



UNIVERSITY OF
CAMBRIDGE

THE UNDERGRADUATE STUDENT RESEARCH EXPERIENCE REPORT



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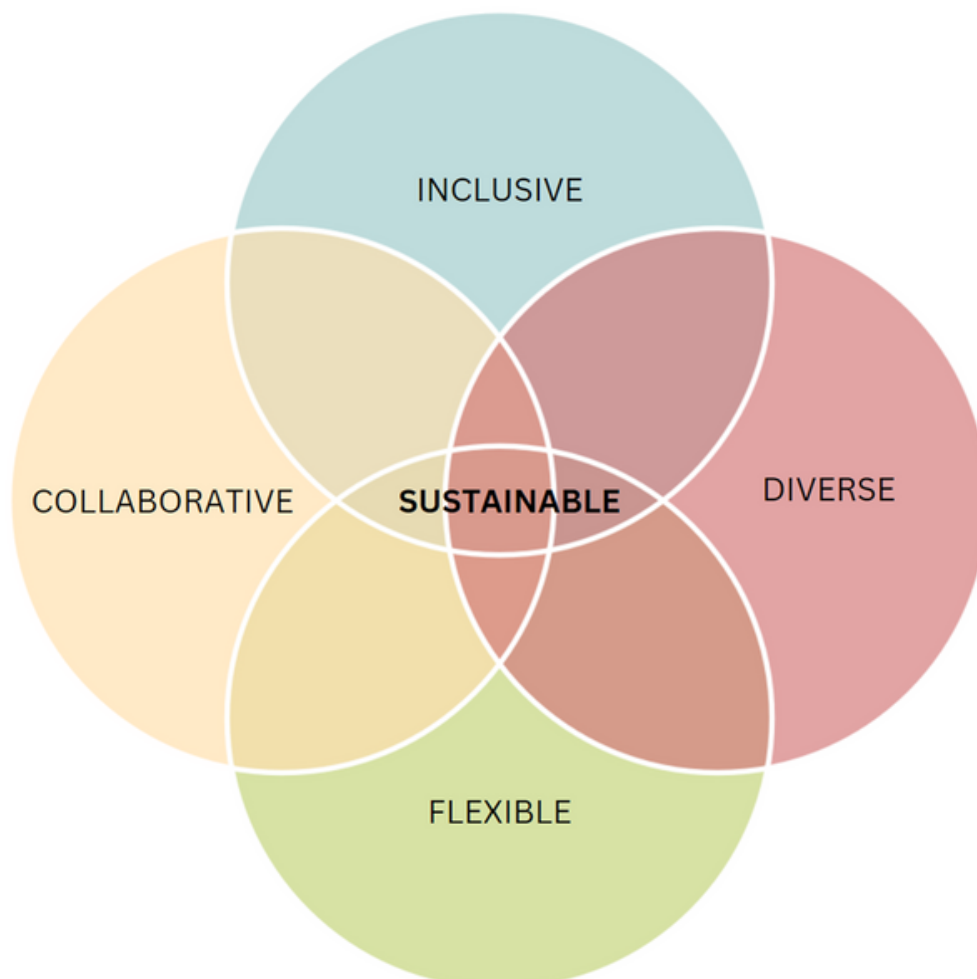
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EXECUTIVE SUMMARY

Based on an in-depth qualitative research across multiple STEM and Arts, Humanities and Social Science (AHSS) departments, students at the University of Cambridge want to experience an **1) inclusive, 2) diverse, 3) flexible, 4) collaborative** and **5) sustainable** education. These data-driven concepts are interdependent, so they rely on each other for their implementation, existence and understanding. While there are pockets of examples highlighting such practices across the university, students argue that there are still barriers preventing these ambitions from turning into a complete reality. This research has looked at the students' experience during their time at the University of Cambridge and the practices, curriculum and structures that support and stand in opposition to their expectations and hopes.



The findings in this research report shed light on various aspects of the educational environment at the University of Cambridge, focusing on inclusivity, diversity, collaboration, flexibility, and sustainability. The university prides itself on attracting students from diverse backgrounds, cultures, and experiences, aiming to provide a nurturing and empowering learning experience. However, it is essential to acknowledge the challenges that students face and identify areas of improvement, constructively, to enhance their overall well-being and holistic academic success.

To create **inclusive** environments, the university could continue prioritising training for academic staff and support personnel on understanding the needs of students from diverse backgrounds. Enhancing support for transitioning students, particularly those from state schools and lower-income countries, can alleviate challenges during their academic journey. Additionally, clear and detailed course descriptions, along with well-defined expectations, will empower students to make informed decisions and reduce confusion. Lastly, reflecting on various teaching methodologies to accommodate diverse learning paces and preferences can mitigate student challenges and promote a more inclusive academic experience.

To create more **diversity** in teaching, learning and assessment, academic staff could reflect on introducing more interactive, engaging and creative teaching and assessment methods and a wider variety of learning resources and tools. Diversifying students' learning experience has the potential to help students develop more skills that are not solely limited to academic success or traditional career paths. Additionally, Moodle and other digital platforms should be utilized to their fullest potential, ensuring that learning resources are organized, accessible, and effectively promoted to students.

By embracing **flexibility** and adopting an adaptable mindset, the university can cultivate an environment that fosters lifelong learning, empowers students to make choices that suit their individual needs, and prepares them for success in a rapidly changing world. However, to create a truly flexible and inclusive learning environment, it is crucial to prioritize understanding and addressing the diverse needs and circumstances of its student body. For example, academic staff and support personnel could ensure that all students, regardless of their needs and backgrounds, feel supported and empowered to succeed. Additionally, clear communication and well-defined expectations will further enable students to make informed decisions and actively participate in their educational journey. Lastly, by continuously monitoring and evaluating educational practices, along with a commitment to ethical considerations when implementing new technologies (e.g., AI), ensures that the educational experiences at the University of Cambridge remain relevant, inclusive, and responsive to the evolving needs of students and societal changes.

To foster a **collaborative** educational environment, departments could start prioritizing interactions, shared decision-making, and collective knowledge construction among students and academic staff. Collaboration plays a pivotal role in advancing knowledge and practices, benefiting both individual students and the university as a whole. For example, the university could encourage more informal interactions between students and professors, and implement and support group work. By providing opportunities for collaborative work, students who may not have developed strong connections with their peers can engage and socialize with new people and foster a sense of community beyond the college level. Lastly, encouraging more informal and immediate communication channels could enhance the accessibility and approachability of professors, allowing students to ask questions and seek guidance more freely.

To ensure long-term **sustainability** of any practices and changes, it is essential to address the impact on students' mental health and wellbeing. For example, the continuous addition of content without sufficient support or time allocation has had a detrimental impact on students' mental wellbeing. Additionally, communication practices have also played a role in affecting students' mental and physical health. Delays in supervision allocation and the need to seek support, separately, from multiple staff create additional stress. Lastly, the competitive culture that some students have experienced at the university has added to their anxiety and fear of failure. The labelling and classification of student work, along with, in some areas, grading on a curve, have contributed to the perception that individual high achievement is the only measure of success. This mindset hinders collaboration, discourages making mistakes, and limits students' ability to seek help. Overall, addressing impact of academic practices on students' mental and physical health requires thoughtful, institution-wide and collaborative efforts.

‘BETTER TOMORROWS’

The main sections in this report (inclusivity, diversity, flexibility, collaboration, and sustainability) are enriched with several "better tomorrow" statements, barriers and opportunities. These statements convey the students' visions for a more promising and improved future at the University of Cambridge.

Inclusive

- I1.** Students hope to belong, be acknowledged and understood, and have access to a more structural and less individualised or confrontational way of detecting and solving student-staff issues.
- I2.** Students, particularly state school applicants and first year UG, expect more guidance regarding exam preparation, interview techniques, and study skills relevant to their course.
- I3.** International students expect to have more cultural inclusion.
- I4.** Students expect academic staff to have more empathy and awareness regarding their level of understanding of the subject matter and learning needs.
- I5.** Students expect an easy and universal access to study resources and tools.

Diverse

- D1.** Students expect to have access to a diverse curriculum, which allows them to explore various subjects before specialising in their chosen field, later in their academic journey.
- D2.** Students expect to engage with a broader range of knowledge delivery methods and resources, thus reducing the dependence on lectures and placing more emphasis on interactive sessions.
- D3.** Students expect study materials that are diverse, supportive, and properly referenced, encompassing various formats such as videos, 3D visualisations, lecture recordings, course handouts, and engaging yet informative PowerPoints.
- D4.** Students expect to have alternative types of assessment methods that foster their creativity and communications abilities.

Diverse

D5. Students expect to get more varied, practical and creative skills out of their degree.

D6. Students expect to have seamless Moodle user experiences that emphasize an intuitive navigation and a full utilisation of its features.

Flexible

F1. Students expect to learn in an educational environment that is up to date, fosters flexibility, and provides inclusive and convenient study resources.

F2. The integration of AI in education has elicited mixed responses from students. To pave the way for a more sustainable future that embraces AI and other new tools, students need appropriate guidance and structured support.

F3. Students hope to have more flexible study spaces that cater to their diverse study needs.

F4. Students expect increased flexibility when it comes to their examinations, particularly 3rd year exams.

Collaborative

C1. Students expect to actively collaborate and engage in discussions, both with their peers and academic staff, across various informal and formal settings.

C2. Students expect to have a more group oriented and social learning environment that does not promote unfettered competition and individualistic mind-sets.

C3. Students hope for more enhanced collaborative communication tools, facilitating group and individual messaging options that enable them to interact with both their peers and academic staff.

C4. Students hope to feel comfortable when talking with academics and be able to ask questions without the fear of being judged.

Sustainable

S1. Students expect a reasonable volume of course material which does not overwhelm them.

S2. Students expect that their supervisions will be assigned in a timely manner and not abruptly substituted with other alternative sessions that differ in format from their regular supervision sessions.

S3. Students hope for a more comprehensive and holistic design of university practices and structure, which takes into account their academic journey and needs and is not dependent on individual staff members.

S4. Students hope to study in an environment that does not promote intense individual competition between students or further amplify their fear of failure and already ingrained high expectations.



METHODOLOGY

This report is based on an in-depth exploration of the hopes and challenges faced by students throughout their undergraduate period at the University of Cambridge. The qualitative data gathered for this report has provided the opportunity to understand new or unanticipated emerging trends in the student population, but also a contextual understanding of why and how students experience education at the University of Cambridge in particular ways. Moreover, this research is an effort to give a voice to students who felt that they were not heard and wanted *“to speak to an actual human”* since in surveys *“no one is going to care what [they] say.”*

The insights in this report are drawn from 17 in-depth, semi-structured interviews with an average of 90 minutes/interview and 4 observation days (9 am to 5pm). In total, 20 undergraduate students (1st, 2nd and 3rd/4th year) participated in this research, from which 3 students had an SSD. Out of those 20 participants, there were 11 Science, Technology, Engineering and Math (STEM) and 9 Arts, Humanities and Social Sciences students (AHSS), which were spread across 9 different departments (HSPS, History, Modern Languages, Maths, Engineering, Physics, Geography, Biology, Computer Science and Medicine).

Prior to the observation days, participants were asked to grant their consent by signing a form. However, for the interviews, consent was secured verbally before initiating the interviews.

At the end of the research, part of the data analysis results were validated with 8 other students.



LIMITATIONS

While qualitative research provides a rich understanding of user experiences and offers flexibility to delve into emerging trends, changing preferences, or evolving user habits, the insights in this report should be read as key variables that can be quantitatively measured and tested in specific contexts (e.g., departments, colleges).

INTRODUCTION

Starting from the premise that universities are environments that shape and are dependent on students' identities and society, this research has looked at understanding the holistic student experience in an effort to learn about their unique challenges, drives, and needs during their time at the University of Cambridge. By doing so we can create an environment that nurtures student engagement, wellbeing, and success.

Preliminary data from the Blended Learning Service and former Service Design Programme research has shown that one of the main issues at the University of Cambridge is the lack of student experience consistency, baselines and benchmarks. There is a need for iterative, consistent and holistic data regarding students' needs and expectations.

As such, this research has delved into the multifaceted aspects of student life (academic, social, and personal well-being) to gain insights that can be used for further research and to make informed decisions that positively impact students' educational journey.

The predominant themes emerging from this research highlight students' visions for education as inclusive, diverse, flexible, collaborative, and sustainable. The following chapters provide detailed discussions on each of these themes and the obstacles that students have experienced to obtaining such an education at the University of Cambridge.





INCLUSIVE

- 11.** Students hope to belong, be acknowledged and understood, and have access to a more structural and less individualised or confrontational way of detecting and solving student-staff issues.
- 12.** Students, particularly state school applicants and first year UG, expect more guidance regarding exam preparation, interview techniques, and study skills relevant to their course.
- 13.** International students expect to have more cultural inclusion.
- 14.** Students expect academic staff to have more empathy and awareness regarding their level of understanding of the subject matter and learning needs.
- 15.** Students expect an easy and universal access to study resources and tools.



INCLUSIVE

In this report, the concept of 'inclusion' as a fundamental element of education at the University of Cambridge entails the institution's responsiveness to the needs and backgrounds of students, encompassing factors such as race, gender, income and disability. Moreover, it emphasizes the university's commitment to fostering a diverse student body and promoting practices which are in line with the students' varied ways of learning and busy schedules.

'Better Tomorrow': Students hope to belong, be acknowledged and understood, and have access to a more structural and less individualised or confrontational way of detecting and solving student-staff issues.	
Barriers: Perceptions of preferential treatments for academic staff when misconduct occurs, discriminatory staff and problematic reach out campaign.	Opportunities: Make students feel like their needs are taken into account and given a fair weight. Additionally, there is an opportunity to create an environment where the burden is not further placed on the individuals who are already struggling and may have had negative experiences with university staff in the past.

Students' expectations extend beyond academic achievements; they hope to belong, be acknowledged and understood.

"I don't want to feel anonymous, I want the academic to know who you are and have a personal rapport with your teachers. You feel like you matter as a person."

"I am from an ethnic minority background so I thought 'why not be part of the solution, increasing the stats instead of complaining about places not being diverse'."

However, some students were particularly concerned about the university's "elitist mentality and the idea of being surrounded by very posh entitled people".

"I was on a bursary to a private school and being the poor surrounded by the rich kids was a horrible experience, so I was like 'I'm not doing that again, not going to a place like that' [...] I wanted to prove that I can get in, but I didn't have a good opinion of the university at first."

Although the student's fears did not completely materialize and they eventually found like-minded peers during their studies, certain concerns they had regarding the university's sometimes preferential and confrontational practices did become evident.

"I don't think the reach out campaign is adequate, it fundamentally says you need to reach out, you need to tell us when you're upset and struggling, again that's an individual mentality, an expectation that you're comfortable with the mechanisms at play, most of them directly ask me to go to the college staff and a lot of people have very strong issues with their college or have past conflicts. Again, it's the individual reaching out when many issues need to be resolved at a higher level. Informally, you had to sit and forget and, formally, you had to sit in a room with your perpetrator and confront them."

Further research conducted by Wonkhe and Pearson reveals four fundamental elements - connection, inclusion, support, autonomy - that contribute to a sense of belonging among students (Blake, Capper and Jackson, 2022).

'Better Tomorrow': Students, particularly state school applicants and first year UG, expect more guidance regarding exam preparation, interview techniques, and study skills relevant to their course.	
Barriers: Some state school applicants are not mentored on how to prepare for entrance exams or interviews. As students transition from the application stage to becoming enrolled students, they may encounter challenges in their learning journey due to lacking the initial necessary study skills to succeed.	Opportunities: Explore the introduction of foundation years in more departments and guidance on how entrance exams and interviews should be tackled, studied for and what applicants should expect from them. Additionally, the university could improve its communication regarding the study skills that are relevant to each student's course.

Applying to Cambridge can be a challenging experience for state school students as they do not always receive guidance with regards to entry exams, personal statements or learning techniques.

"My school didn't help me at all. They gave me this one mock interview, but it wasn't what Cambridge was looking for. The mock interview was asking just basic facts, a Cambridge interview is a problem-solving interview."

Furthermore, some prospective students from public schools may continue to face difficulties throughout their academic journey.

"I didn't know how to study and do the test because the time was running out, but I just stayed on the question and that's what ended up pulling my grade down."

"Everything is meant to be independent study and I was never guided on how to do it."

While foundation years could be a way of addressing the disparity between students, at present the university only offers a foundation year in Arts, Humanities and Social Sciences to UK residents. International students may face additional challenges around inclusivity during their transitional period at Cambridge. Such challenges may result from coming from lower income countries, whether EU or other international countries, and a lack of understanding of the British education system – particularly the University of Cambridge unique learning ecosystem.

'Better Tomorrow': International students expect to have more cultural inclusion.	
Barriers: Some international students face cultural barriers (language, expectations, and study-social life balance practices), which can lead to a lack of support systems and social integration.	Opportunities: Provide more informal opportunities for students to study and socialise together that are less formal than college dinners and where students can bond over having to do tasks or study together (e.g., study night events).

Cultural barriers are an extra aspect that international students have to navigate during their time at Cambridge. One student argues that *"not understanding what went wrong and what [they] should do"* in particular situations has had a negative impact on their ability to form social connections. As a result, their experience at Cambridge has become *"pretty isolating."*

"It's quite overwhelming because I'm an international student and there's a cultural shock."

"In my college you have a tradition of having formals every day, you have a minimum dining requirement of 36 tickets per term. People go with friends and you have a group of students that are friends sitting on the left and another sitting on the right and I'm the only one in the middle and no one to talk to"

Cultural differences affect students' capacity to establish connections with other fellow students, which can further transform into difficulties obtaining other students' notes (when missing classes) or engaging in collaborative studying sessions.

As will be presented in the collaborative section of this report, most students felt that they could benefit from more social study opportunities or group work, organised by the university, department or college.

<p>'Better Tomorrow': Students expect academic staff to have more empathy and awareness regarding their level of understanding of the subject matter and learning needs,</p>	
<p>Barriers: Students have criticised the lack of course roadmaps, clear instructions and expectations. Students feel that some academic staff assume students already possess a comparable level of context when imparting knowledge to them.</p>	<p>Opportunities: Departments could provide clearer and more consistent course requirements and expectations, as well as listening and anticipating students' needs, and providing regular overviews and curriculum summaries.</p>

Concerning the delivery of course curriculum, students have argued that some lecturers and supervisors fail to anticipate where students might struggle to understand the subject. Some participants felt that the information provided comes from a perspective of assumed knowledge and expertise on the part of the academic staff.

"You need to understand what you don't understand to ask a real question and that's a very difficult thing. My supervisor expects us to ask questions and then he will give the answers rather than going through the course material; maybe consider the material from our beginner perspective and anticipate what kind of questions we would encounter."

Despite valuing the interactive nature of supervisions, students would like for such sessions to encompass more than just Q&A formats. When appropriate, they would appreciate staff members taking a more active role in guiding the discussions towards crucial topics within the course material that students' might have missed or overlooked.

Participants also remarked that the lack of course structure and guidelines also points to some staff's inability to relate to the student's level of understanding of the subject and requirements. The expectation that the student will at one point "figure it out" does not match their reality, or if it does, it is only after unnecessarily failing due to missing or unclear requirements and guidance.

"People write exam questions, lab reports or whatever knowing what they want out of it. They have a complete lack of appreciation for writing for someone who doesn't know what they are trying to get at. It's a very specific thing they want, but if you don't put that in you're gonna get marked down. But how would you know that that's what they want? Miscommunication implies that they're trying to communicate it, it's more like 'you should know this'. But how?? I can't read your mind!"

Some students also felt that *"PhD students make the best supervisors, especially those who have just been through the same course because they can say 'here's how I understood it' or 'now that I look back here's why I see it like this'. They know what students might not understand and they're are empathetic."*

Students argued that the academic staff could become more inclusive in their teaching by providing regular overviews and summaries of the curriculum. Designing a clearer and more comprehensive curriculum can be a fairly straightforward undertaking for students to stay on track and understand their subject holistically, The start of lectures that seem to have no beginning or end makes students feel demotivated and confused about which lecture material they should prioritise or how different material elements fit together.

"I think what lecturers could do is maybe when they finish a topic is recap and say here's what we've done, this is section one and the next thing we'll move on to is this and give an overview of how much we've done and have left."

The inclusion and availability of clear and detailed descriptions of different subjects that students can take during their Tripos was another aspect that students found lacking. Specifically, one student expressed the desire to have access to current course descriptions on Moodle to determine if the content matches their understanding of the title.

'Better Tomorrow': Students expect an easy and universal access to study resources and tools.	
Barriers: Students are disappointed by the unequal access to resources. This has lead to students perceiving that the university is perpetuating an environment of inequality, which creates a divide between those who have access to resources and those who do not.	Opportunities: Offer all students access to a learning environment that aims to cater for diverse learning styles, flexibility in accessing information, and promote interactive and engaging learning experiences.

The absence of universal recording further emphasized the university's challenges in promoting inclusivity for all students. Students perceived the lack of recordings as inherently problematic and rooted in a flawed reasoning.

"What is this classist system, yes some people have greater needs, but others can develop impairments. I might not be disabled but something might crop up in my life. Do you want some people to be punished by not coming or do you want them to have access to the resources they need, it just feels malicious."

"The people who come to lectures won't stop because of recordings because their motivation is not primarily fear, the ones that won't will not come even if they don't have the recordings but will suffer."

The argument put forward here is based on the premise that not offering someone a chair to sit on because they are able bodied is flawed and enables an adversarial learning design approach to the student experience. Ability and disability work on a spectrum (De Schauwer et al., 2021) and detection and certification of a disability makes access to resources even more problematic. Students can spend an entire year with issues and no support because they are not able to get the necessary documents or because their disability is diagnosed late.

Inclusivity is more than recognising diversity, it is about designing the everyday aspects of the educational experience to include as many students as possible. That is, inclusivity should be reflected in the factors that directly influence students' daily lives. (e.g., educational resources, clear guidelines, pace of lecturing, inclusive workspaces and events etc.). Furthermore, this reflection should be evident in the practices of the university staff, which ought to be supported by comprehensive guidelines and higher-level support, informed by student experiences and best practices.



DIVERSE

D1. Students expect to have access to a diverse curriculum, which allows them to explore various subjects before specialising in their chosen field, later in their academic journey.

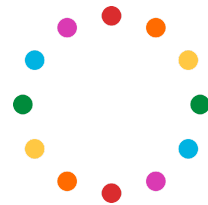
D2. Students expect to get more varied, practical and creative skills out of their degree.

D3. Students expect to engage with a broader range of knowledge delivery methods and resources, thus reducing the dependence on lectures and placing more emphasis on interactive sessions.

D4. Students expect study materials that are diverse, supportive, and properly referenced, encompassing various formats such as videos, 3D visualisations, lecture recordings, course handouts, and engaging yet informative PowerPoints.

D5. Students expect to have alternative types of assessment methods that foster their creativity and communications abilities.

D6. Students expect to have seamless Moodle user experiences that emphasize an intuitive navigation and a full utilisation of its features.



DIVERSE

While inclusivity and diversity in education are highly interdependent, in this report 'diversity' represents the method of delivery and type of content that is taught, learned and assessed at Cambridge. While relevant to this section, the report will not discuss the matter of decolonialising the curriculum as this was not something that students touched upon during the data gathering stage.

'Better Tomorrow': Students expect to have access to a diverse curriculum, which allows them to explore various subjects before specialising in their chosen field, later in their academic journey.	
Barriers: The abundance of choice in undergraduate programmes is highly valued by students, but often reveals disorganised inter-departmental alignments and communication, which impacts students' experience and their ability to navigate multiple disciplines with adequate support.	Opportunities: To ensure continuous improvement, the university could re-evaluate the existing inter-departmental evaluation and feedback mechanisms, as well as the effectiveness of current communication practices.

Some students have suggested that the choice to apply to the University of Cambridge was primarily influenced by the wide variety of subject offerings within their selected programmes. The diverse curriculum allowed students to explore various areas of study and ultimately choose a preferred academic and personal path later on.

"I hated the idea of narrowing down before I even knew where my interest lay or who I am."

"The Natural Science course encompasses more subjects, I could explore more."

"Chose history because it was a broad humanity and they were doing these course videos, which said that they have a fellow for every period in history and place. I found that really inspiring, like whatever you find there will be someone who shares that passion with you."

However, the success of a diverse curriculum offering is dependent on clear guidance, a cohesive communication between departments and understanding of the students' holistic experience of that programme.

As such, the lack of collaboration and convergence between departments can impact students' academic growth at the university.

"1st year is very hard for [AHSS subject] people, you belong to many different departments and cohorts and you have to think differently for each of them. As a first year it is very stressful and I don't think there was enough support for that and communication between departments."

'Better Tomorrow': Students expect to get more varied, practical and creative skills out of their degree.	
Barriers: There is a concern that the university's focus on traditional metrics of success overlooks the importance of other skills and approaches to building one's future.	Opportunities: Encourage and promote creative thinking, and opportunities for experiential learning, which can help students explore and prepare for a wider array of career possibilities.

Concerning the skills that students thought they were acquiring throughout their degree, many STEM students circled back to their problem solving capabilities, which were seen as a useful and direct translation to further research or employment outside of academia. Nonetheless, students from AHSS did not have a strong opinion on what their course related skills – academic essay writing, literature reviews and some primary research – could be used for when moving forward in a non-academic career.

"I feel like the skills I have are very generic, research and writing skills, but very specific to the papers that I've done. Technically, I don't think my research abilities have massively improved to be honest, but I feel more confident reading something that I haven't seen before and write definitely about it, but I don't know if it's a full translation of the skills I got from my degree, I just feel more comfortable."

Participants felt that the university expects students to pursue careers as academics or corporate consultants, with the skills being taught primarily focused on thriving in a highly competitive corporate landscape or within academia.

"It's very much like oh you went to Cambridge, you will go do something really cool in finance"

"You'd think this is boot camp for the corporate world. I feel like this place for corporate is the perfect preparation. It's like dog eat dog mind-set. That mentality suits the corporate world, the discipline and commitment."

"There's traditional metrics of success and very little attention to ideas of fulfilment and a future as a holistic thing that you are building. I think institutionally Cambridge prepares you for law, medicine and consulting which is everywhere on the careers page and I hate it."

Some students considered continuing their education/pursuing a PhD because of a lingering interest in their dissertation topic, but also because of not knowing what they would like to do in the future, or knowing, but finding themselves uncertain about how to pursue it successfully or practically, since they may not fit to the traditional ideas of a successful career.

"I would pursue a MSc. partly because I still don't know what to do with my life and how to make money, but I'm also interested in my dissertation area."

Overall, students thought the diversity of skills they developed from their course is broadly limited to problem solving (STEM), extracting information and essay writing (AHSS), time-management (both) and some research skills (AHSS).

Communication skills were repeatedly highlighted as important by students, yet many felt that these skills were not given sufficient value or emphasis by academic staff throughout their course.

"I'd like to be able to write something down, stand up and talk through something and have it as high quality as if I was working through it on my own in my head."

Some students from both STEM and AHSS criticised the lack of importance their course places on practical skills, which are built on a foundation of theoretical knowledge, but rarely integrated in the curriculum.

"Academically we are focusing on too much theory; at least we should get some computational skills."

"Would like a better course where they show you practical skills not just theory on stats."

One AHSS student felt that applying their theoretical knowledge in a creative and practical way would allow her *"to engage in a multi-sensory experience which requires so much more, like conceptual thinking, and the technical and the political side"*.

Students want to see more creative applications of their course (e.g., computer science used for game design) and learn new skills, such as video editing.

"I started a YouTube channel to learn video editing and have a creative outlook in my life. I was genuinely feeling like I was lacking creativity."

However, students want to develop such skills in a meaningful way; that is, they need to be integrated into their course rather than as an additional learning burden. Students suggested incorporating these skills through new assessment methods or coursework formats that would not increase their workload.

<p>'Better Tomorrow': Students expect to engage with a broader range of knowledge delivery methods and resources, thus reducing the dependence on lectures and placing more emphasis on interactive sessions.</p>	
<p>Barriers: The didactic style of teaching is not seen as the most effective way to acquire knowledge and actively engage with the course material. Students prefer interactive sessions where they can learn from academic staff and other students in more informal and compelling ways (e.g., video materials, discussions, group activities/ problem solving).</p>	<p>Opportunities: The university and departments could embrace alternative teaching approaches that create a more dynamic and interactive learning environment, thus enhancing the students' engagement with the subject matter.</p>

STEM and AHSS students have distinct approaches to their course curriculum. This was particularly apparent when considering the importance of lectures in their learning journey. On the one hand, STEM students found lectures to be, primarily, a heavy-loaded information delivery session. They considered that most of the information needs to be absorbed in order for them to problem solve a specific issue or succeed in their final exams.

“Exploring is interesting, but we have so much content that if it wasn't focused I don't think we'd survive”.

On the other hand, AHSS students felt that lectures were a more flexible part of their learning experience and most useful if one was interested in a particular topic or they needed an overview for a supervision essay. AHSS students argued that not knowing everything does not impact their understanding of one particular issue or essay quality.

“With [my degree] not every lecture is relevant, just the ones you do essays on.”

“My DOS kept saying that the point is not to go to every single lecture and do the reading for everything, you have to be selective and choose the paths that really interest you.”

In contrast to lectures, the supervision system at Cambridge was regarded as the “highlight” and “pillar of students' learning experience”.

Additionally, one student further commented that they are *“the only reason Cambridge does so well”*. Students also expressed a preference for supervisions over lectures as they saw them as the moment when teaching and learning converged in a highly interactive manner.

While two students strictly preferred one on one supervisions, the rest of the students talked about the benefit of group supervisions and seminars due to their potential to learn from and share ideas not only with one person (i.e. the teacher), but also with other students as well.

“A group of like 7-8 people with a supervisor or a smaller one with 2 other people, I really like that dynamic.”

Additionally, the interactive aspect present in such a teaching and learning method did not only extend to other people, but also their engagement with other learning materials such as videos. Different technologies could also support academic staff introduce more interactivity into their courses (e.g., online discussion tools, digital annotation tools that allow students to annotate readings, share comments, and collaboratively analyse texts).

“I was in a supervision last term and they made us watch videos in it, I was loving it, it was so cool.”

While diversity of experiences in teaching and learning was something students encouraged, it did not extend to providing more or less support or challenges to students because of their degree or college choice/allocation. The impact of inequitable educational provision can result in a lack of interest, frustration, and ultimately lower outcomes. For example, many AHSS students in this research argued that their Tripos' lack of contact hours feel like an absence of adequate resources and support rather than a constructive educational challenge. In such circumstances, two students mentioned that their parents have made serious sacrifices for them to be able to study at the university.

“I was grappling with 300 years of history a week, with only six contact hours a week and no idea what's going on.”

“If it was easier for me to do it [change degrees], but I'm an international and my parents are giving up a lot for me to come here which is partly why I'm frustrated that I don't get a lot of contact hours because I realise how much of a sacrifice it is for them and the thought that I'm not making the most of it is really frustrating.”

“My DOS said that I should be the one to start them [ways to learn with other students] which it just irritated me because I thought that's your job, I literally pay 9 grand a year, why would I organise my own learning?”

Yes, I can manufacture my own contact hours, but I do pay someone else to do that. In my 3rd week I had only one hour and a half contact time and feels like a lack of provision."

While different interactive formats were particularly welcomed by students (e.g., seminars or supervisions), replacing them with other less interactive sessions (e.g., example classes) was not seen to provide the same educational experience and benefits.

"Example classes are not supervisions, they are just small lectures and that is the major problem. It's just a smaller teaching class, and you don't really interact with the lecturer or other students."

This view was reinforced while observing another STEM example class. During the class the professor taught for the entire hour with little student input or interaction.

Overall, the traditional didactic lecture was not considered to be the most effective method for consistently receiving and comprehending course material. Students emphasized the need for greater reflexivity and exploration of innovative approaches to education delivery at the university.

"I don't think this idea of having someone talk for 55 min is the best way to learn, I get that it's efficient for that one person, but if you take a step back I don't think that's the best way."

One AHSS student specifically expressed a preference for co-creation in one of her lectures. In this context, co-creation does not involve the initial development of lecture content or structure with the professor. Instead, it entails students being assigned small tasks that would be presented by them in the following lecture. More on engaging students as partners in higher education can be found [here](#) (Colson, Shuker and Maddock, 2021).

"She [lecturer] did this brilliant lectures where she asked us about a week or 10 days prior to the lecture to go with another student in the paper to a museum, pick an object and write 2-3 lines about it and send it to her. The following lecture she had it all in the presentation and we had to present 1-2 minutes and it didn't feel stressful or a commitment. We had the opportunity to go in and talk with each other and also interact with things outside of the class and she knew all of our names because of it; she's done variations on it, it's not like her special one off thing"

Another student found sociology lectures particularly engaging - *"they feel like there's more to help you stay present"* - as they allowed for a more interactive and eclectic format, with videos, breaks and discussions.

Courses that are heavy on reading lists were also thought to lack variety in terms of modes of learning material and assessment. Some students argued that they would like to learn about their subject in other ways than reading books.

"I'm a visual person so that's why I find it hard to read for 7 h/day."

"Ideally I prefer to learn with people in multiple different ways: set reading, watch videos, be lectured, talk with other people so it's much more stimulating than the only method – reading."

'Better Tomorrow': Students expect study materials that are diverse, supportive, and properly referenced, encompassing various formats such as videos, 3D visualisations, lecture recordings, course handouts, and engaging yet informative PowerPoints.	
Barriers: Some students feel that their departments have a shortage of helpful study resources (e.g., course handouts and lecture recordings) along with the issue of inadequately designed PowerPoints.	Opportunities: Departments could enhance the availability and quality of study provisions, creating a more engaging learning environment for students and supporting their academic success.

A STEM student has argued that the difference between a good online or in-person lecture depends on the availability and usage of lecture capture tools and teaching styles.

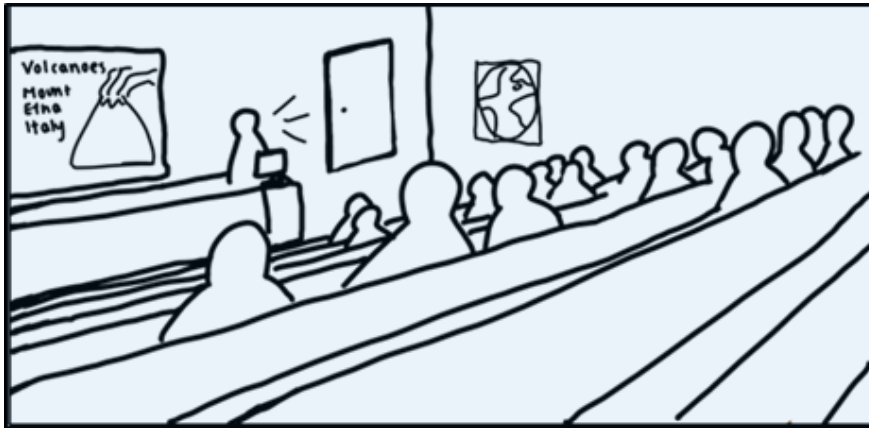
"Lecturers are better in person, when they use both visualizers. Switching is quite hard in Panopto, so it's much better to be in-person than online. Sometimes you can hear them point at something, but quite a few lecturers don't use a laser pointer so we can't see when it's recorded. One of our lecturers' used the blackboard so that made the lecture recording pretty hard to deal with."

Recorded lectures are better when the lecture delivery is complementary to the way students use lecture recordings when studying.

"An example of lecturers being better online is when they allow the fast bits to be slowed down and the slower bits to be sped up. This means that students can make sure that they understand the parts where the lecturer is speaking quickly by slowing/pausing the recording, whilst being able to speed up the parts where the lecturer is speaking slowly which is helpful when watching lectures."

PowerPoints (PP) that were not adequately referenced or appropriately used to aid students' learning were also deemed less useful by students.

"PP are just like a nice thing to look at, there's not even like a photo caption. I was in a lecture the other day and he was talking about the rise of Islam and there was just a photo of a mosque behind him. They are seen as decoration rather than helpful resource."



A student's drawing of their experience concerning PP at The University of Cambridge

Providing a diverse and supportive array of resources also extended to the lack of lecture recordings and course handouts.

"They often have PP, but they are exclusively photos, there's no recording and rarely a lecture with a handout, so basically a real scarcity of resources which I think it's quite disappointing."

The same student also argued that she told her DOS about her concerns, which were shared amongst her classmates, but she was quickly dismissed.

"I gave my learning experience pitch to my DOS as well but she just said this is how [x subject] is taught."

Properly resourced visual aids and materials were not only highlighted as beneficial by AHSS students, but also STEM participants.

"Professors tend to talk about experimental setups and processes, but the problem is we haven't seen that in the lab or a simulation and they just describe it in an abstract way - 'you've got a core and you put them together and then some magical thing happens'. 3D visualisations rarely happen because most lecturers don't have the time to do them, but they are really useful to understand ideas and I hoped there would be more of them."

STEM students have also raised concerns about the inclusion of excessive information in their PP presentations. They argue that regardless of being labelled as minor, the mere presence of such information in the slides compels them to comprehend and research it.

"Some lecturers say it's a minor point, but they still put it on the PP and we feel like we have to know it as well."

In such situations, academic staff could provide previews and outlines at the beginning of the presentation to set expectations. This way, students can focus on the main topics covered during the lecture. Additionally, lecturers could engage in open communication with students and involve them in the content design process. By understanding students' needs and preferences, academic staff can tailor presentations to better suit their learning styles.

'Better Tomorrow': Students expect to have alternative types of assessment methods that foster their creativity and communications abilities	
Barriers: Students feel that there is an over-reliance on exams, which do not align with the skills they will need in their future endeavours.	Opportunities: Diversify the assessment methods with more project-based assignments, presentations, group work or case studies.

Some AHSS students have welcomed group work as an alternative type of assessment, if it would disrupt the essay production process that they have to go through every week.

"If you could do group work instead of an essay once a term then that would be different, but not on top [of existing work]."

The downside feeling like *"the new printing press"* or *"essay churning machines"* is that essay writing becomes a robotic process, which may prompt students to dislike their course content, as well as going through each essay in a shallow manner, due to the lack of time and the large amount of essays they have to write.

"It's hard to enjoy it cause I have limited time, I'm doing my essay quickly because there is so much to do, you're just looking for that good quote for an argument as opposed to enjoying and engaging mentally [...] if I enjoy something I remember it more and the amount of things I've forgotten because I didn't enjoy it, just tried to get the essays done. The quality can be really compromised."

Due to many AHSS exams being mainly focused on structuring arguments in the format of an essay under a specific time constraint, supervisions are also heavily based on teaching students some of the skills needed for their exams. Nonetheless, it is worth noting that while supervisions might be teaching students the skills needed to structure arguments and critical thinking, some participants have lamented that the topics they sometimes receive and the theories they would need to discuss during exams do not always match those covered in lectures or supervisions.

The addition of summative coursework throughout the academic year, which encompasses different formats, was also seen as a beneficial addition to AHSS students' learning experience. Students have argued that this type of assessment would provide them with the opportunity to delve deeper into a specific subject without having the exam pressure at the end of their third year.

"I'd love to go in depth into a topic and actually understand it for more than one and a half days. I want to dedicate more time to the area, actually form an opinion rather than something that I've read in the dark crevices of Wikipedia for an essay."

'Better Tomorrow': Students expect to have seamless Moodle user experiences that emphasize an intuitive navigation and a full utilisation of its features.	
Barriers: While some students already benefit from a user-friendly Moodle, others tend to avoid it due to disorganised content and inadequate navigation.	Opportunities: Address the disparity of student experiences using the platform and provide support to both staff and students so they can enhance their understanding and utilisation of Moodle's features.

The usage of Moodle, as a learning resource, exhibits significant variations when it comes to adhering to best practices.

On the one hand, a minority of participants from specific programs expressed their satisfaction with Moodle, considering it *"fairly easy"* or *"very clear"*. On the other hand, approximately half of the participants have argued that Moodle is not used to its fullest potential or promoted to them as a helpful resource, but is a chaotic repository of pdfs and links. Because of this, checking Moodle becomes another cognitive burden, leading students to avoid engaging with it and, as such, missing out on opportunities to enhance their learning. For such students Moodle's navigation is a cumbersome process (e.g., confusing notification function, chaotic display of resources, poor mobile format).

"I don't like it, I find it overwhelming really, and its helpfulness mostly comes too late. It's ridiculous, it's just text, text, text everywhere. If it would have made my life easier I would use it."

Students have also argued that the form and frequency of their engagement with Moodle align with the staff's ability to use and promote it as a learning tool.

"It can be a bit bizarre at times, a lot of my professors don't know how to actually use Moodle that well so it can be a bit of a maze to get through."

In addition to Moodle, students also rely on the departmental website of their course to access various resources. However, the constant back and forth between these digital locations can also impact students' workflow and time-management.

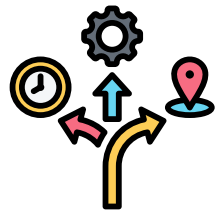
"It gets really annoying when there's stuff on the department website and on Moodle. They are trying to move everything on the course webpage which is a lot better because you can access everything in one place."

"Why is the cover sheet lab report not on Moodle, why is it on the dep website?"

Additionally, the existence of multiple disjointed calendars that students must navigate between is a consequence of providing diverse resources without sufficient cohesion and integration among the services. This includes challenges such as having separate department calendars, university timetables, and a lack of supervision scheduling opportunities on either of these calendars.

"The departments have this weird thing where they have their own calendar on their webpage and then there's the ical and they're not linked."

The motivation behind diversifying the university's curriculum, mode of teaching, or assessment should primarily focus on the advantages it will offer to students' learning experiences, while also taking into account the workflows of both academic and non-academic staff. However, it should not be prompted by a desire to seek shortcuts, which will eventually create more educational debt,



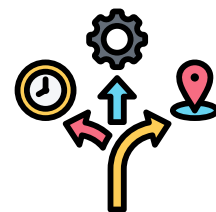
FLEXIBILITY

F1. Students expect to learn in an educational environment that is up to date, fosters flexibility, and provides inclusive and convenient study resources.

F2. The integration of AI in education has elicited mixed responses from students. To pave the way for a more sustainable future that embraces AI and other new tools, students need appropriate guidance and structured support.

F3. Students hope to have more flexible study spaces that cater to their diverse study needs.

F4. Students expect increased flexibility when it comes to their examinations, particularly 3rd year exams.



FLEXIBILITY

The importance of flexibility in our daily lives has significantly grown since Covid-19; the concept of flexibility here refers to the ability to adapt and accommodate the wide variety of student learning needs, preferences, and circumstances.

Creating flexible study environments does not mean adopting a technological determinist outlook, but an openness to cultivate educational practices that embrace and support students' contemporary experience and their life after university. Flexibility empowers learners by offering choices and skills that promote lifelong learning and a sustainable work-life balance, not just learning for a limited time in a specific environment.

'Better Tomorrow': Students expect to learn in an educational environment that is up to date, fosters flexibility, and provides inclusive and convenient study resources.	
Barriers: Participants' criticised the lack of understanding and accommodation of their needs , leaving them with disparate and difficult access to what they believe to be fundamental study resources (e.g., lecture recordings) in the modern learning context.	Opportunities: Some opportunities in this area could focus on accommodating staffs' and students' privacy concerns, clearly communicating to students when and how different technologies will be made available or, conversely, why they are not available, listen to and take into account students' feedback and lifestyles, provide student guidance on how to best make use of educational technologies, and provide support for staff on how to effectively use them.

Though flexibility is involved in many aspects regarding the students' learning, teaching and assessment journey (e.g., communication, pace, tools), this section will start by discussing the availability (or lack) of a specific learning resource, lecture recordings. That is, for all 20 students in this study the option to use lecture recordings was identified as one of the most important feature to experiencing a flexible education.

Because Cambridge is classified as one of the most prestigious universities in the world AHSS students did not expect it to lack *“in basics that other universities have been doing even before Covid.”*

Several students used the concept of ‘modernisation’ when talking about Cambridge’s inability to *“keep up with the times”* and provide lecture recordings.

“I think they need to shake things up, just with the lecture capture they need to modernise and I think they would have a more enjoyable student body without this archaic learning model”.

Some students felt that the university’s cutting edge reputation does not particularly include education, but is predominantly based on its research and research staff. As such, some students feel like an afterthought when decisions are being made that impact their education.

A few students were aware that recordings might persuade some students – who do not find in person lectures better than online – to stay at home; however, they did not see this as a problem, but a matter of personal responsibility.

“I think it's true that recording lectures does mean that is less attendance, I don't see that as a problem. I get that lecturers want to lecture to people, but if people don't see that it's not the university's duty to make sure people turn up in person, if they don't want to I think that's up to them.”

AHSS students have also raised concerns about receiving conflicting messages from staff regarding the significance of attending lectures. Participants argued that when lectures are not mandatory or deemed essential for their education, attendance will inevitably vary, regardless of the availability of recordings.

“I think it's telling that one of the excuses they gave for not giving our recordings this year is ‘well the lectures are only supposed to be a basic introduction if you haven't been to a lecture that's actually in a way good for you cause you have to go beyond lecture content in your essay’, whilst simultaneously being ‘you have to come to your lecture or the lecturer is not going to lecture properly.’”

Lecture recordings, however, were seen to empower students to prioritize various components within their demanding schedules and maximize their educational experience. As such, there are 7 main points that students put forward when talking about the importance of lecture recordings.

1) Pace

The pace at which the lecturer delivers the curriculum material is one factor that hinders some students, both in STEM and AHSS fields, from effectively reflecting on and comprehending the knowledge being conveyed. In this case, lecture recordings fill in the gaps that STEM students may have missed and provide the necessary background context for AHSS students.

"The pace tends to be quite fast and there's not that much interaction with students so a lot of the time we write notes, but we don't know what's going on".

"Our notes are fill in the gaps so we don't write them from scratch and lecturers sometimes go too slowly or too fast, mainly too fast to write them down for me, so I'd like for certain lectures to be able to slow them down".

This allows students to progress through the curriculum in a more tailored fashion, enabling them to spend more time on challenging topics, while moving quickly through familiar ones. Moreover, by initially guiding students on how lecture recordings can be used to yield the best results they can learn the skills needed to use various learning tools that fit the context of their study and, later on, work.

2) Heavy content

Mismatches between a lecturer's expectations and a student's actual approach to comprehending challenging information is another issue that students have raised in the context of providing lecture recordings. In this case, lecture recordings are seen as an extra tool in the students' learning toolbox that can clarify difficult content.

"I can pause, if there's a point I want to write down and I don't understand it I can rewind it".

This is particularly relevant when students cannot access more traditional support, like approaching other classmates or supervisions. Looking at the same content in a different context or format can illuminate the gaps that may have been missed.

However, not all students use recordings for this purpose, but having different study resources available to all students so they can chose what is most appropriate for them ensures a more flexible and inclusive approach to education.

"If something is extremely unclear maybe [use recordings], but then chances are the lecture won't help me clear that up, because I probably didn't

understand the way the lecturer was trying to explain it so that might not help me in the end".

3) Concentration Issues/Zoning Out

Depending on the pace, content, difficulty or other internal or external factors, students may lose focus during lectures.

"I mentally switch off when the content gets really difficult or I don't see why".

While students with particular SSDs were more likely to report this issue, STEM students without any special needs also reported that lecture recordings helped them go back to the particular points they may have missed and try to understand the content, alongside their notes. However, losing one's focus throughout the lecture does not automatically mean that students will double check the recordings. This is based on how important they feel that particular lost point was or whether they will have already understood it from their notes.

"I got frustrated with myself and discouraged. When I watch it online I can zone out for 3 min and just rewind it".

"If you zone out at the start of a proof and the proof takes 15 min, the other 10 min are gone, I'll write it down and then I just do my emails or like read something online".

4) Social Teaching Context

While many students enjoyed the social atmosphere and meeting up with friends during lectures others emphasized the downfalls of large-scale lectures and the necessity of lecture recordings when attending them. In instances where students encounter distinct accents, they may express a desire for lecturers to repeat themselves. In these situations, flexibility and accessibility go hand in hand and lecture recording transcripts serve as valuable support tools.

"In your 1st and 2nd year when I'm in a huge lecture theatre I feel too awkward to ask professors to repeat themselves".

The student further argued that as she progressed into her third year, her lectures became more enjoyable and interactive. This was attributed to the smaller class sizes, which promoted a sense of conviviality and interactivity among the lecturer and classmates.

Other times students cannot rely on other classmate's notes because *"people refuse to share notes with [them] and is really off putting".* In such circumstances, lecture recordings also serve as a useful backup.

5) Biorhythms

Some students have argued that they are more active and mentally awake in the evening until late at night. As such, they tend to study until 2-3 am and will not benefit from going to a 9 am lecture the next day. This way of studying can then lead to sitting through the lecture in order to check an activity off their schedule without actually being able to concentrate. This becomes especially relevant when lectures are designed as traditional didactic sessions, which lack an active engagement with students.

6) Hectic/Modern Life

Some students felt that contemporary life and their experience of it diverge significantly from those of previous decades. For this reason alone they argue that flexibility is a necessary key element in their learning journey. For example, even as University of Cambridge graduates, it may take some students' months to find jobs or prepare for life after graduation. These issues are further exacerbated for students who cannot afford to rely on parental help.

"Modern life is very intense and as someone who loves going to lectures and felt tearful when I went to my first in person lecture after Covid, I could see my learning and how I experienced the lecture transformed in real time! I understand it and online I had to watch it 1000 times, when in real time you're doing it in one h and you're moving on with your life. However, I'm a 3rd year, I have jobs that I'm applying to, I have interviews so I might not make it."

"The biggest advantage of having the recording is when I'm not able to be there, which is quite often because I can't physically be in Cambridge when some of the lectures are happening and can't do anything about that."

7) Q&A

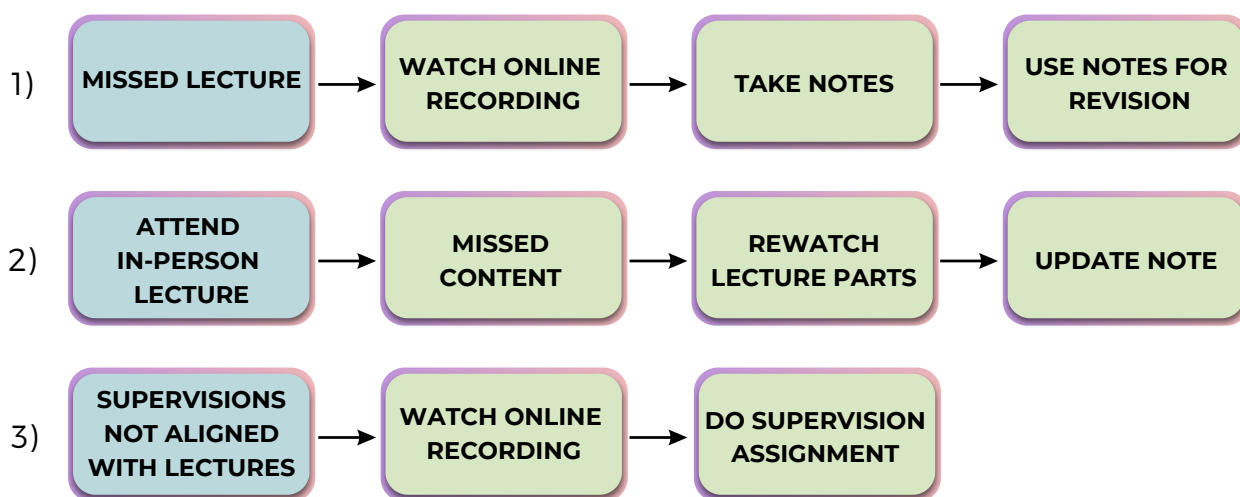
Similarly, just as watching or listening to the question-and-answer session of a recorded conference lecture can be advantageous, recorded lectures or example classes that incorporate opportunities for asking questions can also be beneficial. Allowing students to ask some questions during or at the end of the lecture session does not fundamentally change the teacher's mode of delivery or students' engagement with the material.

"If you go down and talk to the lecturer the mic will probably pick it up and you can hear it. I was watching a lecture online the other day, I didn't understand something and a student went down to ask that question and the mic picked it up and I heard the lecturer's response just by chance and it was really helpful."

Some students are also concerned about academic staff restricting their access to lecture recordings because their teaching sessions may include some Q&A segments or student privacy concerns.

"The only big gripe that I have is that they will often say this is a Q&A session and it's not recorded. We had a Q&A session today which only had 10 min of questions at the end and that won't be recorded and that is not right. If it's a question of privacy ask students to sign waivers and just include it at the start of the year digitally. When more and more sessions become Q&A based what does that have an implication for lecture capture because a lot of good work can be done in the questions [...] most of my lectures will have some questions."

Students felt that the academic staff often attribute the lack of student engagement or inadequate learning practices to lecture recordings, despite the absence of clear guidance on how to effectively utilise them to improve learning outcomes. Participants have, however, revealed three main ways in which students use lecture recordings.



Overall, students view lecture recordings as a learning resources that enable a more flexible educational experience, blended learning practices, self-paced learning options, and adaptability to their lifestyles. All participants felt that lecture recordings do not undermine the benefits of good in person lectures (e.g., engagement, social appeal, contextual inspiration/concentration, and schedule structure). In essence, when lectures are thoughtfully chosen and receive pedagogical attention, they prove to be an effective and practical solution, particularly when used in combination with lecture recordings (Nordmann, Hutchison and MacKay, 2021) .

'Better Tomorrow': The integration of AI in education has elicited mixed responses from students. To pave the way for a more sustainable future that embraces AI and other new tools, students need appropriate guidance and structured support.

Barriers: Some students are afraid to use AI tools, like chat GPT, due to fears of plagiarism, whereas others are fundamentally against it.

Opportunities: There is an opportunity to address various concerns and misconceptions, but also provide case studies that do not hinder human creativity or identity, but help students and staff alike devise new ways of learning and creating.

The integration of AI into different professional technologies and contexts highlights the importance of embracing flexibility and adopting a more adaptable mind-set in relation to work and education in today's society. Though students are still unsure of how they could use AI to enhance their education (e.g., fear of plagiarism or lack of knowledge regarding its uses), some have already begun using it to their advantage.

"Using it in the right way to benefit your overall understanding and education, I hope the university doesn't ban it. Works really well if you need a different approach to things"

"When I used to do coding sessions last year I asked a silly point that everyone should know about coding, but now any silly but fundamental query you just type it into GPT. Understanding what it is, is game changing. I was in a quantum lecture and I had no idea what he was on about and I was like screw this, I just copied them [his notes] and post them into GPT and it broke it down! Having such an outline of what you're doing is such an important thing! Game changing!"

Students have also used other AI powered software which summarise lecture notes and provide a more comprehensive way to delivering information. Others would use various AI tools in their workflow if they would act as a spellchecker that would *"not spoil the solution to the problem"*.

Nonetheless, the way some students view the addition of AI in education is also based on whether their previous perception of such technology is positive or not. Fearing AI, in general, whether it is because we think it will take our craft, identity, or jobs can have an impact on whether we are open to use it or not.

"I've heard of it but I haven't gone on it, I refuse I'm scared. I find the idea of AI scary."

"I don't see how that idea (AI writing essays for you) can be good, maybe it's because I fundamentally like writing. I like that fact that I have to process things slowly".

Though we are still at the beginning of understanding how new educational tools, such as AI, will enable fundamental changes in how we work or study, our reaction to it should not be based on fear and prohibition, but cautious openness to new ways of learning and collaborating. Some key aspects that the university's response should include: education and awareness for staff and students (e.g., workshops and seminars on emerging best practices, uses and limitations), curriculum enhancement that integrates AI learning, ethical considerations when using new technologies and continuous monitoring and evaluation practices throughout the university and the wider education industry.

'Better Tomorrow': Students hope to have more flexible study spaces that cater to their diverse study needs.	
Barriers: Some students have expressed concerns about the limited availability of informal, '3rd spaces' on campus where they can collaborate in groups without the expectation of being quiet. This situation is problematic for both students who prefer quiet, independent study in libraries and those who want to learn by discussing with others.	Opportunities: Explore the possibility of establishing and/or advertising dedicated centrally provided study lounges (e.g., Spacefinder) equipped with suitable infrastructure for group work.

Generally, students express a preference for study environments that offer diversity and flexibility, allowing them to choose based on the specific context or situation.

Conventionally, some find libraries particularly beneficial as they provide a quiet space where *"everyone agrees to study"*. Others consider them too stressful due to the overwhelming peer-pressure to study 'hard' or a particular amount of time (e.g., some consider 5 hours of study too little compared to what other students do).

"In the library you are surrounded by people with serious faces and it's not a very good environment for me to learn."

"I'm in the library, extremely tired not being able to work and feeling that I have to keep working cause everyone have been there for 2 hours and I only arrived for 30 min, 'how could I leave?'"

Students have also argued that there is a scarcity of third spaces at the university where they can work as a group and not be expected to stay particularly quiet. The lack of more informal and group-work environments – with the exception of West HUB – is, partly, a reflection of the individual focus of the curriculum at Cambridge.

"In the library you're supposed to work independently and be quiet. We do have small tables where you can talk with four people with minimum volume."

"In our college there's a silent zone and a quiet zone, but I've been shouted at whispering in the quiet zone so I don't think it's particularly group oriented."

Similar to other post-Covid work rituals, some students prefer to work in their room as it allows them to concentrate without the distractions of a lively café, or a library's pressure and etiquette barrier.

"I don't like to study in the library because in my room I have the freedom to walk around and talk to myself."

Other students need to maintain a separation between studying and their other personal activities, opting to study outside of their college libraries or dorms.

<p>'Better Tomorrow': Students expect increased flexibility when it comes to their examinations, particularly 3rd year exams.</p>	
<p>Barriers: Students feel that the absence of resits and the heavy emphasis on 3rd year summative exams create a high-pressure environment with a 'one shot, win or lose' mentality. This approach is seen to discourage a deeper understanding of the course material and prioritises strategies for achieving good grades, rather than fostering healthy in-depth learning and a genuine enjoyment of their course.</p>	<p>Opportunities: Explore and encourage continuous assessment, introduce resit opportunities, diversify assessment methods, and foster a supportive learning environment.</p>

Flexibility does not only relate to various teaching and learning methods and spaces for students, but also the assessment process. The lack of resits and focus on 3rd year summative exams, have made students feel that Cambridge's assessment is based on a 'one shot, win or lose' mentality, which does not allow for mistakes.

This adds considerable pressure and pushes many students to focus on strategies that lead to good grades rather than being able to fully digest the course content or providing a more enjoyable understanding of the subject at hand.

"We had a progress test in January and it felt like the result didn't reflect how much effort I put in [...]for now it's all in the examinations and that one result."

"I think it would be better if the department can stretch the pressure over the years because it's too intense. I don't have any work life balance now."

Many AHSS participants tended to overlook the importance of formative assessment during their initial two years at the university. Particularly, the formative supervised "essay churning" process was considered 'workload' - though not devoid of pressure - rather than 'assessment'. Leaving the crucial summative assessment to the final term of the 3rd year impacts how students approach their studies during their time at the university.

"I'd probably think about them [teaching, learning and assessment] separately. I think the way it's done here, you do your teaching and then you do your learning and exams, they're very segmented. Coursework tends to blur that line a bit more, which I like personally."

Upon reaching 3rd year, many students realise that they must proactively prepare for their 'real' exams and will prioritize strategies and shortcuts to achieve the highest grades possible (e.g., using puns in exam essays to make them more appealing or cramming before the final dates). This process adds stress since there is no opportunity for, or students may not be able to afford the cost associated with a second chance (e.g., retaking the year).

In essence, a flexible education means listening to and understanding the needs and life circumstances of students. It involves offering choices that are based on well-informed best practices, which ultimately try to meet students' diverse requirements effectively. Moreover, by designing learning environments and materials that are accessible and adaptable to diverse learners, the university can ensure equity while allowing for flexibility in the way students engage with content and demonstrate their understanding.



COLLABORATIVE

C1. Students expect to actively collaborate and engage in discussions, both with their peers and academic staff, across various informal and formal settings.

C2. Students expect to have a more group oriented and social learning environment that does not promote unfettered competition and individualistic mind-sets.

C3. Students hope for more enhanced collaborative communication tools, facilitating group and individual messaging options that enable them to interact with both their peers and academic staff.

C4. Students hope to feel comfortable when talking with academics and be able to ask questions without the fear of being judged.



COLLABORATIVE

Collaboration as an educational focus involves promoting interactions, shared decision-making, and collective knowledge construction amongst students and other academic staff, within and across disciplines. Collaboration and co-creation in education is crucial to developing and advancing knowledge and practices that benefit not only students, but the university as a whole (Zarandi, Soares and Alves, 2022).

'Better Tomorrow' : Students expect to actively collaborate and engage in discussions, both with their peers and academic staff, across various informal and formal settings.	
Barriers : Students feel that with the exception of some more group focused supervisions, there is little opportunity to collaborate with their peers in the context of their course. The lack of opportunities centred on group work has made students feel like they are not properly equipped to work in teams and cooperate with each other while working towards a common goal.	Opportunities : Actively engage students in their educational journey, incorporate group projects into the curriculum and provide clear objectives, guidelines, and assessment criteria for projects to ensure students understand the expectations.

"I wanted to be in a room where I wasn't the smartest and I definitely feel that has happened."

Some of students' most memorable experiences during their time at Cambridge were encounters with other students and supervisors where they were immersed in deep conversations about their course or other philosophical topics. Indeed, participants did not only look forward to engage with other talented students, but also with academics who *"are truly accomplished people and in a place like this you have so many more opportunities to have people to learn from."* However, some feel that engaging with professors in more informal ways, with the exception of structured and exercise-focused supervision hours, has not happened.

"I idealised Cambridge a lot. Before Cambridge I expected to meet my professors and have those deep talks and discussions, but I didn't have that chance."

Even in situations where interaction is not anticipated, such as during lectures, there are students who desire to attend lectures for reasons beyond acquiring knowledge. That is, being present in lectures allows them to connect with and engage with other students.

"Lectures are a social occasion for me. Lectures have value [...] it's connecting with other people in your course and why would I stop getting to that after all this social deprivation of Covid."

Despite this, not all students found their lecture classes to be conducive to socializing and discussing their program curriculum.

"When you go to a [AHSS] lecture, even if it's the people doing one of your outlines they probably don't do anything else like you, there's nothing else that you can talk with them except the lecture you're at."

'Better Tomorrow': Students expect to have a more group oriented and social learning environment that does not promote unfettered competition and individualistic mind-sets.	
Barriers: Some students feel that the university's environment and practices reinforces students' pre-existing competitive and high achiever expectations.	Opportunities: Increase the inclusion of collaborative activities for students, not only within coursework, but also through social events such as communal study nights.

Students maintain that engaging collaboratively with others fosters a positive environment for sharing and creating knowledge, as well as facilitating more social and informal interactions. By providing more collaborative assignments or learning opportunities, students can learn how to work with others to advance knowledge and momentarily switch off the more individualistic competitive mind-set, which left unattended can instigate low self-esteem and other mental health issues. As also mentioned previously (i.e. inclusive section), collaborative practices can also foster cultural inclusivity and conviviality between students.

"In my first and second year everyone is so competitive, mainly people from private schools that is almost uncomfortable to be around."

Through collaborative work, students gain the opportunity to comprehend and consider others' viewpoints, whilst being able to express their thoughts coherently.

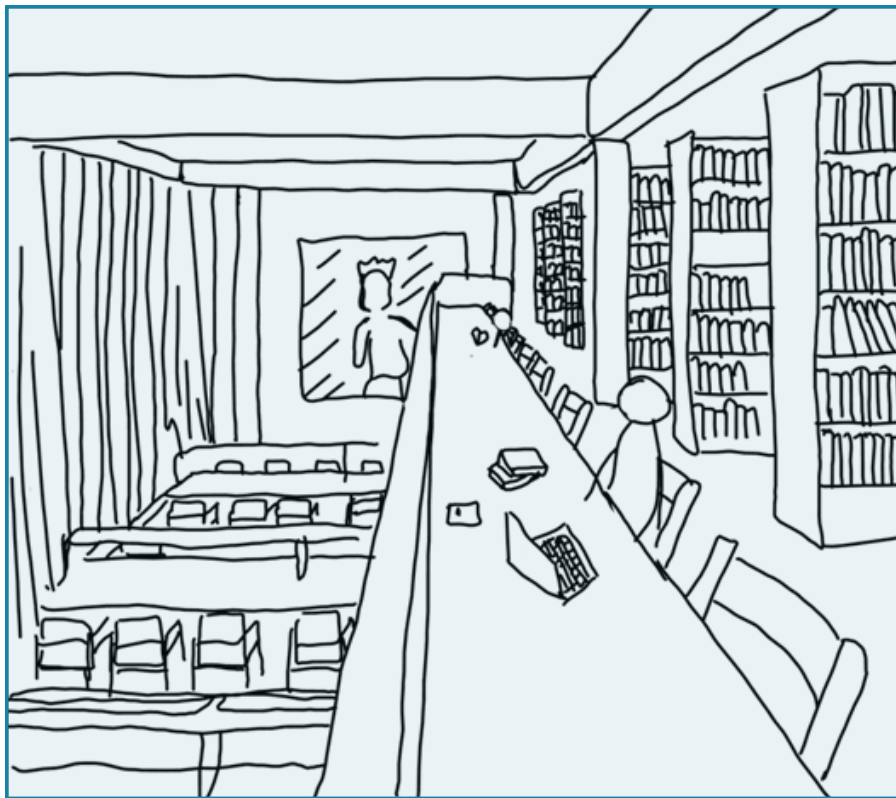
Except circumstances where supervisions are run as a group, most students have maintained that Cambridge is very individualist-centred in the way it promotes teaching-learning and assessment.

"We could increase the percentage of interpersonal skills. They are really important for academic research because you have to discuss your ideas clearly with your colleagues, but we don't really do that."

Assignment based group work can also give some students, who may have not developed strong connections with other classmates, the chance to engage and socialise with new people. That is, some participants felt alienated by the lack of opportunities to meet other people in their course.

"You're always studying on your own [...] you sometimes have different subjects and after class you just go to your accommodation and don't really see each other"

"I genuinely can't think of more than ten people that do either [subject x] or [subject x] and [subject y] outside of my college."



A student's drawing of their lonely experience @ The University of Cambridge

While during some supervisions – particularly in AHSS – students are being guided to interact and discuss a particular subject with their peers, others experience less interactive and more prescriptive sessions.

"During my supervisions, the supervisor just tells us how to do the question, we just interact with the teacher rather than ourselves."

However, without clear objectives, monitoring and guidance, which level the playing field and provide the necessary support, group work can become a sore point for some students who will feel frustrated and grow to dislike the process of sharing and developing knowledge in a group. This is particularly relevant in a context where students are used to a more individualistic style of teaching, learning and assessment.

'Better Tomorrow': Students hope for more enhanced collaborative communication tools, facilitating group and individual messaging options that enable them to interact with both their peers and academic staff.	
Barriers: Students may hesitate to email their professors out of fear of inconveniencing them. According to some, if academic staff would have an 'available' status online, it would serve as a clear indication of their availability and make students feel more comfortable approaching them.	Opportunities: Consider using university supported tools that can enable collaborative communication among students and academic staff (eg., Teams, Moodle).

The availability and effectiveness of communication technologies also played a significant role in determining students' ability to engage in collaborative work during their studies.

A third year STEM student provided an example of a professor who created a Teams group chat for their course, facilitating a smoother and more collaborative interaction among the students.

"The most efficient thing is that your question may be similar to others and they can solve this problem at the same time; that was really useful. It's more direct compared to emails because emails take too long and you can't see other people's reaction."

Other students also welcomed the opportunity to interact more informally and immediately with the academic staff (i.e. online chat function).

"That would be helpful because you don't want to feel like you're bothering them in an email, if there was a mechanism in place to contact them quickly during office hours that would help you feel like it's their job to be there."

"If there was something on Moodle set up like that where you see if your tutor or DOS was online and gave you the option to message them that would be good."

Students generally communicate with each other via WhatsApp, in group chats connected to various courses and contexts at the university. However, some students find that the amount of WhatsApp group chats related to their 'study' life (e.g., 14 different groups) on their personal phone has become intrusive and not very useful. The university could help support staff and students to utilise chat functionality in existing tools, such as Moodle or Teams, to help limit the blurring of boundaries between personal and educational contexts.

'Better Tomorrow': Students hope to feel comfortable when talking with academics and be able to ask questions without the fear of being judged.	
Barriers: Some students have struggled to ask questions or communicate freely with academic staff due to the fear of being seen as 'less intelligent' or criticised. The lack of more informal contact with some academic staff (i.e. most students only see their lecturers in formal lecturing situations) can also exacerbate the inability to engage in open conversation with them.	Opportunities: Organise informal events or social gatherings where students and academic staff can interact outside the classroom and enable online discussion opportunities where students can post/send questions, share ideas, and engage in discussions with academic staff.

Whether or not communication between academic staff and students is open and informal is not just a matter of providing the right technological tools for it, but also a cultural and social issue.

"I've had less communication with lecturers than it would be expected normally, certainly in terms of how the university was presented to me - there are office hours, lectures love it when you email them, they want to chat about their subject, you can really go and converse with staff outside of lectures and that has not been part of my experience."

"I didn't think there was an option that was really there so I haven't ever emailed a lecturer. I've occasionally exchanged extra emails with supervisors, but never lecturers because I have no relationship with them."

Some students have struggled to ask questions or communicate freely with academic staff due to the fear of being judged.

Even when they, rationally, know that their professor might not judge them, students would still not feel comfortable enough to discuss certain matters or ask questions. However, students felt that this gap closes to a lesser or greater extent when their lecturers are also their supervisors.

"I am hesitant to talk to them. Even my tutor, he's a lovely person, but he's known for being a workaholic and a really serious academic and because of that I am hesitant to say 'oh I'm struggling with procrastination'."

"I personally don't just because they are very smart and I can't understand what they are saying half of the time. I feel like if I would be asking a question it should be something interesting and not trivial that they just told me about."

Overall, students want a more collaborative approach to their education that emphasizes the importance of communication, teamwork, and interaction with other students and academic staff. To enable such an education, there needs to be an emphasis on more informal and formal (e.g., course work) group based interactions and activities between students, and students and staff, but also access to and encouragement to use more collaborative communication technologies.



SUSTAINABLE

S1. Students expect a reasonable volume of course material which does not overwhelm them.

S2. Students expect that their supervisions will be assigned in a timely manner and not abruptly substituted with other alternative sessions that differ in format from their regular supervision sessions.

S3. Students hope for a more comprehensive and holistic design of university practices and structure, which take into account their academic journey and needs and is not dependent on individual staff members.

S4. Students hope to study in an environment that does not promote intense individual competition between students or further amplify their fear of failure and already ingrained high expectations.



SUSTAINABLE

Ensuring that students have access to an inclusive, diverse, flexible, and collaborative education creates a foundation for fostering positive student experiences. By maintaining and prioritizing these principles, we can take significant strides in safeguarding students' long-term mental well-being. Doing so, the University of Cambridge can establish a stable and nurturing environment that enriches the overall educational journey for its students.

By stretching the concept of sustainability beyond its ecological meaning and into the area of mental health and personal wellbeing, this section will explore students' aspirations for the university as a nurturing and healthy learning environment and the barriers they have encountered in achieving such a vision. However, when talking about students' expectations of the university and whether those expectations were met, some participants directly mentioned the university's less positive impact on their mental health.

"Before coming here as a student you have no idea how stressful this place really is."

"Being at Cambridge is a privilege that's also been a hardship that comes with much emotional weight."

Students also maintained that their time at Cambridge has taught them resilience and learning how to fail, however, many students talked about such skills in the context of making the same mistakes multiple times due to not being given the necessary guidance or support throughout their course. During their final year, students may eventually grasp how to navigate and cope with the challenges of studying at Cambridge, but acquiring these lessons and skills often comes at the cost of their mental well-being.

'Better Tomorrow': Students expect a reasonable volume of course material which does not overwhelm them.	
Barriers: The amount of information that students are being taught and told to process is unsustainable, which, in turn, can impact students' mental health.	Opportunities: Consider conducting a comprehensive evaluation of the curriculum to identify areas where the workload can be reduced or streamlined without compromising the quality of education.

"Just looking through the handbook at all the things we have to do, like page after page of information... it's just 'how are we going to absorb this in so little time?"

"The volume is simply too much, but as a physicist you need to know a lot of it, the problem is, it's too short to understand all of it."

To manage the high amount of information and workload given to them, many students use their vacation days to study. However, cultivating an educational environment that forces students to continuously study throughout their days off can create or exacerbate mental health issues and burn out.

"During my first year I was really anxious with the timetable, like 'wow it's so difficult and the course is so intense', I could not remember anything, it's not possible. Went on 3-4 hours of sleep for weeks on end."

"I now know that I have a general anxiety disorder and my first year was a constant cycle of very terrible stress and it was not helping. In my subject they have an absolutely unreasonable expectation of students in terms of workload - 12 essays/term and it's an 8 week term. Obviously not possible, but they don't tell you that they don't expect you to complete that. That wasn't good for me, that wasn't good for anyone and in January of my first year I had a full mental breakdown".

Students also found that some academic staff tend to strictly prioritise their subject and disregard the students' total workload and time needed to finish particular tasks. Each subject becomes increasingly laden with high expectations, which do not match the student's reality, and as such, the total amount of workload becomes unsustainable.

"They say something takes 'x' many hours and it normally takes a least double that. I remember doing a lab report and it said it took 2 and a half hours and I was shocked, I thought I've done something wrong. Lab reports typically take 6-7 hours. But I think, especially with older academics with traditional old fashioned views, they are like 'it would take me 3 hours to do this'. You are a professor here, you've been here for 30 years, and I would be disappointed if it didn't take you 3 hours."

There is an opportunity to encourage academic staff to have open discussions with students about workload, transparent time estimates, and the level of quality expected in assignments (e.g., when something is 'good enough'). Departments could regularly assess the curriculum and assignment workload to ensure it aligns with realistic time expectations and addresses students' concerns. Additionally, staff could also reflect about potential gaps in understanding the time and effort required for tasks in today's educational landscape.

<p>'Better Tomorrow': Students expect that their supervisions will be assigned in a timely manner and not abruptly substituted with other alternative sessions that differ in format from their regular supervision sessions.</p>	
<p>Barriers: Some students experience delays of up to five weeks before their supervisions are assigned, which poses challenges in catching up on accumulated backlog and adds additional stress to their daily lives.</p>	<p>Opportunities: Implement a streamlined process for assigning supervisions, ensuring that students receive their supervision schedules in a timely manner. Additionally, departments could offer additional and more flexible resources or support for students who experience delays in supervision assignments.</p>

Among the issues raised by students, one STEM participant pointed out that he and his peers in the course regularly experience delays in receiving their supervisions allocation, often waiting weeks after the classes have already begun.

"I got my supervisions allocated in week 4-5. Imagine, you've learned all these things for a whole month and you have so many questions and you only maybe get some of them answered in week 5. The department said they've done a lot of things to solve this problem but nothing got solved. This issue is progressing through a lot of years."

This makes it hard for students to catch up on all the backlog that they have amounted. Since supervisions are the official way students are supposed to ask for clarifications or further question, many of them do not approach or email lecturers, even if they would like to.

When education is based on disconnected practices (e.g., going weeks without being taught content that is already being used in supervisions or lecturers using theory that is not explained), it places further burdens on students who now need to be able to juggle not only an increasing amount of content, but also trying to make sense of disorganised and unclear study materials.

On the other hand, AHSS students found that exam questions do not always align with the content covered in supervisions or lectures. As a result, they may feel uncertain about which topics they should focus on while revising and preparing for exams. Additionally, students experience uncertainty regarding the expectations placed upon them when grade points are not provided for specific questions in exams or they do not receive any feedback on their essays.

"Here I haven't gotten any feedback for any assessments, I find out what my grades are but not feedback."

Even in my own papers I've had a 10 mark difference and I'd love to have more feedback. I've had my supervisors tell me that a lot of the grades you get, particularly for dissertations are to an extent subjective and up to the individual examiners' thought on it."

Helping students develop skills that would make them more efficient when studying, should not only be framed as a one day workshop or reading a self-help book. That is, poor time management may not necessarily be a result of a lack of discipline or knowledge, but an unhealthy amount of course work and mental health pressure.

"Some people may find that a bit patronising at times when they're told they are not as good at organising their times 'just go to this workshop and organise your time there'."

However, some students pointed out that they would have benefited from a more comprehensive study skills course in their first year. One student suggested to make such courses accessible on Moodle, enabling all incoming students to access it at the start of the academic year.

'Better Tomorrow': Students hope for a more comprehensive and holistic design of university practices and structure, which take into account their academic journey and needs and is not dependent on individual staff members.	
Barriers: While students have encountered supportive staff members throughout their academic journey, others have been less inclined to offer assistance or have exacerbated their precarious situation.	Opportunities: Address the fundamental structural mechanisms that contribute to the excessive dependence on individual staff members throughout students' academic journey at the university.

Different positive experiences with staff have helped students navigate their way at the university, however, many students who have struggled or are currently struggling with mental or physical health issues have criticised the way in which they have to seek support within its structure. Inconsistency in practice and an overwhelming emphasis on student self-advocacy are sources of particular frustration.

"For my [x] papers they put a section on the site saying if you have an SSD you can watch the recordings there, but for my [y] papers I would have to get in contact with each professor separately and ask them to record it and release it to me. It's way too much effort and that would counteract the entire point, I am not going to be carrying out that emotional and mental load."

Unsustainable communication practices between students, colleges and professional support services can also affect students' physical health.

"[In order to obtain accommodation adjustments] I had to keep harassing the student services. It felt like I was being made to send so many emails and loiter around the SSC building, like 'hi did you get my email? Sorry, who are you again? I think I sent it last week'."

Students' university experience is based on the off chance that they will encounter helpful individuals, at the right time, who can help them navigate the university's system and practices.

"I think it's the individual people that make Cambridge stand up, without them the whole thing would be soul crushing."

"My DOS was very insistent that I don't do my work for a week, don't bother, and don't do that essay. That was revolutionary because when we arrived we got a really intense, several page document saying 'you must do your supervision work to your highest standard', 'if you don't send it on time there will be consequences', 'if you don't turn up to supervisions you're wasting your education basically'. I remember reading that in the freshers' week and being like, oh my god and that's completely opposed to what my DOS was saying later [...] these were not the messages they gave you, it was you had to do everything perfectly."

When individual staff are not as helpful, students are more likely to struggle during their time at the university.

"This year's DOS told me that he thinks these meetings are artificial and I should only come to him if I have a problem."

"Last year I went to DOS meetings and got told off. I'd sometimes say I have no clue what to do and then they'd be like oh 'work more' and 'working more' never really works"

While some students may feel comfortable to reach out and would consider such meetings artificial, others who need them and may not feel as comfortable to challenge that idea or approach their DOS will suffer the consequences of not having a supportive and empathetic academic staff. Nonetheless, the university is actively pursuing initiatives related to student mental health and wellbeing to ensure their experience is more supportive and inclusive. Refer to [The Student Mental Health and Wellbeing Plan](#) for more details.

<p>'Better Tomorrow': Students hope to study in an environment that does not promote intense individual competition between students or further amplify their fear of failure and already ingrained high expectations.</p>	
<p>Barriers: Receiving conflicting advice from academic staff and emphasising a constant striving for improvement or doing more work has contributed to the the students' fear of failure and self imposed pressure.</p>	<p>Opportunities: Promote consistent and cohesive guidance among academic staff and clear guidelines and expectations for students. Encourage regular communication among staff members (lecturers, DOS, supervisors) to align their advice and ensure a more robust approach to supporting student progress. Moreover, it is important to recognise that a student's ability to achieve a first class degree does not necessarily imply their desire or willingness to endure the associated pressure and workload.</p>

Participants' experiences regarding the promotion or enablement of detrimental competitive practices within their college vary. While some claim that their college does not foster such practices, others have had contrasting experiences.

"The college system is the university's unique selling point, but also its curse. It's the lie that they tell you on the website that your college does not determine your experience. Yes it does, it's the exact determinant of your experience teaching, academia, pastoral care, friends, and absolutely everything and they need to stop selling this lie."

"In my first and second year everyone is so competitive, mainly people from private schools that is almost uncomfortable to be around."

However, participants did not only feel the pressure of competition from being in a particular college environment, but also due to practices of being marked on a curve.

"We're marked on a curve so I am competing with these people and I came to the realisation that I can't, which is quite depressing. [Student starts crying] My realisations have not been positive, this is a very competitive environment, it just gets worse and I didn't expect it to be that way."

Marking on a curve can lead to discouragement and demotivation amongst students who put in considerable effort but still fall short relative to their peers. Moreover, the perception of being constantly compared to others can undermine students' confidence in their abilities.

Many students' motivation to progress through their course is based on an already established high expectation (e.g., during college and beyond) that others have placed on them due to being 'gifted', and the associated fear of failure and of not being a disappointment to others.

"What keeps me going is fear of failure and trying to not let my supervisors down. I can't even say that it hasn't worked [...] I feel completely fried at the end of it and go crash and do nothing. It's not a great experience, but it technically works."

"Fear of failure is a big motivator to grind through. There's been times when I set an alarm for 3 am to write my essay, hand it in at 9 am and then go back to eat, wake up at 4 pm to try to do my work for the next deadline."

One student has argued that *"as long as you do your best, there's no judgement on how well you're doing"*. However, what happens if students can't or don't feel the need to always be at their best? The idea that as long as you perform at a high level and give it your all it will be ok and people will take you into account, further reinforces students' pressure to continue being high achievers. Such expectations also hinder the student's abilities to collaborate, make mistakes and ask 'silly questions'.

While some third year students have learnt how to let go of some of these expectations and even improve their quality of work/life as a result, as observed during a supervision, academics might still try to push students to do their very best because they could get a first instead of the 2:1. However, for students who have already made the decision to not keep pressuring themselves to get the best grade possible, further nudging them to perform at the highest level possible is not as effective as supporting them to identify the right level for them.

In order to establish a sustainable educational environment, structural changes need to be implemented that provide robust student support and mitigate the over-reliance on individual staff. Sustainability should not rely solely on individual goodwill, but rather on a carefully designed and holistic approach that minimizes the necessity of relying on individuals to address the shortcomings in the university's operations.

CONCLUSION

Students see **inclusivity** as a vital aspect of education. Nevertheless, participants have faced various obstacles impeding the establishment of more inclusive practices within the university.

Some students expressed concerns about negative practices, or inequality of treatment between staff and students. Moreover, some participants encountered additional difficulties during their journey, such as insufficient support regarding (entry) exams, interviews, and effective learning methods, both during the application process and throughout their time as students at the university.

Students expressed the need for more inclusive teaching practices, including regular curriculum overviews, summaries and requirements and highlighted the value of some PhD students as supervisors due to their more recent student experience and empathetic approach. Additionally, the absence of lecture recordings was seen as hindering inclusivity and accessibility that goes beyond a formal recognition of disabilities.

Some international students may also face additional challenges – due to cultural differences – in establishing connections with their peers, leading to social exclusion and difficulties in engaging in collaborative study efforts.

Students at the University of Cambridge expect to have a **diverse** curriculum and teaching, learning, and assessment methods. Students have emphasised the need for cohesive communication between departments and a holistic understanding of students' academic journey to offer a diverse curriculum effectively.

Supervisions were widely regarded as the highlight and pillar of students' learning experience, offering interactive teaching and learning opportunities. Group supervisions and seminars were particularly valued for the exchange of ideas among students and engagement with various learning materials.

Students talked about the negative impact of inequitable educational provision, including disparities in support, workload, and contact hours. Some students criticised the overreliance on traditional lectures and student workload that focuses mostly on reading and note taking, emphasizing the need for reflexivity and innovation in education. Additionally, students particularly welcomed the introduction of more visually engaging aids and study resources.

Students criticised the lack of diversity in assessment methods, with many expressing a desire for more coursework, group projects, and opportunities to engage in creative outputs within their curriculum.

Participants also felt that the skills acquired throughout their education were overly focused on a corporate or academic post-undergraduate life, neglecting other potential career paths and failing to nurture skills necessary for success in alternative fields.

Student engagement with Moodle also posed a challenge as some had access to a well-structured and engaging Moodle experience, while others hesitated to use it due to its disorganized and underutilized features. Participants expressed the need for staff to actively promote and utilise Moodle in various and innovative ways that maintain baseline standards.

Students regard flexibility as an important factor in their academic journey, enabling them to learn at their own pace, develop autonomy and responsibility, and choose their optimal study environment, tools, and resources. Flexibility in assessment was also emphasised as a way to decrease stress and promote enjoyment of their respective courses.

Overall, participants believe that the university should update its practices to align with modern learning needs, seeing some of the current educational structures as a failure to accommodate the natural variations in their university experience (e.g., the absence of lecture recordings in some programmes). Additionally, while acknowledging the potential benefits of AI in education, some students voiced both practical and fundamental concerns.

Students prefer study environments that offer **diversity** and **flexibility**. Some students appreciated the provision of personal and library space for concentrated quiet study. However, other participants particularly mentioned the lack of 'third spaces' where they can study as a group. Moreover, students argued that the assessment system at Cambridge, which limits resits and heavily relies on final exams in the third year, is a significant source of stress and an obstacle to deep learning.

Students found **collaboration** in education highly valuable, emphasizing interactions, shared decision-making, and collective knowledge construction. Participants talked about coming to Cambridge with the expectation of meeting and learning from other talented individuals – both their peers and academic staff – who share similar intellectual aspirations and interests. However, many participants felt that opportunities for informal engagement with professors are limited, leading to a more formal and rigid student-staff interaction.

Students also expressed a desire for more collaborative assignments and learning opportunities to foster a positive environment for sharing and creating knowledge. By introducing collaboration in the way students acquire knowledge and are assessed, they can learn how to share knowledge and work on a common goal that does not only benefit the individual.

The use of communication technologies, such as Teams and Moodle, can facilitate collaboration, but cultural and social factors also play a role in creating an open and informal communication environment. Some students find that the overabundance of WhatsApp group chats related to their studies on their personal phone can be intrusive and not always useful. Overall, students seek a more collaborative approach to education that promotes communication, teamwork, and interaction among students and academic staff.

To effectively implement a more inclusive, diverse, flexible, and collaborative education at the University of Cambridge, it is crucial to ensure **sustainability** without compromising students' mental and physical well-being. This requires the establishment of supportive structural frameworks as pillars on which such educational endeavours can rest.

Students have recognized the importance of learning from failure during their time at the university. However, some students feel that many of their repeated mistakes were due to a lack of guidance and poor communication throughout their courses and not personal choices. It is only in their final year that some students begin to grasp how to navigate the challenges of the university, but this realisation often comes too late or at the cost of their wellbeing.

To manage the high amount of information and workload given to them, many students use their vacation days to study. However, cultivating an educational environment that forces students to continuously study throughout their days off can create or exacerbate mental health issues and burn out. Additionally, participants felt that academic staff do not always effectively coordinate their workload with colleagues, leading to a prioritization of their own subjects without considering the overall student workload.

Students have raised concerns about poor communication of expectations and guidelines, (essay) feedback and supervision scheduling. Moreover, students have argued that some academic staff lack a realistic understanding of the time required to complete specific tasks, creating a sense of urgency and stress as students feel pressured to meet unrealistic deadlines.

Lastly, students have expressed that the university's competitive culture and their fear of failure have had a detrimental impact on their mental health, intensifying the pressures they already placed on themselves before entering the university. For instance, such pressures arise from students being frequently told to achieve their highest potential.

While certain staff members have helped alleviate some of students' concerns, there is an overreliance on individual support that risks students receiving conflicting messages from different staff. As such, in order to establish a sustainable educational environment, the university should minimise the dependence on individual staff members in addressing these concerns and reassess or implement structural support measures that guarantee that students' well-being is not left to chance.

FURTHER RESEARCH

Further research on the issues presented in this report would ideally encompass a combination of longitudinal and quantitative studies, as well as more qualitative and quantitative targeted investigations in specific areas and departments and undergraduate/postgraduate programmes.

Conducting longitudinal research in this context would, for example, allow for the examination of long-term effects of academic practices, workload, and competitive culture on mental health. Such studies can help identify patterns of stress, burnout, and coping mechanisms throughout students' academic journeys. In this context, further research should concern an in-depth investigation into the way students tackle pacing and heavy content in lecture materials. Similarly, qualitative longitudinal studies could explore how flexible learning opportunities shape students' academic experiences. By tracking students' learning trajectories and gathering narratives about their encounters with flexible learning, the study can provide insights into the benefits and challenges of such approaches over time.

Further research could target students from particular undergraduate programs to assess their experiences with collaborative learning (e.g., group work), diversity initiatives, and flexible learning opportunities. For example, survey-based questions could explore how often students engage in collaborative activities, their perceptions of the effectiveness of such activities, and whether they feel included and supported in the learning environment. Additionally, such research could assess students' satisfaction and usage of communication technologies for collaborative purposes. Feedback on the effectiveness of online chat functions, team collaboration platforms, and other digital tools can inform their implementation and improvement.

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