

## **HUBS Workshop: Closing Attainment Gaps in the Biosciences**

**Dr Nick Freestone and Dr James McEvoy**



In the merry, halcyon days pre-COVID this HUBS-funded workshop was eagerly anticipated to be held at Kingston University in south-west London. Instead it had the distinction of being the first online HUBS workshop to be held in the post-COVID, lockdown era. Upwards of 100 colleagues from across the UK signed up to participate in this virtual workshop, the value of which was highlighted by the burgeoning influence of the “Black Lives Matter” movement sweeping the globe that occurred at around the same time. This was then a very opportune moment to come together to discuss the learning barriers different groups of students face within our institutions and what we can do as bioscientists and academics to remove those barriers to ensure that all of our students reach their full potential.

The first speaker, Nick Freestone from Kingston University set the scene in a brief introduction that showed that societal problems in equitable employment opportunities was reflected in poor student outcomes in higher education settings for specific groups of students. He then went on to discuss strategies he has employed amongst his students that removed all attainment gaps in the different student groups represented within his degree programme. This entailed providing students with science-orientated career paths outside of the laboratory setting, access to relatable successful role models, staff development in the Equality, Diversity and Inclusion milieu and instituting an academic peer mentoring programme across the different year groups. Building on this James McEvoy from Royal Holloway, University of London discussed more detailed national data showing that alongside significant underperformance by male students, BAME students were the recipients of significantly fewer first and upper second degree awards than their white counterparts regardless of their entry qualifications. This data really brought home the point that there is something inherent within current UK HEI structures and processes that systematically disadvantages BAME students. James then discussed

active learning strategies he has employed within his modules to reduce the attainment gap for his BAME students.

The morning session was brought to a close by Stacey DeAmicis from the University of Plymouth who talked about how inclusive teaching could be demonstrated in a Marine Biology degree. She described how she gives her students a choice of assessments (each assessing the same learning outcomes) to give different learners the opportunity to excel, and her work in problem-based learning to engage them in class. This was a useful reminder that diversity in teaching and assessment go hand-in-hand, and how both can be used to reduce attainment gaps.

After lunch, sadly provided by the participants themselves with the lack of conference catering reinforcing the unusualness of our current contexts, we launched undaunted and refreshed into the afternoon talks. The first of these was by Amarachukwu Anyogu of the University of Westminster who shared with us her work on a Foundation Degree programme (“Beginning with the end in mind”) and her intention to show that early interventions at this stage of a student’s university career might be helpful in reducing or eliminating degree attainment gaps. Amara reminded us that attainment gaps were not restricted to BAME students but were also found in students with a disability and those from poorer homes. Amara’s talk demonstrated that extra-curricular features of a course were as important as the formal learning environment in developing successful students. Relationships between staff and students and how students were supported in their daily interactions with the university were key factors in student outcomes (If you want to go fast, go alone. If you want to go far, grow together – an African proverb deployed by Amara reinforced this point very nicely).

The next speaker up was Ali Orr from Kingston University who brought us back to one of the themes from the beginning of our workshop to examine employment outcomes for our students. Ali showed OfS data that revealed that there are unexplained differences in employment outcomes for a number of identifiable student groups. These include, BAME students, students with a disability, younger students and those from underprivileged backgrounds. Rather dispiritingly the outcomes for all bioscience graduates were revealed by Ali to be a little weaker than other STEM subjects with bioscience graduates receiving lower salaries, 40 months after graduation. Additionally, of bioscience graduates in employment at 15 months, only 64% are in highly skilled roles which is lower than almost all other subjects. Ali then outlined the strategies undertaken by Kingston University to try and improve the job prospects for all its graduates. These include providing work experience opportunities, career planning structures and active engagement with employers. Ali also introduced the topic of the Inclusive Curriculum and related how an emphasis on employability was embedded within curricula at his institution.

This provided us with a virtually seamless transition into the next talk given by our esteemed keynote speaker Nona McDuff MBE who, although now Pro Vice Chancellor for Students and Teaching at Southampton Solent University, previously worked at Kingston University and laid the groundwork for much of the good work that continues to be disseminated throughout the sector especially in terms of her

work on the Inclusive Curriculum. Nona first of all sketched out the size of the problem confronting us showing data that revealed that Black students had an attainment gap in the conferment of a “good” degree of 24% compared to their white counterparts. Nona tackled this head on showing that the usual arguments expounded by defenders of the status quo have no basis in evidence (eg BAME students come in with less tariff points, standards will drop if we make our teaching more accessible etc). These conversations were difficult she said but were needed to win over hearts and minds. Nona then went on to discuss the “value added” concept that goes some way to explaining the disparities in student outcomes. Steps to address inequity in teaching need to incorporate the concept of inclusivity in all aspects of the student journey through university she argued. This includes all aspects of learning at the modular, programme and institutional levels. This very evidence-based and passionate exposition was certainly a high note to end the workshop on.

Such was the energy and interest generated by this topic and workshop that the organisers James McEvoy and Nick Freestone are planning to extend this important work in collaboration with the RSB and HUBS by initiating a Bioscience Awarding Gap Advisory Group. This is intended to provide a forum for colleagues across the sector to access and contribute to developing good practice in this important area.