

Students as partners in the co-creation of inclusive curricula

Higher Education (HE) institutes are committed to attracting and supporting students from diverse cultural and social backgrounds that reflect the communities they serve[1]. As a result, the demographic profile of the student population has gradually changed, posing more significant challenges than before. Increased diversity has been coupled with concerns about student success[2]. The attainment gap is an increasing cause for concern across the HE sector[3]. The Advance HE 2019/20 report on the size of ethnicity awarding gaps demonstrated a difference of 9.9% in proportions of white and Black, Asian, and minority ethnic students awarded the first/2:1 degree. The attainment gap was particularly pronounced for Black students, with an average awarding gap of 18.7% between black and white students[3]. Additionally, a recent survey conducted by the National Union of Students revealed that '42% of black students did not believe their curriculum reflected issues of diversity, equality, and discrimination[4]. To make higher education relevant, engaging, and accessible to all students, HE institutions and university teachers should proactively reconfigure their curriculum and reconsider how curriculum design, content, and delivery process could be adapted to the needs of their students. This inclusive approach will, in turn, improve student retention, achievement, and progression. This requires enabling students to see themselves reflected in the curriculum. To achieve this, students as critical stakeholders should be involved in consulting or co-producing new curricula. Students can offer unique insight into the student experience – and have access to communities that we cannot always access ourselves[2].

Consequently, we at the University of Liverpool invited and involved the **students as partners** to assess the existing curriculum in three disciplines (Life sciences, Chemistry, and Psychology). The project aimed to produce a robust evidence base to inform if the principles of equality, diversity & inclusivity (EDI) are reflected in the design and evaluation of our curriculum and was jointly funded by the Biochemical Society's Diversity in Science grants and the University's FHLS EDI committee. Undergraduate student interns were recruited to work alongside staff to evaluate their curriculum using our Inclusive Curriculum Tool (ICT). This tool aims to support the lecturers to identify and demonstrate existing good practices, learn more about inclusivity, and set future priorities. The ICT is designed to help all students, including those protected under equality legislation, first-generation students, those from a lower socio-economic background, those in the care system, have caring responsibilities or a commute, and international students.

The student interns audited the inclusivity of 45 selected modules in different Life Sciences, Chemistry, and Psychology programs. The modules represented various learning and teaching elements, e.g., quantitative, laboratory-based, field-based, or theory-based. The ICT recommendations are categorized into four sections: Sense of belonging and engagement, teaching content, teaching delivery, and assessment and feedback.

Our student interns have proven invaluable assets in our curriculum's meticulous evaluation through their insightful analysis. Their fresh perspectives and eagerness to delve into the intricacies of our educational programs have resulted in a thorough and comprehensive assessment. They showcased their ability to identify areas of improvement and suggested innovative recommendations as follows:

Sense of belonging and engagement:

1. *Awareness of student Support and additional materials*, including KnowHow and English Language Centre activities. KnowHow is the University's programme that offers a range of workshops, webinars and online tutorials to improve students' academic skills.
2. *Online Response Systems and Discussion Boards*: These platforms provide opportunities for interaction, collaboration, and participation in class discussions.
3. *Using pronouns*: Using pronouns correctly shows respect for the person we interact with, irrespective of gender identity.
4. *Timetabling Issues*: The students have stated timetabling issues, particularly scheduling early morning or late evening classes. These can significantly impact student engagement, e.g., with care responsibilities and commuters.

Teaching content:

1. *Editable and Accessible Online Resources* make it easier for students to engage with the material at their own pace and in a manner that suits their individual learning preferences.
2. *Extra induction for international students, mainly Labs*: This extra support ensures that students are prepared for the lab environment and procedures in the UK, which differs from their home country.
3. *Open-ended lab experiments and flexible assignments*: These assignments offer students choices in how they approach and complete their coursework, fostering creativity, deeper understanding, and critical thinking.
4. *Introducing diverse scientists or experts* to inspire students by presenting role models they can relate to. Learning from diverse perspectives enriches the educational experience and broadens students' horizons.

Teaching delivery

5. *Mixed Group Work* encourages diversity and collaboration among students from various backgrounds, fostering a more comprehensive understanding of the subject matter.
6. *Online materials*, including in-advance lecture recordings, to accommodate diverse learning styles and schedules. This approach allows for flexibility, enabling students to access content at their own pace and review materials as needed.

7. *Lab accessibility and flexibility* to ensure that labs are adaptable to students with special needs.
8. *Real-world applications* to link with theoretical concepts to enhance student learning.
9. *Using more cross-cultural evidence while avoiding ambiguous or sensitive language* for effective communication and understanding.
10. *Avoid slang, colloquial language, and idioms* to ensure clarity, inclusivity, and enhanced communication and accessibility.
11. *Hybrid delivery of lectures* to promote flexibility and accessibility, catering to the students' diverse needs and preferences.

Assessment and feedback

1. *Extra student surveys and module feedback* to assess the effectiveness of the courses and provide opportunities for students to voice their opinions.
2. *Spreading out assignment deadlines during a semester* allows for a more balanced workload, enables students to dedicate sufficient time to each assignment, enhances the overall quality of their work, and prevents unnecessary stress.
3. *Available information about assessment and feedback*: Comprehensive information about the assessment criteria, expectations, submission dates, and marking rubrics helps self-assessment and improves the quality of assignments.
4. *Ramadan Consideration for Assessment*: Students recommend providing flexibility or alternative arrangements during this period to ensure all students can engage in academic tasks while committing to their religious duties.

Conclusion:

The student interns' exemplary work serves as a testament to the untapped potential within our student body, underscoring the significance of integrating their perspectives into the ongoing development of our academic programs. The project outcomes will help create an accessible curriculum that will improve the experience, skills, and attainment of all, as well as a diverse community at the University of Liverpool and beyond in the HE sectors. We would like to thank the Biochemical Society for their support to advance our efforts towards developing inclusive curriculum.

Report compiled by Dr Raheela Awais (Life Sciences, project lead), Dr Maria Limniou (Psychology) and Profesor Gita Sedghi (Chemistry) at the University of Liverpool.

1. Economy, D.f.t. *Higher education widening participation*. Available from: <https://www.economy-ni.gov.uk/articles/higher-education-widening-participation>.
2. HE, A. *Inclusive Learning and Teaching in Higher Education*. 2010; Available from: <https://www.advance-he.ac.uk/knowledge-hub/inclusive-learning-and-teaching-higher-education>.
3. HE, T.A. *Degree attainment gaps*. Available from: <https://www.advance-he.ac.uk/guidance/equality-diversity-and-inclusion/student-recruitment-retention-and-attainment/degree-attainment-gaps>.
4. connect, N., *Why is My Curriculum White? - Decolonising the Academy*. 2016