student experience. *Journal of Philosophy of Education*, 46(4), 631–648. https://doi.org/10.1111/j.1467-9752.2012.00885.x

Stevenson, J. (2012). *Black and Minority Ethnic Student Degree Retention and Attainment*. Online: https://www.heacademy. ac.uk/sites/default/files/bme_summit_final_report.pdf [Accessed April 21]

Zwysen, W. & Longhi, S. (2016). Labour market disadvantage of ethnic minority British graduates: university choice, parental background or neighbourhood? *Institute for Social and Economic Research, Working Paper Series, No. 2016-02*, ISER, Colchester. Online: https://www.econstor.eu/handle/10419/163527 [Accessed April 21]

Appendices

Appendix A: Survey Questionnaire

Differing Perceptions of Quality of Learning (draft v2) UoP sample

WELCOME

The current academic year 2020-21 has not been a typical one, and we would like to understand to what extent students have been able to have the university experience they may have expected or wanted. Research carried out before the COVID-19 pandemic shows us that the student experience at university can vary significantly. We know, for example, that certain student groups disproportionately miss out on achieving certain degree classifications, and that there are students who never feel as though they 'belong' to their university community. We want to understand more about this through this survey. This survey is part of the project 'Differing Perceptions of Quality of Learning', which is funded by the Quality Assurance Agency for Higher Education in the UK. This survey, which is being run across four universities, asks questions to help us identify how students with different characteristics (e.g., ethnicity) feel differently about how they have been taught this year. In addition to demographic questions, you will be asked questions from across the following sections: Learning and Teaching; Accessibility, Engagement and Expectations; and Assessment and Feedback.

The survey should take around 20 minutes to complete. Your feedback will be combined with those of others to help improve the learning experience of all students. We will be asking you for some demographic data to help us understand if students from different backgrounds have different experiences and perceptions. As well as getting the chance to have your voice heard, if you provide your email address when you complete the survey, you will automatically be put into a prize draw, with prizes of 3 x £50, 2 x £100, and a top prize of £350.

The project is led by the University of Portsmouth (UoP). The UoP takes responsibility for the lawful, fair and transparent use of the data you submit through this questionnaire on the JISC online surveys platform. Please click on the following links to read the Privacy Statement and the Information Sheet for the project.

In order to participate, please read the following consent statements and then click to indicate your consent to the use of your personal data as described:

I confirm that I have read and understood the Information Sheet and the Privacy Statement for the project.

I understand that my participation is voluntary, and that I am free to withdraw without giving any reason during the data collection process. I can do this by exiting the survey at any point. I can also choose not to respond to any questions that I feel uncomfortable answering, but recognise that this will prevent accurate analysis.

I understand that withdrawal of my data is not possible once the data analysis process has begun, which is (or the day after the survey closes, if the closing date is extended).

I understand that the anonymised results of this project may be used in publications and/or presentations.

I understand that the information I provide will be treated in confidence, and that my identity will be protected in the publication of any findings. I give my permission for my anonymous data, from

which it will not be possible in any way to identify me as an individual, to be disseminated in this way, and to be shared for other researchers to make use of under the University's commitment to Open Access research.

I consent to the data I contribute being retained for 10 years and accept that it may be referenced in any future related research that has been approved by a Research Ethics Committee. I recognise that I am under no obligation to participate in any future related data collection.

(Please click on the following statement in order to express your consent)

I consent to all of the above statements

If you would like to enter the prize draw, please enter your email address below:

If you would like to participate in our focus groups, which will help us to develop a better understanding of your perceptions and experiences, please click on the box (more prizes will be offered!):

You will now enter the survey. Please do not identify yourself or other individuals (including staff) in your comments. If you have a complaint or need support with any of the issues raised within the survey, please contact uopsurveys@port.ac.uk. Thank you for your time. Your participation is greatly appreciated.

ABOUT YOU AND YOUR PROGRAMME/COURSE - DEMOGRAPHIC QUESTIONS

To help us understand whether your university is meeting the needs of all students, we would like to ask some questions about you. As with the rest of the survey, all reporting will be anonymous and your responses will be treated confidentially.

How would you describe your gender?

Where do you consider your permanent home to be? [countries]

What is your fee status? [Home, EU, International]

How would you describe your ethnicity? (Please choose one option that best describes your ethnic group or background):

Where have you been living (for the majority of the time) since the beginning of this academic year?

- On-campus university accommodation
- · Off-campus university accommodation
- Private student/non-student accommodation
- My family home in the UK
- My family home in Europe (excluding UK)
- My family home overseas (excluding Europe)
- Staying with friends (or other) in the UK
- Staying with friends (or other) outside the UK
- I would rather not say
- Other

What year of your programme/course are you in?

TEACHING & LEARNING

Q10. How valuable to your learning have these elements of teaching in your programme/course been during this academic year (if applicable)? [Very valuable, Valuable, Average Value, Limited Value, Not valuable]

- Recordings of teaching materials (audio with slides, video with slides or annotations)
- Online streaming of live lectures
- Face-to-face sessions on campus (workshops, seminars, lectures)
- Lecture engagement sessions (live and interactive online sessions)
- Tasks and activities set by teaching staff to complete on your own
- Tasks and activities set by teaching staff to complete with other students
- Individual feedback on tasks you completed on your own
- Group feedback on assignments by teaching staff
- Opportunities to ask questions (email or other)
- Personal tutorial sessions

Q11. To what extent do you agree with these statements about your learning experience in the current academic year? Definitely Agree / Agree/ Neither agree or disagree / Disagree / Definitely Disagree

- I am enjoying it
- I feel more comfortable online than I would in a face-to-face class
- I feel better able to contribute to discussions online
- I am comfortable using the technology
- I feel I am learning well
- I would prefer to be in a primarily face-to-face learning environment
- I don't feel I am missing out as a result of studying online
- I feel that online studying provides all aspects of studying, although in a different mode
- I feel my voice is heard when I give feedback on my course
- I feel motivated to complement my learning through further resources beyond what is provided
- The course inspired me to join a professional network/community or an open course.

Q12. To what extent do you agree that the teaching you have experienced this year does the following?

Teaching on my course this year has...

- engaged me in learning that is meaningful and relevant to me.
- enabled me to access course content that stimulates learning and allows participation in learning activities.
- allowed me to demonstrate my knowledge and strengths during assessments.
- promoted my engagement and my sense of belonging amongst students.
- valued my background and recognises it as a resource that enriches my learning experience
- motivated me to seek learning opportunities beyond the programme/course

Q13. How important do you think that the following experiences are/can be to the quality of your learning?

- get time, albeit remotely, with academic staff when you need it
- receive personal support/guidance with learning
- · study with fellow students

- discuss academic work with fellow students
- develop a sense of belonging to peers on the programme/course
- have sufficient access to the on-campus materials and equipment that you need
- have sufficient access to the online resources that you need
- have sufficient access to the library content, services and support that you need
- knowing where and how to locate additional resources that are useful to your learning
- knowing where to find additional learning opportunities
- have sufficient support to develop your digital/technological competencies
- · make good contacts or network for your future career

Q14. How important do you think that the following experiences are/can be to your wellbeing?

- receive adequate support for your mental wellbeing
- make university friends
- feel like a member of a university community

Q15. To what extent do you agree that your study experience this year gave you the opportunity to do the following:

- get time, albeit remotely, with academic staff when you need it
- receive personal support/guidance with learning
- study with fellow students
- discuss academic work with fellow students
- develop a sense of belonging to peers on the programme/course
- have sufficient access to the on-campus materials and equipment that you need
- have sufficient access to the online resources that you need
- have sufficient access to the library content, services and support that you need
- know where and how to locate additional resources that are useful to your learning
- have sufficient support to develop your digital/technological competencies
- make good contacts or network for your future career

Q16. And to what extent do you agree that your study experience this year gave you the opportunity to do the following:

- · receive adequate support for your mental wellbeing
- make university friends
- feel like a member of a university community

Q17. Given the ongoing coronavirus situation and the likely safety measures required for face-to-face teaching (social distancing, etc.), which of the following teaching delivery methods do you prefer?

- I prefer face-to-face teaching
- I prefer online teaching
- I have no preference

[If selected no preference] **Q17a.** Is there anything that works particularly well, or that you particularly enjoy, about face-to-face teaching or online teaching? (open question)

[If selected online teaching] **Q17b.** What have you enjoyed/most valued about online teaching? (open question)

[If selected face-to-face teaching] **Q17c.** Is there anything that works particularly well, or that you particularly enjoy, about face-to-face teaching? (open question)

Q18. What aspect of the way staff have taught you in 2020-21, if any, has prevented you from fully engaging and benefiting from your study experience? (open question)

ACCESSIBILITY

[Note: To provide context to your responses about your perceptions of the quality of teaching, we need to ask some questions about your situation and conditions related to studying from home]

Q19. Please indicate how frequently you have had access when needed during the current academic year to the following, when studying from home [Regularly, frequently, occasionally, rarely, never]:

- A reliable internet connection with sufficient bandwidth for all my devices
- Adequate computing devices (or other hardware) to complete all my work
- All the software I needed to complete my work
- The required camera/microphone
- The Virtual Learning Environment
- The online resources of my University's library
- Time, space and resources to engage in independent learning
- Further resources beyond what is provided by the University [please specify]:

Q19a. If you used further resources beyond what is provided by the University, please specify. (open question)

Q20. Please indicate how confident you have felt in using the following, during the current academic year [Very confident to not at all confident; 5-point scale]:

- My internet connection
- My computing devices (or other hardware) required to complete all my work
- All the software I needed to complete my work
- The required camera/microphone
- The Virtual Learning Environment
- The online resources of my University's library
- Time, space and resources to engage in independent learning
- Further resources beyond what is provided by the University

Q21. What could the university do in terms of helping you better access the resources you need for your learning? (open question)

ENGAGEMENT AND EXPECTATIONS

Q22. How important to your quality of learning are the following?

- The amount of time you spend communicating with academic staff online
- The amount of time you spend communicating with academic staff face-to-face, on campus
- The amount of time you spend speaking to other students on your course, online

- The amount of time you spend speaking to other students on your course, face-to-face and on campus
- The time you spend communicating with others outside your course/programme/ university in networks and communities?

Q23. In the coming academic year, and in a normal study week, how many hours do you typically expect to spend on the following? [ranges: less than 1 hour, 1-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, greater than 16 hours?]

Separate answers for: On campus (when government guidance allows it) / Online

- Lectures
- Supervised group seminars/workshops
- Individual time with teaching staff/supervisor
- Unsupervised study with peers
- Independent personal study

Q24. In the coming academic year, and in a normal study week, how often do you typically expect to do the following? Regularly, frequently, occasionally, rarely, never

Separate answers for: On campus (when government guidance allows it) / Online

- Ask questions in taught sessions or contribute to discussions about course material in taught sessions
- Discuss ideas from your course with teaching staff outside taught sessions, including by email/online
- Discuss your academic performance and/or feedback with teaching staff
- Work with teaching staff on activities other than coursework
- Work with other students on course projects or assignments
- Explain course material to one or more students
- Ask another student to help you understand course material
- Talk about your career plans with teaching staff or advisors
- Participate in networks and communities or open courses external to your programme/ course
- Use learning resources external to the programme/course

Q25. Overall, how important to your learning is it to:

- feel connected to the staff on your course?
- feel connected to other students on your course?

ASSESSMENT AND FEEDBACK

Q26. Please tell us to what extent you agree/disagree with the following statements:

This year...

- the teaching prepared me well for my assessments.
- the online assessments provided valuable learning opportunities.
- there was a good and balanced variety of assessment types.
- I was given the opportunity to tailor assessments to my own aspirations and interests.

- I received quality written and/or verbal feedback from teaching staff.
- I had opportunities for peer-to-peer feedback from other students.
- I was encouraged to self-evaluate and reflect on assignments.

Q27. In your opinion, what assessments worked particularly well? What kinds of assessment would you like to have more frequently in the coming year? (open question)

Q28. What would be the most useful way to get feedback on your work in the coming academic year? (open question)

OVERALL

Q29. What does quality teaching mean to you? (open question)

Q30. What does quality learning mean to you? (open question)

Please tell us to what extent you agree/disagree with the following statements:

Q31. My overall experience of my programme/course in 2020-21:

- met my expectations for quality of teaching.
- met my expectations for quality of learning.

Q32. If you have any additional comments about your overall student experience of learning and teaching in the current context of the COVID-19 pandemic, please write them here. (open question)

END OF SURVEY - THANK YOU MESSAGE

Thank you very much for taking the time to complete this questionnaire. Your answers have now been recorded on our database. If you provided your email address, you will automatically be put into a prize draw. If you have a complaint or need support with any of the issues raised within the survey, please contact uopsurveys@port.ac.uk.

Appendix B: Focus Group Core Questions

Focus Group Questions

- 1. What does quality learning mean to you? What does quality teaching enable you to do? Most of the students who agreed that they are enjoying their learning experience feel that they are also learning well. There is a correlation between these two: enjoyment and learning. Are there elements that are not so enjoyable, still valuable to your learning? Does the content have to challenge you to be engaging/effective?
- 2. Recordings of teaching materials (audio with slides, video with slides or annotations) are the most valuable teaching element (73% agreed they were valuable the highest percentage by far when compared to other teaching elements). Why is the recording the most valuable teaching method? How relevant is the teaching method to quality of teaching?

- **3.** Just over a third of students agreed that, based on their experience of teaching on their course, their background is valued and recognised as a resource that enriches their learning experience. **If you agree, how do they do this? If not, how do you feel your background could be better valued and recognised as a resource that enriches your learning experience?**
- **4.** The vast majority of students indicated that, during the current academic year, they have had access when needed to the following when studying remotely: time, space and resources to engage in independent learning. Additionally, 62% of the students feel very or quite confident in using these resources, and the rest of the students feel less or not confident. **What do you understand by** 'independent learning'? Is independent learning important to you? How does your university help you to become/develop as an independent learner?
- 5. Which assessments have you learnt the most from, and why? Which assessments have you learnt the least from, and why? Do you ever do assessed tasks (these may be called formative assessments) which do not count towards your grades? If you do, how do they help you learn? What sort of tasks are they? How do they work? Does everyone do them?
- 6. Most students feel that the quality of both learning and teaching met their expectations this year.

 What are the 3 key things that made a difference to your learning? What aspects of this year's learning and teaching experience would you keep for next year? And Why?

Appendix C: Overall Survey Results

Teaching and learning in 2020/2021

Value of elements of teaching (Figure 3)

The first question that students were asked, following the demographic questions, was related to how valuable to their learning various elements of teaching on their programme/course had been during 2020/2021, as shown in Figure 3.

Recordings of teaching materials were reported as the most valuable teaching element, with 45% of the students regarding them as very valuable, and 28% as valuable (73% in total). Opportunities to ask questions and individual feedback were also highly valued, as were online streaming of live lectures and face-to-face sessions on campus. It is worth mentioning that 22% of students reported that face-to-face sessions on campus were not applicable to their experience (some universities/courses followed a blended learning approach, while others had exclusively online teaching, due to the COVID-19 pandemic). Students were most sceptical regarding the formal tasks and activities with other students, with one in three students being positive, one in three students being neutral, and one in three students being negative. Group activities and group feedback were among the least valued elements.

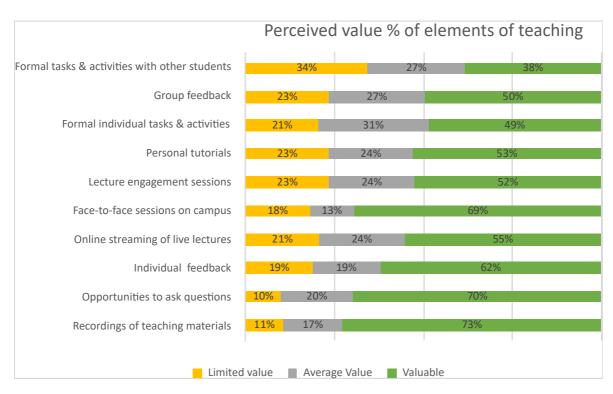


Figure 3: Perceived value % of elements of teaching

Open question: Q29

Q29 asked students what quality teaching means to them. There were 646 responses.

Themes that were very frequently associated with quality teaching were: delivery that is engaging or passionate; teaching that is conducive to learning, knowledge acquisition, knowledge retention, or student achievement; teaching that is clear, comprehensible, concise, efficient and effective; teaching that develops or ensures understanding, or facilitates understanding of the material; teaching staff that provide support and guidance; teaching methods and approaches that are personalised or tailored to student needs or learning requirements and preferences; teaching that provides opportunities to interact with the lecturer; teaching that prepares students for assessments; the sentiment that quality teaching is of paramount importance; and teaching that provided in-depth and high-quality explanations. Approximately 7% of references were made to engaging or passionate delivery.

Responses to this question were quite broad, yet clear themes still emerged from the answers. Quality teaching is clearly important to students. They defined quality teaching primarily as teaching that is delivered passionately and is engaging. More general answers defined quality teaching as conducive to learning, conducive to knowledge acquisition and retention, and conducive to students achieving their goals, with a specific emphasis on success in assessments. Some students associated quality teaching with motivation; others specifically associated it with being on campus in a face-to-face environment.

"An engaging lecturer who loves the course they study, instead of a rather tame and boring person who looks to get the lecture done and leave."

In terms of delivery, students thought lectures and content should be relevant, high quality, and delivered in a clear, concise and comprehensible manner; lectures and content should be an efficient and effective way of conveying ideas. Students were of the view that quality teaching should develop

and ensure understanding, partly by helping students understand content through the simplification or logical breakdown of complex concepts. Explanations should be high quality and in depth.

"Clear delivery (both in speech and subject matter) that is engaging and taught with enthusiasm, as well as in a manner that prepares us for examination. Clarity is the most important."

With reference to teaching staff, students thought that quality teaching involved staff who were approachable, accessible, and available when needed for help, support, and guidance. Students were of the opinion that teaching staff should have a genuine interest in their subject area. Moreover, they should also show that they are invested in their students' success. Teaching staff should provide a thorough, organised coverage of a well-structured course, and promote opportunities for students to interact and participate in the teaching process. Students also identified high-quality feedback as a feature of quality teaching.

"...engaging, answers questions, teaches the process not just the end result, quality feedback that allows development..."

Additionally, for the students, quality teaching provides them with opportunities to interact with teaching staff. Quality teaching is also enjoyable, and it teaches students problem-solving methods which they can use to put theory into practice.

"Quality teaching is when the lecturer is interacting with all students and everyone is getting along with the teaching and giving examples with real life situations."

Another characteristic raised by students was that quality teaching should cater to the various different ways in which students learn; there is not a one-size-fits-all approach, and teaching should be inclusive by incorporating a variety of different methods aimed at different learning requirements and preferences.

"It means engaging with students, understanding their needs, and realising that they are all individual and will need different levels/methods of support..."

"Clear aims, ability to ask questions, providing for different learning types, e.g. visual learners or those who listen best. Teaching relevant to future assessments and career."

"Being able to interact with understanding lecturers who support your method of learning and help guide you in the right direction."

For a number of students, quality teaching is teaching that acts as a catalyst for independent learning, by providing resources and guidance on further reading, as well as highlighting areas of interest outside the core course material. For some students, quality teaching may also serve to smooth the transition between the more guided learning of secondary school, to the more independent learning of university.

"Delivering insightful and relevant information which is applicable to the assessment or tasks at hand and to a degree whereby it is fully understood by students, but also in a way that can lead students in the right direction for independent and self-learning."

"A way in which a teacher goes above and beyond to demonstrate course and content material that benefits your learning and provides you with an inspiration to further your own learning."

Impact of teaching (Figure 4)

One of the next questions was broader in scope, asking students to what extent they agreed with a number of statements about their experience of teaching on their programme/course in the 2020/21 academic year. The teaching on courses had an impact on students' experiences, as portrayed in Figure 4.

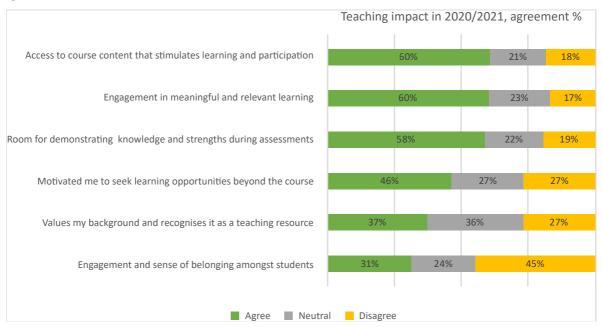


Figure 4: Teaching impact in 2020/2021, % agreement

Approximately 60% of students agreed that teaching on their courses (i) engaged them in learning that is meaningful and relevant to them, (ii) enabled them to access course content that stimulates learning and allows participation in learning activities, and (iii) allowed them to demonstrate their knowledge and strengths during assessments. Students were more sceptical about the how well the teaching (i) promoted their engagement and sense of belonging amongst students, (ii) valued their background and recognised it as a resource that enriched the learning experience, and (iii) motivated them to seek learning opportunities beyond the programme/course.

Impact of assessment and feedback (Figure 5)

The aforementioned, largely positive experience with *room for demonstrating knowledge and strengths during assessments* is in accordance with the satisfaction with various relevant aspects of assessment, as presented in Figure 5, where nearly 60% of the students agreed that the online assessments provided valuable learning opportunities, and that there was a good and balanced variety of assessment types. Approximately half of the students agreed that they were encouraged to self-evaluate and reflect on assignments, and that the teaching prepared them well for their assessments.

Students were more critical towards the feedback they received from staff; this is a common issue emerging in most surveys. Finally, when they were asked about being given opportunities to tailor assessments to their aspirations and interests, as well as opportunities for peer feedback, only one in three students agreed that they had these opportunities.

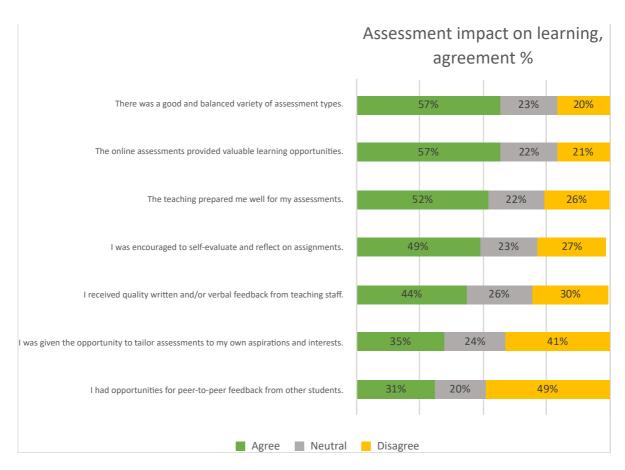


Figure 5: Assessment impact on learning, agreement %

Open question: Q27

Q27 asked students what assessments they felt worked particularly well, and what kinds of assessments they would like to have more frequently in the coming year. There were 531 responses.

Assessment types that were mentioned very frequently were: exams; essays or assignments; coursework; online assessments; group assessments; and multiple-choice tests. Essays or assignments, exams, and coursework accounted for 9%, 9% and 8% of references, respectively.

The assessments mentioned the most frequently in a positive context were exams, essays or assignments, and coursework. These three types of assessment were approximately equal in frequency and were clearly the most preferred options by a large margin. Some students also highlighted that incorporating a variety of assessment types would be fairer and more inclusive, to cater to the variety of learning requirements, preferences and skills among a particular cohort.

When exams were mentioned, the emphasis was overwhelmingly on the preference for online exams, with only one or two cases mentioning a preference for traditional, on-campus exams. The perceived benefits of open-book or take-home exams was also frequently mentioned. Some students also liked the exams with time limits of 24 hours or greater. It was felt by students that these open-book, less strictly timed exams were a better test of understanding and application, rather than just recall and memorisation. Moreover, online exams were thought to be a more realistic simulation of an environment that students might encounter in the workplace in later life; this was viewed positively. From a mental health perspective, students in favour of this type of assessment generally

also mentioned lower stress and anxiety levels associated with assessments. This sentiment in the open questions was not reflected in the focus groups, as there was significant scepticism expressed in many of the focus groups about the value and integrity of online, open-book exams.

While group assessments, such as presentations and projects, were viewed favourably by many students, a significant number expressed a preference for individual assessment, citing issues with group members' accountability for group work, and also the difficulties of communication and coordination associated with remote group working. The appeal of group working to students very much depends on whether it will be conducted in-person or remotely, with a preference for the former.

Smaller, regular assessments were favoured by some students, who felt that assessment in this way took some of the pressure off the final exams. It was also seen as a good way for students to get feedback to assess gaps in their knowledge and understanding in time for them to do something about it before larger final assessments. In this way, formative assessments, mock exams and regular quizzes were mentioned by some as being particularly useful. Multiple choice questions were also a popular form of assessment; however, it was unclear from the responses whether these were part of a regular, smaller assessment regime, or whether they were used as a larger summative assessment tool. They were therefore coded separately in the analysis.

For coursework, essays and assignments, some students liked being able to tailor the assessment to their interests, aspirations or abilities, and so having a degree of autonomy over the direction of an assessment was viewed favourably.

Open question: Q28

Q28 asked students what would be the most useful way for them to get feedback on their work in the coming academic year. There were 509 responses.

Themes in relation to feedback that were mentioned very frequently were: receiving feedback online (not live), via email, Moodle, Turnitin, or similar platform; having the opportunity to discuss feedback with staff or in an appointment; receiving feedback in-person or face-to-face; and written feedback or a feedback report. Approximately 29% of references were accounted for by those related to online (not live) feedback and having opportunities to discuss feedback with staff.

Themes in relation to feedback that were frequently mentioned were: feedback that is detailed and/ or high quality; feedback that shows students how to improve; feedback that is personalised or individual; feedback in the form of annotations made to work; online (live) via MS Teams, Zoom, or other video call; and feedback that clarifies what errors were made with explanations and reasons why marks were lost.

When asked about useful ways to receive feedback, students most frequently expressed a preference for receiving feedback through some kind of online written format or report, including via email, Moodle, or Turnitin. While students preferred to receive feedback in this way, many would also like the opportunity to arrange a follow-up meeting to discuss feedback further with staff, should they have further questions or wish to query marking. Although less popular than online methods, many students would prefer getting feedback face-to-face, again with the opportunity to discuss feedback with staff. A few students suggested feedback seminars or tutorials for the cohort to allow students to discuss feedback with staff and with each other.

Other themes mentioned included feedback consisting of direct annotations to work, clearly indicating to which part of the work the feedback referred. Some students would also be happy with a video call or similar online live format.

Aside from the method of delivery for feedback, the nature of feedback was also frequently raised. Students want their feedback to be detailed, specific, high quality, and personalised; they want feedback to tell them how to improve for the future, with clear explanations of why marks were lost. A few students raised the issue of consistency of grades and feedback given, raising concerns about the subjectivity of markers.

Another specific theme that was raised, although not frequently enough to be highlighted by frequency analysis, was the lack of feedback on summative exams. Students typically referred to exams where they are unable to see marked scripts and get no feedback other than a grade. For some students these types of assessments are the ones they learn the least from, because of this lack of feedback.

A similar number of students were happy with the current method of feedback delivery, but did not specify what that was.

Experience of factors related to learning (Figure 6)



Figure 6: Learning experience in 2020/2021, agreement %

All the aforementioned elements of the questions described so far, as well as other factors, affected the learning experience of students. While most students (82%) feel comfortable using technology (Figure 6), and therefore using technology should not be a negative factor for their learning experience, just under half of the students agreed that they enjoyed their learning experience, and that they feel they are learning well. Almost two-fifths of students feel more comfortable online, and they feel better able to contribute to discussions online. Nevertheless, the majority of students (58%) feel they are missing out as a result of studying online, and they clearly appreciate face-to-face learning environments (70% would prefer it to be the primary environment).

Frequency of use and confidence using (Figure 7)

Furthermore, students were asked to indicate how frequently they have had access, when needed during the 2020/21 academic year, to various resources when studying remotely, and how confident they were in using them (Figure 7). The figure compares frequency of use (when needed) with confidence, and it is interesting to see whether there is a correlation between the two.

Students were largely confident in using their computing devices, camera/microphone, software and a reliable internet connection. With the exception of further resources beyond what is provided by the university, approximately two in three students were confident in using every other element in the table. At the population level there is a general trend showing a correlation between frequency and confidence. The higher the frequency, the higher the confidence, and vice versa.

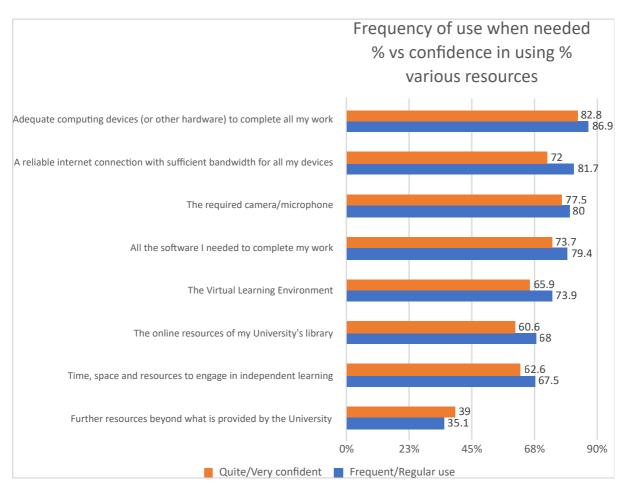


Figure 7: Frequency of use when needed % vs confidence in using % various resources

Correlations

When looking at individual responses, positive correlations (using Spearman's rho) do indeed exist for all aspects. Between frequency of use when needed and confidence, there is a weak positive correlation for adequate computing devices (or other hardware) to complete all my work (rho = 0.376, p = 0.000). Moderate positive correlations exist for: a reliable internet connection with sufficient bandwidth for all my devices (rho = 0.497, p = 0.000), all the software I needed to complete my work (rho = 0.549, p = 0.000), the required camera/microphone (rho = 0.474, p = 0.000), the Virtual Learning Environment (rho = 0.528, p = 0.000), the online resources of my University's library (rho = 0.490, p = 0.000), and the time, space and resources to engage in independent learning (rho = 0.572, p = 0.000). A strong positive correlation exists for further resources beyond what is provided by the University (rho = 0.685, p = 0.000).

Open question: Q19a

Q19a asked students what resources, if any, they had used beyond those which the university provides. There were 147 responses.

Resources that were mentioned very frequently were: books not acquired through university; Youtube; and internet research or other general websites. These three resource categories accounted for approximately 31% of resources mentioned.

Other resources that were frequently mentioned were: news articles; Google; other online resources; and web courses.

The four most frequently mentioned resources were books not acquired through the university – both purchased and borrowed; Youtube; research on the internet, or use of a non-specific website; and features related to Google, including the search engine generally, Google Scholar, Google Docs, etc.. Youtube was used to supplement course material, clarify areas where students had not understood course material, and for tutorial videos for, e.g., certain pieces of software. Books were obtained in e-book format as well as hard copies. Web courses and tutorials (other than Youtube) were also accessed, including those provided by, for example, LinkedIn Learning, Udemy, Codecademy and Khan Academy, among others.

Open question: Q21

Q21 asked students what the university could do in terms of helping them better access the resources they need for their learning. There were 217 responses.

Themes that were mentioned very frequently were: re-formatting, clarifying the layout of, or restructuring Moodle (or other VLE); the provision of how-to videos or workshops and classes on how to access or use resources and software; the provision of resources being adequate; and improving the clarity of university or library websites, including by providing clear links to resources. Approximately 29% of the references were accounted for by those relating to Moodle (or other VLE), how-to videos, and the clarity of university and library websites. Approximately 8% were accounted for by those indicating that provision of resources had been adequate.

Other themes that were frequently mentioned were: needing financial help to install better wifi, get access to better laptops, or other resources; the expansion of online library resources; the availability of online resources, such as having more of them or making them easier to access; having physical

access to the university library building; and having resources better signposted by email, or improving email communication in general.

Many of the responses focussed specifically on how confusing and arbitrary the organisation of material on Moodle (or in some cases an unspecified VLE) is, how poorly signposted it is, and how – even once students have found a certain resource – they still do not know how to access it. Also highlighted by a significant number of responses was lack of clarity on the university and library websites; the format was deemed out-dated, not user-friendly, and somewhat arcane. Suggestions included the provision of clear links to material, and extra classes on how to access and use these resources.

"Make the library site easier to use, when you press on a certain book or e book for example, it can be hard to open it, or give instructions for certain websites which can be hard to understand."

"Make Moodle clearer to navigate."

"Provide clear instructions on the main Moodle page on how to access things and where."

"In the context of Moodle, all modules should have one set structure to them. My modules are all structured differently so I can struggle to find the specific resource I require."

For some, the lack of physical access to the library was a major issue. Some students wanted to use it as a good place to do university work; others wanted hard copies of books, rather than e-books. Frustration was expressed at the limited selection of e-books available, as well as the limited number of copies that could be borrowed at any one time.

"Make more copies available - often my suggested reading books/journals have only 5 online copies or so - there [are] around 300 people on my course."

Many students have had issues with Wifi or access to laptops and other resources, such as printers. This has been an issue for those living in university accommodation as well as those living at home. For some this has been an unwelcome additional expense; for others not in the position to be able to afford it, they have tried to cope without. Some students either in private rented accommodation or university halls have no control over the quality of their internet connection. In the absence of a reliable connection and adequate computer at their place of residence, the university library would have been their solution. However for some, as highlighted above, their access to the library was also limited.

"I had to buy a new laptop and upgrade my internet in order to keep up with the indefinite online shift and in lieu of library access. I was in a fortunate position to be able to afford these although this required very careful budgeting. It is disappointing when members of staff are unable to match these commitments."

Experience compared to perceptions/expectations (Figure 8)

Students' satisfaction is often influenced by the expectations they had and their perceptions of how important a number of factors are for their learning. Figure 8 shows a list of important factors related to quality of learning, what students think about their value, and what students' experience was in relation to them. Students were first asked how valuable the factors in Figure 8 are to them, and

then to what extent they agreed that their study experience this year gave them the opportunity to do those factors.

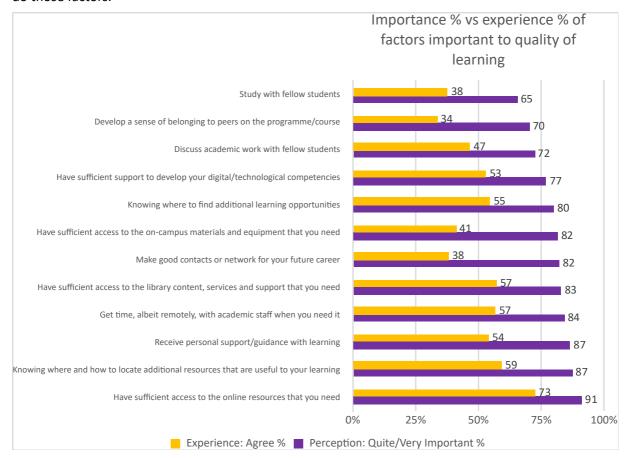


Figure 8: Importance % vs experience % of factors important to quality of learning

With reference to perceptions and expectations, when looking at the details of the figure, all listed factors seem important to students, yet some elements seem slightly less important to students than others, for example, engagement with other students (in various contexts). Some elements were almost unanimously regarded as important, for example, sufficient access to online and other resources and personal support/guidance with learning. Making good contacts or networking for their future career and developing a sense of belonging to peers on the programme/course are the areas that reported the greatest gap between expectations and experience. Additionally, having sufficient access to on-campus materials and equipment that students need received low scores for experience, which makes sense when taking into account the circumstances around the pandemic, especially for practical courses which require physical access to these resources.

Meeting expectations for quality of teaching and learning (Figure 9)

The apparent overall trend suggests that opportunities and experience have met expectations for a large proportion of students; nevertheless, a large proportion of students felt they did not have enough opportunities to experience the elements they regard as important. This is the prominent trend with the answers throughout the questionnaire, with one in four students typically being neutral about their experience. Similarly, to the question about their experience of learning and teaching (Figure 9), slightly more than 40% of the students were positive, one in four students was neutral, and approximately one in three was negative.

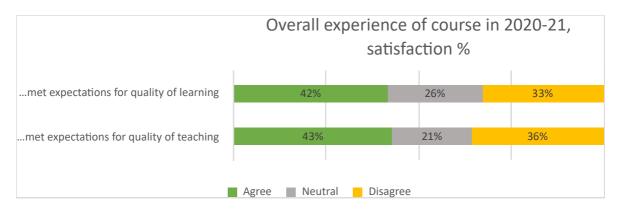


Figure 9: Overall experience of course in 2020-21, satisfaction %

Open question: Q30

Q30 asked students what quality learning means to them. There were 596 responses.

Themes that were very frequently associated with quality learning were: understanding material; applying theory in a practical context, or a context that is relevant for future use; having access to sufficient resources, learning platforms and materials; retention of skills/knowledge; the sentiment that quality learning is not a substitute for quality teaching, or that quality learning depends on quality teaching; preparation for assessment; high-quality, meaningful, relevant and accurate course material; learning in which students feel engaged; independent learning; and learning that is efficient, effective, and maximises the potential of time spent. References to understanding material accounted for approximately 11% of all references.

When students were asked about their perceptions of quality learning, a number of themes very similar to those that were raised in Q29 (concerning perceptions of quality teaching) also emerged. Both quality learning and quality teaching are perceived to be engaging and conducive to knowledge retention. They are both also perceived to be an integral part of preparation for assessments.

The word "understanding" was frequently used by students in their responses in relation to quality learning; this was a fundamental concept identified by students. Additionally, for quality learning to occur, students identified access to high-quality resources and course materials as another key factor.

"Having help and guidance. Correct resources. Gaining understanding of what is expected and being able to use that information going forward."

While quality learning was thought by many students to be associated with independent learning, a similar, greater number expressed the view (either explicitly or implicitly) that quality learning should not be a substitute for quality teaching.

"Taking my own initiate to build upon the the teaching and areas that interest me, however it should not be done in replacement to poor teaching."

"The ability to discover something new, understand it and implement it given a scenario, this stems through quality teaching which can can then be reiterated through independent study alongside help from the community you're within."

Additionally, quality learning is associated with putting theory into practice to consolidate understanding. Applications of theory that are relevant to future use – either at university, or more frequently in a future career – are perceived to be particularly valuable to quality learning.

"Well-rounded content that sets students up for future careers."

Students also feel that quality learning should maximise the potential of the time and effort investment they are making.

"To me it is when I'm in a good, energetic mood, able to focus for many hours, and I do not spend excess hours on one topic. In other words, when I learn efficiently."

Importance and experience of factors related to wellbeing (Figure 10)

Although indirectly linked to the learning experience, yet still an influential factor, factors related to wellbeing were also explored (Figure 10). Similarly, most students think that the following experiences are/can be important to their wellbeing; however, only 34-46% agreed that their study experience this year gave them the opportunity to do the following.

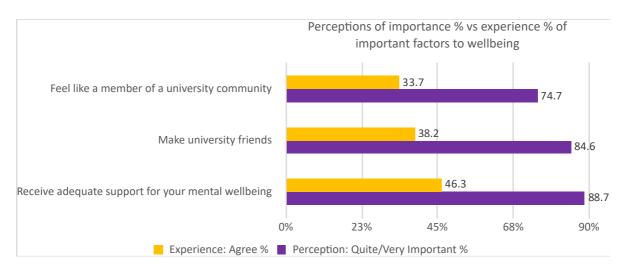


Figure 10: Perceptions of importance % vs experience % of important factors to wellbeing

Preferred mode of study (Figure 11)

While a few conclusions can be drawn from the material further up, and a few implications emerge from the data, students were directly asked about the way forward and their preferences. The first question in this regard asked students which teaching delivery method they prefer (given the ongoing coronavirus situation and the likely safety measures): face-to-face teaching on campus or online teaching (Figure 11). Students could also choose the option of no preference, but there was no option to express a preference for a blended approach of both on-campus and online teaching. While this seems like a limitation, the reason for this approach was that the aim of the question was not necessarily to see a statistical difference, but rather to understand in the open questions that followed (and the focus groups) why some students have strong feelings towards a specific delivery method.

The 60% of students with a preference for face-to-face teaching is consistent with the proportion of students who felt that they are missing out as a result of studying online; however, this does not reflect the much lower percentage of those who reported further up that they are not enjoying their learning experience (28%), that they do not feel they are learning well, or that they feel as

comfortable with the online experience as they would feel with the on-campus, face-to-face experience. One in four students prefers online teaching, and approximately one in six students is neutral towards the two delivery methods. Reasons for these preferences were expanded on in the answers to the subsequent open questions.

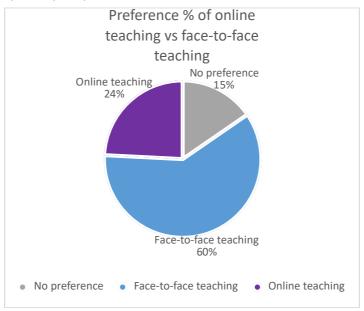


Figure 11: Preference % of online teaching vs face-to-face teaching

Depending on their preference, students were asked: (i) whether there was anything in their opinion that works particularly well, or that they particularly enjoy, about online or face-to-face teaching (if they selected no preference); (ii) what they have enjoyed/most valued about online activities (if they selected online as a preference); or (iii) whether there is anything that works particularly well, or that they particularly enjoy, about face-to-face teaching (if they selected face-to-face as a preference). They were then asked – regardless of preference – what aspect of the way staff have taught them in 2020-21, if any, had prevented them from fully engaging and benefiting from their study experience.

Open question: Q17a

Q17a asked students whether there was anything in their opinion that works particularly well, or that they particularly enjoy, about online or face-to-face teaching (depending on their response to Q17). There were 92 responses.

Themes that were mentioned very frequently were: the appeal or utility of recordings and/or other online resources, including the ability to review material at will and at the student's own pace; and the convenience, flexibility, comfort, and/or time economy which is allowed by online teaching. Approximately one third of themes identified in responses were accounted for by the above two themes.

Other themes that were frequently mentioned were: the appeal and perceived utility of blended teaching, or an appreciation for the pros and cons of both online and face-to-face studying; the opportunity to engage and interact with others that comes with a face-to-face environment; and the perception of a better learning experience in a face-to-face environment.

The utility of having recordings of live and pre-recorded material available online gave students flexibility in their schedules and allowed them to view the material at their own pace. Online learning

allowed some students to save time on their commute. Additionally, a blended approach to teaching, incorporating online and face-to-face elements, was an appealing concept to students going forward. Students generally felt that face-to-face teaching gave them better opportunities to engage and interact with others; some students also felt that face-to-face teaching gave them a better learning experience overall.

Open question: Q17b

Q17b asked students what they had enjoyed, or most valued, about online activities. There were 179 responses.

Themes that were mentioned very frequently were: the appeal or utility of recordings – either of a live session or pre-recorded material – sometimes when followed by a live seminar; and the ability for students to work at their own pace, under less pressure, and with the ability to review content at will. Just over one third of themes identified in responses were accounted for by the above two themes.

Other themes that were frequently mentioned were: travelling less, saving time, or being more efficient online; the convenience and flexibility of learning online; and feeling more comfortable or having more privacy online.

In Q17b the themes that are mentioned very frequently are very similar to those mentioned in Q17a. Recorded material was highlighted again (in 58 of 179 responses). Of those 58, the benefit of having recordings or recorded lectures accounted for 39; the benefits specifically of recordings of live material accounted for 12; the benefits specifically of pre-recorded lectures accounted for seven, of which two made explicit references to live follow-up sessions. Recorded material was mentioned positively, as it gave students flexibility in their schedules and the ability to learn material at their own pace. The ubiquity of recorded material has been invaluable to certain students with learning difficulties and certain disabilities. Moreover, the utility of recorded material was also mentioned with reference to revision for assessments. When comfort was mentioned in relation to online learning, students frequently mentioned that learning online caused them significantly less anxiety and stress than face-to-face learning.

Open question: Q17c

Q17c asked students what they enjoy, or what they feel works particularly well, about face-to-face teaching. There were 404 responses.

Themes that were mentioned very frequently were: feeling motivated, engaged and/or more focussed; and being able to interact with peers or lecturers and/or feeling connected. Over two fifths of the themes identified fell into these two themes.

Other themes that were frequently mentioned were: being in a learning environment and/or belonging to a university community; being able to ask questions and get help; and seminars, workshops, or other interactive learning opportunities.

The motivating aspect of face-to-face teaching and attending in-person lectures was frequently mentioned. Additionally, students mentioned that they would be more likely to engage with their courses in a face-to-face environment, and they find it easier to focus with fewer distractions. Students also enjoy the social aspect of face-to-face learning, including opportunities to interact with teaching staff.

Related to staff-student interaction is the ability for students to ask questions. The ease of asking questions face-to-face was frequently mentioned, specifically with reference to getting an immediate response. Additionally, sometimes students feel too awkward or uncomfortable about asking questions online, and response times to emails are often perceived to be too long.

It was highlighted in a number of responses that for students with learning difficulties and conditions, such as ADD and ADHD, online learning is particularly difficult; it is much easier for these students to remain engaged and focussed in a face-to-face teaching environment.

Open question Q18

Q18 asked students what aspect of the way in which staff had taught them in the year 2020/21, if any, had prevented them from fully engaging in, and benefitting from, their study experience. There were 554 responses.

Themes that were mentioned very frequently were: a lack of face-to-face teaching, or too much online teaching; lectures not being engaging or motivating; staff doing well despite the circumstances, or some other positive comment; encountering technical or IT issues – for both students and staff – including in relation to accessing resources; a lack of support, lecturers not being accessible, or having difficulties getting help; poor communication and/or lack of interaction with staff, including during lectures; and a lack of an environment conducive to learning. Approximately 18% of the themes identified were accounted for by the first two in the list above. Positive comments, or comments about staff doing well despite the pandemic, accounted for approximately 6% of themes.

Many students said that too much online teaching had resulted in them being less able to engage or benefit from their study experience. This was overwhelmingly the most frequently occurring theme. Students also found that, in general, the way in which lectures had been delivered was not motivating or engaging.

"Being just simply read to off a screen is not an enriching way to learn. It has given me no interest and lack of motivation towards my course."

"De-motivated from online classes, left feeling as if I haven't learned anything this year and anxious for next year."

There were some students who thought that staff had done their best despite the circumstances, and a small number of students expressed being very happy with their study experience over the 2020/21 academic year.

"The teaching staff worked well under difficult circumstances. They have adapted to lockdowns, online teaching and face-to-face teaching. The level of teaching was also good, and I finished each block-teaching session with a full understanding of the topic taught."

Issues with technology, for both students and staff, were highlighted in the responses. Not only did students frequently have issues with their internet connection, but there was some discontent expressed over the lack of investment in IT hardware and infrastructure for staff.

"Old lectures, bad WiFi signal from tutors, disruptive classes from outsiders, links not working, some lectures being cancelled last minute, just bad quality lecturers (not all but a few)."

"...lots of times staff had problems with internet and using Zoom."

"Lecturer had internet connection problems."

Other, more specific, but still related issues were raised. Some students pointed out that online teaching is not an adequate substitute for face-to-face teaching, and the lack of interactive and practical elements was highlighted. Discontent was expressed about an over-reliance on reading off powerpoint slides by staff during live lectures, combined with a passionless delivery; it was felt that this method of delivery might as well be pre-recorded, and as such was a waste of a live session. Additionally, students felt that there was a lack of opportunity for effective group work or peer interaction; the futility of break-out rooms in live sessions was mentioned. There was also the perception of an over-reliance on pre-recorded material and an inappropriate balance between live and pre-recorded material.

"They seem to just read what is written on the powerpoint and this gets pretty dull and boring."

In terms of asking questions, the awkwardness and difficulty of asking questions online was raised, as well as long response times to questions and lack of detail when responses did finally arrive. Students also mentioned that support and help was lacking or difficult to access when they needed it, and staff were hard to get hold of at critical times, particularly around assessments.

"Online is so much harder as you have no motivation and asking questions via email and chat is so much harder."

"Not answering emails for weeks when this is the only method of contact we have available."

"I feel as though many of the people on [the] course do not understand the mental toll that current times are having on students. They offer little to no support, and any time I email or write on a forum I get a half-arsed response really, if a response at all. As I said, other modules have been fine but I wouldn't wish that same treatment on other students in future."

While not necessarily related to the way in which staff had taught them over the 2020/21 academic year, students felt that learning online, away from the university campus, was not an environment conducive to effective learning. Many also expressed feelings of isolation, loneliness, and lacking social interaction.

Additionally, a number of minority viewpoints were noted as being important but unlikely to be highlighted by frequency analysis. The need for adapting teaching and delivery methods for those with conditions, such as autism and ADHD, was mentioned.

"I have autism and find online lectures hard to focus in, and the uni software has been incompatible with my assistive technology making note taking harder."

Some international students whose first language is not English have struggled with online learning, particularly with lecturers whose first language is also not English, as they are communicating

through a mutual second language. These communication issues are exacerbated by technical issues associated with the delivery of teaching online.

"...as a foreign student I found [it] extremely difficult [...] that I have to [...] listen [to] and understand a non-English lecturer speaking English with the accent from his country....I respect all of them and I know that they [are] trying really hard. However, [...] this make[s] me struggl[e] with my studies."

Importance of communication (Figure 12)

The next few questions are about perceptions and expectations regarding engagement for next year. When students were asked how important to their quality of learning the ways in which they spend their time are, the majority agreed that all the ways of spending time mentioned in Figure 12 were quite/very important.

Either online or on campus, communicating with academic staff was reported to be quite/very important by nearly 80% of students. The amount of time students spend speaking to other students on their course online was still regarded as quite/very important by 67% students, yet it was the category with the lowest score. This seems consistent with the perception of the limited value of formal group tasks and activities, as presented in the Figure 3. Moreover, it is interesting that students connect the time spent communicating with others outside their course/university in networks and communities to their quality of learning, and they regard this time as quite/very important.

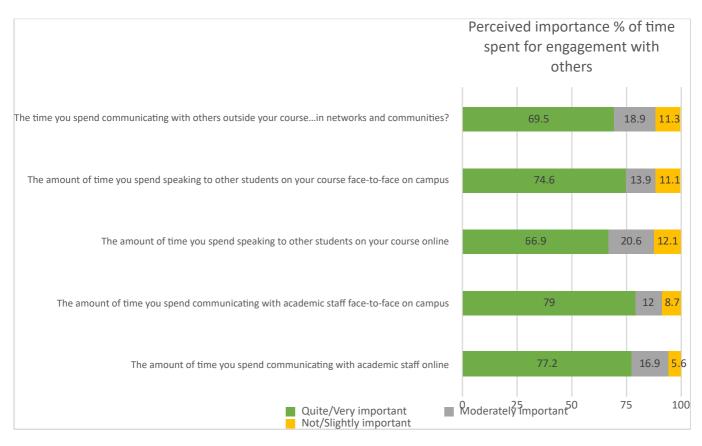


Figure 12: Perceived importance % of time spent for engagement with others

Importance of feeling connected (Figure 13)

While in the previous question students were asked about the importance of communication, the next question explored the idea of feeling connected (Figure 13). Similarly, students felt it is very/ quite important to feel connected to staff and students (84% and 79%). For these two questions, it is interesting to see that communication and connectedness are different concepts, yet equally appreciated and possibly correlated.

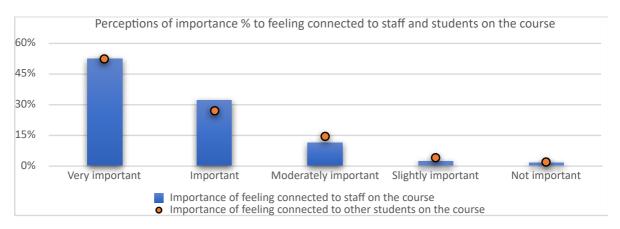


Figure 13: Perceptions of importance % to feeling connected to staff and students on the course

Expectations for time allocation, online vs on campus (Figures 14 & 15)

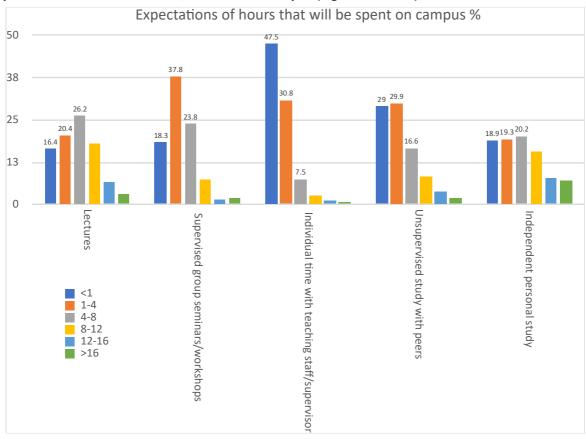


Figure 14: Expectations of hours that will be spent on campus %

Figures 14 & 15 show students' responses when they were asked to be more specific about their expectations for next year about how they would spend their time, either face-to-face or online.

It is interesting how the medium plays a significant role in time allocation and differences in expectations are obvious. Students expect to spend more time for independent personal study online, rather than on campus. Students expect to spend more time for supervised group seminars or unsupervised study with peers on campus, rather than online. Similar trends for either online or on-campus individual time with teaching staff/supervisors were reported.

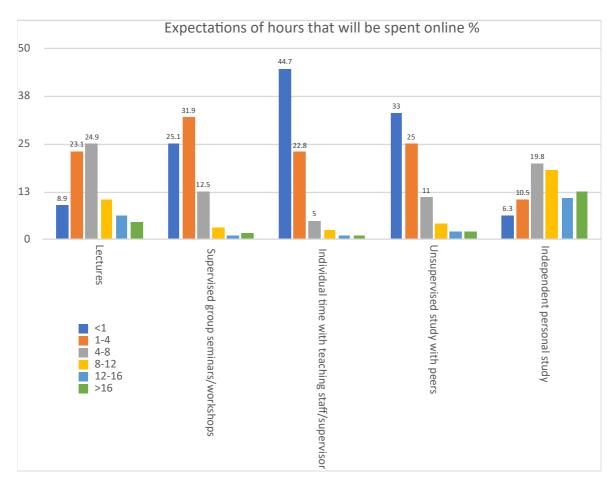


Figure 15: Expectations of hours that will be spent online %

Expectations for frequency of engagement (Figures 16 & 17)

When looking at the whole picture of 'engagement' (Figures 16 & 17) and various ways for students to be engaged, again their expectations differ depending on the environment (online or on campus). Students seem to expect to be significantly more engaged face-to-face in all aspects of engagement mentioned in the questionnaire. However, 31% of students did not answer the question and subquestions regarding engagement online, and a comparison of expectations by students who completed questions about both environments may be a more accurate representation of trends. Three hundred and twenty-one (321) students completed answers about their expectations regarding both online and on-campus engagement. Figures 16 & 17 show a comparison.

The comparisons between Figures 16 & 17 show a trend for more frequent engagement face-to-face/ on campus. The exception to this trend is the engagement with learning resources external to the programme/course.

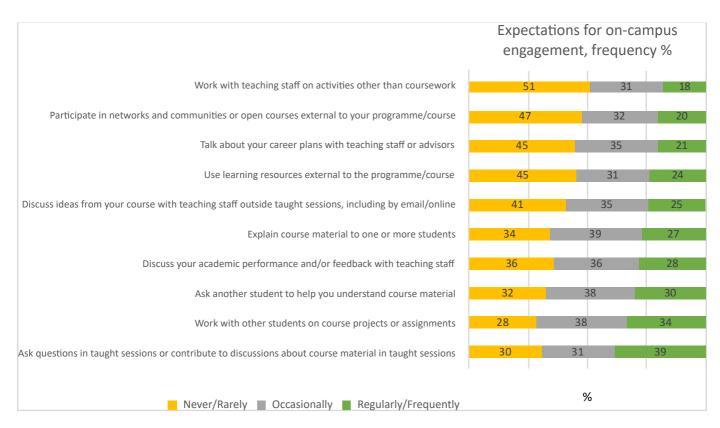


Figure 16 (above): Expectations for oncampus face-to-face engagement, frequency %

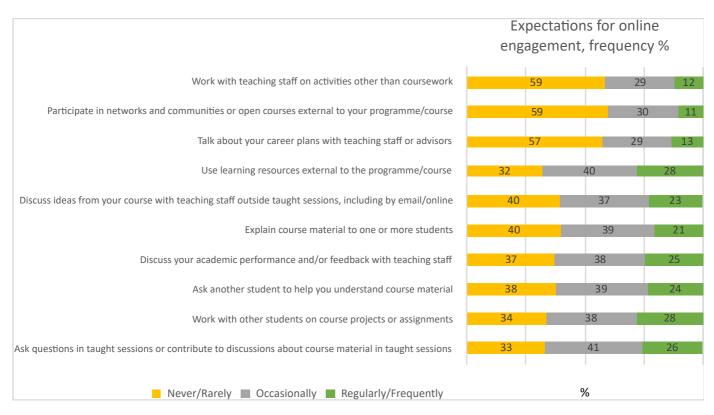


Figure 17 (above): Expectations for online engagement, frequency %

Open question: Q32

Q32 asked students if they had any additional comments about their overall experience of learning and teaching in the (at the time, current) context of the coronavirus pandemic. There were 278 responses.

Themes that were very frequently mentioned were: the need for a return to face-to-face teaching; having encountered difficulties with, or barriers to, learning; having issues with teaching, or having experienced poor-quality teaching; the 2020/21 academic year not having met students' expectations; teaching staff having done well or having been supportive, despite the circumstances; the sentiment that the past academic year has been "terrible", "horrible" (or similar); support that is lacking or poorly advertised; students having benefitted from, or preferring, online teaching; the sentiment that hopefully next year will be back to normal or be better; and a lack of value for money. References to needing face-to-face teaching, having difficulties with learning, and having issues with teaching accounted for approximately 13% of references.

The responses to this question are somewhat reflective of the general trends seen in Q17 (concerning preferred mode of teaching): approximately 67% of references were thematically negative; 20% were positive (compared to the 60% who preferred face-to-face teaching and the 24% who preferred online teaching). Students most frequently mentioned needing face-to-face teaching going forward, or that they had experienced issues with, or barriers to, effective teaching and/or learning over the 2020/21 academic year.

However, some felt as though teaching staff had done well, despite the circumstances. This theme has been a recurring trend across a number of the open questions (e.g., Q18, staff doing well despite the circumstances, or other positive comment; and Q21, provision of resources is adequate). Moreover, some students felt as though they had thrived with online teaching and learning, with responses indicating that they had preferred online learning, or done better compared to a face-to-face environment. When reasons were given for this, it was often due to the reduced social anxiety of learning or taking assessments online, or because this mode of studying was particularly suited to independent learners.

"I found the online exams an amazing help along with block teaching. As someone who suffers from anxiety, not having to go through the stress of an exam hall helped exponentially. Being able to type rather than write helped as well. I was able to write more and have it look neater than handwriting. The only downside of online learning has been the social aspect, but content and learning-wise this has been my best year at university."

However, the majority of responses were thematically negative, with many students saying that their university experience (both in terms of teaching and more generally) had not met their expectations. There was quite a strong feeling expressed by some about the negative aspects of the 2020/21 academic year (e.g., the sentiment that the past academic year has been "terrible", "horrible" (or similar)); many felt as though value for money had been poor, and money on accommodation had been wasted. A small number of students expressed that they had felt deceived by their university, regarding the amount of face-to-face teaching that had been promised, compared to the reality of the situation (which was almost entirely – if not exclusively – online).

"I think the tuition fees should have been lowered. Even though the University claims that it is providing/provided more than satisfactory resources and standard of education to justify the fees staying the same it isn't. The fees were barely justifiable beforehand and most people justify it

through the experience they gain through University. COVID-19 robbed people of that opportunity and while that isn't the University's fault, it is wrong of the University to keep the tuition fees the same."

"Honestly it was pretty terrible. It feels like I have been scammed with the amount of money I paid just to sit at my computer and look at PowerPoints 24/7."

"Honestly, I could have gotten the same grade if I just used YouTube for free. My grades this year have suffered due to the lack of in person lectures/face-to-face teaching."

"My only issue is that the university fees remain the same and it seems hard to justify a 9-grand-ayear course when the campus is rarely visited or used."

Appendix D: Other Minority Views

A number of minority view points were raised that were not highlighted by the frequency analysis, but were still felt to carry significant weight.

It was highlighted that the assessment format and structure should be the same in 2021/22 as the 2020/21 academic year for students going into their final year. For some, they have never sat proper university exams, so to expect them to do so in their final year without fair practice, when so much is at stake, is perceived as unfair.

"As a second-year student I have now adapted and practised my learning style to online learning, being a third-year student next year I won't have the time to re-adapt with the work load. Keeping lectures and exams the same for final years is vital."

One or two students felt as though staff had been rude, or treated their questions as an inconvenience.

"...this year it feels as though I have been ignored speaking to my tutor and head of [my course] several times about recurring issues, only to be shut down."

Teaching being online has meant that students have not had to travel to campus. This has enabled them to not only save money, but also save time, allowing them to dedicate more time to study or their own wellbeing.

"Learning and teaching this year was great. After the first month the new learning system was great and really allowed me to greatly increase my learning ability by not stressing about transport or time getting to university and rather spend that time on extra learning."

Having pre-recorded material released ahead of a live seminar/tutorial seems to be popular. Students have felt that having a lecturer give a lecture or read off slides with minimal interaction live was a waste of time and a waste of a live session; it was felt that this sort of content could be pre-recorded and released ahead of a session to discuss the material (a similar theme emerged in Q18).

Recording all live sessions seems to be essential for the learning and success of students with additional needs and mental health difficulties. Students expressed that they require recordings to

be done to a high quality, and want this practice continued – even if teaching returns to being largely on-campus and face-to-face – to ensure that these students have equitable access to education.

Some mature students with young families requested more support, arranged specifically for mature students, as they struggle to manage home and university commitments.

Throughout the open questions, some students expressed having significant mental health difficulties, including anxiety and depression, which had been caused by or exacerbated by the move to primarily or exclusively online teaching. Some of this seemed to be due to their inability to promptly access help from staff when needed, particularly around assignments.

"Like everyone, I have been effected greatly by learning online. It's been difficult for me to get any of my work done and that has led to stress and increased anxiety among other problems. I think people should be reminded of the university welfare service more often, so if anyone experiences the same problems they know exactly where to go."

The need for adapting teaching and delivery methods for those with conditions, such as autism and ADHD, was mentioned.

"I have autism and find online lectures hard to focus in, and the uni software has been incompatible with my assistive technology making note taking harder."

Some international students whose first language is not English have struggled with online learning, particularly with lecturers whose first language is also not English, as they are communicating through a mutual second language. These communication issues are exacerbated by technical issues associated with the delivery of teaching online.

"...as a foreign student I found [it] extremely difficult [...] that I have to [...] listen [to] and understand a non-English lecturer speaking English with the accent from his country....I respect all of them and I know that they [are] trying really hard. However, [...] this make[s] me struggl[e] with my studies."

Appendix E: Overall Focus Group Results

Normalisation of student contributions

In order to not diminish the contribution of students who were less vocal in focus groups, frequency analysis of assigned codes was repeated with normalised/scaled frequencies. This was done by dividing the frequency of each code for a particular participant by the the total number of codes for that participant. For example, if Participant A mentioned the benefits of the recordings of live material three times, but mentioned 60 code-able points in total, their contribution to the frequency for the code corresponding to the benefits of recordings of live material would be 3/60 = 0.05. In this way, the total frequency contributions from each student was normalised to sum to unity; each student's contribution was therefore equally weighted. Both normalised and un-normalised frequencies were considered in the qualitative analysis, with the former informing and supplementing analysis based on the latter.

Summary

- Students are generally in favour of the concept of blended learning, although with the majority of
 material taught face-to-face, and online learning should only be used when it is appropriate or
 more effective than face-to-face teaching.
- Students want recordings of all live lectures to continue, even if they are held face-to-face. They also want the access to online material that was provided during the 2020/21 academic year to continue, regardless of the teaching mode. Physical access to university libraries is also important to students.
- Quality teaching is interactive, motivating and engaging. Quality teaching also adapts to student requirements and abilities.
- Students emphasise the practical application of theory.
- Formative assessment is considered valuable when implemented correctly with quality feedback. Formative assessment is also thought to be a valuable part of independent learning.
- Independent learning is seen as an essential skill, and students think quality teaching should be a catalyst for independent learning.
- Coursework was the most popular form of assessment. Skepticism was expressed by many about online exams, contrary to the results from the open questions (in which many students said they were in favour). Formal group work was mainly seen negatively in the context of online studying.
- Summative exams were criticised for the lack of feedback (students only receive a mark). More, higher quality feedback and more opportunities to discuss feedback with staff would be valued for all assessments.
- Students want their university experience to prepare them for the future workplace; some thought this involved developing independent learning skills. They want assessments to have elements that relate to workplace applications.
- Background was generally not seen as relevant to teaching by most, although these responses
 were given largely by White students, or students whose ethnicity was not known or not given.
 Mostly it was prior educational background that was raised by students. Aside from this, various
 elements of course content were mentioned, specifically for Business Studies and Health Sciences.
 In these two subject areas, students' professional backgrounds were thought to be a resource that
 could be better recognised.
- It was hypothesised by one of the researchers running the focus groups that the focus group environment perhaps did not give students the right opportunity to discuss potentially sensitive topics, such as their background, in front of their peers.
- Students also thought that financial help for software, laptops and improved WiFi would all have been helpful.
- It was felt that staff need to be accessible, approachable, and responsive. Students felt that the long response times associated with emails to staff were an issue. Occasionally emails had gone unanswered.

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Results

Recorded material

Overall, the benefits of having recordings of live material were highlighted the most frequently. Recordings of live material allows students to work at their own pace: some students struggle to make notes sufficiently quickly during live lectures, or find that they are less able to keep up with the speed of delivery of the material. Having recordings allows students to pause to make notes, or rewind and replay sections that they need to hear multiple times to fully understand; students can also skip over material they are already familiar with or find easy. For example, a number of students mentioned playing recordings at double speed, then bringing the speed back down when desired. This has made studying more efficient and effective for many of the students in these focus groups. Additionally, students also found recordings useful during preparation for assessments; previously some students found that course notes alone often did not convey all the details and subtleties of the information that was conveyed during the live sessions. Some students mentioned that online learning was very convenient, allowing them to catch up missed lectures (oversleeping was mentioned once or twice), or allowing them to schedule jobs or engage in other extracurricular activities around their studies. A small number of students emphasised the importance to them that pre-recorded material should not replace – but rather supplement – live and primarily face-to-face learning.

Some students with additional needs also expressed that having the recordings during the pandemic had been absolutely essential for them to be able to study. Given how much of a difference the recordings made, they felt that the practice of recording all live material needed to continue, even if teaching returned to face-to-face.

Access to resources

The importance of having access to resources was also among the most frequently raised points — whether it was in relation to independent learning, quality teaching, or quality learning. Although the availability of online resources was typically the focus of students' comments, the availability of offline or 'hard copy' resources, such as university libraries and other books, was also raised — albeit relatively infrequently. When asked what the university could do to assist students in their independent learning, a number of students mentioned that not having access to the university library during the pandemic had been a barrier to their independent learning. Perhaps seen as a viable substitute, the access to online resources that universities had provided over the past academic year (specifically in response to the COVID-19 pandemic) was also important to students. Keeping this access was among the recommendations made for next year.

Students are individuals – they have different learning requirements and preferences

Recognising or utilising the fact that different students have different learning requirements and preferences was also mentioned with comparable frequency. Again, this was in relation to several questions, including those exploring independent learning, quality teaching, quality learning, assessment and also background. When the data was normalised, the recognition of different student learning requirements and preferences was a more prominent theme than having access to resources. Students frequently mentioned that a critical aspect of quality teaching was staff that could deliver material or explain concepts in a variety of ways, depending on the ability and learning requirements and preferences of their students. This was seen as particularly important for inclusive teaching, in which all students are able to understand the material. Students also thought that quality teaching should be interactive, motivating, and engaging.

The method of teaching was in general thought to be linked to the quality of teaching. Students highlighted that an appropriate method should be chosen for both the type and complexity of the material. Employing a variety of learning methods was also linked to preferences for online and face-to-face teaching; students frequently felt that material that could be delivered effectively or better online should be done online, while material that would be better done face-to-face should be done face-to-face. A hybrid or mixed approach, in which students could choose whether to engage online or face-to-face in the same content, was also mentioned by two students.

In terms of quality learning, a number of students thought that they were more visual learners and responded poorly to being overloaded with reading material (while the hypothesis of 'learning styles' has little or no support in the literature (Newton, 2015), it seems the idea is still prevalent among students); others pointed out that some students needed more interaction than their lecturers simply reading off powerpoint slides during live sessions. There was a strong general consensus among the students that quality learning should be interactive, both in terms of staff-student interactions, but also students having interactive tasks to do, to reinforce their learning. For many, this was epitomised by the practical application of theory. There was also the perception that interactive elements, particularly practical applications of theory, were easier and more enjoyable in a face-to-face environment. However, there were some students who said that learning online worked particularly well for them, because they were able to contribute more easily to online classes due to their introverted personalities or lack of confidence.

Independent learning

In relation to independent learning, and occasionally quality learning, the importance of working alone, outside of timetabled classes, and/or revision was frequently mentioned. These themes were not only raised when students were asked to define independent learning, but also in relation to the necessity – whether desired or not – for effective independent learning during the pandemic. A link was made by several students between independent learning and quality teaching, in that quality teaching should act as a catalyst for independent learning. This could take a number of forms; teaching staff may guide students in their independent learning, recommend credible sources or further reading, or help students with the transition from the way of working in school to that of university. Formative assessment was frequently emphasised as a valuable part of independent learning, especially when high-quality feedback was given.

Skills for the future

Quality teaching, quality learning, and more frequently independent learning, were associated with preparing students for life after university and their future careers. The skills and self-discipline developed in effective independent learning are seen as similar to those required in the workplace. Students expressed the sentiment that quality teaching and quality learning should give them the skills they will need in the future. Additionally, occasionally independent learning and quality learning were thought to be dependent on self development, focus and motivation; however, there was a lot of overlap thematically between quality teaching and quality learning, implying that one depends on the other.

Assessment and feedback

While formative assessment (as mentioned above) was seen as a valuable part of independent learning, it was also seen by most as a valuable part of learning and assessment in general. There were some, however, that thought formative assessments were an unnecessary distraction, especially when content was not relevant, or if scheduling with other summative assessments was particularly poorly planned. However, for many students, formative assessment was seen as

valuable, especially when implemented well with feedback. As part of formative assessment, mock exams and regular practice questions were also seen as a good way to prepare students for assessments and give them confidence in the course material.

In terms of summative assessments, pieces of coursework (including essays) were thought to be the most useful, especially when there was an emphasis on practical application or simulating the type projects or situations that students might encounter in the workplace.

While some students felt that online exams were beneficial, many more expressed scepticism about their credibility and integrity, and how much was actually gained from them – especially when feedback was so lacking and students only received a mark. In addition to coursework, group assessments (including presentations) were thought to be beneficial for developing confidence and new skills, as well as interacting with peers. There were a number of students who thought that group work online was too difficult to coordinate, or that they disliked the idea of some students being free-riders and benefitting from the efforts of others, while putting little or no work in themselves.

The importance of high-quality and detailed feedback was emphasised; exams were criticised for having little or no feedback other than a mark. Students wanted more and higher-quality feedback in general. Increased opportunities to discuss feedback with staff on a one-to-one basis (or occasionally in small groups) would also be valued.

Background

More often than not, students' background was not immediately seen as relevant to their teaching and learning, although these responses were given largely by White students, or students whose ethnicity was not known or not given. When it was seen as relevant, it was generally prior educational background that was seen as either a help or a hindrance to transitioning from school to university; those who had covered some of the material at school would be at an advantage. However, students thought that the materials and teaching provided, especially in the form of recorded lectures, would allow those who were at a disadvantage, due to prior educational background, to go at their own pace. Differences in educational backgrounds were also seen as a way for peers to learn from each other. Additionally, the diversity of a cohort in general was identified by a few students as a valuable way to learn from each other's experiences and backgrounds.

Sometimes background was seen as important and relevant to teaching, and some students felt that it was recognised occasionally (although this was less common in Other Sciences, but not seen as a problem). Ways in which background was seen as recognised in course material included: the teaching of ethnicity-specific risk associated with hypertension; students relating more to, or having increased empathy for, minority ethnicity patients when on placement; and content related to international businesses, financial systems, and economies. Students sometimes identified that there was scope for improving the recognition and incorporation of their backgrounds into teaching.

Students' different learning requirements and preferences were also highlighted in relation to background; some students felt that teachers should adapt to this. Regarding assessment, some students would like to choose the direction of their assessments more, for example, by tailoring a project or essay title towards their nationality, ethnicity, or personal interests.

Help and support

In general, the view of help, support and communication was mixed. Help, support, and communication was frequently thought to be good by some students, especially regarding advertising of mental health support; fewer thought that help and support had been absent, or that communication had been poor. Poor communication was mentioned often in relation to sending emails to staff and the associated long response times. Some students highlighted the importance of students being listened to; some had felt ignored. The importance of approachable, available, and accessible staff was emphasised.

Financial help for laptops, software and improved WiFi was raised a number of times. This seemed to be particularly an issue during the pandemic, possible due to the inability for many students to access their university's library.

Additional observations

Overall, the trends seen in the focus groups are similar to those seen in the open questions, with one main exception: responses to the open questions indicated a preference for online open-book exams, whereas many of the focus group participants expressed a scepticism and dislike of this assessment format.

In terms of acknowledging their backgrounds, it is clear that it is either not immediately at the forefront of students' minds, or that they do not feel comfortable discussing potentially sensitive topics in the context of a focus group. Occasionally scope for better incorporating students' backgrounds into teaching was identified, but only after further questioning.