2021 NSS departmental recommendations

Summary of Contents:

Introduction

Thank you for reading the Imperial College Union's (ICU) 11th annual National Student Survey (NSS) response. The NSS is a key measure for the College and Union on overall student satisfaction. Over the last year, the Union has worked with faculty and departmental student representatives (reps) to develop localised action plans that follow up on department-specific issues raised in the NSS. There were a total of 17 different departmental reports developed by the student reps, one for each department, with separate recommendations for the Biological Sciences and Biochemistry (Department of Life Sciences), as well as BMB and MBBS (Faculty of Medicine) courses. The reps have provided 3-7 recommendations for their departments and are encouraged to present them to departmental staff at various staff-student meetings.

The pandemic has presented significant challenges for students in their final academic year. Some of the most common problems identified by the reps and addressed in their recommendations included: assessment and feedback concerns (included in 10 departmental reports) and the lack of mental health support (8). Besides the reoccurring issues, more COVID related issues have been highlighted. For example, students would like to see more social events happening within departments to rebuild the student community (4). Some students are worried about their future career and they wish to have more departmental specific career support (3).

While there was an overlap in the problems identified, recommendations proposed by the reps were often very department-specific, depending on what they had already been doing to address these problems. Although some departments received a high student satisfaction rate, more work has to be done to maintain, or improve, their NSS ratings.

We are also working with the College to address some fundamental issues that came up such as assessment and feedback, overwhelming workload and further improvement of welfare support. The ICU will provide support throughout the year to help the reps keep track and monitor the implementation of the suggested recommendations.

Lastly, I would like to thank all departmental academic and wellbeing representatives for working with us closely this academic year and volunteering their time to contribute to this document.

Daniel Lo

Deputy President (Education) 21-22

NSS Recommendation for the Department of Aeronautics

Written by Haganta Ginting and Uddeshya Saini, in collaboration with Imperial College Union

Overall the course satisfaction has stayed the same at 80.00% as compared to 79.66% from last year which is impressive considering the disruption caused by the pandemic.

Some of the areas identified for improvement are:

1. Quality and timely return of feedback
2. Practical Aspect of Course
3. Acting upon students' feedback
4. General workload concerns

Numbers 1 and 4 were common with other departments indicating that they are a University wide problem.

Some of the positives which we identified are:

- iPad rollout
    - *"I have enjoyed the roll-out of iPad within the department. Especially how they have useful apps pre-installed and department support with them has been good."*
    - *"… and the iPads provided by the university were definitely helpful."*
- GDP/Group Projects
    - *"Group design projects are highlights"*
    - *"Final year research project and 3rd year group project were great"*
    - *"A lot of group projects that were interesting that allowed me to work with my teammates"*
    - 87.27% of students agreed with "I have had the right opportunities to work with other students as part of my course"
- Lecturers are helpful
    - *"All our lecturers were open to discussing the modules with us and answering all our questions, even outside of lecture hours."*
    - 83.64% of students agreed with "Staff are good at explaining things" which is an improvement from 81.01%.

Notably, organization and management saw a 10% increase in satisfaction from 74% to 84%. Given the circumstances surrounding the past academic year, with organization encountering many issues from timetabling to accommodating the new remote learning modes, the fact that satisfaction on this front has in fact increased would suggest that the department has done a commendable job in adapting to these exceptional circumstances.

1. Quality and timely return of feedback

From an academic standpoint, the most consistent complaint both from the NSS survey data as well as the students' comments are to do with how the department handles marking and feedback. Satisfaction on this aspect is by far the lowest of any academic aspect, at 55% overall. Notably, satisfaction with feedback timeliness has been consistently extremely low in the past two years, hovering around 40%.

"Feedback is painfully slow..."

"Feedback I got sometimes was not at all personal."

"The feedback with regards to coursework or even exams... has been really below par"

Students are frustrated that feedback oftentimes comes too slowly, and sometimes even past the deadline set by the department itself. Furthermore, there also issues regarding the content of the feedback itself. Students take issue that the feedback is not personalized enough, insubstantial, or sometimes both.

From my interactions with students from my cohort and other years, this is indeed an ongoing frustration that is experienced by many students. It often feels that for much of the work we do, we do not get sufficient personalized feedback from which we can build on. Notably, feedback for the preliminary design phase of AVD was the subject of much frustration for many of the 3rd years, due to how sparse the feedback we were given was. Similar frustrations were voiced in the NSS comments as well.

In order to tackle both these issues, it may be worthwhile allocating more time and resources towards giving students feedback on submitted work. As well, setting out more lenient timelines for the department itself may help to both give staff an easier time in delivering quality feedback, as well as not set undue expectations from the students regarding how quickly feedback will come to them. While students dislike having to wait a long period of time for their feedback, it reflects much more poorly on the department and is much more frustrating for students when feedback deadlines are missed or when the received feedback is insubstantial.

Marking and giving sufficient critique for the many coursework of, at times, 100+ students is a monumental task and I am of the opinion that students would be more than willing to wait longer if it meant a better opportunity to learn from their work.

2. Practical Aspect of Course

Another common complaint from the comments were with regards to the practical aspects of the course. This is reflected somewhat within the survey results, where application of learnt knowledge polled the lowest satisfaction within the "Learning Opportunities" category, at 70%. This is an ongoing concern, looking at the previous year's NSS report, which voiced a similar dissatisfaction among the student body regarding application/practicality within the course.

"Practical aspects of the course were not as good..."

"Little to no chance of applying engineering knowledge..."

"The course felt too theoretical, and we went into a lot of depth without clearing out basic concepts."

"... very little practical application of work, didn't have the opportunity to get my hands dirty within the course..."

Comments often voice a frustration at a lack of substantial opportunity to apply the engineering knowledge learnt within course modules. While the design projects exist, students feel that it was either not enough or lacked sufficient guidance. The second comment highlights reason that complaints regarding practical aspects of the course have been a returning issue. While we are taught many concepts that are useful, we often have insufficient class time to attempt to use these concepts in a supervised environment.

Seeing as the curriculum has recently been overhauled with similar concerns already in mind however, it is probably advisable that the department keeps a close eye on whether similar concerns develop within the cohorts using the new curriculum rather than taking pre-emptive, possibly unneeded action. The department should seek to closely work together with the 1st - 3rd year student representatives to monitor students' opinion regarding this topic.

3. Acting upon students' feedback

Overall, the Student Voice had a massive drop from 81.38% to 61.82%. Students were unsure about how/if their feedback was being acted upon since only 48.18% agreed with the statement "It is clear how students' feedback on the course has been acted upon" which has dropped massively from 77.40%. There was also a reduction in the percentage of students who agreed with "I have had the right opportunities to provide feedback on my course" from 94.41% to 72.73%.

A factor for this massive drop could be due to the clashing deadlines for AVD reports and lab week in 3rd year. A lot of students complained about the stress this caused and their requests to have the deadlines moved were ignored. We understand that this has been mitigated in the new curriculum and we will need to work with the incoming 3rd year reps to see if improvements have been achieved.

"I did not feel that the department did its best at listening to our opinions and our feedback was mostly ignored or brushed off"

"Some of the lower staff level staff listen to the students but the higher level staff don't listen as much."

"Every year, students are given a SOLE survey mid-term to voice out their thoughts and opinions on individual modules. However, there is no other survey at the end of term after results are released. This means that students were usually only able to assess the modules when they were only halfway through, without a solid idea of the entire module."

In terms of providing feedback to the department, it is understood that the department has introduced a brand new survey which has replaced SOLE. Again we will need to work with the new student reps to evaluate the survey. The timing of the survey can be looked at as well to make sure that students only fill it out once the modules have been completed fully.

To address the feeling that students are not heard by the department, both the department and student reps can start giving updates on the progress for any suggestions and changes suggested by the students. In addition, an action tracker after SSC meetings can be implemented to make sure recommendations are acted upon in an appropriate time frame. For any improvements which the Department does not act on, a reason should be given as to why that is the case which should be communicated well.

4. General Workload Concerns

By far, the most common comment received from NSS survey was to do with workload and the negative impacts it has had on student mental health and general enjoyment of the course. Students felt that at times deadlines were placed too close together, and that they did not have sufficient time during their studies to consolidate the information they had been taught.

"The most difficult thing to deal with in that aspect was the relentlessness of the work – as soon as one thing is finished it's straight onto the next."

"...deadlines are crammed sometimes that the value of learning is stifled."

"...poorly balanced course workload, which doesn't help as it does not provide any learning aspect, just stress."

Similar lines of discussion had been had between the year reps and the department over the past year, and this is an issue that has surfaced repeatedly for the department. While the most obvious solution would be to simply reduce workload, such a solution is likely not in the best interest of our education. Multiple suggestions have been thrown around, but what seems to be a sensible first step is to encourage some level of culture shift within the student body of the department.

Aeronautical Engineering has always been, and probably always will be, an incredibly challenging and technical discipline to learn. It is therefore to be expected that many students may feel overwhelmed by the work presented to them, feel like they are unable to perform to the standards that they have previously set for themselves. From personal experience, much of the stress students experience stems from being unable to complete work to the level of detail that they feel is required of them.

Steps must be taken by both the department and student representatives to make clear to students that these things are to be expected and are not a problem. To this end, representatives have drafted plans for a series of talks to potentially be held to address this issue throughout the next academic year, and support from the department would be greatly appreciated. On the side of the department, it would be helpful if personal tutors or even academics in general could play a more active role in tempering students' expectations regarding how much work students can reasonably finish. Having a mentor figure such as the academics step in and tell students that their working enough or that their work is sufficiently detailed would go a very long way in easing students' stress regarding workload. To my knowledge, something of this sort is already being worked on by the wellbeing representative in co-operation with the wellbeing advisor, so further efforts in the same vein could prove helpful.

It has often been emphasized to us that time management is a skill that we must develop within the college, however for students it often feels that there is an endless level of detail and scrutiny that can be given to a given piece of work, and clear stop signs are not usually present in our work. Tying into the lack of feedback given for our work, it might help to alleviate this somewhat if a higher level of supervision/interaction was present in our workflow. Something of a similar nature to small class tutorials currently implemented in earlier years into coursework workflow might be able to ensure students do not feel lost/overwhelmed as often.

This workload issue is another one that is clearly going to be affected greatly by the introduction of the new curriculum. As such, it is once again very important for the department to work closely with the student representatives of the 1st – 3rd years in order to monitor how curriculum changes have impacted this long running issue.

NSS Recommendation for the Department of Bioengineering

Written by Aurna Maitra, Alexis Morgan and Elisa Soliani, in collaboration with Imperial College Union

Following an analysis of data provided in the NSS of the graduating cohort of Bioengineering, there was a need for improvement within the Department given a total of 50 positive comments against a total of 54 negative comments. Issues such as poor organisation and management, a category in which Bioengineering was ranked in the 4th quartile nationally (NSS Scores of 55.6 in 2021 and 65.6 in 2020), as well as assessments/feedback (NSS Scores of 61 in 2021 and 68.2 in 2020) and academic support (NSS Scores of 75.5 in 2021 and 74.2 in 2020) were highlighted in the document containing a selection of the feedback received. Those first two matters were significantly impacted by the pandemic as both scored 10 and 7 NSS points lower respectively this year. Although the issues mentioned were of significant concern, there is great potential for improvement which can be implemented rapidly and successfully. In fact, many of the Department's current methods such as the teaching and learning opportunities have allowed for it to rank within the 2nd quartile for overall satisfaction. There is also much to learn from the College itself, given its significant change in student satisfaction national rank from 95th (2020) to 15th (2021) overall. Thus, increased communication and collaboration between students, the Union and Department alike should greatly improve the learning and overall university experience for current and prospective students.

1. Increased support regarding academics, welfare and careers opportunities

Numerous NSS comments showed that students felt that the departmental workload was often too much and that they felt unsupported and unable to voice their opinions. Additional comments showed that many felt finding job opportunities as well as alternate options to the field of Bioengineering to be difficult. The course provides students with a broad skillset however students aren't able to master any specific topic which can be detrimental while searching for internships/jobs that look for students who are experts in their field such as computing. Moreover, the department's academic support was rated by its students in the 3rd quartile nationally. During the pandemic, many students have expressed their concerns about remote learning and how it has negatively impacted their wellbeing. Below are a few comments supporting the need for greater academic and careers-related support:

"Although we may seem to have a significant workload compared to other universities, I don't feel as if we are more prepared to get a job."

"Sometimes the course was too crowded with deadlines and different courses at the same time, to the point that it was very difficult to keep up, even if you were extremely organized and planned ahead."

"I felt that I personally needed more support and guidance through a process of extremely steep learning of prototyping and building an engineering product/device, without having done it before."

"Students are forced to look at that stuff on their own."

"I feel that the anxiety and stress associated with studying in a pandemic were not fully understood and considered. When the course was already difficult, not having the usual means of disconnecting every once in a while, and not being able to socialise as much can impact a student greatly and that should have been accounted for more than it seemed to have been. We are growing tougher, but I don't feel that we deserved to be stretched this much".

"COVID-19 during the last year made it very hard to keep in touch with course mates and feel as engaged with the course as it used to be in live teaching, making me feel isolated and alone."

"Graduates of this degree are unable to compete in industry with the rest of the engineering students from the same university."

"The course does not fully prepare you for industry, rather research or further studies as it gives a broad range of skills, but none of them deep enough."

New initiatives such as having a team of advisors as well as academic mentors would benefit the Department greatly. Students mentioned it was often difficult to contact staff regarding academic issues, so having senior academic mentors such as older students, graduates, members of staff, etc. working as "tutors" with regular 1:1 academic guidance and subject specific practice for struggling students in the form of remedial classes alongside tutorials would help remedy this. Additionally, the implementation of more personalised careers counselling sessions during the year may be beneficial to students, 1:1 with a member of staff, or regular online questionnaires to identify those students who face issues that would benefit from the department's career counsellors' advice. This would be most helpful as these members of staff would have significant experience in the field and would be able to provide the best advice. This would allow students to find jobs/internships in more niche industries that have worked with bioengineers in the past and understand the unique skillset students have. Regarding welfare, it was highlighted that many departments outside the department

of Bioengineering experienced issues with contacting wellbeing advisors, etc. Including additional members of wellbeing staff would act as a preventative measure for dissatisfaction and poor mental health thus further benefiting students. During remote lectures, many students commented on the lack of engaging content, lectures should be easy to follow for an hour and not get distracted. This could for example be done by having multiple shorter videos (eg two 25-minutes videos rather than a single 50-minutes video).A survey could also be issued to students asking them to score their modules in terms of engagement. Therefore the lecturers that have successfully taught their students remotely should be contacted, and learn from their methods.

2. Increased support regarding academics, welfare and careers opportunities

A majority of the comments selected from the NSS survey contained criticism regarding either constructive feedback on submissions. Lack of transparency regarding the release of results, mark schemes for certain assignments and mark distribution also seemed to be a point of concern.

"One minor issue was that coursework feedback tended to be given quite late and was not very detailed (especially in the first couple of years). It would have been helpful to have more constructive feedback on what to do better, e.g., when writing lab reports, etc."

"No ability to view our exam paper and see our mistakes"

Regarding transparency around exam results, a lot of students are confused about the extended delays for release of results and feedback. The department hasn't really addressed these issues in years, and it seems that the exam result release process will continue to be slow. That being said, students would benefit from clear explanations as to why results are late in some circumstances and also why some exams/coursework only get general feedback, which is often frustrating for students who want to learn from their mistakes. If students aren't allowed to access their full transcript, they could alternatively be sent an automatic collection of the feedback from their paper, in a PDF or word document sent to each students. This could also be done for each student by having an outline of their paper's marks (if paper has four 25 points questions, let students know they scored 12 points in question 1, 15 points in question 2, 20 points in question 3 and 24 points in question 4). Again, looking at which modules have successfully released their results on time might help bring solutions to light.

The provisional results release date could also be announced after each assessment, keeping students informed of the progress of the marking process.

3. Improved overall organisation and management of the department

Most comments from students raised concerns about the Student Office or the overall organisation of the department regarding several topics. Indeed, the department was given a 55.6 NSS score, 10 points lower this year. This goes to show that remote teaching has further deteriorated the communication between the administrative staff and the student body. Unanimous concerns are the organisation and timetabling issues of exam/coursework as reflected in the student comments below:

"Poor administrative staff (exam timetable scheduling, notifying students about changes in advance)."

"Organisation and administration from student office is often delayed and adds stress."

"There have been many administrative errors and miscommunications which negatively impact student satisfaction. Timetables are always released late, and staff can be hard to contact. I would have enjoyed my course a lot more if the department had not been so notoriously disorganised."

"Admin is terrible."

"Student office can be very disorganised and slow to respond to emails and queries. Also, results always get delayed."

The Department currently offers numerous points of contact for students looking for support and information. However, it is often unclear who to contact for specific problems, thus leading to many students reaching out to the incorrect member of staff or just deciding to ignore their issue. Perhaps having a brief directory detailing issues that staff can be contacted about below signatures of emails may be a beneficial step. An easily accessible Blackboard folder containing an online version of the same would also be useful. Alternatively, having a single point of contact for administrative issues per stream (e.g MBE, BME, graduate students, etc.) may be more beneficial than one student office email to sort all issues. This segmentation of student feedback to administrative staff should allow faster and more appropriate sorting of issues. The student office would therefore be able to identify the most pressing concerns from students and reply to them faster (a period of 3-4 working days for a relevant member of the department to reply could be useful). Again, on Blackboard for instance, under that new contact points directory, a weekly/biweekly summary of these discussions could be published for each cohort. Students will therefore have a bigger picture of what's happening in the department, the different concerns that their peers are having, which normally would be done by word of mouth in person, in between or after lectures catching up, but with remote learning that communication between students and their issues has come to a halt.

NSS Recommendation for the Department of Chemical Engineering

Written by Cameron Aldren, Emma Pajak & Sulekh Teegala, in collaboration with Imperial College Union

The following three recommendations have been written by the incoming Chemical Engineering departmental representatives, supported by data from the National Students Survey (NSS) statistics from 2021. The recommendations look at improving students' workload and timetable, the approach to those who do not contribute to group projects, as well as increasing the career support provided to the Final Year students. It is worthwhile mentioning the department had great strengths in teaching, learning opportunities, and overall satisfaction. The dep reps would like to thank the department for their time and consideration in these matters and look forward to working together.

1. Excessive workload and timetabling

Based on numerous comments left in the NSS, the intense workload of the course was deemed excessive. The timetabling effectiveness score saw a decrease from 78.49% to 70.59% from the years 2020 – 2021; students appeared to struggle with difficulties in finding time for themselves, evidenced by comments such as: evidenced by comments such as: "Timetable doesn't respect students' time and leaves little time for anything else." This lack of free time led to some students observing shortfalls in other areas, such as in "opportunities to build ourselves as a person and for character development." Good character development and the nurturing of important soft skills are key factors for a world leading undergraduate degree course; as such, any impediment to the growth of the aforementioned traits within the student body would be detrimental to the quality of the holistic education the course aims to provide.

To remedy this, the following recommendations are put forward to the department:

- Coursework deadlines are to be approved and confirmed by year chairs in order to prevent a build-up of deadlines, especially at the end of term 2.
- Academics are encouraged to set coursework deadlines across the entirety of the term, not just at the end.
- Short, well timed, deadlines are more effective than long deadlines in our experience.
- Deadline extensions for the entire cohort should be approached with careful consideration. Instances where only a handful of students request an extension can result in students who were 'prepared' feeling disadvantaged. It can be disheartening, having finished a piece of work, getting an extension which in turn encourages guilt (for not continuing to improve your work) and over-polishing.

Having offered quotations and quantitative data from the NSS survey, the department representatives hope that this issue can be taken on board. The representatives appreciate the complexity of the running of the department, as such, the recommendations serve as suggestions to be supplemented with ideas from members of staff – with the overall aim to ease the level of workload and some timetabling complaints. If implemented, this should yield a greatly positive impact on the department's NSS standing.

2. Non-contributions in group projects

Multiple comments were made in the NSS survey regarding difficulties faced with a group member who didn't contribute to a group project. With comments highlighting that: "We could probably improve our system when a groupmate did not contribute enough especially for labs."

A couple of students suggested having "more individual coursework" in response to poor/non-contribution in group projects. However, the representatives do not feel this is a suitable approach as group projects underpin the work of an engineer, and as such, it is more than suitable that the degree follows a similar structure. Equally, despite non-contribution being a topic included in multiple student responses, there were numerous responses highlighting positive experiences, such as:

"Lots of group work that builds team working and other soft skills."

"I've learned to work effectively with other students through group projects."

"Taught me a lot of soft skills, especially with regards to team-working."

It can be seen from this feedback that the protocol by which non contributions are raised with the department could be improved. A reality of a career in engineering is that group work will constitute a substantial portion of one's work; as such, replacing group work with individual course work doesn't aid in preparing the students for their future careers.

Upon consideration of this feedback, the departmental and wellbeing representatives posit the following recommendations to the department:

- The protocol by which non contributions are raised with the department needs to be made clear to the students (potentially adding to the DOCO briefing each term and adding a document to the DOCO folder outlining the process).
- Students need to be trained in how to raise an issue with a teammate personally before raising it to a departmental level or with the module lead.

- Those who do raise an issue with the department regarding a non-contributing student need to be confident that the matter will be dealt with effectively and need reassurance that they will not be disadvantaged for having one (or more) group member less.
- The resulting penalties (be it mark deduction or other) for non-contributing students should be made clear to students to discourage such behaviour and reinforce zero tolerance policy.

Having offered quotations and quantitative data from the NSS survey, the department representatives hope that this issue can be taken on board. As mentioned above, the representatives appreciate the complexity of the running of the department, as such, the recommendations serve as suggestions to be supplemented with ideas from members of staff – with the overall aim to improve the dealing with of non-contributions in group projects. If implemented, this should yield a greatly positive impact on the department's NSS standing.

3. Increasing the career support provided

After having gone through the feedback and comments provided by the Final Year Students, it has come to our concern that we definitely have to improve the quantity of career support being given to the Final Year Students. This includes, more physical company visits, more talks and lectures given to the Students and the Department playing a more active role in finding placement opportunities for the students as they are involved in this role across all departments. Here is some of the feedback mentioned by the students.

"Generally, I have found the workload can be high at times; however, I believe this is necessary and ultimately benefitted us for being prepared adequately for future employment. Additionally, versus universities in the US, the careers department could have been more involved with company visits in multiple employment sectors. On the whole, it has been a very positive experience."

"Insufficient links with industry, more talks and lectures given my industry professionals would have been good."

"I think the department, and the College as a whole should take a more active approach/participation in helping students find placements, opportunities during and post-graduation, to ensure every student has a destination (one idea would be to start implementing the model of campus interviews, or personal tutors regularly following students' progress on job/academic pursuits), especially in times of the pandemic."

Having offered quotations and quantitative data from the NSS survey, the department representatives hope that this issue can be taken on board. The representatives appreciate the complexity of the running of the department, as such, the recommendations serve as suggestions to be supplemented with ideas from members of staff.

Therefore, what we recommend is that

- There should be more career talks and lectures by Industry Professionals outside of college hours
- It should be made compulsory, if possible, for every Final Year Student to make at least 1 company visit to increase their knowledge of the company that they might want to work in and gain more work experience.
- CEng staff should also play a more active role in finding placements and opportunities for these students during and post-graduation though surveys or emails

This will be a great way to collate their feedback and increase their chances of getting employed, which is the end goal for this recommendation.

NSS Recommendation for the Department of Civil and Environmental Engineering

Written by Mohammad-Omar Diab El-Arab and Cavin Ganesh, in collaboration with Imperial College Union

These recommendations have been chosen and based upon the NSS Survey Results 2021 as well as comments made by students within the department of Civil and Environmental Engineering. Both the academic and wellbeing reps have studied and analysed these documents, before reaching a mutual agreement to which recommendations will be brought to the attention of the various committees within the College.

Overall, based on the NSS Survey Results 2021, student satisfaction has increased from 78.08% in 2020 to 89.87%, an increase of 11.79%, with most areas seeing better rates of satisfaction. While this is a great improvement from 2020, there are still various areas such as Assessment and Feedback that need attention to change based on the numerous comments made from students. In comparison to other departments, the Department of Civil and Environmental Engineering has among of the highest satisfaction scores within the College, well above the overall College satisfaction rate of 84.46% . Furthermore, when compared to other Russel Group universities, the department has also scored very highly.

With reference to the NSS Survey Comments, a large proportion of students have also praised the number of opportunities that this Department has offered, which includes the group projects such as the Constructionarium. Additionally, students have also mentioned positive aspects of the learning environment, stating that it was challenging yet rewarding and that the degree has helped to acquire the skills required when entering employment. Furthermore, many students have also enjoyed the social aspect of College, as the Department is regarded as a great community. These are some of the many aspects that the Department should maintain.

The student representation has also increased by 8.76% to 64.94%. However, this number is relatively low, and we are hopeful that these recommendations will boost collaboration between the student representatives and staff in order to ensure that the student experience is maintained to a high degree.

Though the overall course satisfaction is at 89.87%, there are several areas that still need improvement based on NSS Student Feedback and we felt that some changes to the course are required in order to further boost this number. Based on the NSS Survey comments, the most common issue was the workload. However, a small number of students have also raised concerns with inadequate feedback, and some have also expressed worry for job prospects. The main areas of concern are therefore: workload, assessment and feedback, and teaching. Our recommendations have taken all of these factors into account, and have been split into three sections: Balancing Assessments & improving feedback, Reviewing modules within the course and emphasis on student's mental health and wellbeing.

1. Balancing Assessments & Improving Feedback

The vast majority of comments that were received, addressed the sheer amount of work that students were given, as well as the very tight deadlines they had to work to, which many found stressful. This has also led to some students mentioning how it has impacted the mental health of themselves and of their peers. To remedy this, the following recommendations are put forward to the department:

Workload is extremely stressful and doesn't quite account for mental well-being of students."

"I can't help but feel that the ??? didn't fully anticipate the huge workload they would create"

"Very intense coursework periods where the shear amount of work makes it impossible to do each individual piece of work very well."

"Sometimes it is too much coursework or work at the same time."

Organisation of some modules were also an issue. Many comments addressed the poor organisation of work and how it has clashed with many other aspects of the course such as Design Weeks and other projects. There have also been some issues with insufficient learning materials and the amount of time students have had to wait for feedback.

"Sometimes planning could be better. Coursework return is very inconsistent."

"Some modules provided insufficient learning material."

"Organisation and feedback. With the marking criteria, there is a lack of consistency. Some staff in general are not very clear in their manner when delivering course content."

To resolve these issues, we suggest:

- Module Coordinators should ensure that deadlines for coursework and assessments are implemented in a way such that students can output a high quality of work without compromising their mental health due to a high amount of work.
- Encouraging the use of MS Teams for feedback as this has allowed for faster communication between students and lecturers. The "Chat" section has been especially useful for one-to-one feedback and mini forums can also be started on larger channels which keeps feedback more organised
- The inclusion of Graduate Teaching Assistants (GTA's) in the marking process could be expanded as this will allow those who are struggling in some modules to get help more efficiently rather than waiting for a longer time for feedback, which could have been addressed much earlier. By introducing a two-tier system, where GTA's are first to give feedback, this can help identify students who still require more help and they can then ask lecturers and GTA's for more clarification
- Another recommendation is for student representatives to host weekly meetings with other students in order to collect feedback on the course which can be brought forward to the department. This will also form a cohesiveness within the department, encouraging more collaboration between the students and department staff.

2. Reviewing modules within the course

Some students felt that the first year of the course had a large focus on Structural Mechanics and that other aspects of Civil Engineering (such as Transport) were not given enough exposure, which meant that students had to wait until the third year of the degree to experience the other disciplines of Civil Engineering. Students also felt that Computing should be taught more, as technology is more important than ever in this day and age and the use of this would benefit students greatly in the future.

"Incorporate more Transport Engineering modules in first and second year of the degree."

"Lack of IT teaching in the age of it."

"I think we could have had more computing skills. Like MATLAB is great but it is not enough."

Therefore, we suggest:

- The department ask students through SOLE or by other means on the possibility of teaching certain modules earlier in the course. If there is a high number for this module, then it can be phased in for future years, which will allow students to have more choice when it comes to specialising.
- There is more depth to computing modules rather than just learning how to use MATLAB. Python is also another coding language that students can take advantage of as it is very versatile, and many programmes can be coded using it rather than just relying on MATLAB. This would not only increase the skillset of pupils, but it will also better prepare them for the future, with respect to the ever-increasing use of technology in construction and other related injuries.

3. Emphasis on student's mental health and wellbeing

Mental health is a huge factor for students at Imperial and ties in with the previous points made about workload and deadlines. A few have also commented on the lack of clarity regarding the support opportunities available, ergo acknowledging they exist but also acknowledging how little they are mentioned and how difficult it is to access them as a result.

"Mental health advisors and psychological support is available, but this is not enough as the source of the problem is not changed."

"Greater emphasis on well-being on first year and helping with the transition of balancing workload."

"Work is definitely the number one priority before mental health."

One of the comments listed previously also hints at the lack of co-operation between support lines and teaching staff, something that is quite frankly crucial to the improvement of the student experience at Imperial. The comments allude to the fact that little or no change has been made on that front, or just simply not enough co-operation between student support and course co-ordinators exists, and that this impacts both physical and mental wellbeing. This is further highlighted in the following:

"Workload is extremely stressful and doesn't quite account for mental well-being of students."

"Everyone stayed up all night long [regarding a two-day project in year 2]."

"Better communication of how student changes are being implemented as it is not always clear to the student body."

"Students had to work ridiculously long hours to complete these projects and I witnessed this have a negative impact on the wellbeing of quite a few of my peers."

Taking these comments into account, we recommend the following:

- Include a section on where and when support is available in introductory sessions, if not make it even more clear. Make it known to students regularly that these services are available through relevant email addresses. Organise workshops or drop-in sessions if necessary. Make it clear regardless of where support is available.
- Ensure that student support lines and teaching staff/course co-ordinators meet at least once a month to discuss student queries and issues raised, in order to liaise a change process to the course structure etc.
- Ensure that the student body is aware of what changes have been made or are due to be made, perhaps through emails or similar communiques that are easily accessible to students, and also which comments have been taken into consideration to ensure that these changes take place.

NSS Recommendation for the Department of Computing

Written by Codrin Cotarlan and Ines Wright, in collaboration with Imperial College Union

Following the responses from the NSS the Union decided to, we have created this document that which contains the most common complaints of the survey and our recommendations for improving the student experience. Firstly, the departmental representatives created a summary of the main positive and negative themes in the NSS results. These summaries were forwarded to the Union and a meeting was held with all the department representatives in order to gather insight from other departments that may prove helpful in improving the student experience. We believe a good collaboration between the staff and the student representatives will be beneficial for both the course and the student experience and we are looking forward to it.

Overall student satisfaction was very high this year, increasing from 83.52% last year to 87.95%. Some of the key comments recurring in the students' positive feedback include how much practical work the course offered the students which helped them get internships/placements and learn many useful skills. Many students also felt that the lecturer-student communication was very efficient, with lecturers open to questions and feedback. Students also appreciated the amount of group work they had to do, both in terms of the technical and industrial skills learned. Thankfully, students did not feel the transition to online learning affected the teaching quality of the course. Some students felt open-book exams were harder because of the pandemic. After reading the provided NSS comments, we found three primary areas in which the department may improve:

1. Balancing Assessments & Improving Feedback

Something which comes up regularly in surveys and among students is the timing of coursework feedback. Many students struggle to improve on their work without feedback, which is sometimes returned long after the assignments are completed, or even at times, after the exams for that module. With satisfaction for categories such as quality of teaching, learning resources and learning opportunities scoring respectively 88%, 90% and 91%, assessment and feedback scoring 59% is a cause for concern.

Some quotes from the students:

'The feedback was not in a very timely manner, some of the feedback for coursework only happened after I had done the exam.'

'Marking is regularly late and superficial with very little feedback for coursework across nearly every single module I've done in 4 years.'

We suggest it would be beneficial to the students if there was more clarity communication around the timing of the feedback process return process. If individual lecturers could be clear to students on their timeframe around which coursework results could be expected, and the lecturer's chosen timeframe stuck to within the best of their ability, it would reduce anxiety on the part of students on when to expect feedback.

2. Clarity of coursework feedback

Similarly, another issue that often comes up regularly in surveys and has done in the NSS results is the clarity of coursework feedback. Many students feel as though they miss the opportunity to improve on their work when feedback given is not as clear and constructive as it could be.

Feedback is often late and often lacks suggestions for improvement and there is often little opportunity to act upon improvement advice if any is received.'

We suggest it would be beneficial to the students if there was more clarity within the feedback itself. Although it is the departments policy not to provide mark schemes for exams and coursework, some general feedback of common mistakes and misconceptions on each coursework given in a timely manner would further help students learn from their mistakes.

3. Clashing deadlines

Although, especially in 3rd and 4th year, some proportion of clashing deadlines may be inevitable due to the number of modules available to students, more serious deadline clashes do occasionally still go unnoticed until it's too late and have a detrimental effect on the student's academic performance and mental health.

Some quotes from the students:

"Sometimes, particularly in third and fourth year where there are module choices, there have been (in my view) insufficient efforts to make sure that deadlines do not massively overlap."

"Overall workload/CW clashes could be improved"

"Overload of the work competing to deadlines make it hard to have a work life balance"

Usually this is the student's responsibility to investigate. However, it would be greatly advantageous if the department aided the student. We recommend asking all lecturers to post their coursework timetable on CATE by the end of the first week of term. Then, by increasing awareness that clashing deadlines is a possibility (for example a cohort wide email reminding students to double check their timetable for clashes), students can report back to their reps well ahead of time and any serious clashes rectified. Upon finding such a clash, discussing the clash with the lecturers involved should solve the issue.

Clashing deadlines can particularly be an issue for JMC students, where lecturers from one department may not be aware of deadlines in the other department, or clashes are more unavoidable. By making all students aware of their deadlines from week 1, JMC students will be aware of these cinch points in term ahead of time, can inform their lecturers from whichever department, and prepare further in advance in order to make it easier to cope with the increased workload.

We are additionally hoping this will have a positive impact on the wellbeing of students by reducing the stress caused by times of increased workload.

NSS Recommendation for the Department of Design Engineering

Written by Amy Mather and Frederick Seidler, in collaboration with Imperial College Union

The following recommendations were made upon thorough quantitative and qualitative analysis of the NSS Student Survey Results 2021. Across the board there has been a decline in student satisfaction from previous years (80.65% overall satisfaction vs 97.37% in 2020), the authors believe this could be accredited either to effects of the pandemic, or the fact that the course is no longer considered to be in its infancy, so student expectations have increased.

Assessment Feedback and Organisation scored very low at 57% and 69% respectively, down 18% and 13% respectively. These should be our main focus for the upcoming academic year. The department however has continued to have high satisfaction across the areas of teaching quality, learning opportunities, community, and student voice. So we endeavour to continue the good relationship between staff and students and work together to improve the student experience over this coming year.

Problem Categories from Qualitative Feedback, 17 Negative Comments Received

Issue Summary	Comments
Workload	11
Disorganisation	5
Marking & Feedback	4
Group work	3
Mental Health	3
Masters	1

Praise Categories from Qualitative Feedback, 15 Positive Comments Received

Issue Summary	Comments
Content	5
Community	4
Collaboration	3
Placement	2
Wellbeing Resources	1
Teaching	1
Masters	1

1. Workload

65% of comments from students critiqued the volume of the workload on the course, this is unsurprising given this has been on the student representative team's radar for years. It also aligns with the research done by the previous department reps through the workload surveys. 57 students responded with calculations of their working hours with a mean of 46 hours per week which is around 10 hours more than is expected by ECTs.

"A very high workload forces you to compromise on projects that you have less of an interest in/is worth fewer marks. It felt impossible to do everything to my best ability."

"Unrealistic expectations in terms of effort and time invested on each subject. It was found that in our cohort more than half the students were working 50+ hours a week, and a quarter was working 60+ hours. This is highly unrealistic and leaves very little room to live your life outside of university, or invest time in clubs and societies, which are also a very important aspect of university life."

"The workload is very high and damaging to students work/life balance."

"The course is structured in a way that incentivises people to work to their limits, resulting in a number of people feeling burnt out."

"I don't think they consider the workload when they plan the course. The course causes a lot of mental and well-being issues at the end of every term."

"The high workload and complete lack of support finding a placement mean that with some modules you have to scrape by to just survive. The course is fundamentally elitist - the amount that is covered is completely unrealistic. If you have come from a school (which I did) that does not have the resources to teach you about 3D printing or introduce you to Arduino/Rasp Pi, you haven't been taught how to code nor how to use CAD, then you're at a complete disadvantage because it's impossible to effectively learn all of these skills in such a short space of time. So you end up knowing very little about a lot of things. The level of false advertising with this course is scandalous - multiple workshops were advertised - where are these? Just pure false advertising. If someone came to me to ask whether they should do the course, my short answer would be no and my long answer would be a far more extensive version of the above"

This issue has been raised at every SSCC in the previous academic year and yet a solution has still not been found.

An immediate review of every module's workload needs to happen. Consider the following:

- How are module lead's evaluating how long coursework takes to complete?
- Are the module lead's expectations meeting student's realities?
- How long are students spending on making videos (often raised as a particularly time consuming task)?
- Where are students spending most of their time?

2. Organisation and Management

50% of students felt that the course was poorly organised and wasn't running smoothly. 5 students commented on this and details are provided below.

"This year finding resources has been a nightmare. More clear marking rubric for design subjects would be appreciated. Remove opinions from marking."

"Course is new so keeps changing so it's hard to know what to expect. Level of performance is high so might feel if I have done a good job may not get an A mark."

"It's a very new course so when things go wrong, they go wrong in a big way. There have been some disastrously organised and managed, heavily weighted courses throughout my time."

The course is no longer in its infancy and needs to have clearer guidance for students and staff. The issue of workload partially arises from the fact that coursework and group work lack same oversight and scrutiny that is applied to exams. On a course that is so coursework heavy, the evidence is pretty clear that something needs to change.

It is recommended, as has been recommended at previous SSCCs, that two new positions are made, one for a coursework officer and one for a group work officer.

3. Marking & Feedback

Scoring only 57.26% overall this was the department's most problematic area in the quantitative portion of the survey. Only 41.94% of students felt the marking criteria was clear in advance, 32% of students felt that the marking and assessment was unfair and only 45% of students received timely feedback.

"When it comes to group work, peer assessment is unclear (how it works), and is usually worth 40% of the grade. Not knowing exactly how it works leads to misunderstandings such as unintentionally lowering someone's grade by two letter bands. Moreover, personal disputes between team members can significantly impact someone's grade. Sometimes, people would give a low grade out of spite. On a few occasions, coursework feedback was a bit lacking and did not focus on how we could have improved, but the lecturer's/GTA's personal opinions, or 'this statement is wrong' with no explanations."

"More clear marking rubric for design subjects would be appreciated. Remove opinions from marking."

"The amount of group work. The marking on the course is haphazard at best especially with group-work letting other students mark each other. The lack of clear grade boundaries and not marking to a mark scheme is also difficult especially when you got a lower grade, which you don't think you deserved. The structure of some modules is also poor and they are assessing skills which are sometimes far too easy for the 4th year."

The following recommendations are made:

- WebPA is being used in the department in a way that is considered unfair: staff rely on it as an excuse not to individually assess students within a group and despite assurances, when students are marked as 0 the situation is not handled appropriately. Group work is often stated as preparation for the real world, however in work you have meetings with a personal supervisor and work together to reflect upon your progress. If module leads worked more as a work supervisor for group projects, then students could receive a mark which more accurately reflected their efforts and learning.
- A lot of marking rubrics, particularly those for design work, rely on subjective objectives. This needs to be reviewed and standardised across the department.
- The coursework officer mentioned above could be responsible for checking the clarity of rubrics before term starts.

4. Group work

Several the comments mentioned the high volume of workload. We are aware that this is on your radar and that the HoD has been working on a review for the past year as has been the topic of many a SSCC.

"The amount of group work. The marking on the course is haphazard at best especially with group-work letting other students mark each other."

"Personal disputes between team members can significantly impact someone's grade. Sometimes, people would give a low grade out of spite."

"The high level of group work within the course completely compromised the learning experience. I feel that I learnt a lot less than I would have on a different course. Additionally, it means at times you have very little control over the direction of the project and have to waste time negotiating on minor details (like the font size of the portfolio). Staff would argue that this is what it's like in the 'real world' but that's not what an undergraduate degree should be about. It's about giving a solid foundation and actual learning."

We recommended considering expanding the review to be undertaken by a team of staff so that changes can be implemented on a shorter time span.

5. Wellbeing

Mixed feedback was received around wellbeing, with some praising the mitigating circumstances process and community and other's feeling poorly supported.

The negative comments received were as follows:

"The course causes a lot of mental and well-being issues at the end of every term. A lot of student had mitigating circumstances mainly for mental health and well-being issues."

"Bad support (mental health), quantity of work expected is too high, and we're all over worked."

"Helped me understand the importance of prioritising my time, leaving mental health breaks and time for social activities. This is something I had to learn myself through trial and error."

And the positive:

> *"Department was generally very understanding and helpful with mitigating circumstances and difficulties, especially during the COVID-19 pandemic. We had many wellbeing resources available to us during the duration of the course, both on a departmental and college level. In addition, students were encouraged to give feedback on these resources. Discrimination of any kind was taken very seriously in our department, and both staff and students worked to make all events inclusive."*

The discrepancy suggests that students are receiving varying levels of support. This could be explained by differences in each student's support system, for example different personal tutors. In the mitigating circumstances survey undertaken by the wellbeing representative team last year it was found that different personal tutors gave wildly different levels of support and that there was a lot of students confused about how the mitigating circumstances process works.

It is recommended that personal tutors are encouraged to help students with their mitigating circumstances form and take a more proactive response where appropriate.

Additionally, simplified and clearer instructions for mitigating circumstances needs to be advertised.

NSS Recommendation for the Department of Earth Science and Engineering

Written by James Wood and Reha Chandresh, in collaboration with Imperial College Union

Although the results this year rank highly and are the best results in College (which received the best satisfaction results of the Russell Group and of London universities), there are several areas in which the department's scores have fallen or remain fairly low and need to be addressed. These areas include: learning opportunities, assessment and feedback, academic support, learning resources, learning community, and student voice. This has contributed to an overall fall in satisfaction of 2.1% to 98.8%.

It is worthwhile noting that, due to the small sample size (~40 responses), small changes in scores may only represent 1 or two students but, nonetheless, are worthwhile investigating.

The following recommendations have been written by the Dep Reps in the department and aim to address some of the issues that the NSS scores and comments identify. Recommendations 1-3 are related to academic issues while recommendations 4 and 5 are related to wellbeing concerns.

	Teaching	Learning Opportunities	Assessment and Feedback	Academic Support	Organisation and Management	Learning Resources	Learning Community	Student Voice
% Agree	95.3	89.6	77.6	86.1	92.4	91.7	88.5	88.2
Change from 2020	+1.6	-2.8	+1.6	-9.0	+4.2	-2.1	-4.2	0.0
Rank in College	1	4	1	1	1	1	2	2

1. Workload

Background:

The academic support category scores dropped considerably (9%) from 2020's scores. Although the score remains the highest in College, the large drop in academic support likely contributed to the overall drop in student satisfaction in the department.

The pandemic has undoubtedly impacted academic support with lecturers sometimes being harder to reach and explanations from demonstrators being more difficult over a Teams call. This is particularly the case in our discipline with 'Geography, Earth and Environmental Studies' students having the third lowest agreement rate among subjects to the question 'I am content with the delivery of learning and teaching of my course during the Covid-19 Pandemic' (https://www.officeforstudents.org.uk/advice-and-guidance/student-information-and-data/national-student-survey-nss/nss-data-covid-19-questions/).

There were few negative comments indicating concern about academic support so it is difficult to know where the department is failing in this regard. However, the variability in enthusiasm for teaching was noted by one commenter as a potential cause for this and another mentioned that support from tutors is 'hit or miss'.

Student Comments:

"Few lecturers seem burdened by having to teach their course to students and show they would much prefer to be anywhere else, but only a few."

"Pastoral support from tutors is hit or miss."

Recommendations:

- Encourage more students to speak out if their tutor is not providing them with satisfactory support. Perhaps an anonymous submission form for complaints about tutors (Qualtrics/physical submission box) will encourage more to come forward.

- Streamline the Mid-term survey process in the department to encourage a higher completion rate to better identify if a lecturer is not providing sufficient support to students.

    o The number of questions that are asked in these surveys should be reduced to improve completion rates. In person lectures should help with completion rates too as reps will be able to talk to the class etc.

2. Explore how marking can be made fairer and how feedback practices can be improved

Background:

Although assessment and feedback has improved by 1.6% this year, the category's value (77.6%) remains well below the department's average score across all categories (88.7%). Therefore, further improvements can be made to the assessment and feedback practices in the department.

Regarding marking, there appears to be a sense of confusion around how marks are awarded with several comments stating it is "unfair" or "complete luck" for what they are awarded. There is a perception of inconsistency here.

Improving feedback has been a long-standing goal of the department and representatives. In Summer Term 2021, a new feedback policy was written to ensure feedback is both timely and of acceptable quality. However, the comments indicate that further improvements can be made here.

Student Comments:

'Bad experience when asking for script to see where mistakes were made.'

'Marking throughout the degree is unfair and complete luck who marks your work. Barely ever given any encouragement or constructive feedback, it's only ever negative.'

'Some marking can be inconsistent, i.e., your mark depends on the marker. One can hand in the same work as someone else in your group, and receive a different mark for it.'

Recommendations:

- Ensure staff continue to follow the new feedback guidance in the department, providing timely and high-quality feedback.
- Ensure that, prior to an assessed piece of work, the module coordinator has provided students with detail on how the work will be marked, to what criteria, and by who.
- Ensure that the policy regarding returning of papers is communicated to students (i.e. not normally allowed) and identify modules where post-exam feedback is poor/unclear where students may have lost marks.
  - TRAs aid in this regard as students have access to both the paper and their answers following the exam.

3. Improve the learning community in the department by increasing effective groupwork

Background:

Learning Community saw a noticeable drop of 4.2 pts in this year's survey placing the agree percentage at 88.5%. It is therefore worthwhile investigating this drop and attempting to fix any issues.

Naturally, completing the end of their degrees with over a year of remote learning will have been damaging to the learning community as social contact and effective group work was minimised or difficult to complete remotely. However, some comments suggested that a lack of group work outside of fieldtrips was detrimental to the learning community. Also, one commenter suggested that a lack of diversity in groups had a negative impact on the community.

Student Comments:

"…I also wish diversity was encouraged in group work (in general, people of similar backgrounds stuck to each other)."

"Other than fieldwork, there was no strong emphasis on teamwork throughout the degree even though most of us will leave into the real world and will need to effectively work within a team."

Recommendations:

- Identify modules where groupwork could be encorporated into the specification, particularly in geophysics/EPS focussed modules as these students have less groupwork on fieldwork.
- Look into novel group-forming methods that could be used in the department to improve diversity.
    - i.e. allowing one chosen 'friend' per group – group these pairs together with others.

4. Continuing to provide support for stress management

Background:

In academically rigorous times of the year, students find it especially difficult to cope with the workload, which increases stress levels and affects mental health. Students thus seek support from the department in areas that include:

- Mapping projects and other deadlines

- Heavy layout of course structures

- Lack of breaks between online classes and virtual fieldwork.

- Lack of prior awareness of costs of fieldwork and projects.

Student comments:

"Stress and mental strain of the year 3 mapping project isn't addressed by staff"

"Layout of year 2 content was too heavy- we had no breaks from exams and fieldwork, which caused too much stress"

"Almost constant high stress from the course and related finances"

Recommendations:

- Increasing the frequency of MS Teams calls/ five-minute drop-ins during office hours with personal tutors so students can discuss any issues they may have. Personal tutors must be encouraged to reach to students more frequently.
- The department can release a detailed breakdown of the expected expenses of fieldwork and other extra costs at the beginning of the year, so the students are well aware of the same. This will encourage financial planning and reduce the related stress during the year.
  - In the recent years, the department has made costs available to the students very early on during the course, and financial advisory services, scholarships etc have been made clearer.
- The representative network can work with the faculty to produce a concise document containing a list of all department and college-wide resources- (Senior Tutors, the Student Wellbeing advisor, personal tutors, welfare reps, relevant scholarship/bursary opportunities etc.) Students are thus made more aware of the resources available to them, and can be encouraged to reach out.

- In the recent years, the department has implemented this, and has also increased the frequency of relevant emails for effectively signposting these resources. The representatives are also well briefed regarding the same.

5. Increasing the number of social events on a department level

Background:

Fun social events and small get-togethers are great ways to relieve academic stress. Students get a chance to interact with fellow course-mates, make friends, and build relationships. The lack of such events can make them feel lonely and left out. This affects their mental health, hence increasing stress levels.

Student comments:

"Lack of student unions/bars/pubs"

"...Left feeling quite isolated and out of the community..."

"...Need for building a community for disabled students on campus..."

"Prevalent lad culture"

Recommendations:

- Increasing small socials at department level during the fresher's/ pre-vacation periods and organising events that allow informal chats among students of different years. These are a good way to promote interaction among students from different cultural backgrounds so that they can all integrate to be part of ESE's diverse community.
  - When students from different backgrounds interact under the name of games afternoon, tea and biscuits etc, they are brought closer together, and one can always find some like-minded person to talk to. Such events will also promote tolerance for different views and cultures, hence increasing inclusivity.
- Organising non-drinking events such as tea-and-biscuits, yoga days and a mental welfare month with various activities planned for each day of this month. These are good ways for students to get to know each other and make our community more welcoming for everyone, while also staying away from the alcohol. These also serve to boost mental wellbeing.
  - The department has already begun initiating such events on online platforms. These can be moved to an on-campus format in the upcoming academic year, to further encourage student participation.

NSS Recommendation for the Department of Electrical, Electronic and Information Engineering (EEE and EIE)

Written by Arijit Bhattacharyya, Bharat Chilukuri, Jason Zheng, Eleftheria Safarika, and Ishaan Reni, in collaboration with Imperial College Union

The following recommendations revolve around three core themes:

- Assessment feedback and transparency
- Communication between the EE department and the students
- Mental health and pastoral support

The recommendations regarding feedback, transparency, and communication will have flow-on effects towards student mental health and wellbeing. Hence, addressing these issues will also help to improve mental health.

The NSS feedback provided by the Union was read by all EEE & EIE Departmental Representatives and was discussed in several video calls on Microsoft Teams.

Overall, there has been a decrease in the satisfaction ratings for 9 out of the 10 available categories. The three most significant decreases from 2020 to 2021 were in Academic Support (from 72.92% to 65.92%), Organisation and Management (73.08% to 66.56%) and Teaching (85.38% to 80.11%), with overall satisfaction seeing a 2.5% decrease from 84.34% to 81.88%.

Despite there being a 0.8% increase for Assessment and Feedback, it is important to note that for the 2019-2020 ratings there was a 16% decrease, meaning that this is still a prominent issue that needs addressing.

We hope that the department will collaborate with us so that these recommendations are put into action, ensuring an improvement to the overall student experience.

1. Improve assessment feedback and transparency

Many students have complained about the poor quality of coursework feedback for certain modules, as well as a lack of transparency in how students received certain marks. Often the feedback received by students is not clear and concise enough to be used in a constructive manner.

On top of this, some modules do not provide any form of feedback for students to work with. For example, for the third-year module Advanced Signal Processing, students were asked to hand in a 42-page report and received absolutely no feedback. Given the effort that students put into this, they found the lack of feedback very unreasonable. The lecturer for ASP has been approached regarding this and students were told that they would not receive any personalised feedback, only general cohort-wide feedback would be sent. At the time of writing (16 August), this has not yet been sent.

The Digital Electronics II module received praise for the quality of feedback. The comments students received were detailed and highlighted both areas where they did well and areas where they needed improvement.

'There are courses where you do not receive a single line, letter or word of feedback after submitting 42-page reports such as Advanced Signal Processing which was exceptionally bad with feedback.'

'Feedback has been generally slow and lecturers frequently miss deadlines for feedback.'

'The feedback from marking is really bad and unclear; it's not at all transparent. It's been made purposefully difficult to get back the paper or even get feedback on how to do better on exams.'

'Lack of transparencies of how you receive a specific mark in exams, it doesn't feel like you got that mark'

'The department failed to act on feedback particularly no transparency on marks, no way to know why you got that mark or protest it, you can't learn from your mistakes.'

Students feel that the department is not held to the same standard as students, since students are penalised if coursework is submitted late. Delays in feedback are often not communicated well to students. Informing them about any such delays would help put their minds at ease.

Our recommendations are as follows:

- Require lecturers to provide personalised feedback for all summative coursework.
- Require lecturers to provide general cohort-wide feedback for all exams.
- Have guidelines in place for the amount and quality of feedback that each lecturer must provide for every coursework and exam. These guidelines should be developed with student consultation.
- Require lecturers to inform students if there will be a delay in returning feedback within the advertised timeline (by default this should be within 10 College days).
- Allow students to meet with their personal tutors to view their exam scripts.

2. Improve the quality of communication between the Department and students

In the NSS, several people talked about the inadequate quality of communication from staff when in contact with students. According to the students, the department did not effectively communicate when there were administrative changes. Examples of this are when there was a late cancellation of specific modules which were publicly advertised as available, which caused unnecessary distress to students.

Although this lack of communication has been a consistently recurring problem for many years, this issue was further aggravated by the COVID-19 pandemic.

'Communication between department and students can be quite poor - didn't tell us about modules being cancelled at the start of the year, resulting in it being very rushed in deciding which modules to pick.'

'Lack of contact.'

'Trying to contact staff, you don't get a reply.'

'Communication from university was particularly poor at times, especially about the pandemic.'

'Very difficult to contact staff to even arrange a meeting to clarify doubts, made worse because of the pandemic as they can just ignore emails and messages.'

'A lot of the confusion that happened around COVID-19 restrictions and how that has affected my course with any long-term plan not being clearly explained to the students so I then feel that the 'quality of my education' is not what it would be without the restriction'

An additional issue arose in Autumn 2020. When the Department was creating the 3rd year Autumn exam timetable, students were told two weeks into term that certain modules would clash. This resulted in several students changing their initial module selection.

The exam timetable was then sent out seven minutes prior to the module selection deadline. This timetable did not clash Artificial Intelligence and Communication Systems, even though students were told this would be the case.

Following this, student reps gathered feedback to reduce the number of clashes, though there were still some new clashes. This ordeal created a lot of stress for students, especially for those who had to choose multiple new modules several weeks into term, requiring them to spend even more time on top of their already heavy workload to catch up on lecture content.

One suggestion was offered in the NSS responses to tackle the inadequate quality of communication:

Tools like online classroom or forums should be used to help both parties keep track of questions and answers.

We received a suggestion from student representatives from the School of Medicine who said that Padlet is used in the medical school to inform students about feedback and how they are responding to it, and this has been well-received by students.

Our recommendations are as follows:

- Create a virtual noticeboard for departmental notices so that students can find up-to-date information in one place. Padlet is used in the School of Medicine and has been well-received. This should be publicised to the students from the beginning of the 2021/22 academic year. This noticeboard should be highlighted by both the Department staff and the reps to all students and be regularly maintained.
- Arrange more regular meetings between Dep Reps, the DUGS, Senior Tutor and Year Coordinators. Currently, SSC meetings take place once a month and often there is not enough time for reps to discuss all the issues their cohort are facing.
- Require the Year Coordinator to host weekly drop-in sessions with their respective cohorts so that all students have an opportunity to voice any concerns and ask any questions they may have.
- Recommend that all documents and departmental emails are double-checked to ensure the provided information is correct and up-to-date, and that the correct people are receiving this information.

3. Improve Mental Health and Pastoral Support

Many comments in the NSS talked about the intense workload, and how this negatively affected their mental health. University life is very stressful, especially during a pandemic, and accessing support from the Department and the College is often difficult. Not all students are aware of how and where they can seek support, and some students have been unable to book meetings with the Department's Student Wellbeing Advisor.

Currently the Student Wellbeing Adviser only works part-time within the Department, though it has been confirmed that they will be starting full-time from this coming academic year. This is a positive change which we strongly support.

The College's Student Counselling and Mental Health Service has limited resources and is only able to dedicate an initial consultation and six 50-minute sessions per student per year. This is not enough dedicated time for many students. Furthermore, the wait time in between the initial consultation and the follow-up sessions can be at least two months. This length of time is unacceptable, and a student's situation may have significantly worsened during this period.

The Mitigating Circumstances form is impractical and unintuitive to use. This can discourage students from applying for Mitigating Circumstances if they do not know how to fill in the form correctly. The Department's application form is also different to the one published by the College. This form should be updated to be more streamlined and intuitive to use. For example, currently the form asks for a date, but does not specify whether this date should be the date the form is submitted, the date the reason for mitigating circumstances began, or the due date of the affected coursework. Ideally, we would also like to see the form standardised across the College to minimise confusion.

It is important that students be able to apply for Mitigating Circumstances as smoothly as possible; if a student needs to apply then we should be providing as much support as possible for that student and not discouraging them from applying due to not understanding the process to do so.

'The amount of work has taken a toll on my mental health and my relationships, and I know that to be a common occurrence among students. The response to this varies among departments, but in my department of Electrical and Electronic Engineering the response has essentially amounted to 'if you planned better, you would not have this problem' which is simply not true.''

'Lack of pastoral support, limited access to mental health services, feels like staff don't care.'

'Maybe too intense at times. Lack of student support I would say on non-academic issues.'

'The amount of work that some of these courses have required is so ridiculous and excessive that it pushes students beyond what is healthy, reasonable or normal'

There were comments that the personal tutor system is good and provides support for students. This is encouraging, however not all students are aware that the personal tutor system is primarily for pastoral support rather than for academic support.

Some comments in the NSS stated that students feel as if some staff do not care and that the university does not listen to students' opinions. This disempowers students, and therefore discourages them from seeking support.

Our recommendations are as follows:

- Clearly signpost what pastoral and mental health support is available to students from the Department and College. The Imperial College Health Centre and the NHS are also able to provide mental health support, and this should be clearly signposted to students as well. The Union also has an Advice Centre which can provide wellbeing support. This should be done at the start of each term and halfway through each term.
- Lobby the College to increase funding and space, and in particular hiring extra counsellors, for the Student Counselling and Mental Health Advice Service. This should be done throughout the year.
- Encourage students, especially first-years, to ask for help should they need it. Students need to know that asking for help is encouraged and know where to ask for this support. Lecturers and personal tutors should emphasise that they are available to answer questions from students.
- Improve the mitigating circumstances form so that it is more intuitive to use. The form is not the same one published by the College; this can also lead to confusion from students. Furthermore, ideally it should be possible to see the current status of the mitigating circumstances claim. This should be done with student consultation and be done as soon as possible.
- Emphasise that the primary role of the personal tutor is for pastoral support, not academic support. This should be done from the start of each academic year.
- Provide training and guidance to personal tutors so that they can better support students. This could include flowcharts of what to do in certain situations.
- Change the personal tutor system in third and fourth year so that tutors are required to schedule at least one one-one meeting with tutees per term. This can be implemented at the start of the 2021/22 academic year.
- Require lecturers to consider other deadlines when setting coursework and ensure that lecture content and coursework requirements are released on time to provide students with as much flexibility as possible. This could be supported by introducing a tool where lecturers can see deadlines in other modules: this is already possible in the Department of Computing via CATe.

NSS Recommendation for the Department of Materials

Written by George Morgan and Shirley Xu, in collaboration with Imperial College Union

All departmental representatives of the 17 departments at Imperial College London received the response to the 2021 National Student Survey (NSS) on 20th July, detailing the responses to the survey, and including metrics comparing the 2021 results to the previous 2020 survey. Percentage Agree scores to various topics were outlined, year on year changes were calculated, departmental rank was established, and anonymous comments from students were given. Most notably, the college is the only institution of the Russell Group's 24 members to increase their student satisfaction from the recent 2020 survey, an increase of 3.1% to 84.5%, building upon the increase in satisfaction of 4.4% observed in 2020. Moreover, Imperial College London ranks 15th for student satisfaction in the country, the highest of the Russell Group universities. The college scored highly in learning resources (87.5%), teaching (86.3%), and learning opportunities (82.9%). Following a meeting between the Student Union and the departmental representatives, recommendations have been made surrounding particular themes to improve both the overall student experience at Imperial College London, and at departmental level. Department-specific proposals for Materials have been curated in this report to be implemented throughout the next academic year. With strong collaboration between college staff and student representatives, we believe we can work together to improve the student experience at Imperial College London.

1. Assessment and Feedback

The NSS category Assessment and Feedback received the most negative criticism. Students mentioned the lack of a comprehensive marking rubric before completing a piece of marked work, poor punctuality in marking time, and also an inconsistency in the marking. The student satisfaction for assessment and feedback increased, from 50.2% in 2020 to 53.9% in 2021, although the category scored the lowest of all NSS categories for the department.

Quotes from NSS comments:

"Marking of coursework often feels inconsistent."

"Sometimes a resistance of staff to make changes based on student feedback because they believe it may make it too easy for students e.g., providing detailed rubrics for coursework and mark schemes for past exam questions (also done to allow past question styles to be reused). Although understandable reasons it can make students feel like the department is working against them to prevent them doing too well, rather than giving them all possible useful resources and then ensuring exams and coursework are assessing at the right level."

"Rubric and guidelines for written/coursework [is] often vague and unclear."

"Marking for coursework felt very inconsistent and non-standardised."

"A report similar in style to my literature review for my dissertation received feedback almost two months late, and the feedback was a number grade. I strongly believe that I would have been able to write a second piece of work if I had been given proper and timely feedback, and given the size and importance of both pieces of work, am insulted that this did not occur."

"Clarity around exams, would be nice to get model answers to exams question[s] and statistics on how previous year[s had] fared."

"It would be quite helpful if we can get more feedback and comments for the results of the end of term exams."

Proposed solutions:

- A comprehensive rubric could be supplied for each piece of assessed work when the work is set to allow for good time for students to understand the rubric and approach each piece of work as required.
- When work is marked and feedback is provided, students should be made aware of where they gained or lost marks within each of the rubric sub-categories.
- A mark scheme, or a sample paper accompanied by a sample mark scheme, could be given to the past papers provided, to enable students to understand how marks are awarded. If the finer details are not wanted to be shared, then numerical answers with some verbal explanation would help students know if they are heading in the right direction.

- In order to understand how students have fared with their marks, some statistics, for example mean and standard deviation, could be provided so that students are able to understand the distribution of marks throughout the cohort. This would also enable a greater transparency of marks given and assure students that they are being marked fairly.
- Introduce a system which will enable students to review their exam scripts, either over summer and after the exam board, or at the start of each academic year.

2. Organisation and Management

Numerous comments were made surrounding the Organisation and Management of the course. Most notably, students commented on the lateness of changes to deadlines and lack of communication between staff and students. Despite a large increase of 13.4% to 68.9%, which suggests significant improvement from the department in this area, this category ranked second lowest of the NSS response categories for the department more time on top of their already heavy workload to catch up on lecture content.

Quotes from NSS comments:

"A member of staff made changes just three to five days before a deadline, which was pretty frustrating."

"There was a lack of communication and navigation to resources pertaining to the course."

"Occasionally poor communication, lack of understanding of a reasonable workload/expectations."

"Communication about timetable[s is] often very last minute."

"There were some gaps in terms of communication between staff and students. The staff in the department can be quite unapproachable, as their jobs also entail research along with teaching, and are often busy. Therefore, staff should allocate more time to students and their needs within the department, personalising their services and ensuring everything runs smoothly."

Proposed solutions:

- Outline the availability of lectures and staff and make this clear in the department itself, as well as online for example on Blackboard and Teams. From this, students will be made aware when they can approach and contact staff outside of teaching time for extra help.

- Ensure the handbook is the central point of all information, such as deadlines or marking time, and is kept up to date with the most recent information so that students can rely on the information presented.
- For each teaching module, include the recommended resources and relevant content that students should be made aware of, enabling students to understand where they can look in times of uncertainty surrounding knowledge.
- Provide a short summary at the end of each lecture displaying key points of that lecture or three key takeaway points to cement progress and learning.
- If any changes are made for an assignment, they should be made with at least a week's notice of the deadline and should be clearly communicated. This could resolve the need for deadline extensions.
- Monthly or bimonthly events could be organised with lecturers or year coordinator so they are more approachable to students and a greater sense of belonging and togetherness is achieved.
-

3. Learning Opportunities

This category, Learning Opportunities, presented the most contrasting views of the responses. Lots of positive comments that were received mentioned the wide scope of the course and good quality of teaching from a high calibre of teaching staff. Students felt that the hands-on nature of the course is supplemented by including interesting laboratory sessions that really make the course its own. However, the lack of maths in the later years is disliked by students and opportunities during term-time, specifically, are limited. Learning Opportunities received a student satisfaction of 77.9%, up from 70.2% in 2020, implying a great response from the students of the department's efforts and is extremely apparent from reading the vast number of positive comments received.

Quotes from NSS comments:

"The teaching staff made the course interesting. The scope of the course is broad, covering not only technical stuff, but also economics and finance."

"I enjoy the hands-on education, there are a lot of hands-on projects everything that was practical was really well done and there was a wide choice of modules in my final two years."

"Great chance to meet people from all over the world and make interesting friends. Very intellectually stimulating course, I enjoy my course covering a large range of content. Large number of labs was an enjoyable break from lecture and homework."

"Good teaching. Good learning. Good research opportunities."

"Great combination of theoretical and practical concepts."

"Math is not taught in the third year, unbelievable for an engineering degree."

"There is a significant lack in delivering lectures focusing on basic sciences and maths. Being an engineering degree, one would expect there to be at least an equal number of credits across maths and physics, as there would be for specialized engineering courses. This makes it very difficult for students wishing to pursue further studies to meet admission criteria, even for management degrees!"

"Don't get enough resources to use at campus."

"Opportunities on campus, i.e., research, are pretty hard to come by. There aren't any opportunities to get real experience outside the classroom during term time."

"I like how the science and engineering are brought together for this program. We have lots of experiments, but also design projects. Courses are comprehensive that cover all the essential aspects of our future careers."

"It was an honour to be taught by researche[r]s who are at the top of their field, doing cutting edge research, and to personally (through my thesis) work on these projects with them. I love Imperial and I wouldn't change it for anything in the world!"

"The research oriented and integrated learning of the course as a whole has left me with skills that extend beyond just academics-time management, working with others, being organised, and it was a positive experience beyond just a university degree."

Proposed solutions:

- In first/second year, surveys should be sent to students throughout the degree to gauge or identify the students who would like more help or with basic maths or science so extra sessions or resources can be organised accordingly.
- All opportunities available during term-time should be advertised and suggestions given to help students find external opportunities, if internal opportunities are limited.
- Ensure that students know where to find extra help when on campus so that resources are easily accessible and the department can be informed of what resources students are in need of so that they can be more readily provided.

NSS Recommendation for the Department of Mechanical Engineering

Written by Isabela Lopez and Angela Sun, in collaboration with Imperial College Union

The following recommendations were based on comments written by final year Mechanical Engineering students in the National Student Survey (NSS) and read by the 2021/2022 Departmental Representatives.

Comparing this year's results with the previous, all but one section of the survey had a decrease in percentage points. This is shown in the table below.

National Students Survey Results	2020	2021	Change in pp
The teaching on my course	90.00%	88.49%	-1.51%
Learning opportunities	88.12%	85.13%	-2.99%
Assessment and feedback	76.30%	73.56%	-2.74%
Academic support	87.83%	79.62%	-8.21%
Organisation and management	92.46%	84.65%	-7.81%
Learning resources	93.04%	82.25%	-10.79%
Learning community	83.91%	82.01%	-1.90%
Student voice	89.77%	82.13%	-7.64%
Student representation	45.13%	53.24%	+8.11%
Course satisfaction	94.74%	87.05%	-7.69%

It is likely this decrease was affected by the conditions of online learning during the Covid-19 pandemic, however, this should not negate the comments made by graduating students. We are very happy that despite the inability to see each other face-to-face, students felt they were still represented well.

We hope that the changes suggested below can help further improve the department.

1. Review course workload and time

The most popular negative comment from students was regarding the workload and time. Students often felt like they were not able to manage a good work-life balance during the academic year and wished they could have more time in developing their other skills during university.

"The course workload is very high and standards frequently feel unreachable, there is no doubt that student wellbeing suffers as a result. The university experience has been solely academic, social side is practically non-existent. Although I don't regret doing the course and love my subject, I have not enjoyed the university experience overall."

"No time."

"Imperial doesn't have a ton of opportunities for people to explore engineering interests beyond your course. There are societies like robotics, drone, data science, etc. but there is limited time to do this so it relies on people to have done it on their own most of the time. Funding for these societies is also limited compared to universities in the US it seems so the activities are somewhat limited at times. However, compared to other universities in the UK, Imperial still does pretty well."

"Results are too exam-focused in 1st and 2nd year. Other departments have mastery exams and place more emphasis on coursework spread out through the year. Courseworks are very time consuming and count disproportionately little to your final end of year mark. Very few examples of good/bad work is provided for coursework assignments to gauge the level of work to expect."

"Even though there are plenty of opportunities and facilities, there is hardly ever sufficient time to explore other interests outside your area of study."

"The amount of work is very frequently excessive without any clear indication as to what we are learning from it. Maybe there is a reason for requiring students to spend the vast majority of their time on academic work but this is not readily communicated."

Requirement	Recommendations
Students should be given enough time outside of their studies to pursue entrepreneurial projects or other projects	• Decrease coursework and space deadlines adequately. • Increase oral reports (success in first year thermo) • Better signpost the calendar for coursework deadlines that is currently on Blackboard. Students could benefit from having this included in the student handbook, or put the digital copy in a more accessible folder online.
Marks given for coursework should reflect the time and workload needed to complete them successfully.	• Increase weight of the coursework mark or, alternatively, decrease level of work expected so students spend less time on it. A great way to do it is provide students with a template for reports that have a lot of content, e.g. the Material report that ME2s write.
Exams should test a student's ability to apply understanding rather than their memorisation.	• The open book exam format used in online exams has worked well. This format should be kept for in-person exams, especially for subjects that usually require high levels of memorisation.
Course Notes available at least 24hrs in advance	• Ask students to feedback on when course notes are not available

2. Improvement of Wellbeing Services

Many students within the Mechanical Engineering department felt that wellbeing and mental health services could be improved. During the NSS training session, many student representatives from other departments also felt that the college counselling service and personal tutorial structure were lacking. The Mechanical Engineering department was often praised in the positive comments section of the NSS regarding staff support for students, however some students still suggest some structural changes could be made to the personal tutorial support scheme.

"I found the college mental health services to be lacking, with long waiting times and limited services offered. This appeared to be due to understaffing/funding."

"Lack of consistency across tutors when it comes to personal tutorials and project supervision. I have only met my personal tutor twice since first year compared to others who still have regular meetings."

"The senior tutors & lecturers in the Mechanical Engineering Department are excellent, truly care and dedicate an immense amount of effort to improving the course and helping students."

Requirement	Recommendations
Student wait times for counselling services need to be greatly reduced, and more that 5 separate hour-long sessions need to be available for each student. This is because the Departmental Well-being Advisors do not have the same role as counsellors.	• Allocate more college resource for counselling services directly, so that more students can access this support. • Alternatively, offer discounted/subsidised counselling services that students can use instead of expensive private counselling, or the NHS service, where wait times are even longer than Imperial's.
There needs to be a more uniform standard of personal tutorial support across all tutors and all departments.	• All staff members of any department acting as personal tutors need to be given training on how to provide academic AND wellbeing support for students as college policy. • A record of personal tutorial meetings should be taken to ensure that all tutors are meeting with their tutees at the same frequency. • If free coffee or dinners are offered on department budget, these should be mandatory for all tutors to do within a certain time frame, to mitigate the disparity of tutor support and engagement across the student body. • If personal tutors fail to meet the criteria needed for adequate support of students, e.g. at least 3 meetings per term, and take their students out for a meal, they should not be allowed to be a personal tutor.

3. Improving the Culture at Imperial

Several students commented on an issue with culture within college and its effect on the student experience and satisfaction. Cultural reform has to happen across the whole university, not just within the departmental level. However, there can be a few changes within the department to facilitate this.

"I think there is still work to be done in terms of culture and opportunity at Imperial and MechEng has its own role to play. I think that more could be done to help combat racism and sexism in the department, especially through proper education of staff and students. I also think that MechEng would benefit from better outreach and further supporting students who are disadvantaged."

"A college run by bullies is hardly going to be a positive experience."

"The attitude of staff and students can be overbearing, in that there's an expectation to 'just get on with it' no matter what the circumstances."

Requirement	Recommendation
The overall culture at Imperial does not cater to the minority groups and those of underprivileged backgrounds. More specific support needs to be available for students AND staff of these groups.	• There should be some structural change in the union's paid roles and volunteer roles. There should be an addition to the Deputy President roles, specifically a Minority-Groups Officer, whose responsibility encompasses issues of all minority groups. This is a separate role to wellbeing as it is specific to students of minority groups. They can then alleviate the burden and pressure put onto the volunteer roles, e.g. Black & Minority Ethnic Students Officer. • Each department should have an EDI coordinator assess their department, which the MechEng department has successfully appointed.
Students do not engage with upper management of college, nor do they really understand what happens with decision making within the college.	• There could be better signposting to where students can access information to do with upper management. For example, the union could run a campaign on its Instagram or other social media to improve student understanding of the what the union does and what the college does.
Better relations between staff and students, especially for those of different backgrounds.	• Introduce a reverse mentoring scheme within the department. This has been successfully implemented within higher levels of college, as explained by Stephen Curry, and can and should be done at the lower levels too.

4. Feedback & Assessment

While students enjoyed the range of subjects and the depth of knowledge taught, many thought that the differences in marking between assessors was extremely variable. Through talking with students in general, it is well known to avoid certain lecturers as supervisors as they either mark badly, or give little to no feedback or support on projects.

"There should be better standardisation in terms of providing grades for everyone. Some lecturers mark leniently and some mark too strictly which can disadvantage some students. In terms of some of the coursework that especially with cases such as an extraordinary circumstance such as the pandemic last year, some of the grades given were not reflective of the effort that students had put into the work"

"Feedback and mark schemes are acceptable; however, it is often not clear what is required to achieve the highest-grade band - specifically the top grades of the highest band. Marking for exams is reasonable but marking for projects and coursework is very dependent on the supervisor. There is no standardised mark scheme for projects leading to huge discrepancies between quality of work, amount of work, and final grade achieved by different groups doing the same project."

Requirement	Recommendation
Transparency in Moderation	• Report to students when moderation took place and by how much so students can gauge if their mark is representative of their understanding.
Transparency in Marking & Grades	• Have dedicated tutorial sessions for the sole purpose of receiving one-to-one feedback on an assessment– especially in design. • Students should be told their final marks in each assessment, not only the final mark of the module • Provide students with a solved paper (even if without marks, so no negotiation can take place) after the exam. This especially benefits student learning, as they can spot their own mistakes and not bring a lack of understanding to the following year
Consistency in Marking & Grades	• Allow students to feedback on whether they thought their coursework was marked as expected, marked under, or marked over expectations. If this data is gathered for all coursework marked by an assessor and across multiple years, the department will be able to see whether students consider certain lecturers to be more or less generous in their mark allocation.

5. Engage Students with the Research at Imperial

Some students commented on how the student body could benefit more from being engaged with the research happening at Imperial. Though this was not a common comment, this was added as the recommendations seem very feasible and would have a positive impact to the student body.

"The departments pride themselves in having close connections with industry. However, this is hardly noticed by undergraduate students. Even simple lab tours to see what research is going on would be inspiring."

Requirement	Recommendation
Students should be able to see what research is happening at Imperial	• Organise tours & talks about research happening at Imperial, including those from other departments. This would allow students to expand their understanding of the subject just beyond the course and assessments/exams, in a format that is familiar to them. (Guest lectures are good but aren't particularly close to home. It's always fun to hear about what your lecturers are researching at the moment, and what projects are going on.)

NSS Recommendation for the Department of Medicine (Medical Biosciences)

Written by Cristina Riquelme Vano, in collaboration with Imperial College Union

The following recommendations were based on the National Student Survey (NSS) 2021 BMB results and the opinion BMB students expressed in the Student Union survey regarding their course. According to the NSS BMB 2021 results there has been significant improvement in staff making modules more interesting (87.27%-2021 vs. 62.15%-2020), the course providing opportunities for students to apply what they have learnt (87.27% vs. 46.89%), efficient timetable (76.36% vs. 48.02%), and changes in teaching being communicated effectively (61.82% vs. 42.20%). Overall BMB course satisfaction has increased as compared to 2020 but there is still space for more improvement, especially regarding assessment and feedback and academic support, which are the main aspects that have worsened regarding student satisfaction. The following recommendations hope for a collaboration between the BMB staff and student reps, working together to improve the student experience.

1. Marking rubrics available for all ICAs

This recommendation was chosen based on the significant drop in satisfaction (40.74%-2021 vs. 59.32%-2020) regarding students thinking marking and assessment has been fair, according to NSS BMB results and the comments received by BMB students. Some BMB students have expressed they lacked guidance for some coursework leaving them unsure on how best to achieve what was asked of us. Not knowing exactly what it is expected from them is likely to result in them thinking the marking and assessment was not that fair, since they lacked some guidance.

Here some comments received from students quoted:

Most ICAs in BMB have already a marking rubric but clear and transparent marking rubrics (as well as instructions which already are) should be implemented for all ICAs in BMB so that students have a better idea on how marking criteria is done and therefore we can reduce the drop in satisfaction regarding students thinking marking and assessment has been fair that has happened this year.

2. Feedback on exams

This recommendation was also chosen based on the significant drop in satisfaction (40.74%-2021 vs. 59.32%-2020) regarding students thinking marking and assessment is fair, according to NSS BMB results and the comments received by BMB students.

Students are aware that they are not allowed to receive their exam scripts. However, students would like to go through the exam together with the module leads or the suitable teaching staff firstly, to learn what they have done wrongly and secondly, so they have a better idea of how they performed and the reason why they got such mark.

It is sometimes the case of students thinking they performed greatly in exams and then getting a lower score than expected and then thinking marking was unfair. If this recommendation was implemented, this number of students could reflect on what they did wrong and would not think it has been unfair. Therefore, we can reduce the drop in satisfaction regarding students thinking marking and assessment is fair that has happened this year.

3. Improve the learning community in the department by increasing effective groupwork

Background:

This recommendation was also chosen based on the significant drop in satisfaction (40.74%-2021 vs. 59.32%-2020) regarding students thinking marking and assessment is fair, according to NSS BMB results and the comments received by BMB students.

Some BMB students have expressed they lacked guidance for some exam structures leaving them unsure on how best to achieve what was asked of us. BMB students would like to have a revision session at the end for all modules where they can train with practice questions for the exams. Especially BMB students expressed they would like to practice more data interpretation that resemble exam questions and go through them with the module leads so they know the details of the answer they are expected. While this is already implemented by many module leads, there are some modules which lack of data interpretation and overall exam practice.

We suggest that this recommendation is compulsory across all modules in order to reduce the drop in satisfaction regarding students thinking marking and assessment is fair.

4. Fair group work assessments

Background:

This recommendation was also chosen based on the significant drop in satisfaction (40.74%-2021 vs. 59.32%-2020) in students thinking marking and assessment has is fair, according to NSS BMB results and the comments received by BMB students.

Some BMB students have expressed they have had a negative experience with group work assignments. They have felt like they have been allocated to groups where they have done most of the work and other people have done almost nothing and there hasn't been any consequences for the people who have not put effort into the work.

Here is a quote from a student:

"Some of my experiences with group work assignments have been negative. I have been placed in groups where I have had to do 80% of the work, some people in my groups have done almost nothing, and it doesn't have any consequences for the people who don't put in the work. This feels very unfair and there should be ways to see who have done most of the work and who have not done anything."

We suggest having a small percentage of the assessment grade based on students from the team anonymously ranking each other and providing between them feedback of teamwork to eliminate imbalance of workload. A platform that could be used for this is TEAMMATES (the one used in Lab Pod 2, which encourages students to participate equally since they will be ranked and that mark counts towards the placements of year 3).

Otherwise, this recommendation suggests eliminating group work assessments if there cannot be a track of equal input. This is, especially important given the COVID-19 situation which makes communication harder and can pose stress for students to have group work assessments, taking into consideration that the teamwork skills are already developed during the face-to-face sessions. Therefore, we can reduce the drop in satisfaction regarding students thinking marking and assessment is fair.

5. Avoid contradictory feedback when assessments are marked by two examiners

This recommendation was also chosen based on the significant drop in satisfaction (40.74%-2021 vs. 59.32%-2020) regarding students thinking marking and assessment is fair, according to NSS BMB results and the comments received by BMB students.

BMB students expressed they thought the feedback they received on coursework was not specific enough and often contradictory when marked by two examiners, especially when assessments are oral presentations or storytelling markings. This is due to the marking system used for those assessments, where feedback sentences are already pre-set so the examiners just have to click on the ones they do think that correspond to the presentation.

Two markers can disagree in certain aspects, but BMB students think examiners should discuss between them thoughts on the assessment before submitting feedback to avoid very contradictory feedback (i.e. "great discussion of your presentation" and "student really struggle to follow up the discussion of their presentation"). Although they might disagree in certain aspects of the marking, the student overall should get clear feedback on how they performed if they want to improve in the future. Therefore, we can reduce the drop in satisfaction regarding students thinking marking and assessment is fair.

6. Better organised Y2 optional module and Y3 short module fair

This recommendation was chosen based on the significant drop in satisfaction (55.56%-2021 vs. 77.40%-2020) regarding students thinking good advice was available when they needed to make study choices on their course, according to NSS BMB results and the comments received by BMB students.

For choosing Y2 and Y3 modules, in addition to having module leads present some previous information of the modules before the fair, BMB students would like to be able to ask some Y2 and Y3 students about their experience studying those modules.

This has been previously done but students have reported that it was a bit unorganised (students at the end not answering their questions and/or leaving whilst the Q&A session was running). They also felt the department did not get as involved as they would have liked to, since as the opinion of senior students are very valuable for the incoming years.

We therefore suggest that the department coordinates with the ICSM (BMB president and Academic Officer) to have more organized Y2 and Y3 fairs with senior years so they can get honest feedback from them. Therefore, we can reduce the drop in satisfaction regarding students thinking good advice was available when they needed to make study choice.

7. Regular and monitored contact with Personal Tutors

This recommendation was chosen based on the decrease in overall satisfaction with academic support, namely in receiving sufficient advice and guidance (54.55% - 2021 vs. 66.10% - 2020), according to NSS BMB results and the comments received from BMB students.

Contact and support from personal tutors varies greatly within the cohort with some students having termly personal and group meetings, while others have never met their tutor. Some have also been allocated tutors that have no relation or knowledge of BMB and feel as though there is insufficient support as a result. Here are some quotes from students in relation: "I did not feel like I had a close relationship with my personal tutor", "Often left to your own devices. Did not have a personal tutor throughout my three years!"

To resolve this, we suggest that personal tutors have a prerequisite of having some involvement in the BMB course or working in the department, with preference given to those with experience in a pastoral role. Tutor groups should be capped at a maximum of 8 students to ensure a relationship can be formed between each student and their tutor to achieve the best support. Personal tutors should also adhere to the set criterion of a minimum number of meetings a year, including at least one group meeting and one individual meeting per semester. As such, this should be monitored with an online form for tutors to complete after meetings and with feedback surveys each semester for confirmation from students. Students should also be made aware to contact either the FEO, welfare reps, or officer if their tutor is not responsive for reallocation. Therefore, we can reduce the loss in satisfaction in academic support.

NSS Recommendation for the Department of Medicine (MBBS)

Written by Julia Komor, Rebecca Thompson, Roshni Patel, and Rayyan Islam, in collaboration with Imperial College Union

As the incoming academic officers for 2021/22, we have had the pleasure of discussing and analysing this year's NSS responses to identify key positive and negative themes and make suggestions for improvement based on our findings. As a result of this process, 4 sets of recommendations have been devised in liaison with Imperial College Union representatives, who ensured that the points were clear and actionable.

We are pleased to see that the NSS results showed an overall improvement in course satisfaction, with a rating increase of 11.75% in comparison to last year, reaching 91.63%. In particular, the 'Student Voice' and 'Assessment and Feedback' components were rated over 10% higher than in 2020. However, there are some aspects of the student experience that could be improved further, such as the 'Student Representation' and the 'Organisation and Management' components. We are looking forward to collaborating with the faculty of medicine to further improve the student experience of the MBBS course.

1. Consult with students on upcoming large-scale decisions which affect us

One of the key issues raised by many students was regarding important decisions about the medical school being finalised without consulting the student body. This has been a consistent concern amongst ICSM students who feel that their opinions are often disregarded, despite these decisions directly affecting their student experience. Further to this, students felt as though many of the decisions were made without any prior information being given regarding the intended changes, why they are being implemented, and crucially, without addressing the student opinion on these proposals.

For the graduating cohort this year, a pertinent theme was the upset surrounding the recent sale of St Mary's Medical School Building (which was confirmed on 08/06/2020, just 10 months after the College first announced their intention to sell) and the moving of MDLs from the Sir Alexander Fleming Building, the student hub for ICSM. This builds upon a series of large-scale decisions made in previous years where similarly, a lack of student voice and involvement was noted.

"The lack of student input before decisions are made, shrouding of details around decisions, and clear tick boxing of consultation (proven by the fact all meaningful consultation that wasn't patronising and disrespectful has been led by those not at the top of the School and Faculty structures) has been frustrating and at times insulting."

"Finally, decisions taken by the College regarding ICSM facilities (e.g., at St. Mary's and MDLs at South Kensington) without prior consultation of the medical student body has been appalling."

"I think a lot of high-level decisions that affect the student experience are made without student consultation. E.g., sports grounds sale/movement, sale of St. Mary's, closure/suspension of Reynolds Bar (it was never reopened after first lockdown despite Beit reopening)."

"There is limited or no student involvement or communication in key decision regarding facilities, e.g., sale of St. Mary's building"

"Faculty has sold St. Mary's Hospital Medical School and closed off MDL rooms in SAF without consulting students."

"Various large decisions made without much/if any student consultation: sale of Heston sports ground, sale of St. Mary's medical school building, loss of MDL labs."

"Lack of student voice in decision-making that affects medical students such as selling buildings."

"There have been a number of times when the faculty will make major decisions without the input of students, and often will then seemingly not care when students don't like those decisions. 2013: Sale of Teddington with no student involvement in decision. 2015: Closure of the Teddington Memorial Bar at Heston with no student involvement. 2018: Move of medical student sports from Heston to Harlington with no student involvement. 2018: Attempted closure of St. Mary's Pool with no student involvement. 2019: Sale of St. Mary's Hospital Medical School without student involvement. 2020: Loss of MDL labs with no student involvement and refusal to confirm SAF will remain the home of ICSM undergraduate education."

"There have been a few instances of big changes being made whereby we are simply emailed about the change & that we have no say in the matter"

"Imperial has consistently made huge decisions affecting the medical students without consulting or warning us."

Students have expressed a desire to be more involved with decision-making, particularly in those circumstances where the outcomes have implications on their medical school journey or the experiences of students to come.

> *"Can sometimes feel as though Imperial College does not consult the medical students about issues that directly concern us - for example selling St. Mary's campus and using the MDLs in SAF for a different faculty. We are not often consulted even though student consultation should be an important part of any decision that ultimately affects us."*
>
> *"Students should all be stakeholders in these decisions as they are for their benefit as much as the benefit of the college, however, the whole process felt very non-transparent."*

Recommendations:

As per student feedback, it would be greatly appreciated if students could be thoroughly informed of proposals that would greatly change their student experience as soon as the ideas are being conceptualised. This would allow for student involvement, mediated via ICSMSU, to be present throughout all stages of large-scale decision-making, enabling and empowering the student voice to be heard.

Furthermore, as discussions develop surrounding significant proposals, students should be updated at all opportunities with their opinions sought and either addressed or acted upon. This should be implemented sufficiently in advance to allow time for ICSMSU to consult the wider student body for their input. Clearer communication during the deliberation stages would greatly facilitate wider student satisfaction and overall acceptance of the implemented changes.

In addition to clear communication throughout the deliberation stages of large-scale decisions, outcomes of the finalised decision should be relayed to the wider student body with the utmost transparency and clarity. Regarding the sale of St Mary's Medical School Building, the proposed use of the finances gained from the sale has remained relatively vague: "used in ways that will benefit students and staff and help create the next chapter in the rich history of Imperial's Faculty of Medicine" with the main aim being to create better facilities for medical education and research. However, this is neither a measurable nor tangible outcome for students – it would be appreciated to have clear, actionable and focused plans including details of any new resources that will be made available, new sites for expansion, how long this will take to implement, exactly how students can make use of these new facilities, how current and future students will be impacted by this and how much of the money will be directed towards these student-oriented targets vs other uses which may be within or outside of the Faculty of Medicine. This clarity has been greatly lacking thus far and would be helpful once again in facilitating student acceptance towards such large-scale decisions.

To ensure the phrasing and manner of all communication is appropriate, and to adequately manage student expectations (particularly for large-scale decisions which are likely to face conflict), correspondence to the wider student body should be drafted in a collaborative approach, involving both staff and students from ICSMSU. This would ensure the relevant academic and social implications of the decisions are relayed to the students whilst considering all parties involved in and affected by the decision-making.

2. Communicate more clearly and regularly with students

In tandem with the lack of student consultation on major proposals, a consistent concern has been the more day-to-day lack of communication surrounding the course from faculty. Students repeatedly mentioned times where they received important information late, in vague terms, or not at all. Frequently, information may be available but poorly organised and therefore hard to find. Particular points of upset include when there is no clear communication on changes or decisions made about students and the course, in general worsening student experience in a variety of areas.

Exams were a troubling example of this, where mistakes or vague communication led to errors for students taking exams or receiving results. Another frequent point of concern was the lack of communication regarding important issues and actions that faculty intends to take on problems such as sexual assault.

'Improved communication from the University senior leadership team ... especially regarding decisions on the sale of the St. Mary's Medical School building and any future similar decisions is also important to facilitate student engagement with these decisions'

'There have been times when students are not communicated with until the last minute, or even late.'

'Poor communication'

'I don't think that decisions are always made in the best way via communicating with students and hearing their opinions. There have been a few instances of big changes being made whereby we are simply emailed about the change & that we have no say in the matter'

'Need for more transparent communication.'

'We need outright protection and resolution to these problems with clear communication with students.'

'Poor communication by email and changes that have not been well communicated.'

'Timetables for placements are often communicated very late, sometimes even only 1-2 days before, showing little consideration for students and not allowing them to plan.'

'I also am very disappointed with the way in which the college has handled a very specific indecent pertaining to reports of sexual harassment and assault. I know that as a year we were very distressed by this and in the future changes should be implemented whereby there is better communication between faculty and students when incidents like this arise.'

Positive Feedback

Despite these comments, students did praise examples of positive feedback specifically relating to COVID-19. A great example of this was the weekly all-student briefings, consistent and detailed explanations of faculty's efforts, the opposite of the more typical irregular, vague, and late comms.

'The student facing communication was very good especially in these tough times.'

'Good communication with the faculty on the changes for our course, placement, assessment due to COVID.'

'This has been clear during the course of the pandemic, to which the faculty have done their utmost to give clear communication and to ensure the course continues to run as smooth as possible.'

'We have been very well supported during the pandemic, with weekly updates and bulletins alongside year meetings. We were notified about most changes in good time.'

Proposed Solutions

In short, the best examples of clear communication were those driven by COVID-19: we'd therefore recommend maintaining some of the measures created during this time as they have been markedly successful.

All-student briefings should be continued. While these might not need to be weekly as previously, regular updates on the work being done by faculty and upcoming changes and important decisions are essential for maintaining a culture where students are always informed.

While students have commented that information is sometimes hard to find, this has been less of an issue during COVID due to information being organised in specific forms, simplifying the process. Going forward, it should be more explicitly stated where specific pieces of information can be found, and this signposting should be easily accessible for students to reference at a later date.

Finally, as with the aforementioned major proposals, there needs to be a shift in communicating information to students as early as possible - this not only contributes to the student experience but also enables more student engagement with Faculty overall.

3. Mitigate discrepancies in exposure and teaching across clinical sites

Numerous students raised concerns regarding the disparity in teaching and clinical opportunities provided across clinical sites. Whilst we note the enhanced difficulties in standardising clinical placements introduced by COVID-19, this issue has been longstanding, as evident from its inclusion in the 2020-21 NSS Recommendations Report.

Further, students have commented on an overall lack of centralised, quality-assured clinical teaching, with particular reference to the third year of the MBBS course. Many felt their clinical placements alone did not adequately provide them with the core medical and surgical knowledge essential for advancement through their degree. The Learning Resources rating of 89.3 (-2.2pp from 2020 data) likely reflects this perceived teaching vacuum.

'There is not comprehensive didactic teaching on basic clinical medicine'

'There needs to be more bedside teaching - I can probably count the limited bedside teaching sessions I've had throughout medical school. When I had them, they were most often amazing, we just haven't had enough.'

'There was too much discrepancy between one firm and the other in terms of teaching and skill that it just became a lottery.'

'Clinical placements far too variable in quality, some are vastly better than others. The so-called 'good' firms should tell other firms how they run in order to improve student experience'

'More structured teaching in 3rd year (but this has hopefully been addressed). A way of better standardising how some people have excellent placements, others not so good (centralised teaching is one way, but perhaps providing a checklist to consultants of what they should be expected to provide in the firm).'

'I felt in 3rd year we were left with very little guidance. Without external sources like MedEd and unofficial OSCE tutoring group, I think we would've struggled to pass the year.'

'More often than not you rely on older years notes to revise rather than any standardised resources produced centrally. Students should not have to rely on the good will of other students and societies in order to adequately progress through their clinical education.'

Positive Experiences

Despite concerns, several students shared highly positive experiences of clinical placements and specifically, the impact of quality bedside teaching. Such success stories further emphasise the theoretical benefit of addressing reported disparities.

Proposed solutions:

It is evident that the standardisation of clinical teaching must adopt a two-pronged strategy. Firstly, expanded (quasi-)centralised teaching mapped to examinable learning objectives to ensure baseline clinical competency amongst students, without dependence on external resources and events. Secondly, enhanced monitoring and regulation of site-provided teaching to avoid conflicting learning experiences and ameliorate the vast discrepancy between clinical attachment qualities.

Specific recommendations identified include:

Introduction of practical FY1 Competencies – increased attempts to incorporate prescribing via tools such as Practique are recognised and appreciated by many students. It would be beneficial to build on these resources and integrate skills such as discharge summaries and basic ward round documentation throughout the clinical years rather than solely at the later stages of final year and via the new PFA programme. Increasing students' knowledge of and exposure to these skills may also enhance student engagement and job satisfaction within clinical teams, in addition to improving practical competency upon graduation.

Dedicated bedside teaching opportunities – assigning small groups of students a placement 'Mentor' to provide regular 1:1 or small group teaching, targeted to difficult clinical theory, physical examinations, etc.

- This would provide regular opportunities to embed OSCE/PACES and Written exam content with greater certainty in teaching quality (tutoring led by fellow students is highly useful but insufficient to establish clinical competency).

- Additionally, this scheme provides valuable and easily monitored opportunities for FY1 and other Juniors to enhance portfolios and teaching experience.
- Finally, it alleviates the strain placed on clinicians in having to throw together teaching sessions at short notice for students on wards/in clinics.
- One student, in fact, reported successful implementation of this programme already 'In one placement, we were each given a registrar as a 'mentor' who would give us extra one-on-one teaching and more practical opportunities - this was fantastic'.

Faculty-informed tutorial programmes on placement – establish a series of "core" medical and surgical themes for each Clinical Year e.g., Gastroenterology, Neurology, Endocrine for Third Year students.

- These themes should be covered in tutorial format throughout each placement, regardless of ward allocation to negate for students' highly divergent allocation of specialties i.e., some students will complete all 3 clinical years without any time spent on the Respiratory ward.
- Sessions are likely to be led primarily by teaching fellows but in whatever format is most appropriate for the individuals involved – PPT lecture-based, TBL, patient-centred, etc.
- Additional teaching and educational support from practising clinicians, fellows, etc. is incredibly welcome and may incorporate innovative sessions targeted to the placement site and type, but this tutorial system should form a minimum-required basis for placement teaching.

Introduction of 'Clinical carousel' events – Caplan et al. 2020[1] report the successful use of weekly carousel (rotating, station-based) teaching to enhance ward learning and provide students with a protected environment to develop patient communication and practical skills, with the opportunity for direct feedback (Fig.1).

- These sessions would run in a format similar to the Endocrinology TBL sessions conducted in Years 1-2 in the SAF MDL rooms and/or Clinical Skills teaching provided at placement sites in Year 3.
- COVID-19 adaptations including, but not limited to social distancing, specialist nurse and simulation stations to replace patient-based stations, regular disinfecting of clinical skills, and simulation equipment could be identified and implemented as required, to reflect ongoing risk.
- Additionally, we could look to adopt a phased introduction of these events, initially hosting 1-2 station sessions based at each of the clinical sites once per term and adapt as required, as informed by facilitator and student feedback.
- This proposal is admittedly the most logistically challenging, requiring organisation of equipment and extensive staffing hence would be held more sporadically, perhaps 1 session annually for each of the three clinical years.
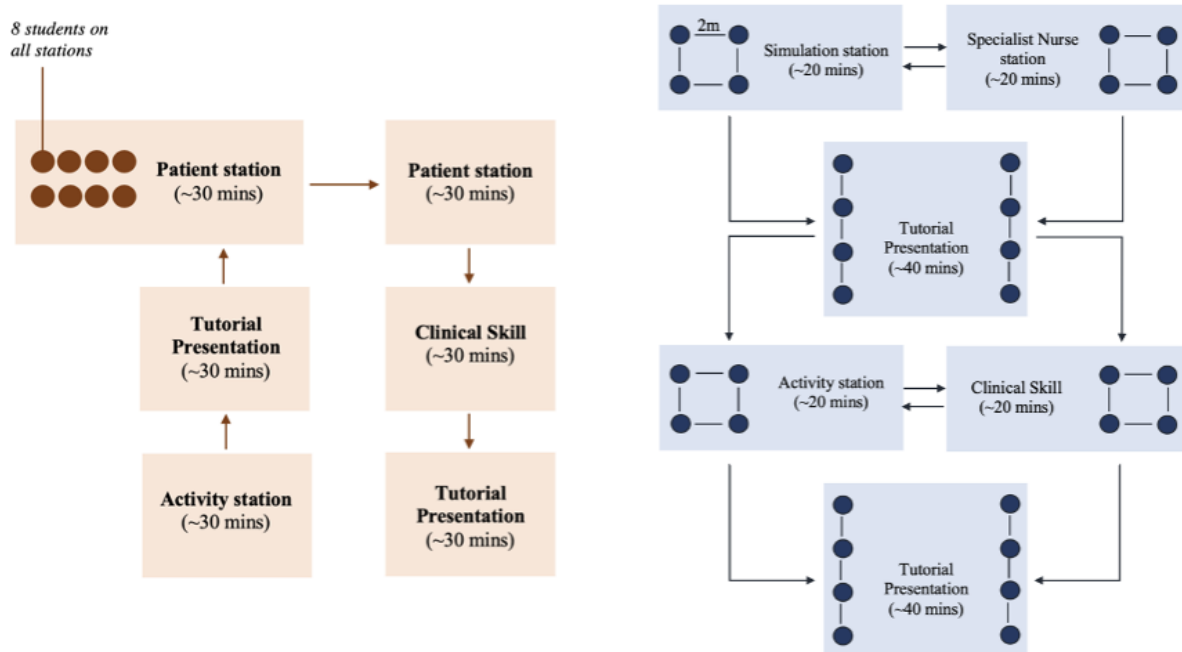
Figure 1. Clinical teaching carousel, pre and post COVID-19 precautions (left and right, respectively). Adapted from Caplan et al. 2020.

Caplan, J., Clements, R., Chadwick, C. et al. Medical Education in 2020: Developing COVID Secure Undergraduate Hospital Placements. Med.Sci.Educ. 30, 1677–1683 (2020). Available from: doi.org/10.1007/s40670-020-01080-2

4. Address discrepancies between offered versus provided welfare support

A common theme among the issues raised in this year's NSS responses for MBBS graduates was the clear discrepancy in what welfare support is advertised (both by College and by the ICSM) and what is available and provided to students in need. Many students felt that the faculty had done a great job recently in signposting what support is available and how to access it, as well as outlining key persons of interest such as Senior Tutors or the Welfare Team. However, there were several instances in which students had reached out to the correct people or had tried to identify the best point of contact for a particular issue, only to be disregarded or even threatened with fitness to practice concerns for addressing their problem in the first place. This approach is detrimental to student wellbeing and discourages people from seeking help, which can lead to serious consequences both in terms of their health and academic performance.

"On a number of occasions, the welfare support provided has been absolutely terrible, and detrimental to my welfare […]. I have left meetings with senior members of the welfare team feeling suicidal because of how I have been talked to, and ended up being referred to therapy in order to cope with what had been said to me. [...] I have been threatened with a fitness to practice assessment […], based on having asked a trusted member of staff for support, because apparently, I 'should not talk about my mental health to anyone other than healthcare professionals looking after me, as I might make other people feel uncomfortable.' […] I was further upset by the hypocrisy of the medical school tweeting, on World Mental Health Day, that if you're struggling you should reach out to someone, such as a trusted member of staff - I had done exactly that and been stigmatised and threatened as a result.'

'The welfare system is terrible, the senior tutor I encountered was undermining and difficult to approach when I encountered welfare issues in my second year.'

'There is a very concerning lack of care and empathy displayed from seniors surrounding student welfare and wellbeing at the College. Although the concept of welfare is used superfluously in news bulletins and emails, sadly, none of them carries any real substance when it comes to it. For example, in the Department of Medicine, there was a lack of understanding and outright refusal in approving any requested leave for students who have been away from families for almost a year due to the pandemic to go back and visit. The use of 'guilt-tripping' with comments on whether the student was willing to risk having to repeat an entire year and not graduate. […] Pretty shocking given the nature of what we had to see and endure on hospital placements during a pandemic and during the second wave.'

'Discrimination and bullying are rife and the faculty are not invested in student welfare, although they would like to think they are. The actions of the faculty and their lack of compassion and empathy have directly caused students' mental health issues. Some students are favoured over others.'

There is a clear lack of faith in the welfare system. Some students feel that they are met with a lack of empathy and compassion when reaching out for help, and in a few cases, they felt that this worsened their wellbeing. This is directly contrary to what a welfare support service should provide, and although it may not apply to every encounter (some students were very impressed with welfare support, see positive points below) it shows that there are flaws in the system which need to be addressed.

Positive Experiences

Despite the concerns expressed by many students regarding the quality of welfare support and the negative experiences they've had while using the support system, there are several comments which applaud the help and resources provided by faculty and show that there are students who feel supported by the ICSM welfare team.

'A key focus is placed on student welfare, and I have always felt that getting help and advice was easily accessible.'

'FEO Welfare team consistently do an amazing job, having those welfare talks at the start of the year is excellent (honestly you may start the year thinking you won't need it, but you can be mistaken), also the welfare guides sent around Christmas, Easter, etc., are sweet reminders that we're not alone, self-care, etc.'

'Student welfare and pastoral staff are excellent. Student concerns are taken seriously by the faculty of medicine.'

Although the numbers show that, overall, students feel well represented (75.29% agree, up 2.39% from 2020) there are no aspects of the survey which address student welfare directly, and therefore it is difficult to qualitatively assess how this aspect of student life has changed over the years.

Proposed solutions:

There is a lot of mixed feedback regarding the welfare system, with experiences falling on either side of the spectrum. In general, it seemed that the negative comments were more concerned with the staff approach to student issues, and what some felt as an apparent lack of empathy from senior members of the team, whereas the positive remarks praised the ease of access and clear signposting of resources by faculty.

- To improve the student experience of the welfare system going forward, we suggest the following steps:
- Implement an anonymous feedback system (using Padlet, for example) for every welfare encounter, which would allow students to voice concerns regarding the support provided - there is already a feedback form for personal tutors, but it may benefit from increased signposting and there should also be an opportunity to provide feedback on senior tutors and FEO Welfare. Understandably, these encounters include issues that are often very sensitive, and feedback may need to include identifiable details if relevant but would still reduce the risk of stigmatisation for the student and would highlight any issues within the system in real-time, as and when the encounters take place.

- Improve the welfare training provided to personal tutors and senior tutors in particular and involve students in the consultations – it would be beneficial to find out what students feel are the biggest barriers in contacting or obtaining help from their welfare system and use this to educate staff going forward and prepare them for their role (also beneficial for all staff members, not just those specifically on the welfare team).
- To build on this, host an annual session towards the end of the second term where students are encouraged to discuss the welfare system and their experiences so far, and what they feel would be best going forward – an informal coffee-meeting format could work very well for this, doesn't necessarily have to be hosted by faculty if students don't feel comfortable discussing it with them directly but the minutes/feedback should be presented to the welfare team as possible action points for discussion.

NSS Recommendation for the Department of Chemistry

Written by Chinny Lee and Krzysztof Oliwa, in collaboration with Imperial College Union

The following recommendations have been made based on the issues brought up in the NSS comments, combined with our previous experiences and feedback received by us as Chemistry reps. The NSS results for our department show that there has been improvement in satisfaction in all categories as compared to previous years, however there is still a bit of room for improvement, particularly in the 'sense of community' and 'timely feedback' categories.

We hope that we can keep working on these issues with the department, as we have in the past as year reps. We look forward to interacting with all the fantastic Chemistry staff and working together on improving the student experience.

1. Introduce a more standardised criteria into coursework marking

The issue of inconsistent coursework marking, where different markers produced vastly different marks, and vague requirements for lab reports have come up most often in the negative NSS comments. In some cases, students seemed unsure as to what exactly should have been included in the reports, and were given conflicting information on stylistic choices and what elements should be included.

'Marking of coursework sometimes felt inconsistent. In particular, certain stylistic choices were claimed by some staff to be essential practice, whilst others claimed otherwise. A broader, clearly understandable standard for what constitutes good work would have been appreciated.'

This issue of lab report marking is certainly a recurring one and has been mentioned in multiple SECs. The department has already introduced a workshop on how to write a lab report in second year, which has received extremely positive feedback. This could perhaps include This could perhaps include how lab reports are marked, as clarification to students on what they will be awarded marks for, and what will cause penalties.

'Better rubrics can be provided […] for better understanding on scoring.'

'For lab reports please make it clearer what is required […].'

'[…] more details about formatting lab reports and essays […] and not just citations.'

'Lab marking can also be fairly inconsistent.'

'Whilst marking criteria for lab reports/coursework is made available beforehand, sometimes these can be a little vague. […] Lab marking is questionable'

'There were huge mark fluctuations in the second year synthesis lab in-lab marking.'

'[…] When marking lab reports, different markers have different standards and requirements and it's really unfair when one marker gives really different grades on average than another marker. […]'

We would recommend that a more standardized method of mark allocation for coursework is adapted. This could take a form of rubrics that can be filled or partially filled and result in the allocation of a specific number of marks. Such a breakdown of marks would ensure that each marker allocates the same number of marks/penalises the same way for specific mistakes. Alternatively, markers could be required to explain why they are choosing to allocate a specific mark to a student in the feedback they leave. In addition to this a timely return of feedback should be ensured, as this (in particular through Q10) aspect showed one of the lowest satisfaction scores: 69%.

2. Introduce more in-person events to increase the sense of community

A lack of feeling of community has come up a few times in the NSS comments. The issue of a lack of sense of community has also been reflected by Q21 of the NSS showing the lowest overall score in our department: 64%.

'The sense of community within the department has improved but could still do with more work. As a whole, the college lacks identity compared to its older rivals [...].'

'Not a super large feeling of community [...].'

'Lack of community.'

'Being an ethnic minority from an inner London State School, I found it difficult to find my place in the community within the Department and this is still the case.'

Understandably, in the time of national lockdowns it was not possible for the department to organise any in-person events to develop a greater sense of community. However now that we have come out of lockdown, we would make the recommendation of aiming to organise as many safe and allowed events in-person as possible, especially involving the freshers and 2nd years who might have missed out on the experience. These could take the form of movie nights in the lecture theatres, lunchtime tea/coffee socials once we can return to campus, and many more. We understand that his recommendation also applies to us, and will aim to organise safe sociable events for students when term starts and collaborate with the department to provide these.

3. Integrate student participation in recruitment process for well-being related roles

It is generally felt that although well being services are adequately signposted, they are in actuality difficult to access.

"Whilst the department has done a great job at putting events and trying to create a community, which I have benefitted from. However, I know that there are many students at imperial who are still very depressed. The counselling service at Imperial is absolutely shocking and in dire need of more investment and improvement. Perhaps the department can get their own counsellor There are too many students that have to wait too long to speak to someone[...]"

"There are lots of posters around college and university about support for students experiencing sexual harassment[...]"

Complaints of students having negative experiences with college staff in well-being positions are also more common than should be.

"[...] But when I experience this [sexual harassment] within halls I tried to report it to the warden and was unable to contact him/her. I contacted my department and they said that it would be difficult to assist and when I clicked on the website links for students experiencing sexual harassment the links didn't go anywhere and in the end I gave up and received no help or support"

"I saw a counsellor from the college counselling service and was told my mental disability was something I was telling myself as an excuse for my poor work ethic and that if I don't like the college counselling, I should pay for my own private counselling, which I cannot afford"

Generally, students are grateful for the well-being services that are provided, but agree that they can be improved.

"Mental health support available to students could be expanded and improved."

This suggestion targets specifically the problem of well-being staff who may not be 100% invested in their role as a source of well-being support for students. It is suggested that a student panel be involved or a general student-opinion survey be done when appointing or hiring new well-being staff. A well-being figure approved by students would be less likely to take student well-being matters lightly. Students would also feel safer and more trusting of said figure, knowing that he/she was partly appointed by their peers.

The Physics department has in the past implemented a system where a student panel sits in on interviews for new hires into well-being roles.

NSS Recommendation for the Department of Life Sciences (Biochemistry)

Written by Erica Zhao and Kauthar (Coco) Benriassa, in collaboration with Imperial College Union

The feedback and potential solutions presented in this report were made based on the annual NSS survey. This year, Biochemistry has had an overall increase in scoring compared to last year and is ranked in the second quartile compared to other universities with only three areas falling within or below the 3rd quartile. Assessment and feedback was the only category that ranked in the 4th quartile with a score of 54 this year and 51.8 last year, only improving in rank by 2 positions from the 51st to 49th in HEIs. This suggests that this is a major area of improvement within the department.

Throughout this year, students felt like they had the right opportunities to provide feedback on the course to staff. The education team, in particular, helped students feel heard with their timely responses. However, overall satisfaction in the department decreased by 5.62% from the previous year to 81.14%. While the survey does not show any drastic decreases in satisfaction in specific areas of the department, it would be beneficial for us to improve areas with particularly low satisfaction such as feedback, student-staff connections and course organization. By tackling areas with lower student satisfaction, the staff and student representatives can forge stronger connections between staff and students while improving students' education experience and mental wellbeing.

1. Improvement of feedback quality and timeliness

Assessment and feedback is an area where the Biochemistry department ranked lowest among different categories of HEIs assessments, and the only area in the ranked in the 4th quartile. Although there was a general 2.08% increase in satisfaction to 55.08%, the responses in subcategories are polarized. While students found that there was clarity of marking criteria, only 57% of students thought the marking itself was fair and justified. This ties in with the shockingly low percentage of students who thought they received helpful comments in feedback (38%). Furthermore, timeliness of feedback return is still at 55%, even though it has improved by almost 20% compared to last year.

While the department has deadlines for feedback return, they have not been followed closely. For instances when feedback cannot be released on their set dates, the marker(s) should inform the department so that the department can send out an email to students informing them of the reason of delay, instead of leaving the students to chase the department for their grades. This would increase students' trust in the department and decrease their worry.

To tackle the unfairness many students felt about their marks, better quality feedback on assessments can be given. Students have reflected that one-word feedbacks only point out areas of error, but not the reason for it. A few ways of tackling this could be:

1. Providing a one-page summary of feedback: Some professors already to this, which is helpful for general takeaway points.

2. Providing markers with a guidance document for giving feedback, or requiring them to write 2 positives and 2 negatives with full sentences.

While students have said that the criteria for marking is clear, it can be difficult to apply criteria to real work. It would be beneficial to have sessions for students to look at exams and coursework and "mark them". Markers should also provide their marking and feedback to allow students to compare what they think constitutes a 1st class answer to a marker's.

2. Student-staff connections / support system

While students felt like they were able to contact staff, they had lower satisfaction in receiving advice and guidance for making choices during the course. The score was dropped 11% from 73.5 to 65.5, which is expected due to COVID regulations. Interestingly, only half of the students felt like they were a part of a student-staff community compared to the 82% of students who felt like they were given the right opportunity to work with other students. This shows the separation between students and staff which needs to be tackled so that students can feel more supported and heard. There were also many comments about the department and professors not looking after students' mental health.

The staff who were in contact with students did not seem to be very supportive or positive when it came to balancing wellbeing and education.

"Some staff/lecturers disregarded the need to do extracurricular clubs or societies when starting first year"

The division between students and staff should be tackled on multiple levels.

1. Personal tutors, who are the students' first point of contact, should receive mental health first aider training. Alternatively, provide them with a toolkit for signposting so that during the last 10 minutes of meetings with tutees, they can highlight some mental wellbeing resources.

2. Personal tutors should also cover mitigating circumstances during the middle and end of the term when students are struggling more with overlapping deadlines and exams. This will streamline the process around mitigating circumstances more and help students feel more comfortable applying for it.

3. More required meetings of at least once a month with personal tutors to help students feel more comfortable with asking tutors to meet up outside of allocated meeting slots and with opening up to tutors.

4. The physics department holds lateral personal tutor meetings, where people from all year groups with the same personal tutor meet. We understand that this is hard to timetable, so Microsoft Teams could be used to put everyone in contact with each other. At the start of the year, tutors could also suggest some group ice breaker activities to help everyone feel more comfortable with reaching out.

5. Arranging teas or other casual events for students and staff to interact with each other outside of lectures and labs. This will be arranged by the representatives, but staff should be encouraged to attend these events when they are made. Other departments like Medicine and Chemistry have arranged events like these in the past, which has encouraged networking and communication both amongst students and with staff.

3. Course organisation

This was the first year running this course online, which was reflected in the 27.5% decrease in satisfaction of course organization and management with complaints from clustered deadlines to the lack of lab components. While changes in the course and teaching was effectively communicated to students, there is a lot of room for improvement, especially in terms of the spacing of coursework deadlines.

"Times where deadlines were clustered together… When it [did] not need to be"

"The workload is at times extremely heavy which has caused me a lot of stress and has definitely taken a toll on my mental health."

The way deadlines are organized definitely has an impact on students' stress levels and mental wellbeing. Students are tasked with organizing their own time, but many Imperial students are perfectionists who will fret about the quality of their work until the last minute. The department can best support the students in the two following ways:

1. Communicating within the department to ensure that there aren't any competing internal deadlines and send out the coursework resources/protocol as early as possible to allow students better manage their times.

2. If deadlines have to be overlapped due to timetabling issues, the department should communicate with the student representatives to gauge stress levels of students and to discuss potential solutions such as moving the deadline forwards (for shorter, less time consuming / less weighted projects) or backwards (for longer and larger projects). This would also make students more aware of cluttered deadlines ahead of time so that they are better prepared for them.

NSS Recommendation for the Department of Life Sciences (Biological Sciences)

Written by Erica Zhao and Kauthar (Coco) Benriassa, in collaboration with Imperial College Union

The 2021 National Student Survey showed an 84.5% satisfaction rate in the general course quality at Imperial College London, the highest score in the Russell group and in London-based universities, increasing by 3.1% from a previous score of 81.4%.

However, there are still areas of improvement, especially in feedback and mental health and wellbeing areas of the department and in our course, which shows only 80.7% general satisfaction and 54.7% in the assessment categories, a decrease in 6.9% and 4.2% respectively when compared with 2020 scores. These themes were also mentioned across different departments and several times in the departmental recommendation meeting.

We have summarized these issues and proposed the following recommendations below.

1. Feedback, assessment and workload

One of the most common problems that students mentioned in the NSS was in terms of feedback, both in coursework and in exams. Students felt that feedback given to them was vague, untimely, and inefficient for any potential improvement in future exams or coursework. Students have complained that their personal tutors who specialize in another subject do not understand, and therefore cannot explain why and what the student did wrong on the exam.

Only 57% of students felt that their feedback was timely, and 62% felt that they received helpful comments on their work. In addition to not receiving timely feedback on their work, students have also raised the issue that workload is overly stressful and is causing their well-being to decline.

Below are comments from the 2021 graduates regarding feedback and assessment as well as their workload.

"Feedback received on coursework and exams is very vague and almost non-existent. Therefore, it is very hard to improve and to know what you did wrong. On top of that, exam corrections take very long (months) which does not allow you to reflect on what you did well or not as by the time you get the exams back you have almost forgot what the essay questions were."

"Markers also give overly critical feedback or no useful feedback at all on coursework, and as they are fulltime researchers, the department struggles to get them to follow-up and improve"

We were asked about the January exams and the feedback on the questions. There was a collective negative response with students agreeing that the questions were too hard and not suitable for the time given, yet the examiners' report said that the questions were reasonable and discarded students' views. "

"The exam process is very much oriented against students: exam papers are never returned to students after marking & mark schemes are not made available. This means we cannot go over our papers in our own time to learn from our mistakes & also cannot contest our grade if we disagree with marking."

"It is just too intense of the workload. No time to rest in between the modules, giving us courseworks and exams constantly one after another easily frustrates a student to the degree where he or she might face mental breakdown. A little bit less of a workload is advisable."

We have proposed a few recommendations that could be implemented to improve the timeliness and the quality of feedback.

Turnaround deadlines for feedback:

- If possible, have GTAs mark small sections on exams to decrease turnaround time.
- When feedback cannot be delivered on time, make sure that the Education Office emails students to inform them of the issues that the lecturer(s) are having.
- Having transparency with students can increase trust in lecturers and markers and decrease anxiety of receiving exam marks.
- Ensure all modules have a coursework calendar that states the expected return date of the exam mark

Improving feedback quality:

- Feedback should be delivered by the person who is marking the exam, and/or write a short exam report for their given question to highlight what they were looking for.
- Assessors should provide a one-page summary of feedback so students can identify positives as well as areas to work on
- Return copies of exam papers to students (or an alternative) so that they can understand their strengths and weaknesses and focus on areas to improve for the next exam

Decreasing workload/exam stress on students:

- As many exams are becoming essay-based, implement essay writing and exam technique workshops to help students to achieve grades that they deserve.
- Implement revision sessions for specific topics that allow students to complete questions prepared by lecturers in advance that resemble those of the exam, and go through these questions in the sessions

2. Mental health and well-being

A common theme in the NSS feedback was that students felt a lack of support from the department, with poor communication from staff, and feeling as though their voices were not being heard. There was mixed feedback regarding personal tutors, with some disappointed and others ecstatic by the help provided by them.

After going through the feedback focusing on mental health, here are our recommendations and reasons for them:

Clarity and streamline mental health services:

- Some students felt that there was a lack of mental health services provided for students, calling for improvements in this area, including more trained mental health officers, and compensation for those who are at a disadvantage due to certain difficulties or wellbeing impairments.
- However, there is support for such financial issues, as well as various routes for mental support, including trained mental health officers. One comment mentioned the time it takes to receive support, and while there is an option to use CBT (Cognitive Behavioural Therapy) online, there is no guidelines on how to benefit from this.

- To summarise, more clarity on what mental health services is available, and streamlining their accessibility would prove to be useful. Currently, to find help, one must go through the imperial website, which can be quite confusing. A clear, streamlined process on how to get the help on needs will be a significant aid in supporting students. Signposting could be done at the beginning of each year as opposed to once during Fresher's induction.

Personal tutor training

The personal tutor system has been a recurring topic in feedback and surveys. Some students have found that their relationship with tutors, were poor, with one stating:

'The personal tutor system can also be flawed - students can be assigned to uncaring tutors that don't arrange meetings, don't reach out to their student tutees & worst of all: don't do application references for students' internship/UROP applications, thereby directly hurting students' career opportunities…'

On the other side of the spectrum, students are thrilled, with a strong relationship with their tutors:

"Having the support of a wonderful personal tutor really helped me during my time at University. I wish everyone was as lucky to get such an amazing personal tutor."

One thing evident in comments was the need for constant communication between the two to nurture the relationship. While there were scheduled meetings at the start, this slowed down as the students' progress. Clear guidelines on how the tutoring system should work can help improve the bond and set out expectations for both students and tutors. Also, some tutors tend to know more or less than others due to their own position at the university, which has contributed to this contrasting opinion. A tutor who works as head of department will be able to provide more help for example than one who works is based in Silwood Park. If all tutors had the same training regarding how to help students and provided with all information relating to their tutees readily, this could also close the gap in differences between the quality of the tutoring system.

In some departments, a linear tutoring system is now being adopted. It could be beneficial to look at the results of this, and potentially utilising it in this department.

3. Social activities within the department

Some academics were described in the NSS as 'not approachable', while others found them as 'friendly and approachable'. There does seem to be a disconnect with students and staff, with some feeling as though the staff do not care about the students.

Department student relationship building activities:

- Besides promoting open communication, it would be good to have more informal interactions with staff, to help strengthen this relationship. It could also give the more introverted students an opportunity to connect, giving them more confidence to ask for help.
- The department should make an official pledge to change and focus on supporting the student's wellbeing, as well as outlining the steps they will take to do so. These steps could include reviewing current support systems, and providing sessions on how to deal with workloads. By directly opening a line of communication to students and staff, students could have a renewed confidence in the department.

More socialising opportunities:

As expected, social activities have been hit, with a decline in interaction with the college itself, and no apparent time to take part in the society events. Despite Wednesday afternoons being reserved as time off for students, this has not been enforced, with workloads not allowing for this day to be utilised for its purpose. Students have commented that they are in fact worried about taking a rest, in fear that it would negatively impact their grades, with a student stating:

"if I felt encouraged to join a society rather than scared that it would impact my degree, my mental health in first year would have been so much better and I would have actually had a work/life balance"

By having department-organised social activities, it could help the students feel more at ease in taking time off and preventing chances of burn out. These activities could simply be a pizza afternoon or a Prince's Garden picnic but can have ample effect in improving bonding between students and staff alike.

Transferrable skill sessions:

Being overwhelmed and overworked seems to be common in the comments, which many put down as due to intense periods of work and large workloads. There are times however that this cannot be helped, due to the nature of the courses, and the timing of the year, which is understandable. Therefore, it would be beneficial to receive skill sessions in how to manage time, work, decision-making and other important life skills. There are sessions provided by the Careers Service, however, these tend to get lost in emails, and only seen by students subscribed to it. The department itself can provide a training day/afternoon on these skills, or better highlight these events.

NSS Recommendation for the Department of Mathematics

Written by Priscilla Yip and Desmond Lin, in collaboration with Imperial College Union

The recommendations were based on NSS survey data (College and Departmental Scores, College Rank in Sector, Mathematics Results and Comments). We read through the comments and are proud to report that overall student satisfaction increased compared to last year (10% increase from 80.28 to 90.95%) and was above college average (84.50%) despite the pandemic. The department has done exceedingly well in Teaching (7% increase from 83.40% to 90.70% satisfaction), Organisation and Management (6% increase from 80.89% to 86.14%) and Student Voice (10% increase from 71.97% to 81.38%). There was a slight decline in satisfaction with Learning Resources (2% decrease from 89.40% to 88.77%), but we found it reasonable given the circumstance. There is still room to improve on Workload, Student Wellbeing and Learning Resources. We are grateful for the departmental effort in improving student experience and are optimistic about our future collaboration.

1. Workload

High workload is frequently mentioned in the NSS Math Comments. It negatively impacts student mental wellbeing as described in following quotes:

"The workload is really massive. If you're not caught up, you're drowning. If you understand it fully, you're lost. If you're behind, it really takes a lot of effort and time to catch up. Mostly I just left problem sheets until the end of term. The culture of working constantly is pretty toxic...There's just so much content to work through that I feel like I never relax. This is great because we learn an insane amount of maths in a short time, but it does take a toll on your old mental health."

"The workload can be very overwhelming, and the course itself is extremely stressful. Sometimes I had barely any free time during term time. There is a heavy weighting towards the end of year exams, instead of distributing this weighting throughout the year. There is a lack of mental health support available."

We recognise that the main contributor to high workload is clash in deadlines. From year 2 onwards, students have elective modules where their coursework and midterms could take place back-to-back, leaving no time for rest or revision for as long as 2-3 weeks. We have the following recommendations (some of which might have already been implemented):

- Inform students of coursework, midterm deadline and weightage before module selection, alert students of module combinations potentially leading to clashes
- Spread out coursework deadlines, avoid multiple deadlines in the same week as much as possible. Some coursework is released at week 4, but only require week 2 materials. Such courseworks can be released earlier.
- Allow short coursework deadline extensions (even 8 hours could make a difference when coursework is issued during exam weeks) in exam weeks or foreseeable coursework intense weeks

2. Student Wellbeing

Academic workload and the pandemic both exert pressure on mental health and worsen student wellbeing, as recognised by many other departments.

"There were times when the workload felt too heavy and I wasn't sure how I'd cope. "

"Most of the time overwhelming workload. Personal tutorial meetings were not very helpful most of the time."

According to the NSS College Rank in Sector report, we could do better in creating a learning community. Therefore, we hope to increase students' willingness to approach, as well as their access to college support with the following suggestions:

- Normalise students seeking support: convey the idea it is not only normal but recommended for students to approach and consult staff members for help. The department could walk freshers through how to approach lecturers inside and outside office hours during the induction.
- Improve access through key contact listing: for each module's Blackboard site, we could place a key contact list (GTAs, Lecturers, Problem Class leads, Senior Tutors) in the announcement section and a more general support chain in module Mathematics Undergraduate Programme

- Continue Meet Your Personal Tutor Week on week 1,5,9 per term, and provide options for students to sign up for extra individual and group meeting. Ideally, students should have the same personal tutor throughout their time at Imperial. There should also be more training or guidelines for personal tutors to increase the quality of personal tutorials.

3. Financial Support & Spaces

We hope the department could continue to provide support and bursaries for UROP. In the previous academic year 2020/2021, departmental UROP funding had increased by £5000 which is equivalent to funding a few more UROPs. We hope to continue this or even provide more financial support to those with financial difficulties.

We wish to improve parts of the Math Huxley Building, as a handful of students reported that it looked uninviting and dull. We could add posters from students' research projects to improve the way the corridors look. Water coolers in the building also need to be upgraded as there were hygiene concerns over the state they are currently in. We could also have more lockers or microwaves. These are specific amenities which can improve students' campus life.

We recognise efforts in redesigning certain areas in Huxley and are glad that there are such efforts. Such efforts can be expanded to slowly upgrading the Huxley Building in time to come.

NSS Recommendation for the Department of Physics

Written by Stefano Fiocca and Anthea MacIntosh-LaRocque, in collaboration with Imperial College Union

These recommendations were written in response to NSS responses submitted by students graduating from the Department of Physics in the academic year 2020/21. By analysing the free-text responses of the survey, the departmental representatives were able to identify critical aspects of the student experience within the Department which require a unified student-staff effort to improve. These were identified by assessing the prevalence of complaints about a given aspect and the magnitude of the impact this had on students' experiences during their time at Imperial. Consultation with departmental representatives from across college, alongside suggestions made by Imperial students also fuelled the suggestions herein.

The Department saw encouraging increases in satisfaction in seven out of ten categories (decreases seen in 'learning resources', 'learning community', and 'student voice') assessed by the NSS, including a 6.9% increase in overall satisfaction to 68.66% – which is commendable given the health emergency we have all been challenged to operate in over the past eighteen months. However, it must be noted that the Department continues to perform in the lowest quartile in seven of the nine categories assessed by the NSS, among the 49 other HEIs offering the subject. This indicates there is urgent need for a sustained student-staff effort across the board. We remain optimistic that with these recommendations in place, and using the current trend in satisfaction as a spring-board, long-lasting foundations for an improved student experience within the department are possible.

1. Continuation of lab reforms proposed in 2020/21

Assessments and feedback within the department proved to be a low-scoring section in this year's survey, with only 49% of students suggesting they were satisfied with this aspect of their learning experience at Imperial. This sentiment was echoed in the free-text responses where students cited the subjectivity of feedback and lack of clear expectations as reasons for the department's poor performance in this sector. Students were also disappointed with the variable quality of demonstrators and the lack of explicit teaching of lab skills.

"Marking is unfair and rarely justified using the rubric - especially for labs."

"There are specific issues with the course and university as a whole that especially come to mind ... the lab work. The lab work whilst I was a student was very erratically marked, and it felt hard to learn 'how' to be good at labs."

"There is absolutely no consistency in assessment for Labs."

The prevalence of criticism oriented towards laboratory courses in both the most recent and past NSS comments indicates the extent to which improvement in this sector of the course is vital. We identified main areas of improvement:

- Timely feedback (or lack thereof): for instance, in Y1 2020-21, a high proportion of students were given their feedback for their first lab book after the second lab book was due. There is an overwhelming feeling among the cohort that delays in marking are seldom justified: greater transparency over the reasons for such delays would be beneficial.
- Clarity of feedback: not limited to labs, the quality of coursework feedback varies too much between markers. Sometimes, an exhaustive and complete explanation of the marks awarded is provided. More often, though, feedback is limited – and in some instances virtually absent. To ensure consistency in the suggestions markers make to students, we suggest that feedback from previous reports that year be compiled and attached to the subsequent report hand-in: sometimes a student is told to change something in one lab report (e.g. "not enough pictures"), makes the opposite mistake in the next ("too many pictures") and the marker has no way of inferring the reason for this mistake and will just give the opposite feedback, resulting in student confusion. We also recommend that a standard of feedback is imposed in the moderation process on top of what is already done to ensure mark fairness.
- Subjectivity of feedback: from many comments it became apparent how students feel that the marking is too subjective and unfair. We know that there is a moderation process in place, and are aware of the different nature of essay marking compared to problem solving exercises in exams. Putting resources into improving the consistency of feedback provided will definitely reduce this feeling among students, leading to better academic development. We suggest a short talk is given by the head of Y1 lab at the start of the year expanding on and providing clarity on how coursework feedback is produced, processed and used within the department.
- Students feel they are not taught the skills they need for their assessed labs before the labs are assessed. This increases stress and anxiety in the learning. We suggest the introduction of optional workshops aimed at building both lab skills and lab report writing skills, in all years where lab is mandatory.

In the academic year 2020-21, student representatives presented a detailed proposal to members of staff, including Heads of Labs. Some of the suggestions above were drawn from this. This proposal should be reviewed, amended and expanded in a collaborative effort between student reps, heads of lab, lab demonstrators and the department – as obstacles in lab learning are historically by far the largest issues encountered by students. Focus groups and a student shapers project would be great additions to this.

2. Expert consultation and student focus groups on fostering community building and culture

This year's survey results highlighted the need for community development amongst undergraduate students. References to a harmful culture encouraging competition, "workaholism" and an unhealthy work-life balance where among the most common in the survey. The strain of the degree on mental health and wellbeing is reaching crisis-level amongst students studying physics at Imperial, and many students cite the departmental/college-wide culture as a compounding factor.

"Lots and lots of stress. Unfortunately, that culture is just far too ingrained for any token gesture that the staff can offer to improve our wellbeing."

"Imperial lacks a community. Having also studied in the US, I have really felt the lack of culture upon returning to Blackett. There is no focus on alumni; little to no welcoming of first years from older years. Little shared vocabulary within the community. No traditional annual events for the entire community to come together to celebrate…. Of course, this feeling of frustration and distance between students naturally arises from an intense workload, but MIT has a far higher workload than Imperial yet has an incredibly strong community. For advice in improving this aspect of the institution, I would recommend that staff talk to their peers in leading institutions in the US. The difference is night and day and the changes are really not that hard to implement - just giving everyone stickers and merchandise each year would be a start!"

"Overall, a toxic environment, extremely competitive environment fostered by the university as a whole."

"Department doesn't feel like a community."

"Somehow, the environment breeds toxicity amongst the students and the college does little in the way of maintaining student's wellbeing and mental health."

We recognise that both staff and students are willing and ready to see and participate in a more community-oriented, supportive department. However, we have witnessed the difficulty this good-will has had in providing tangible results in terms of improving student community and mental health.

"While the department has many warm and approachable staff members, there is a lack of community within the department (and within Imperial as a whole)."

"I do not think that this apathy comes from the Physics Department heads as they have clearly tried very hard to improve things"

We strongly recommend the department seeks to allocate resources and funding towards three forms of consultation:

- Student focus groups of 4 – 5 students to better understand the reasons behind this perceived lack of community and to brainstorm ideas for improving this.
- One-on-one interviews to allow students to openly discuss issues such as isolation and perfectionism during their studies.

- Community building and culture expert, such as an occupational/organisational psychologist with expertise in working with younger people and HEIs.

Based upon this consultation, we suggest the department create a "Community and Culture" action plan, which outlines steps the department will take to improve this aspect of student life and tangible ways by which the department's progress in this regard can be judged against. We propose these be reviewed at each SSC meeting and then communicated to students at the termly Student-Staff Forums. The progress, reviews, and updates should be fully documented on the department's webpage.

A suggested timeline for this initiative is:

- October/November 2021 - Student focus groups held
- September 2021 – Initiate contact with external expert
- February 2022 - Deadline for publishing action plan and lines of communication with the student-body set-up
- March 2022 - Begin implementing action plan

3. Increased visibility and undergraduate inclusion in the Women in Physics group

Gender imbalance was noted in free-text responses to this year's survey. This is in line with anecdotal feedback both Department Representatives gathered in previous years. Notably, this is likely to be a difficult topic to discuss, even in an anonymous survey. As this imbalance is only negatively experienced by a minority of undergraduates, the scale and impact on female students from this issue are likely to be much larger than what is already clearly portrayed in the NSS results.

"Gender imbalance across all departments results in a subtly misogynistic culture which can be difficult to recognise/confront when you're the only man/woman in the room."

This issue is common across the physics discipline and is something the department has worked to improve previously. However, this issue is far from remedied and there is still much room for improvement.

We propose that the Department ensure that the Women in Physics group is promoted to undergraduate students from the very beginning of their degree. This could be achieved through an introductory talk by the committee to first years in October and making it clear to students that the group is something they are able to participate in as undergraduates.

This kind of visibility is vital, particularly given the stark gender imbalance in lecturers across all years of the course, but most notably in first year. This representation is crucial to the building-up of confidence in female undergraduates, for whom it is significantly more challenging to aspire to one day deliver lectures themselves if they cannot see themselves represented in the teaching staff today. Perhaps our most important suggestion in this survey is therefore to reassess the first and second year list of lecturers to include a materially higher proportion of female lecturers. This should be expanded on in a meeting with college staff to discuss how many female lecturers can be allocated for this purpose. In this meeting, results from a female-led focus group on how to improve undergraduate women's sense of belonging at Imperial should be discussed and acted upon.

Further to the above, we see the need for student focus groups to come up with new ways of addressing this matter further. A female-led StudentShapers project, where students investigate and discuss, with the support of college staff, how to improve on this matter, could prove very important.

4. Exam timetabling questionnaire

Repeated complaints regarding the timetabling of exams during students' time at Imperial appeared in free-text responses.

"Having all exams in one go in the summer is horrible."

"Timetabling, especially around exam periods is atrocious. Having exams to start of summer term, followed by learning new modules, only to have more exams after, is terribly stressful and makes for a very hectic final 2 months."

"The examination structure and timetable for most of the course is completely antagonistic to good revision, representative performance and has had serious mental health impacts. I feel that given a more divided examination structure, or devoting a larger part of assessment to courseworks during the year, could ease stress during term 3, and lead to overall better performance in exams, more representatives of students' abilities and understanding."

Notably, however, it is difficult to gauge what exam timetabling caters to the majority of students' needs and will limit prolonged stress and anxiety surrounding this form of assessment. We propose a questionnaire be circulated to students to better understand where student opinion on this matter lies. Questions on this survey should touch on topics including, but not limited to:

- Fewer, more heavily-weighted exams vs. more, lower-weighted exams forming the assessment for modules.
- Ideal spacing of exams / length of the exam period.
- January vs. summer term exams

This survey could prove a very useful source of information planning ahead for the 2022-23 academic year.

5. Student Minds Charity

A common complaint is the impact the intense workload of the course can have on mental health and wellbeing. Students also express feelings of isolation and the lack of availability of mental health support. This is especially relevant given the level of isolation students have felt due to the pandemic, the aftermath effects of which will continue to impact us over the next academic years.

"As Imperial is a top university, this means the standards are so high that it severely affects the mental health of many students, including my own. … It is unfair, and it has pretty much destroyed my life outside of studying."

"Somehow, the environment breeds toxicity amongst the students and the college does little in the way of maintaining student's wellbeing and mental health."

We propose that the department allocate funding to the Student Minds charity in order to set up peer support groups aimed for all students within Blackett. It should be noted that the training of six students was carried out in 2017 for this purpose, with little result. It is crucial that we understand what the reasons for this were, and especially whether this was due to an insufficient scale of the allocated resources. A full costed proposal related to this will be put together by Anthea.

6. Better organised Y2 optional module and Y3 short module fair

Students frequently cited that a lack of peer-to-peer interaction negatively impacted on both their learning and social experience within the department. Additionally, some students noted how the transition from A-level or equivalent to university was particularly challenging.

"the transition from UK state high school to this is extremely difficult"

"Little peer-to-peer interaction."

As a result, we propose a peer study mentor scheme be developed to support first year students. Such a scheme would consist of upper-year students providing a "tutorial" to students in first year for an hour a week. This could be offered to students in their existing tutorial groups. This scheme would be advertised to upper-year students who would be financially compensated for their time. This initiative would also cultivate inter-year discussion, a greater sense of community, and collaborative learning. Whilst this would be primarily aimed at creating a greater sense of community among students, and across year groups, it would likewise be a suitable catalyst to bring first-year students up to the same level.

We propose optional seminars are introduced during term 1 of first year where first-year students discuss strategies learnt from upper years, and introduce each other to content that may be specific to high school curricula not everyone has studied. For instance, former IB students could be asked to lead seminars on coursework writing, whilst A-level students would teach foundations from the A-level further maths curriculum to everyone else. This could be incorporated with the both the M&R and practical physics modules.