



UCL

UCL Education Conference 2019

PRESENTATION ABSTRACTS

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1. BME Attainment Gap - Faculty of Brain Sciences

Lasana Harris, Nozomi Sakata, Cynthia Winston

There is an attainment gap between UK resident undergraduate students from a BME background and predominantly white students at UCL. We explored this problem within the context of the Faculty of Brain Sciences. To what extent and how does the experience of BME undergraduates in the Faculty contribute to this attainment gap? To begin to address this question, we conducted focus groups with high achieving BME students and a general sample of BME students in the faculty. Participants reported a number of experiences consistent with racial discrimination. They also reported experiences external to UCL that hamper their ability to attain high marks. Comparing the two samples revealed interesting differences related to identity and resilience. We discuss these results in the context of the attainment gap project, and make suggestions for structural, curricular, and other changes within and beyond the faculty that might help to improve all student experiences.

2. Reducing the BME attainment gap

Safiyah Ali Raja

The reduction of the BME (Black and Minority Ethnic) attainment gap is a topic of great complexity and concern to contemporary academia. The RAFA2 study has gathered data from BME students in order to better understand their academic experiences and how they see, understand and explain the disparity. This study employed BME undergraduate students as student consultants in order to get both a better insight into the student experience and also to have these same researchers as active agents in considering where the problems lie, with who and what needs to be done to address them. Data collection from through focus groups, interviews and questionnaires revealed common themes in the university experience for BME students including; isolation, lack of trust, lack of inclusive modules, feelings of pressure and lack of motivation. Other themes that touched on 'the student deficit model' were also documented by BME students which whilst problematic demonstrated the lack

of awareness of the issues among the sampled student population. The themes of race, belonging, and inclusion in Higher Education were discussed by the student consultants in terms of tangible interventions that should be considered by academics if they wish to reverse this disparity.

3. "The BME Degree Attainment Gap doesn't exist"

Claire Herbert

The 'BME' degree attainment gap has existed for a long time, and recently has finally been getting the attention it deserves. The impact of the 'gap' is staggering: the latest statistical report from Advance HE highlights that in 2016/17, the gap between White British students receiving a 1st or 2:1 and their minority ethnic counterparts was 13.6%. This becomes more stark when we consider the gap between White British students and Black students was 24.1%. In other words, only 55.5% of Black students in UK higher education were awarded a 1st or a 2:1: almost half of Black graduates from 2016/17 are not eligible for a UCL PhD, or teacher training bursaries, or many graduate jobs.

Whilst this significant issue is finally getting some attention (e.g. through our own Student Success team, and Office for Students targets), this presentation will argue that this is not an attainment issue and we need to stop referring to it in that way. The problem is an awarding rate issue: UK universities award more 'good degrees' to White British students than students from minority ethnic backgrounds.

This change in emphasis may seem too subtle to be significant, but it is the start of a deficit approach to this work. It immediately lets universities off the hook and places the blame with the students, and that needs to change.

Suggesting this change is not new. Colleagues in Student Success suggested this back in 2017, and it has been mooted by academics in the field, and colleagues in the Higher Education Race Action Group. But "BME attainment gap" has stuck. This presentation will suggest reasons why the terminology has not changed to date, and also argue that it is imperative that we, as UCL, lead the

way.

4. Embedding inclusivity across a programme

Rebecca Yerworth, Pilar Garcia Souto, Adam Gibson

All professionals need to embed inclusivity in their working practice. We are preparing students for the workplace, not just giving them an education. Therefore, as a university, we should not just use inclusive methods in our teaching, but we should actively teach students the rationale for inclusivity, appropriate attitudes to inclusivity, and tools for implementing inclusivity. However, in accordance with the principles of constructive alignment, a) all assessment and teaching related to inclusivity, must be appropriate to the context of the course and its core learning objectives, and b) we must lead by example, demonstrating authenticity by embedding 'good practice' in our teaching.

In this session we will showcase how we have embedded inclusivity within the Biomedical Engineering degree, and provide examples of both practicing and teaching inclusivity, from across different year groups and modules. This has not always been straightforward: we will speak of the challenges we have faced, as well as the encouragements.

Micro presentations:

- Including accessibility criteria in an assignment to write a Wiki page
- Providing opportunities to meet, and design products for, disabled clients
- Setting coursework to write user instructions in 'easy read' format
- "Is the data representative of the population?": teaching on population variability and data source selection.
- "I don't get to answer questions in class because the native English speakers get their first": a helpful solution.
- "I find it difficult to follow demonstrations in the lab about software": make training videos that students can access and re-play before, during and

after the lab.

- Providing resources for students to learn outside the class and on their own whilst still getting immediate personalized feedback – e.g. Moodle quizzes using advanced features to add richness to the questions, and tailored feedback.
- Accommodating Religious feasts & scheduling assessments so students can get home for Sabbath

5. The 'Mobile Womens' Cafe': empowering Bengali and BME women

Sima Akter, Mariyah Kulsum, Nadia Hussain, Sadhvi Dar

Bengali women are severely under-represented and marginalized within graduate level employment and often experience "alienation" within their workplaces. In order to better understand Bangladeshi female student's voices, students from this background were asked to research and examine the issues and what could be done. Findings highlighted that graduate level work is surrounded by 'Whiteness' which creates an exclusivity that disadvantages and disempowers Bengali women. This happens through networking events which are usually tailored to White males and involves alcohol-centered socializing. The task of considering the problem space, the literature, the findings and what could be done within the University space to tackle the problems of alienation, marginalization and racial and religious discrimination with Bangladeshi female students were duly considered. Students identified the need to 'amplify the voices of Bengali women students'. The introduction of a sustainable 'Mobile Women's Café' was created with the remit to equip these women with the necessary skills, knowledge and power to breakthrough the barriers to enter into the graduate employment market. This study has identified that empowering spaces where voices are heard, new networks developed and spaces that allow for innovative strategies to be discussed are of value to BME students.

6. The BME undergraduate attainment project at UCL: Progress update

Julie Evans, Paulette Williams, Sukhi Bath

This presentation will discuss the progress made on the UCL BME Attainment gap project which is now in the second year of a 3 year HEFCE funded partnership project. The first UCL BME attainment conference in April 2018 introduced a 3 year plan with a timeline of implementation of actions, supported by the Provost and Vice Provost of Education and Student Affairs with the aim of closing this gap. We will outline the progress made so far and challenges and share examples of good practice in 4 key areas: embedding BME diversity issues in our programme development and quality assurance measures, establishing educational leadership in relation to the experience and achievement of undergraduate students in each faculty, working in partnership with students to reduce the attainment gap and enhance the experience of BME students and creating a more inclusive curriculum and learning experience that will benefit all students. Future plans for the final year of the project and beyond will also be discussed.”

7. Meritocracy in Higher Education

Rhoda Yaa Assah Manu

With the premise of Higher Education being based on the notion of meritocracy, the reason why institutional racism still exists within HE is due to the refusal to acknowledge that in practice meritocracy is non-existent. Hence, with universities operating under and valorising meritocratic principles BME students find themselves being identified with a colour-blind lens, which has devastating effects on their experience within Higher Education and ultimately educational outcomes. With academics and institutions vehemently clinging on to the principle that everyone has equal opportunity and access to success, BME students find themselves the porters of emotional labour as a by-product of living within a racialised society. To begin to address and alleviate emotional labour from BME students, the institution needs to think of itself as it stands - existing and contributing to society,

instead of thinking of itself outside of a societal context. Creating a safe space for students to have nuanced discussions on the impact of race on their experience within their institutions, is one of the ways we can work to alleviate this emotional labour. Universities and academics must work to be anti-racist, respecting and dignifying the BME voice without defaulting to doubt the validity of their testimonies. When the existence of harmful apparatuses such as white fragility, unconscious bias and student deficit models are acknowledged, only then can Higher Education combat its negative effects and work to create a safe space for race talk.

8. The BME attainment gap - implications for the academic and employment pipelines

Parama Chaudhury, Alessandro Toppetta, Hannah Buttle, Otso Hao

At UCL, students from a BME background currently lag behind their white counterparts in academic attainment both in terms of average marks as well as the probability of obtaining a “good” degree (II.1 or above). In this presentation, we will discuss the details behind this finding, including the variation of this gap across faculties and programmes, gender, specific ethnic background, and other individual characteristics. In my role as SHS Faculty Lead for the BME project and as an empirical economist, I have worked with two undergraduate and one graduate student, all of whom are co-authors on this paper to analyse the data in detail to understand the nuances of the attainment gap as well as to lay out the preliminary suggestions for policy change.

In our presentation, we will discuss our main finding that the gap in the probability of a good degree is mostly in the likelihood of getting a first, and a third. That is, the probability of getting a 2.1 is very similar for white and BME students. This means that on the one hand, BME students are less likely to achieve the requirements for further study, with implications for the pipeline of BME academics. On the other hand, they are more likely to get a 2.2 or a third, thereby jeopardizing the chances of acquiring a good job. In addition, different ethnicities within the broader BME group have very different degree distributions. We also condition on the usual determinants of academic achievement such

as prior marks, gender, a measure of parental background, and find that only a small part of the BME attainment gap is explained by these factors. Based on these findings, we suggest some areas requiring further research, in addition to some initial policy recommendations.

9. Awarding BME students lower degree outcomes: a module-specific study in 'Cell Biology' addressing 'when' and 'why' identifies specific solutions

Louise P Cramer

Across UK universities, including UCL (and comparable higher education outcomes in Europe and the USA) black and other minority ethnic (BME) students are awarded lower undergraduate degree marks than white students, for unknown reasons (university entrance qualifications are similar and marking is mostly blind). The problem is multi-faceted and likely requires a combination of approaches to solve. For example, a broad inclusive curriculum, where adopted, has helped reduce the gap. One issue, however is that it is difficult for education leaders to identify specific changes in teaching practice required to fully close the gap at subject-specific level and the gap in many cases, remains wide. To address both these problems, we took an approach to discover when and where the gap started for ~360 under-graduate students in 3-4 cohorts studying cell biology and related molecular cellular sciences, and importantly tracked the same individual students as they progressed in their degree.

Our results identify that the gap appears by the end of year 1 of their studies, with up to twice as many white students awarded the top mark by the end of their year 3, the year the majority graduate with a BSc. When looking at individual 'teaching modules' we find that distribution of the gap is not equal across the different types of constituent assessments; the exam contribution to the final mark accounts for most of the gap. As far as we know, this is the first tangible reason for the award-gap, reported in the life sciences and perhaps for any subject field. The impact on career trajectory outcomes is major. For example, a work in progress, is that our results enable adoption of informed, focused-changes to cell biology teaching practice, closing this gap, and thus those students will now have more equal op-



portunity for competitive doctorate programmes on which BME people are vastly under-represented.

10. Student support and connectedness at UCL's remote campuses

Henry Lancashire

UCL has many locations away from the main student body in Bloomsbury and continues to expand beyond its central London roots, for example with UCL East in Stratford. Teachers and learners at remote campuses can find it challenging to identify as part of, and connect with, the wider institution (Fung, 2017; Lefever, 2012).

Semi-structured, qualitative, focus groups were used to investigate connectedness with students (n = 8) and staff (n = 2) across five UCL sites and four faculties. This study was carried out under ethical approval by UCL Research Ethics Committee held by UCL Arena Centre.

Key themes for improved connectedness and support of students at remote campuses were inductions, events, and spaces. Inductions ground individuals within the institution and build awareness of spaces, people, facilities, and events; without this students at remote campuses are unaware of, or unable to access, support within the university (Smith, 2009). Events help build communities, by providing a pull factor for individuals to travel between sites and encouraging communities to

meet (Lefever, 2012). Mixtures of spaces at remote sites were emphasised, from small local spaces, to larger spaces used by the wider community (Lefever, 2012). Space was also seen as key for learners who travel between sites, in particular having space available within a relevant department to provide a sense of ownership, make it easier for students to seek guidance, complete administrative tasks, and feel grounded in their discipline (Fraser & Stott, 2015; Kozar & Lum, 2017).

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11. The importance and challenges of supporting our innovators

Natalie Humphrey and Mike Chung

Researchers are an important and integral part of university communities and the global community in general. Researchers are the ones who will decide what it is we are driving in 10 years time and the fuel we will be using. Researchers are the ones who keep us alive with innovation in medication and treatments. Researchers are the ones who ask, challenge and keep our world moving and thinking. Yet, within the university community, researchers actually sit in an unusual gap between student and staff and this means that when they need to access support no one really knows who should be

providing it, funding it, what can be provided. The support needs of a researcher do not fit neatly into our toolkit of support. This means that a research student could have delays to support, feel uncared for or lacking in importance and value.

Questions to think about:

- What are the challenges faced by research students?
- What are UCL doing to address the support gap in Student Support and Wellbeing and staff services?
- Ideas on what you can as individuals do to improve how you support and approach the support of research students in your role?

12. Strategies to enhance students' well-being

Nicole Brown, Jo Collins

In this talk, we present specific strategies that have been employed as part of an intervention at the University of Kent in order to enhance the well-being of students. Our talk commences with a brief overview of the context and background of the workshops delivered at the university's of Kent's Graduate School. We then describe the workshops, which provide participants with reflective tools to help students understand their innermost emotions, concerns and needs. We present three student activities: "Who am I?", "What does your learning journey look like?", "What is your PhD?", which all draw on the use of objects and metaphors. Through the process of reducing an experience to its essence and subsequently elaborating on that essence, students implicitly learn how to reflect deeply. This recognition of personal experiences and feelings provides the first step towards developing strategies for well-being. We then offer an insight into the relevance and impact of the workshop on the Graduate School and on individual PhD students. We conclude our presentation with a brief look to future developments and initiatives based on our well-being workshops.

13. A comparative study of personal tutoring practice in academic departments with good/poor student satisfaction ratings - initial findings

Vignesh Venkiteswaran

14. “I don’t have any role models” – experiences of chronically ill, neurodiverse or disabled students in Higher Education

Nicole Brown

Viewed superficially, Higher Education as a sector appears to be welcoming and embracing diversity and inclusivity. However, personal accounts demonstrate that reality differs. In this paper, I present preliminary findings from a research into the lived experiences of chronically ill, neurodiverse and/or disabled people in academia. The data is from 300 responses to a survey that was accessible for the duration of one month in October/November 2018 and 20 one-hour one-to-one interviews with respondents to follow up on specific details from the survey. Staff and students voice their feelings around issues of disclosure and stigma in relation to their conditions, and in relation to accessing relevant support. For many students, not being understood and not having a role model plays a major part for not communicating their specific needs. Staff, on the other hand, feel they, too, cannot be open about their conditions and needs, as they face particular expectations within the academic environment – from colleagues and students. This research clearly shows that a cultural shift around disabilities, chronic illnesses and neurodivergence is needed; and instead of separating support services for students and staff, perhaps a joint approach would be more beneficial, as after all “we are all in this academic boat together.

15. Making it explicit: Improving provision for academic skills development in post-graduate taught programmes

Nicola Bretscher, Androulla Theodorou, Wenjuan Xu, Arunee Narula, Karmel Mohanty, Memona Younis

We will introduce our UCL Changemakers project ‘Making it explicit’, which aims to improve provision in taught post-graduate programmes, specifically in relation to academic skill development e.g. reading and writing critically. As outcomes from our project last year, tutors in Understanding Mathematics Education (UME), the core module of the MA in

Mathematics Education programme, agreed to review session objectives and reading lists. In doing so, tutors aim to develop their shared understanding of how language is used in describing academic writing with UME students and of how and why readings are chosen for the module. We believe these changes will improve students’ academic skill development indirectly through improved pedagogy. More directly, tutors will also aim to use our objectives as a pivot during sessions to open up discussion, creating opportunities for students to articulate their understanding of the language we use to describe academic writing.

Our project this year focuses on evaluating what progress has been made towards the agreed actions; understanding how these changes are supporting students’ academic skill development; and investigating how students’ perceive the support provided for academic skill development following these changes. Continuation funding has enabled us to evaluate how support for academic skill development is provided in the UME module by conducting focus groups, surveys and audio-recording a teaching session. We will present initial findings from our data collection and analysis.

16. Factors influencing mental health and help-seeking amongst Black and Minority Ethnic (BME) university students

Victoria Olaniyan

Since the early 2000s, the UK Royal College of Psychiatrists have been predicting that mental health problems among students would increase, due the governments growing widening participation efforts. This is because, students from these ‘non-traditional’ i.e. low SES or ethnic minority backgrounds can potentially find it more difficult at university, due to lack of representation on certain campuses, racism and other sociocultural factors. Which may in turn, lead to adverse effects on their mental health. Indeed, a 2007 study found that Black and minority ethnic (BME) students are more likely to experience mental health problems, however they are less likely to seek professional help. This reflects reports on the general BME population in the UK who are 75% more likely than the White population to develop a severe mental disorder yet are less likely to seek professional help.

However, it is of great concern that despite this pre-existing knowledge, and the increasing number of BME students now attending UK universities and more recently, elite universities, there is still little attention paid to this group in research, education and public health. Therefore, leaving many theoretical questions unanswered and potentially important factors that can influence BME student mental health unexamined e.g. diversity and representation, racism and discrimination or the pressure of elite education.

To address these issues, this PhD study explores the experiences of BME students and the specific support provision at UK universities with varying levels of ethnic diversity, elite or Russell Group status, and activity within the government's widening participation agenda. This study is the first in the UK to explore these topics with aim of developing student-centred recommendations for policy and practice around the issue of mental health and mental health support provision.

17. 'Yes, I'm fine.' Personal tutoring with students who are reluctant to engage, a three-pronged approach

Harriet Shannon

Students at UCL are assigned a personal tutor to support them both pastorally and academically. Historically, within postgraduate physiotherapy education, personal tutors had an 'open door' policy whereby students could access their personal tutor at any time of the working week. Whilst this worked well for some students, others did not readily engage. Sometimes, this was indicative of a strong external support network, alongside academic flourishing that held no concerns. However, informal discussions with students suggested that others found this approach too intimidating ("I might be interrupting their work"), or worried about how a visit might be perceived ("They will think I am failing if I visit" or "I should be able to cope").

To address this, the postgraduate physiotherapy course devised a three-pronged approach to increase visibility of staff to students, and build rapport. The first was to arrange a weekly drop-in morning. These took place in the students' teaching

building, rather than in a tutor's office so that students would not feel that they were interrupting more important business. Secondly, during each module, a breakfast craft session was arranged. Such sessions gave tutors an informal opportunity to speak with any student they had concerns about. Finally, tutors were encouraged to occasionally send unsolicited, targeted emails to their tutees throughout the year. For example, a tutor might send a message to their Singaporean students on the national day of Singapore. Alternatively they might acknowledge a religious festival or send an inspirational quote during an exam period. These infrequent but personal communications helped to maintain contact between staff and students, and provided an opening for students to engage if they wished to. The 2017-18 PTES scores were strong for postgraduate physiotherapy, with 97% of respondents stating that they were happy with the level of support offered.

18. Developing an inclusive environment In higher education: supporting students' learning needs

Shirley Shipman, Metaxia Pavlakou

Awareness of the need to develop inclusive teaching and learning that is accessible to all students is spreading throughout higher education institutions. This paper gives the overview of an institution-wide initiative based at Oxford Brookes university which promotes inclusive practices and developed resources for staff to support students' learning needs.

Our research methods consisted of a literature review about inclusive design in an educational setting, an assessment of the approaches taken by other universities (through a web-page search and follow-up interviews with key personnel) and a qualitative study examining students' learning needs.

Qualitative data were collected through: one focus group with 4 participants with specific learning difficulties (SpLD); questionnaires distributed to students that came to the Dyslexia Support for consultation (38 participants); and a subsequent focus group with 18 participants from the general student body that examined further what facilitates

effective learning. The key findings from this research included the identification of best practice from other institutions and of students' needs in relation to: accessible written materials for students with SpLD; access to teaching materials in advance; a multi-sensory teaching approach; and a variety of engaging learning activities. Students without SpLD appeared to have very similar learning needs to those with SpLD.

This research informed the development of a number of resources to be incorporated in an online portal for staff. A pilot study was carried out in order to evaluate the quality and suitability of the resources. The results highlighted improvements in inclusive practice, as well as areas in need of work. It was found that even staff already applying inclusive approaches in their teaching made further changes in their practice as a result of these resources. The portal is now live for all staff at Oxford Brookes.

19. Common mental health misconceptions held by UCL students

Frederike Lemmel

20. How can mental health first aid inform your teaching practices?

Natalie Humphrey, Chilima Sianyeuka, Jacqueline Mallon, Carmen Straker, Caroline Brown, Ntale Eastmond

It has been in the public and parliamentary conscience that mental illness, mental health and mental distress in students is an area that requires addressing. Our previous Universities Minister and Universities UK have stated that the mental health of students the responsibility of the whole university, not just those in student support roles / services.

As part of UCL's response to the demand on mental health support from the student body and the concerns of staff in academic departments we have rolled out an institutional wide programme of Mental Health First Aid training. The aim of this is to equip staff across UCL to be able to respond to the needs of our students.

Mental Health First Aid does not need to mean dealing with a crisis. Mental Health First Aid can support you to respond to all levels of mental health need, such as a student who is anxious about a particular assignment, or the student who is struggling to adjust to university life, or the student who got a C when they were hoping for an A. It is about giving you a toolkit to be confident that you can deal appropriately with the student in front of you.

So how can Mental Health First Aid support you?

We will now take you through some of the key principles and a couple of exercises that you can incorporate into your everyday work.

21. Enhancing clinical reasoning and practical skills in health care education using vodcasts

Jane Simmonds, Danie Wallace, Eleanor Main

Traditional approaches to teaching clinical skills in UK healthcare education include lecturer demonstrations and clinical reasoning case studies. An inability to guarantee either models with specific clinical pathologies on specific term dates, or standardised high quality demonstration are amongst the challenges faced by educators. Adequate repetitive exposure to the correct techniques is precluded by large classes gathered around a single model. Further challenges arise when English is not the first language of the students and when the approach to assessment and treatment are very new and different. Vodcasts are a form of e-learning technology whereby video files can be made available to students via the internet to download to mobile devices. Mobile or m-learning provides the learner with the opportunity to access these whenever, wherever and however they want to. This has opened up new ways that skills based education can be delivered to meet the needs of contemporary learners.

Over a 3 year period, a bank of videos of clinical experts undertaking clinical assessments and treatments of young people have been created and utilised in post graduate paediatric physiotherapy education. Working with a film making student

studying on the BA/BSc at UCL, videos have been carefully edited to create 6-10 minute vodcasts with high definition close-up shots, slow-motion repeats, text and voice-overs to emphasize key points. Vodcasts have been streamed to students via the University virtual learning environment Moodle and made available for the duration of modules.

Drawing on feedback from students over a 3 year period and reflecting on student examination performance, the influence of this pedagogical approach on student learning will be discussed.

22. Lessons from accommodating the distance learner

Tim Neumann, Kit Logan

We try our best to optimise our courses for the widest possible range of students, which includes



adapting pedagogy and materials, based on an understanding and knowledge of who our students are, of the subject matter, of teaching expertise, and of the institutional culture.

Every now and then it is useful to take a step back and reflect on how well we accommodate specific

groups of learners, to see what we are missing, what we can improve, and what we can learn. We took this opportunity in autumn 2018 in an event series of two panel discussions and one workshop organised by the IOE's Learning Technologies Unit (LTU) under the title "Accommodating the Distance Learner".

In this session, we will present a synthesis of issues raised during the event series with a view of refining our understanding to improve teaching, learning and the learning experience – not just for distance learners, but for the whole student body. There is much to learn from the experiences of colleagues involved in distance education, and we will highlight the dangers of making wrong assumptions about the student body as well as the benefits for all that can be captured by attempting to accommodate distance learners, for example but not exclusively by leveraging the use of technology.

Technology use in particular however brings up a set of less obvious issues that are sometimes not even articulated. Our series managed to uncover some of these, in particular pertaining to staff and wellbeing, and we hope this session can contribute to raising awareness and finding solutions in the long term.

23. Moodle hot questions

Rebecca Yerworth, Xu Zhao

I (Xu Zhao) am a student from China. I started learning English in middle school and have only been in the UK for just over 2 years. In lectures, although I generally have no problem with listening, sometimes it is a struggle to answer the questions quickly enough. By the time I phrase everything in my head, somebody else has spoken. In addition, I noticed that some non-native speakers feel less confident in shouting out the answer. In my home country, students raise their hand and wait - it is such a formal process, whereas here it is more casual. As much as I would like to fit in, sometimes it can be challenging.

Thankfully, my lecturer, Rebecca Yerworth, introduced a Moodle feature called the 'flipchart' (aka Hot Questions), which I found particularly helpful. It is a live forum where any student

registered on the module can simply type in the answer. One of the huge advantages is that students can be anonymous when answering, which encourages everyone to have a say. Moreover, it can even be used on a mobile phone, so everyone in the room can participate.

It creates this friendly, safe space where students like me have enough time to type in our answer and everyone will look at it at least once (answers appear at the top of the screen). It can also be that, while we are typing our answer, we read something interesting in the flipchart, which triggers more ideas that can be typed. In summary, it benefits all the students since it is a great documentation of our thinking and learning process. For the non-native speakers, it also provides extra language support - it is like whenever we have the answer, the flipchart hands us the microphone, and everyone listens.

24. [Easing the transition from further to higher education: Use of Moodle to welcome new chemistry students](#)

Stephen E. Potts & Mirabel A. Brow

The transition from high-school education to university can be particularly daunting for students, especially if they are coming from abroad. We designed a Moodle page for incoming students with a view to helping alleviate their anxiety and reducing their cognitive load during induction week by introducing enrolment and departmental information early. The page was built by a first-year undergraduate, who used her own and her cohort's experiences to design the content. Common questions were addressed, practice problems were provided and pre-reading and information about the department (including a virtual department tour and airline-style lab safety videos) was given. Students were automatically enrolled on the page as soon as they obtained their ID credentials in early September. They were asked to complete questionnaires on their first access to the page, just before induction week and at the end of the first term. The questionnaires gave insight into which features the students found the most useful and how their confidence and expectations of university life changed

over time. The outcomes of the survey will be discussed and recommendations for similar pages will be made.

25. [Introducing a UCL medical school specific education app with a bank of practice questions](#)

Jenan Younis, Y. Negreskul, J. Ryan, M. Vega-Poblete, J. Younis, F. Gishen

Introduction

Smartphone applications ('apps') are widely used by students in undergraduate medical education around the world to augment curricula (Payne, Wharrad, and Watts 2012; Sheikhtaheri Kermani 2018). They enable easy access to a wide breadth of medical information (Robinson et al. 2013).

The aim here was to explore the current usage of medical applications amongst final year medical students at University College London (UCL) and identify the potential need for a university-specific medical education app for this cohort.

Methods

A PubMed literature search was undertaken to inform medical education app use internationally. A validated questionnaire was identified (Payne, Wharrad, and Watts 2012). Students were asked to take part in an online anonymous survey based on the questionnaire. Questions included whether participants used medical education apps for learning purposes, which aspects of their learning such apps were utilised for, as well as limitations to usage. The data was analysed using Chi-squared test for categorical variables.

Results

70 medical students participated. The main areas of usage were firstly question banks, followed by prescribing aids ($p < 0.001$) with question banks being significantly more popular ($p < 0.001$). A number of issues limiting use were identified; format and layout (43%; $p < 0.001$), content not meeting the learning needs (26%; $p < 0.01$) and concerns about becoming deskilled by using apps (11%; $p < 0.05$). 89% expressed a need for a UCL-specific medical education app ($p < 0.001$) with the most popular features being practice questions (89%; $p < 0.001$), administrative information and timetables (73%; $p < 0.001$) and clinical skills resources (69%;

p<0.001).

Conclusion

The results show that apps are widely used in medical education amongst final year students at UCL, mainly for accessing question banks and prescribing. Lack of perceived content appears to be the most common cause of dissatisfaction with currently available apps. The majority expressed interest in a UCL-specific app, ideally containing a bank of UCL-style questions, suggesting that medical school bespoke apps may serve as a valuable learning resource.

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26. Bartlett School of Architecture E-learning

Bill Hodgson

The Bartlett School of Architecture decided in 2017 to improve its e-learning offer. Several of its many programmes and modules were already using Moodle although content varies and there was no underlying strategy. The common timetable was also inaccurate and most reading lists made little use of the library's reading lists service.

Although there was an expectation from that e-learning materials would ultimately meet the UCL Baseline the primary aim was to improve access to programme and module information and improve consistency.

If successful the project would consider developing

digital feedback for all students as well as using digital essay submissions and portfolios.

The project began by improving the content in Moodle. This was undertaken by developing three templates, one for programmes, one for constituent modules and another for any other miscellaneous courses.

Whilst the project was being undertaken the UCL Academic Model Project agreed a similar structure which was ultimately the basis of the 1819-moodle application. This allowed the beginning of a process of bringing all the programmes and modules into line with this structure.

When complete it is expected that Moodle will replace all the existing PDF documents used for programme and module guidance avoiding duplication and allowing easy access to materials for all staff and students.

To date module materials for Moodle are being written to follow the templates. It is expected the 2019-20 academic session will see all the course materials being accessible using properly formatted and baseline compliant Moodle content.

The proposed paper will present the experiences of this project and the next steps to improve feedback and submission.

27. Blogging for an inclusive, open access, creative education

Suzan Al Shammari, Joel Christoph, Sebastian Gorgon, Ben Glass, Victoria Hristova, Fiona Wilkie, Mina Sotiriou

UCL Arena Centre and UCL Innovation and Enterprise are working collaboratively to improve students' educational engagement and performance through technology. Last academic year, six UCL students and staff from the Arena Centre researched various technologies in furtherance of this aim. Their research suggested that a blogging platform for both personal and academic use, would benefit students most. In response to this research, an in-house blogging platform - UCL Reflect - was developed.

This UCL Educational Conference presentation

serves to demonstrate the potential of UCL Reflect. Throughout, we advance the claim that UCL Reflect will allow students, staff and departments to present, express and reflect on their educational experiences; facilitate outward facing assessments and give students' a voice beyond the class; improve students' assessments and learning environments by catering to differing learning styles, as well as increasing inclusivity on campus.

First, we outline three ways in which UCL Reflect is currently being used as an online classroom; a multi-person project hub; a personal blog. It is noted that these three uses all facilitate the creative sharing of personal experiences to the wider audience of UCL and beyond. In this regard, UCL Reflect as a tool is in harmony with the core values of the UCL Connected Curriculum strategy by providing an inclusive, open-access space for creative education. Second, we indicate how the use of UCL Reflect will increase students' employability. Finally, we invite the audience to give feedback on how they see UCL Reflect benefiting their department, as well as the wider UCL community.

28. Visualisation tool of students support in labs

Ghita Kouadri Mostefaoui

At UCL-CS we are developing a web application whose purpose is to allow students in a lab session to request for help.

Traditionally done by raising their hands, the use of an automated online service allows gathering useful information about students' requests. The latter will help us:

- Accurately quantify the amount of support provided to students in lab sessions
- Accurately define the quality of support provided to students in lab sessions
- Build students learning profiles and monitor students progress
- Rationally estimate the amount of resources needed for a given module/session in terms of teaching assistants
- Analyse lab exercises content in terms of clarity and time needed to complete.

In the presentation, I will describe the main functionalities and use of the first prototype.

29. Using debate to facilitate critical thinking and communication in post graduate healthcare education

Jane Simmonds, Naomi Winfield, Bridget Black, Melissa Walk-ley

Facilitating students to become critical thinkers and effective communicators is essential in today's complex health care environment. Healthcare providers must possess the ability to communicate confidently and effectively, not only to their patients, but also other healthcare professionals, commissioners, policymakers and insurers. Debate is a teaching method that helps students to develop such skills. As an experiential learning process, debate requires students to develop arguments based on a critical review of the evidence. Furthermore debate facilitates active listening skills and can boost confidence when challenged on issues by others.

This presentation will provide an overview of the range of different approaches to debate which are used in post graduate physiotherapy education as part of our evolving teaching and learning strategy. Practical aspects of setting up and running debates including the use of e – technology will be included in the session. The personal experiences of both staff and students when debate is used within our teaching and assessments to facilitate critical thinking and communication will be discussed.

30. Open education centres on a commitment to provide access to high quality education and educational resources to anyone with access to the Internet

June Hedges, Clive Young, and Nephtali Marina-Gonzalez, Claudia Yogeswaran

This typically involves the creation and sharing of openly-licensed learning materials – open educational resources (OER) – that can be re-used and enhanced by the community. OER can include lesson and course plans, exercises, diagrams, animations, video or audio lecture recordings, presentations, handouts, mock papers/tests, reading

lists, and so on, and do not necessarily have to be full courses.

UCL is raising awareness of Open Education and has established a project to embed open educational practice across the institution using a three-pronged approach:

1. Infrastructure, including a repository for OER (which meets an objective of the UCL Education Strategy 2016-21) and a framework of support for UCL members looking to publish and showcase their educational output.
2. Working under UCL's Open Science agenda to inset OE policy across the institution.
3. Encouraging, demonstrating, and rewarding open teaching and learning practice(s) across UCL; this includes a focus on the Connected Curriculum strategy which seeks to promote collaboration across academic levels and disciplines and facilitate communication between academia and the public.

It is our aim that enabling open educational practices at an institutional level and promoting OER as a world-class output alongside research publications, data, and software will ensure the creation, preservation, and distribution of educational output, raise the profile of teaching, and inspire new forms of teaching and learning.

Our workshop will provide an overview of the Open Education project and will include a case study from Nephtali Marina-Gonzalez of the UCL Faculty of Medical Sciences who will present his experience as both, consumer and producer of OERs. The workshop will facilitate discussion with peers on issues related to Open Education which we hope will inform our support provision.

31. [The use of technologies as a way of ensuring an individual approach to students with varying language abilities in teaching writing in Russian](#)

Maria Sibiryakova

Developing writing skills in a foreign language requires a systematic approach, extensive feedback and guidance from the teacher. It also involves teaching both the target language and also stylistic techniques to be able to produce good quality

written content. The task can become particularly challenging if the cohort consists of students with varying learning abilities, differing language levels, and diverse interests in an environment with limited teacher-student contact hours. This paper, based on my own experiences and scholarship, describes how the use of technologies can help teachers address these challenges.

Using the programmes SharePoint and OneDrive facilitated an effective and hassle free teacher-student collaboration on students' written work. The use of recorded audio feedback and feedforward ensured an individualised approach to students' learning and provided a very efficient way of giving high quality feedback in little time. The learning (and discussion) of new target vocabulary for the thematic blocks took place on the interactive platform VoiceThread. The asynchronous nature of this platform enabled the teacher to create an inclusive environment for speakers with different language abilities and schedules by allowing them to interact evenly and learn from each other. Creating personal writer's blogs on WordPress.com facilitated the practice of writing for an audience and increased the sense of responsibility and ownership for the content students had created. It also helped them to become aware of their own and their peers' learning process and progress. The use of technologies to address these issues outside of the assigned classroom time allowed me to conduct workshop style sessions where students could raise and discuss their concerns, brainstorm ideas together, and have guided peer-reviewing sessions.

These experiences can become useful to educators in creating flexible, individualised, and inclusive learning for students across all disciplines.

32. [Development of a structured virtual reality curriculum for laparoscopic appendectomy: Widening the accessibility to high-fidelity simulation technology for surgical trainees](#)

Daniel Sinitsky, Bimbi Fernando, Henry Potts, Panagis Lykoudis, George Hamilton, Pasquale Berlingieri

Background: Appendectomy is the most common abdominal surgical emergency for

which laparoscopic appendectomy is commonly performed, mainly by trainees. Therefore, it is imperative to include all junior surgeons in a programme providing the necessary laparoscopic skill to carry out this procedure safely. Transferability of laparoscopic skill developed on virtual reality (VR) simulators has been demonstrated. The aim of this study was to develop a step-wise structured VR curriculum for laparoscopic appendectomy demonstrating construct and face validity.

Methods: Using a high-fidelity VR simulator, a prospective study design was implemented. Experts and novices were randomised into each of three groups: laparoscopic psychomotor skills tasks, appendectomy procedural tasks, and full appendectomy procedure. Novice and expert performances were compared to assess construct validity for each metric/task. Learning curve analysis was performed. A step-wise curriculum was then constructed using expert performance as proficiency goals. Participants completed a seven-point Likert scale survey assessing face-validity of the appendectomy module.

Results: Thirty-five novices and 25 experts participated in the assessment. Psychomotor tasks three, five, six, eight and nine, and all appendectomy tasks showed construct validity. Learning was demonstrated in the majority of construct-valid tasks. A novel VR curriculum for laparoscopic appendectomy was constructed, rigorously based on distributed practice, with human instruction specified periods, as well as formative and summative feedbacks/assessments. Appendectomy module realism was rated as moderate, participants strongly agreed that the module was both enjoyable and useful, and agreement to making a similar module mandatory prior to operating on real patients was moderate by novices, and strong by experts.

Conclusion: A structured VR curriculum for appendectomy was constructed with many of the psychomotor skills tasks and all of the appendectomy tasks demonstrating construct validity. The appendectomy module was perceived as realistic and useful. Future study should test the feasibility of its implementation and transferability of acquired skill.

33. Writing an interdisciplinary Wikibook

James Everest

This year, the module 'Approaches to Knowledge' (a first-year core course in the Arts and Sciences degree programme) featured a new assignment: in groups of three or four, students collaboratively wrote chapters in the Wikibook 'Issues in Interdisciplinarity 2018-19'.

Arts and Sciences is an interdisciplinary degree program, in which students study modules from across the range of subjects available at UCL. As a result, we are acutely aware of the extent to which the internet is breaking down traditional disciplinary borders. Faced with an assignment, a student's most likely first port of call is now Wikipedia. Many academics steer their students away from such sources, but with this assignment we encouraged students to engage with the Open Knowledge movement (of which Wikipedia and the sister-site Wikibooks are a part), by contributing to it.

In this module, we aim to facilitate students' development into independent researchers as quickly as possible. In the first half of term, students conducted their own research into four issues that commonly face those conducting interdisciplinary work: disciplinary categories, truth and the disciplines, evidence and the disciplines, and imperialism and the disciplining of knowledge. In the second half of term, students worked as teams to write chapters examining how one of these issues might play out in practice. The entire Wikibook was a free and open, student-generated, public-facing piece of research, which aimed at readers ranging from interdisciplinary educators, to stakeholders in interdisciplinary education, though to students thinking of pursuing an interdisciplinary degree program.

This paper will discuss the strengths and weaknesses of the assignment from the perspective of the module convenors (James Everest and Carl Gombrich) and from that of students. It will make the case for assignments of this nature, which work with the grain of twenty-first century students' research instincts, rather than against them.

34. Open, networked, connected: Open educational practices for a connected curriculum

Jo Stroud, Leo Havemann

Recent years have seen an increase in the number and variety of calls to rethink teaching, learning, and assessment to encourage inclusive and participatory learning in higher education, with strategies including Assessment for Learning, networked, connectivist and rhizomatic models of learning, open educational resources and practices, and, at UCL, the Connected Curriculum.

The Connected Curriculum, UCL's framework for research-based education (Fung, 2017), encourages students to critically engage with knowledge production by making new intellectual connections with each other, with researchers, across disciplines, and the wider world. Open educational practices (OEP), meanwhile, not only promote the (re)use and production of open educational resources (OER), but can be defined as activities which foster transparency and collaboration in knowledge sharing and production, develop and strengthen communities of practice, and empower learners as producers of knowledge (Andrade et al, 2011). It is via this focus on connectivity and interdisciplinarity that the Connected Curriculum demonstrates its alignment to the principles of openness, and through which research-based education can be used to address global challenges.

Where the open education movement has concerned itself primarily with how educational resources and practices can be opened, the Connected Curriculum makes arguments for why. This session will consider the intersections and commonalities of OEP and the Connected Curriculum, with a view to raising awareness of open education as a theory, philosophy, and means of inclusive and holistic approaches to learning and teaching. It will further highlight practical activities aligned to the specific dimensions of the Connected Curriculum that can be used to deliver research-based education at UCL.

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35. How using technology in lab based practical classes has helped student engagement and time management

Alison Dolling, Adam Philips, John P Malkinson

This presentation will focus on the use of technology as a teaching aid during laboratory-based practicals. The use of audio-visual technology in this way is in response to poor engagement due to the lack of understanding of simple practical processes, the need to accommodate different learning styles, and time limitations during practicals. These audio-visual aids were implemented for first and second year undergraduates, MSc and summer school students. Demonstration videos were produced and hosted on YouTube with closed captioning available. These are mandatory for students to watch before the start of each practical and can be viewed as many times as necessary for students that need additional preparation time. These videos were made on site by the members of staff that run the sessions and include health and safety information as well as practical instructions required to undertake the class.

Previously staff would deliver a presentation that could last up to 25 minutes at the start of each practical session, which was a poor use of laboratory and staff time. To supplement the demonstration videos, during the practical classes a rolling PowerPoint presentation was displayed on screens around the laboratory. The slideshows have step-by-step instruction and clear photos of how to set up equipment, and include photos of intermediate stages that show how ideal progress should look. Since these changes have been implemented, the time taken for most students to complete the work has reduced, saving staff and laboratory time. Reallocation of some student time to outside of the lab is more efficient and can help students with physical impairments. Engagement during the classes has increased as students know what to expect ahead of time. Students often arrive with annotated practical worksheets, including

details from the videos, allowing focus on key concepts rather than the simple operations of the practical.

36. ABC: An open access toolkit for rapid blended learning design

Nataša Perović, Clive Young

ABC, UCL's highly engaging, quick and indeed 'fun' approach to achieve high quality programme design in less than two hours continues to develop. Last year UCL Action for Curriculum Enhancement (ACE) built on UCL's experience of running this rapid-development learning design method. Extensive testing in our and other institutions had already shown high levels of transferability, academic enthusiasm and satisfaction. Building on this positive experience in 2016 our digital education team successfully bid to the HEFCE Catalyst Fund.

The ACE project evaluated ABC and developed a toolkit available to all HEIs. This helps teachers and academics run ABC themselves and addresses strategic integration, quality, current academic development initiatives and post-workshop pedagogical and technical support. The ACE project evaluation inspired a successful follow-on bid to Erasmus+ for "ABCtoVLE", a two-year project which started in September 2018. In this project UCL is working with 12 leading universities and colleges across Europe to develop a new 'open access' version of the toolkit and build a set of shared resources to help teachers move from paper designs to rich interactive courses in their virtual learning environments (VLE). The presentation will reflect on the lessons learned for using technology to improve learning gained from both projects. We will also invite all colleagues interested in improving programme design to engage with this highly transferable method, download our resources and contribute to the ABC community.

37. Educating and engaging new communities of practice with high performance computing

Andrea Townsend-Nicholson

The identification of strategies by which to

increase the representation of women in STEM fields, including medicine, has been a pressing matter for global agencies including the European Commission, UNESCO and numerous international Scientific Societies. In my role as UCL training lead for CompBioMed, a H2020 Centre of Excellence in Computational Biomedicine (compbiomed.eu), and as Head of Teaching for Molecular Biosciences at UCL,

I have lead the development of HPC-based education targeting medical students and undergraduate students studying biosciences in a way that has explicitly designed to be integrated into their existing university programmes. One version of this course has been designed for medical students in Years 1 and 2 and one of the unique features of the course is the integration of clinical and computational aspects, with students obtaining and processing clinical samples and then interrogating the results computationally using code that was ported for the first time to HPC, at CompBioMed's HPC Facility core partners (EPCC, SURFsara and the Barcelona Supercomputing Centre). Another version of the course replaces the final year research project course for undergraduate science students, providing the opportunity to develop and pursue experimental hypotheses that involve the integration of experimental and computational methodologies. In the past two years these courses have successfully run with 60 medical students and 195 biomedical science students participating. Our experience has enabled us to distil our methodology into an educational template that can be delivered at other universities in Europe and worldwide. This educational approach to training enables us to redress disparities in diversity, providing female and also young STEM practitioners with expertise in computational methods and enabling new communities of practice (medical students, science and engineering students, women) to effectively engage with high performance computing.

38. How to grow and stay small: A strategy for scaling up while enhancing inclusivity

Steven D Buckingham

It is generally assumed that scaling up a program without proportionally adding teaching staff means you lose the advantages of a small cohort, and

therefore runs the risk of students feeling 'lost' in a large crowd. This loss is important, because it is generally agreed that student benefit from low student:teacher ratios and is a threat to inclusivity as minority students get lost in the crowd. Here I describe a strategy that has enabled the Applied Medical Sciences family of programs to scale up from a cohort of around 100 students to one of over 500 with a modest increase in staff numbers and yet preserving the intimacy of a small cohort.

The strategy centred on dividing learning activities into three strata: online delivery content, workshops and small groups. Online delivery uses a range of Moodle activities including webinars, SCORM packages, lessons and quizzes. Delivering these kinds of content online offers several advantages for students (such as working from home, working through lessons at their own pace) and staff (such as efficiency and monitoring of online activity). The second stratum consists of full-cohort, face-to-face workshops in which students rehearse skills learnt online under the guidance of a single teaching fellow. The third stratum consists of small tutorial groups with 2 key attributes: 1) the activities done by the group are orthogonal to module content (ie they do not 'cover the material') and 2) the group is headed by a single Teaching Fellow throughout the year. These groups allow continuous feedback and teaching on general aspects of intellectual development, and having this done by a single, continuous teaching fellow provides a sense of intimate discipleship that guides students through the large group activities.

39. [Micro presentation: Diversifying the talent pipeline](#)

Rochelle Rowe, Kasia Bronk

HR Organisational Development has launched Researcher-led Initiatives for postgraduate research students, now in their second year. RLI awards enable researchers to be creative, proactive, and empowered, through the process of initiating, designing, managing, and delivering new professional development activities for their peers, allowing them to develop the skills and experience needed to progress in their careers in academia and beyond. By clearly naming one of the criteria for the awards as 'Promoting the development

under-represented groups in academia' we have already begun to attract innovative new projects aimed as inclusive approaches to research, including supportive networks for sharing decolonial approaches to research, to supportive spaces to share knowledge, build communities and create new resources.

40. [Striving to ensure that all our students reach their full potential: lessons from our LGBTQ international students](#)

Caroline Selai, Francisco Martins De Carvalho Moreira

Students enrolling at university for a first (or higher) degree set off with a range of goals, hopes and dreams and arrive with many assumptions and expectations which may or may not be explicitly articulated.

A large and growing body of published literature documents the specific challenges faced by International students whilst attempting to assimilate into their host culture. There is less published evidence documenting the experiences of LGBTQ international students.

This presentation, illustrated with a number of anonymised cases, will draw on the lead presenter's own experience in roles including (i) a UCL Dignity-At-Work Advisor (ii) Co-Director of the UCL Cultural Consultation Service (CCS) (iii) MSc programme Co-Director and (iv) role as former Head of UCL Institute of Neurology Education Unit (2006-2017), plus the experiences of many UCL students and members of staff in a variety of roles across UCL. The co-presenter is a current UCL Taught Masters student.

Most students (home and international) are negotiating changes to their kinship ties, re-negotiating pre-existing friendships, developing relationships and forging new identities. From interviewing our LGBTQ international students at UCL, I have learned that students in this group can experience significant challenges. They can feel particularly marginalised, stigmatised and isolated. Rejection and violence or threats of violence are frequent experiences. Some are from countries where same-sex relationships are criminalised and have been forced to keep their sexual identity

hidden. Some are still considering or exploring their personal identity. In some cultures, help-seeking of any kind may be stigmatised. When a student has come from a culture where all information given to an 'official' may be shared with others, statements promising confidentiality are viewed with scepticism. LGBTQ rights in the UK, rules for immigration and asylum, police procedures and pathways to access mental health support may not be known. The subtleties of social etiquette, making friends, being accepted - or not - by a group, faux pas, body language, all need to be quickly learned.

Against this sometimes tumultuous background, LGBTQ international students are also striving to excel in their studies. We will share some lessons learned. Whilst many students have thrived and achieved their goals, others have had a more difficult time. We reflect on what we at UCL can do to ensure that these and ALL UCL students reach their full potential.

41. [Widening participation of maths mentors and promoting inclusive education through the design of an online CPD course](#)

Cosette Crisan, Eirini Geraniou

There is a need for schools to attend to teacher quality in ways that support student teachers, new entrants to the teaching professions, as well as non-specialist teachers. Repeated government calls in the UK require that all school-based mentors are experienced in delivering high quality professional development, have a deep understanding of the specialist subject required for high quality teaching of the subject and understanding of how teachers develop this knowledge.

However, nationally and internationally support for mentors is sparse and rather generic, at the expense of subject specific support (ACME 2015, Barrera-Pedemonte, 2016). Additionally, schools' limited budget and teacher cover implications constrain mentors' participation in such course.

To address these issues, we are designing a subject specific CPD course for maths mentors based on principles of inclusivity, namely widening participation and improving learning via digital

technologies and open access resources. The mode of delivery will be online and asynchronous, with ongoing online forum discussions between the participants and supported by us, the tutors, aimed at promoting an online community of practice. This delivery mode facilitates self-paced studying that accommodates more flexibly the various needs of maths teachers, while the online community of practice will orchestrate peer collaborative learning between mentors with diverse backgrounds and personal experiences and views. The course activities encourage approaches to teaching that address the mathematical needs of pupils with a variety of backgrounds, learning styles, and abilities.

The UCL online platform hosting this course will extend access to the course resources to teachers in schools located anywhere in the UK and abroad, hence disseminating and increasing the impact of UCL's vision of inclusivity in education. In this presentation we would talk about the opportunities and challenges of supporting mentors in their implementation of inclusive teaching, as promoted by the design of our CPD course.

References:

Advisory Committee on Mathematics Education. (2015). *Beginning teaching: best in class?: high-quality initial teacher education for all teachers of mathematics in England.*

Barrera-Pedemonte, F. (2016). *High-Quality teacher professional development and classroom teaching practices.* Evidence from talis 2013.

42. [Preparation for Academic Study \(PAS\): An online course for pre-university contextual offer holders](#)

Louise Green, Rebecca Surin

From September 2018, UCL contextual offer holders have been required to complete the above self-access course. Developed as a joint project by UCL Widening Participation (WP) and UCL Institute of Education Academic Writing Centre (AWC), the initiative addresses a key recommendation made by the Sutton Trust (2017: no page): 'Universities practising contextualisation should provide additional support to students from disadvantaged backgrounds ...in recognition of the additional

difficulties such students may face’.

Using the UCLeXtend platform, PAS aims to help build confidence among pre-university WP students through four hours of self-access learning. Following an Academic Literacies approach (Lea and Street, 1998; Wingate, 2006), we believe that academic communication is acquired within a discipline, and that dialogue around this can enhance inclusive learning (Wingate, 2015) and boost confidence. As such, video-based reflective tasks are used to encourage participants to draw on previous learning experiences, compare these to accounts of existing UCL students and consider ways in which their previous ‘success’ at navigating new academic environments might help them adjust to learning in higher education.

This presentation will:

- Outline the rationale for developing the PAS course.
- Offer an overview of its content and approach to developing academic communication.
- Invite attendees to critically evaluate the extent to which such additional support might be beneficial (or not).

References

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The Sutton Trust (2017) ‘Admissions in Context’, *Improving Social Mobility*. Available at: <https://www.suttontrust.com/research-paper/admissions-in-context-access-gap/> (accessed on 15 January 2019)

Wingate, U. (2006) ‘Doing Away with Study Skills’, *Teaching in Higher Education*, 11(4) pp. 457-469

Wingate, U. (2015) *Academic Literacy and Student Diversity: The Case for Inclusive Practice*. Bristol: Multilingual Matters

43. Engaging with widening participation audiences: Insights and opportunities

Karen Roberts

The Pupil Engagement project within the Access and Widening Participation team at UCL aims to

offer tailored guidance and support to students from widening participation (WP) backgrounds to encourage them to consider higher education and, ultimately, to apply to and enrol at UCL. To inform the project, we conducted 18 focus groups last summer among parents and secondary school students from different ethnic groups across London. The respondents met WP eligibility criteria, but had never previously attended a UCL WP programme.

This presentation will focus on the perceived barriers to accessing higher education which formed respondents’ main areas of concern around applying to university. While several of the barriers are likely to be the same for non-WP audiences, the respondents worried that they would face particular issues related to integration and cultural identity due to the (assumed) lack of diversity on campus. The presentation will identify the types of language and mindset which may inadvertently alienate WP students and reinforce notions of ‘us and them’. It will conclude with the implications of this research for those wishing to develop an inclusive learning environment at UCL.

44. Discover UCL Summer School for D/deaf and hard of hearing students

Manjula Patrick, Alison Forbes, Sannah Gulamani, Alex Owusu and special guest, Natasha Wilcock

Deaf students are hugely under-presented in HE, ‘Discover UCL Summer School for D/deaf and hard of hearing students’, unique to UCL, aims to redress balance by equipping deaf students for university life.

What is ‘Discover UCL...’?

It is an annual residential summer school, which supports deaf students’ preparation for university, by developing confidence and skills to flourish in HE. The programme includes practical information (e.g. UCAS statements), object-based learning sessions using UCL’s collections and PhD student talks on varied subjects convey breadth of study.

An inclusive curriculum:

Deaf role model and current/former UCL D/deaf student talks convey career choices and barriers

through personal stories to help students plan for university and careers.

Disability support sessions provide practical guidance and reassure students UCL can support them.

Running sessions that are engaging and stretching are key to our success, though engaging 16-17 olds with different interests, perspectives and communication preferences is challenging.

The programme is innovative and creative, drawing together groups of (internal/external) people who would never ordinarily work together, or previously encountered deaf people.

Impact:

- 27% of students (2014-2017) went on to HE, two to UCL.
- Enhances UCL's reputation in the deaf sector for both academic excellence and inclusion that welcomes deaf students.
- Quote: 'The Discover UCL summer school was one of the most influential and beneficial times of my life. I developed myself academically, met friends for life and most importantly learnt that even though I am deaf, university is a very real goal'

Summary:

Discover UCL creates unique opportunities for the students attending, and develops the UCL community.

To achieve inclusivity, we need to embrace diversity and share ownership for cultural change. Discover UCL is a beacon for inclusive education, taking active and progressive approaches towards equality, diversity and inclusion by championing deaf people's inclusion in HE.

45. [Micro presentation: Student engagement through choice: Skills-based or hypothesis-based research projects](#)

Renee Vancaenenbroeck, Amanda Cain, Andrea Townsend-Nicholson

In year 3 of the UCL Biochemistry BSc / MSci degree, students carry out a 30 credit specialist

research project using contemporary techniques in Biochemistry. We have recently developed a "Specialist Research Project in Protein Structure and Function" to add to our existing "Specialist Research Project in Metagenomics". Students will be conducting their experimental work in the specialist research laboratory and in research facilities in Structural & Molecular Biology and at Birkbeck, using state-of-the art techniques in biochemistry and biophysics. However, to engage our students in this new protein module and to cater for their varying research interests, we have created two separate options, letting them choose a project that is either skills-based or hypothesis-based. In the skills-based option, students will choose a candidate protein from a list of proteins that are currently used in the academic research of the department and will select from a range of different experimental methodologies to purify and characterize their chosen protein.

In the hypothesis-based approach, students will choose any protein of interest to them and, with an academic mentor, will design and attempt new characterizations based on known information. Examples include introducing a mutation to look at structure-function relationships, testing a homologous protein, or testing a phosphor-mimetic variant. In this set-up, the focus lies on hypothesis formulation and protocol design. This dual option approach will enable students to obtain expertise in protein biochemistry in a way that accommodates their research and career interests.

46. [Celebrating Black Mathematician Month](#)

Eleanor Doman, Luciano Rila, Sean Jamshidi, Nikoleta Kalaydzhieva

There is a lack of representation of black academics in mathematics in the UK. In 2017, we met Nira Chamberlain who told us about his experiences as a black mathematician. Following this we decided to launch Black Mathematician Month, to celebrate the work of black mathematicians and raise awareness of the barriers within the field. Throughout October we published interviews with, and articles written by, black mathematicians on the Chalkdust website. Chalkdust magazine is a free magazine for the mathematically curious, run by postgraduate maths students at UCL. We distribute to universities,



schools and enthusiasts.

As part of the 2018 Black Mathematician Month, with the financial support of UCL Department of Mathematics, we organised a widening participation event to encourage young black students to engage more with maths, enjoy it and view it as an important skill for employment. The day took place at the London Academy of Excellence Tottenham, and was attended by 56 Year 9/10 students from 6 local schools. As guest speakers we invited David Lammy, MP for Tottenham and Nira Chamberlain, current vice-president of the IMA. Workshops were led by postgraduate students and four undergraduates from UCL were recruited to take part in the event and a Q&A panel session on university life.

Feedback shows that 93% of students felt that they had a greater awareness of the applications of mathematics and 55% of the students felt that they were more likely to study A level mathematics after the event.

47. Understanding what inclusivity means for medical students in order to create a more cohesive NHS workforce

Sara Beqiri, Fatima Mahmoud, Ayo Olatunji, Sarah Ashraf, Aashika Luintel, Shivani Singh

Inclusivity, as defined by UCL, involves empowering students to achieve their full potential 'by not advantaging or disadvantaging some over others'. Our initial scoping literature review highlighted that there are marked disparities amongst students' university experience with regards to attainment, range of opportunities available to them, feeling of integration and overall satisfaction. In light of the increasing realisation that a greater diversity within the NHS workforce results in better patient outcomes, our primary research is looking at trying to understand the extent to which these disparities are present within the medical school. As medical students ourselves, the focus of our research will be to understand our peers' perceptions of what inclusivity at UCL means for them.

In order to develop a broader understanding of these perspectives, we will carry out qualitative interviews with students from different racial groups, socioeconomic backgrounds and genders. Following the data collection, we hope that our literature review, in conjunction with our primary research, will help raise awareness for the need to consider inclusivity upon the development and implementation of future interventions within the medical school. Ultimately, the unique pathway which links medical students directly to the medical workforce highlights the need to establish this crucial groundwork at medical school so that as 'Tomorrow's Doctors' we continue to uphold the values of a cohesive workforce to create an NHS without discrimination.

48. Tackling poor student attendance and engagement

Nephtali Marina-Gonzalez, Manuel Hernandez-Guerra, Dalia Elena Morales Arraez, Enrique Quintero

Peer instruction (PI) is a powerful, research-based instructional strategy created at Harvard University to address students' struggle to apply factual knowledge to conceptual problems and to boost the effectiveness of in-class questions and student discussion. It provides a clear framework that guides the teacher and the students through a learning 'episode'. PI is a type of flipped classroom method that is able to support active learning in all sizes of classes (especially important for the ever-increasing number of students) and it works on the theory that students at similar cognitive levels can at times explain content where educators may experience the "knowledge curse".

In UCL, we implemented PI in a flipped year 1 Physiology module in the Applied Medical Science programme to overcome the challenge of ever-increasing student numbers and insufficient academic staff. In collaboration with University of La Laguna (ULL), Tenerife Spain, we implemented PI in a traditional lecture-based year 4 Clinical Medicine module to overcome the problem of poor class attendance and lack of student engagement.

Our data show that PI significantly increased the ability to solve in-class integrative problems in UCL

students. However, academic performance was not affected by implementation of PI. In contrast, in ULL students, implementation of PI dramatically improved final exam scores, student satisfaction and class attendance.

In conclusion, these results suggest that in UCL PI was just as effective as conventional small group flipped classroom tutorial teaching in producing high levels of academic performance without demanding large numbers of teaching staff. In ULL, PI proved to be superior to the traditional lecture-based method in terms of academic performance, but most importantly, PI enabled the creation of a more engaging and interactive learning environment that effectively solved the problem of poor student attendance.

49. Decolonising the medical curriculum

Amali Lokugamage, Faye Gishen, Hope Chow

The Decolonising the Medical Curriculum project was a collaborative project between staff and students from UCL Medical School Clinical and Professional Practice (CPP), UCL Culture, a visiting cultural historian and UCL Alumni performance artist. A 4th year medical student built a website to demonstrate and share our learning from this project with contributions from student, staff and members of the public. We hope this website provides some insight to the UCL Medical School CPP department's efforts to create a more inclusive curriculum.

Within this website, "decolonising" refers to the aim to overturn power imbalances which arise from historic and institutional biases along axes of race, class, gender and disability. Our particular context is medical education in the UK. We explored the work of decolonising through six domains:

1. Decolonising the body
2. Decolonising the curriculum
3. Decolonising learner experience
4. Decolonising learner space
5. Decolonising professional behaviour
6. Decolonising ideas of healing

In this presentation we demonstrate how this

is a very challenging area to navigate. Forging through areas of sensitivity and historic injustice risks exposing unconscious prejudices, requiring diplomacy and an understanding of the impact of personal and intergenerational trauma. We recommend that those leading diversity projects at higher educational institutions be reflective about their own privileges and biases.

50. Students as decision makers in Midwifery student selection processes

Anne Preston, Jane Forman

In this presentation we will share our work on fostering staff and student partnership in the processes of student recruitment in Midwifery. In the HE sector, there is a tradition of inviting medical students to be part of the decision making processes for student selection but to date, Midwifery students have only been involved in a non-decision making capacity. We decided to invite our students to join as partners in the process and become involved in the recruitment process as decision makers. Since introducing this into our recruitment strategy our number of Black and minority ethnic students has increased from 30%-48% and the number of students with learning disabilities has also increased to 7%.

In partnership with student action researchers, we have now started formally evaluate the process from the student perspective. Our aim is to get a more accurate picture of whether there are the specific benefits to students as they participate as partners and to understand what informs their specific collaborative decision making processes as recruiters. Our research questions have evolved into the following:

What is the nature and quality of student collaborative decision making processes?
Do students benefit from the process of collaborative decision making and if so how?
What emerging models of 'midwifery students as partners' come out of their practice as students recruiters and how what can other disciplines in higher education learn from our experience?

51. Micro presentation: Supporting Connect.ed in making collaborative research opportunities more accessible among students

Navya Sharan, Yu Zon Chow

Research skills are best acquired through experience. However, students are rarely exposed to research projects early in their undergraduate degree and most extra-curricular undergraduate academic research opportunities are poorly advertised. To equip themselves with the right skills and knowledge to succeed in academic research, undergraduate students should have the opportunity to easily acquire and develop these skills right from the beginning, i.e., their first year at UCL. Connect.ed is a student initiative to build a student research community by creating a formal channel that would make obscure opportunities readily available. In Connect.ed's flagship Research Mentorship Program, early undergraduates are paired with postgraduate students, who act as research mentors. This allows undergraduates to participate in world-class research. The research projects in this program are for those who have little to no experience in research, hence there are no prerequisites for anyone to participate. It is also an invaluable resource for postgraduate students who can gain mentoring experience while obtaining help with their own research. Harnessing UCL's excellent quality of research, this platform connects undergraduates and postgraduates through collaboration in research, thus closing the gap between two cohorts, which together make up half of UCL's student bodies, but are rarely affiliated.

In the long run, we aim to create one-stop shop for research opportunities in UCL. A research community within UCL students that bridges the gap between undergraduates and postgraduates through collaboration in academic research will ultimately lead to higher quality student research projects and well-trained student researchers, thus contributing to not just the academic excellence but also a well-rounded student life that UCL offers.

52. Educational opportunities for refugees and forced migrants

Jay Derrick, Rachel Rosen

The proposed symposium has four primary purposes:

- Provide a brief overview of relevant research in Refugee Education and the role of universities
- To raise awareness of existing initiatives to support Education for Refugees and Forced migrants at UCL and beyond
- To explore how UCL might build support for the educational needs of forced migrants and refugees into its global strategy and planning, for example by becoming a University of Sanctuary <https://universities.cityofsanctuary.org/>
- To raise the profile of the IOE's Refugee Education Working Party

Increasing numbers of refugees and forced migrants are arriving in London, as they have been for many years. Many are well-qualified and have valuable professional experience, yet they often find it difficult to gain appropriate employment. The reasons for this are a combination of political, cultural, financial and bureaucratic factors, but the end result is that their talents, knowledge and experience, which could be highly beneficial in a variety of ways to London and the UK, are very often wasted (Fiddian-Qasmiyeh et al 2016, Pastoor 2016, Sengupta and Blessinger 2018).

The key element they need to overcome these barriers is often educational and professional qualifications appropriate for employment in this country, for example, in areas such as teaching. The aim of this symposium is to look at ways to help refugees overcome some of these barriers and gain university qualifications that will help them gain employment appropriate to their knowledge and experience.

The purposes of this session align directly with the theme of Inclusion of this year's UCL's Teaching and Learning Conference, in relation to both widening participation in general, and in supporting a specific group of potential students and scholars who experience significant barriers to accessing educational and employment opportunities. To this

end, the symposium seeks to highlight some of the many initiatives supporting Refugee Education that exist already within UCL, and to develop arguments to inform the strategic development of this work at UCL.

The symposium will provide a brief overview of relevant research in the area, and will go on to showcase a range of models for supporting Refugee Education, providing an opportunity for awareness raising, questions and discussion from a wider audience within UCL. A likely outcome will be to increase the number of volunteers coming forward to support existing initiatives to support Refugee Education.

The symposium will be chaired by Lesley Gourlay from the Institute of Education's Refugee Education Working Party. It will consist of up to four short presentations, each reporting on an existing initiative to support Refugee Education. These will include:

- The ReConnect Preparation for Higher Education Programme (Programme Leader: Jay Derrick, IOE)
- Department of Education, Practice and Society)
- Refugees in a Moving World (Rachel Rosen, Department of Social Science)
- To be confirmed: speakers from the Universities of Sanctuary and/or STAR

These presentations will be followed by discussion and questions. The symposium's discussions and arguments will inform the subsequent work of the IOE's Refugee Education Working Party.

References

Fiddian-Qasmiyeh, E., Long, K., Loescher, G. and Sigona, N. (eds, 2016). *The Oxford handbook of refugee and forced migration studies*. Oxford: OUP

Pastoor, L. (2016). 'Rethinking Refugee Education: Principles, Policies and Practice from a European Perspective'. *International Perspectives on Education and Society*, 30, 107-116.

Sengupta, E., & Blessinger, P. (eds, 2018). *Strategies, policies and directions for refugee education*. Bingley: Emerald Publishing

53. Improving students' experience of assessment and feedback by better understanding what they are telling us

Thomas Flynn

Significant amounts of time, effort and resource have been expended to improve students' satisfaction with assessment & feedback. Departments and programmes have made particularly strenuous efforts to improve the timeliness of feedback, the detail and quality of feedback, and the availability of marking criteria. Despite this, scores from students have been slow to improve.

This session will present evidence from the Students' Unions annual analysis of SSCC minutes which indicates that most student feedback about assessment and feedback is no longer related to the timeliness or quality of feedback, and addresses more subtle concerns. Additionally, evidence is beginning to indicate that many current approaches to the provision of assessment criteria, including some we may consider 'best practice', are not in fact addressing students' needs.

This session will begin by outlining the Union's findings, and then move onto a discussion between attendees and a panel of students focused on what the most effective interventions might be.

54. Engaging Mathematics undergraduates in critical writing

Suman Ghosh

The presentation will focus on how we engage maths undergraduates in critical writing as part of the Mathematics Education module. Although the module is highly relevant to students interested in applying for initial teacher training courses, it is aimed for undergraduates who are in their third or final year of a degree and curious about how mathematics is learnt and what educational environments support learning and participation.

An underlying aim of the module is that it is designed to provide students with opportunities to engage with critical writing, particularly as many maths undergraduates will have limited experience

in this area. The presentation will discuss how a carefully designed series of formative assessments help students learn to summarise academic writing, critically appraise research papers and work towards their own research-based writing.

55. Designing assessment methods to address academic diversity

S. Basu, A.P.Jones, A. Norori-McCormac, A. Striolo

The role of assessment is to ensure that learning outcomes are met and add to enhancement of teaching and learning (Richardson and Dann). In line with the UCL Equality, Diversity and Inclusion Strategy (2015-2020), assessment methods must reflect inclusivity beyond disciplinary diversity. These aspects have been addressed in designing the assessment methods for a geology module taught to M.Sc. students of 'Global Management of Natural Resources' program. The aim of the program is to enable students to develop an understanding of the relationship between natural resources, the environment, economic factors and societal impacts and implications. Within the framework of the program, the geology module is aimed to develop an understanding of the occurrence and formation of these resources spatially and temporally that, the student should be able to contextualise in the economic and environmental perspectives for the other taught modules in the program.

Given the interdisciplinary contents of the program, it is no surprise that the students are also from diverse academic background including geology, engineering, management, environmental science, ecology and chemistry with consequent variable skill sets. The assessment methods, both formative and summative, have been designed to assess any learning outcome using multiple formats, so that everyone gets an opportunity to utilise their strength and develop their skills where lacking. A combination of assessment methods include multiple choice questions, software based coursework, field trip activities and hands on specimen studies. The assessments are spread out throughout the term to enable monitor progress. A combination of both anonymous and un-anonymous markings, with provision for peer and self-assessment are used. The associated feedback

allow student to focus on improvement of their future learning (Race 2001).

References

Richardson, M. and R. Dann. *Good Practice in Assessment*. Institute of Education, UCL.

Race, P. (2001). *Using feedback to help students learn*. Higher Education Academy.

56. Student experience about teaching statistics at IoN MSc level and feeding it back to the lecturer in a timely manner

Saiful Islam

It seems that it is difficult to engage with all the students while lecturing any module. Also it may be more difficult to extract what is in student's mind about the lecturer and the lecture itself. Even if they do finally give feedback at the end of the year, there is no time to benefit from this as a lecturer or not possible to make any improvements. If any weaknesses of the lecturer could be ascertained from a group of students contemporaneously, and immediately fed back to the lecturer and followed up, then students would get direct benefit from this flow of feedback.

57. Be more creative!

Sara Wingate Gray

This presentation will explore innovative and creative assessments for undergraduate students, including presenting a case study of a collaborative data science and data curation project with the British Library and Arts and Sciences (BASc) undergraduates (as part of the UCL BASc module BASC0033); and how the use of radio broadcasting can inclusively engage and involve students in extending classroom discussions beyond the classroom and out into the real world (as part of the UCL BASc module BASC0026). In particular, the presentation will focus on the ways in which such inclusive learning assessments can both creatively engage students with real world problem-solving and demonstrate public engagement and public impact.

58. What does an 'inclusive' curriculum mean? Students' views on inclusivity and diversity

Kenza Sabri, Karen Bird, Melissa Akiki, Bylassan Ahmad

This presentation identifies and analyses student perceptions of what an inclusive curriculum is. This research is part of a wider UCL Changemakers project that brings staff and students together with the aim of co-designing an 'inclusive' reading list. The project used a focus group to explore student understandings of inclusivity and diversity in higher education. First, the presentation will outline the rationale and background for the wider project. Second, the data collection and analysis methods used for a student-led focus group will be presented. Third, the presentation will outline and describe key themes that structure students' understanding of an inclusive curriculum.

To conclude, we will draw out the implications for practice in terms of staff and students.

59. Mixed assessment strategies for inclusivity

Cloda Jenkins, Silvia dal Bianco

Assessment strategies are a key dimension of an inclusive curriculum, with the QAA (2016) recommending strategies, such as the so-called "mixed assessment strategies", to ensure "every student with an equal opportunity to demonstrate their achievement".

Economics, as a discipline, traditionally assesses students through closed-book exams. In the UCL Economics Department we have gone through a period of significant transition with our assessment methods across modules for the past three years. In our first year Economics module, based on the CORE curriculum, we have used e-assessment strategies alongside traditional exams. Empirical evidence shows that since the introduction of the new course in first year there has been a reduction in third class grades as well as failures in second year Macroeconomics, potentially linked to the assessment strategies. When choosing optional modules students who learn in different ways, because of their background and/or ability, can now find modules with the assessment method that suits

them best. We expect this to impact engagement and outcomes.

As lecturers we have to design strategies to support students through the range of alternative methods and to ensure these works for all types of learners. We also have to manage administrative issues, not least relating to processes for students with SORAs and similar.

At the UCL Education Conference we would explore the literature on how assessment links to inclusivity (eg, Bloxham and Boyd 2007 and Bowman and Culver 2018). We would discuss how our use of mixed assessment strategies is expected to impact on inclusivity and highlight elements of the design and implementation that are particularly important. We would discuss the challenges that this brings with a large and heterogeneous cohort, and a rigorous quantitative degree programme. We would conclude with a discussion about how we could empirically test the impact of these changes going forward.

References

Bowman, NA and KC Culver (2018), 'Promoting Equity and Student Learning: Rigor in

Undergraduate Academic Experiences', *New Directions for Higher Education*, March

Bloxham, S and P Boyd (2007), 'Supporting widening participation through assessment', Chapter 10 of *Developing effective assessment in higher education*, Open University Press

QAA (2016): <https://www.jisc.ac.uk/guides/transforming-assessment-and-feedback/inclusive-assessment>.

60. Promoting peer to peer learning in medical education

Tom Duggan, Will Parry-Jones, Nick Williams, Renate Fromson

Our project was created as part of the PALS (Peer Assisted Learning Scheme) SSC during our final year of the UCL MBBS programme. The brief was to create a resource for postgraduate learners on a contemporary clinical education topic and so we chose to create a video explaining the theory and application of Team-Based Learning (TBL). TBL was chosen as we had all experienced this style of



teaching during our 5th year studies and found it to be a very engaging and fun way of learning. It shifts the focus away from the didactic to a peer to peer style of learning and innovates how course material can be assessed. We created the video in the style of a news report, with footage of a “reporter”, clips from a real TBL session and also included a section created using VideoScribe software.

The project gave us the opportunity to learn a number of new skills including storyboarding, recording film and audio, video editing and the use of VideoScribe software. As the project developed we worked out the strengths of each member (in-front or behind the lens) and how these could come together to benefit the whole team. This project also encouraged us to conduct research about education theory to provide us with some background to our video. Our supervisors were very pleased with the end result and to date the video has been used on the Royal College of Physicians and UCL postgraduate Master’s programmes, as well as being shown to doctors from Saudi Arabia as an example of TBL. During our 15 minute presentation we would show our project video (6 minutes) and also discuss what we have learned, both about educational theory, and the process of creating an educational resource.

61. Embracing the challenge towards a more inclusive and well-rounded Statistics education

Matina J. Rassias

During this talk we aim to share our experience on actively engaging with a constantly increasing student number in and out of class as: (a) an instructor of Statistics modules for both specialist and non-specialists students, (b) a tutor with pastoral care duties and (c) an educator who via the role of the departmental tutor for undergraduate students aims to contribute towards a fundamentally inclusive and well-rounded Statistics education. We will discuss about the challenges we face along the way and the students’ very important role in overcoming these in an institution which promotes a connected, research-based education. Striving towards effective communication with our student body has proven to be fundamental in our efforts to understand what it actually means to be inclusive

in Statistics education and what could be the most appropriate steps to be taken in order to achieve the (sometimes) unachievable. We will discuss about the lessons we have learned along the way and how these can shape our practice in the near future...

62. Micro presentation: Inclusive and research-based education: Teaching chemistry to undergraduates

Rafaela Vasiliadou, Hazel Smith

Lecturing chemistry for first year undergraduates in biological sciences is always a challenge. In my lectures, I had a diversity of students, 50 % were unfamiliar with chemistry while the other 50 % obtained GCEs in chemistry with high marks. Furthermore, some students had dyslexia and some others were facing language barriers considering that this was their first semester in UCL. Based on my experience until now, I observed that science and engineering students are more motivated during practical sessions rather than in lectures. Thus, I decided to combine inclusive and research-based education by providing real cases during my teaching. All chemical principles from the very basic to more complicated were presented in cases with real data, as obtained from my own publications and experimental data.

The outcome was outstanding, students were participating and expressing their opinions, they felt a part of a real research team. Students with language barriers and dyslexia were able to understand and participate since they didn’t have to study multiple pages and grasped the main points very fast. The same was implied for the students without a background in chemistry. Based on student’s feedback, the cases were helpful for the majority of students and requested real cases for next year.

63. Liberating the Curriculum

Victoria Showunmi, Jason Davies, Nicole Brown

The Co-Chairs will facilitate the symposium on Liberating the Curriculum (LTC) in social science and STEM. This session intends to be an interactive

space to include people which are new to the topic along with others who would like to build on their knowledge. Each of the Chairs will provide a 5 min presentation on each of their individual area of interest. The rest of the time will be for discussion on around the following questions,

- What does LTC look like in social science and STEM subjects
- what would LTC curriculum look like in these subjects? In what way would the curriculum change?
- How would LTC affect research practices?(e.g. research methodology, research samples, data analysis)
- How would LTC affect pedagogy? What would an inclusive pedagogy look like
- What are the barriers to change? How could these be overcome?

64. Developing inclusive education based on cultural factors in conflict-zones

Carol Webb

This paper draws from up-to-date reports on Yemeni education, socio-political context and challenges of conflict, and addresses this with theory from the complexity science domain to propose practical recommendations, with particular emphasis on inclusive education for HE and suggestions for relevancy to UCL colleagues.

Little current work considers the case of education in Yemen in this way from the perspective of a bottom-up emergent engagement with tribes as a way of leveraging the values-based system of tribal customary law in order to address SDGs, literacy, integration in digital society and education.

With a focus on inclusion in HE and what we at UCL might do, we might consider that a total of Yemeni 16,900 students were recorded as being enrolled as internationally mobile students (outbound) in tertiary education in the 2014 school year, indicating that many Yemeni students did make it to universities abroad. Of those that have made it out of the conflict zone, scholarship programmes could perhaps do more as a means of providing higher education opportunities for “suitably prepared youth and adults from developing countries who would otherwise not be able to afford them” to provide a

“significant boost” (UNESCO, 2016). We should ask how “well prepared” all youth and adults could be given current circumstances and review how preparedness could be increased.

In terms of number of scholarships awarded, Yemen has an outbound mobility ratio of approximately 5 per cent and compares poorly with many other LDCs, for example, Djibouti and Bhutan, which both had ratios of 40 per cent. Other LDCs also performing better than Yemen in this regard were Mauritania, Malawi, Timor-Leste, Afghanistan, CAR and Nepal (UNESCO, 2016). More inclusive HE scholarship programmes and initiatives could be launched to focus on the Republic of Yemen more specifically: could UCL be more proactive?

65. Six ways to get students to really learn during a lecture

Elinor Bailey

As an undergraduate I usually found that I couldn't concentrate and follow material in lectures for longer than about 10 minutes at a time. If you missed something in a physics lecture it could be very difficult to pick up the thread again. The rest of the lecture would then largely be a waste of time – I would copy everything down without taking it in and try to learn it later.

As a lecturer I have tried different techniques to help students follow the material and to help keep them engaged until the end of the lecture. Students have told me that they find these lectures to be different from those that they are used to because they actually learn the material during the lecture instead of just copying it down to learn later.

Why is this good?

Learning more during a lecture is a better use of students' time, the lecturer can get them to participate in more active learning that they may not do by themselves and which promotes deeper and longer-term learning, and it encourages a lot more questions that students otherwise may not ask and may struggle with by themselves. Feeling like they are keeping up with the lectures also encourages a positive attitude to the course and reduces stress. The techniques that follow also encourage inclusivity

– they result in a lot more participation from students who do not usually participate in class.

66. Bridging the gap between school and university – Identifying and filling skills gaps via targeted additional training for 1st year neuroscience students

Martina Wicklein

The Neuroscience Undergraduate program at UCL recruits academically high achieving students from different cultural, educational and socio-economic backgrounds. While this diversity is highly valued, it poses a challenge regarding accessibility of our degree course to all students. A student survey I conducted highlighted some of these challenges. 71% of students currently enrolled answered the survey; for nearly half of respondents (44%) English is a second language, with formal English education ranging from 2 to 16 years. 20% of students didn't study mathematics to a higher level, 30% had never used spread sheet programmes to analyse data before joining UCL, while others indicate a highly proficiency in these skills.

Our degree course is challenging and tightly linked to research. All lectures are delivered by experts, students are expected to read original scientific literature and are assessed by essays and reports. To illustrate this, year 1 students are being taught experimental design and basic statistics through lectures and conduct a small research project. They collect and analyse their own data, perform statistics and write a guided report as assessment.

It has become clear that some students are not able to access this content fully. Not necessarily only because of problems with English, the difficulties seem to be rooted in the above-mentioned diversity in skills, e.g. effective reading of scientific literature, understanding and analysing data, writing skills. I therefore introduced targeted workshops, lectures and diversified the in-course assessments providing extensive feedback and training centred around these skills; delivered during induction week and the first term of year 1. These interventions have been very positively received by students despite the challenging additional workload. We are now evaluating the effectiveness in improving academic outcome.

67. Medical curriculum: Filling in the gap as student teachers

Carol Chan, George Benjamin Choa, Oziegbe Eboime

In the ever-changing healthcare environment, the NHS acknowledges the importance of innovation in health professionals, which is crucial in addressing patient needs and improving care delivery. However, traditional pedagogical training in medical schools often does not foster creativity and stimulate critical thinking.

As three fifth year medical students at UCL, we recognised a gap in our medical curriculum that delayed our appreciation of medical innovation in the medical profession. Thus, we developed an 8-week long course within the core medical curriculum for first year medical students under the Student Selected Component (SSC) scheme. We are applying our unique insight as students ourselves into our teaching approaches and delivery to ensure our younger peers are more receptive; we envisage that our mutual understanding of the student experience, will aid interaction with their teachers and improve engagement.

It is important to engage students in a stimulated environment whilst cultivating an understanding and appreciation of innovation. The didactic, traditional method is insufficient to teach the nuances that students need to learn the practical application of the innovative process. Our new course introduces students to the breadth that medical innovation encompasses, including quality improvement projects, advances in medical education and artificial intelligence. Using various teaching strategies, such as case studies, peer-feedback and action learning, we hope to ensure more efficient acquisition of the learning material and better develop their problem-solving skills.

We found that it is crucial to increase peer-to-peer teaching opportunities in order to not only fill out curricular gaps, but to also provide a different perspective for current students. We aim to train up more students to continue leading our course and promote better teaching of innovation within the medical school.

68. Enhanced inclusive learning through the establishment of a student-led, peer-assisted expert group

Vanessa Puetz

Here we present a project that actively enhanced inclusive learning through the establishment of a student-led, peer-assisted expert group. In a student-staff collaboration, we established a student-led seminar series titled “Updates on child development: Identifying new challenges and opportunities for today’s youth” with the students of the MRes Developmental Neuroscience and Psychopathology (DNP) at University College London funded by a ChangeMakers grant. Over the course of one term, students prepared presentations and engaged with UCL staff’s research portfolio and invited researchers as guest speakers on contemporary issues in youth well-being.

Students were encouraged to independently develop the topics that they felt would increase their sense of inclusion that are not covered in the existing teaching, i.e. i. mental health in LGBTQ+ youth and modern families, ii. developmental challenges faced by young refugees and iii. childhood and adolescence in the digital age. The proposed seminar series took place within the framework of an existing module (“Evaluating research literature”) and thus posed no additional workload on students or staff or room requirements, making it highly feasible. Students worked in teams to conduct research into these topics and independently reached out to experts in the field, who engaged in a scientific dialogue with the students.

Students were actively encouraged to seek out scholars from a range of different backgrounds, in particular from BME or LGBTQ+ backgrounds and of different genders as well as disabilities. By illuminating contemporary issues faced by young people today, students also had to expand on their knowledge about child development and include other disciplines like sociology, cultural anthropology and politics. Student feedback was extremely high (4.9/5) and showed that this peer assisted learning project greatly enhanced the student learning experience as students a) learned to include and support each other in skills development such as

presenting, writing and sharing the knowledge gained from study and talks c) increased their employment skills such as presenting, writing, formally talking to experts and organizing meetings and f) facilitated student/staff partnership and thereby fostering a feeling of belonging to the institution and potential future mentoring or supervisory relationships. Most importantly, students from different backgrounds felt that inclusivity was achieved by liberating and diversifying the curriculum through the inclusion of topics relating to LGBTQ+ issues and ethnic minorities and scholars from a range of ethnicities, sexualities and genders.

69. Student ownership in cross-disciplinary research teaching

Michael Baron, Andrea-Townsend Nicholson, Gavin Pringle (University of Edinburgh), Terence Sloan (University of Edinburgh), Marco Verdicchio (SURFSara), Andrew Martin, Ruth Aris (Barcelona Supercomputing Center)

In traditional research projects students have to carry out research following the interest of their host laboratory. Over the last four years, we have run and developed a novel module, which replaces these traditional projects. Students are now required to develop their own research hypotheses, generate their own laboratory protocols and analyse their own data using the latest computational approaches on supercomputers.

This approach has been effective in engaging the students through ownership of their investigations, facilitating inclusivity and achieving their maximum potential. Moreover, students engage with two very distinct disciplines, molecular biology laboratory research and computational biology to analyse the vast amount of data generated by the latest sequencing technology. The versatility of sequencing as a research technique has allowed this module to support a very diverse set of project hypotheses, whilst still being able to deliver the same core knowledge to a large cohort of students (100 in 2018-19).

70. Do medical students understand the educational benefits in attending the operating theatre?

Emma Obiri-Darko, Jenan Younis,
Zabina Satar, Pranavan Pavanerathan,
Tarek Abdel-Aziz

Background

It has been recognised that surgical education digresses from traditional undergraduate teaching methods and thus, medical students have difficulty harnessing its merits (Ravindra, Fitzgerald, Bhangu, and Maxwell-Armstrong 2013; Stark 2003; Seabrook et al, 2000). Operating theatre experience provides a useful educational adjunct to undergraduate teaching, allowing multiple curricula objectives to be met (Lyon 2003; Palilonis et al 2011). Our aim was to establish whether students from UCL medical school understand the intended learning outcomes in attending the operating theatre relevant to their curriculum.

Methods

A PubMed literature search was undertaken and a validated questionnaire was identified and used in this study (Ravindra, Fitzgerald, Bhangu, and Maxwell-Armstrong 2013). This was distributed to University College London Medical School (UCLMS) students who had completed their surgical placements. Questions involved asking students understanding of their learning outcomes from attending the operating theatre in relation to their curriculum and whether they thought their time in theatre was beneficial.

Results

55 medical students participated. 54% of respondents reported that they did not find their time in the operating theatre beneficial ($p < 0.0001$). 93% stated that they did not understand their learning outcomes from attending the operating theatre in relevance to the UCL medical school curriculum ($p < 0.0001$).

Conclusion

A statistically significant number of UCLMS students did not understand their learning outcomes in attending the operating theatre in relation to the UCL medical school curriculum. As a result, our students may not be harnessing the full educational value of

such experiences. The operating theatre has been shown to be beneficial in a number of ways such as consolidating clinical learning, as well as educating students regarding the multidisciplinary team, effective teamwork and patient safety (Chapman et al 2013). It has also been suggested that the operating theatre could play a part in displaying professional behaviour, inclusiveness and positive role modelling. These are all aspects that have been highlighted as priorities in the GMC outcomes for graduates (GMC 2018; Chapman et al 2013). Establishing clear intended learning outcomes is crucial to facilitating more valuable educational environments (Ravindra, Fitzgerald, Bhangu, and Maxwell-Armstrong 2013). This can be extrapolated to the operating theatre which may improve undergraduate UCL medical student surgical learning experiences.

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71. Public international law pro bono project

Kimberley N Trapp, Alex Mills, Luis Viveros, Ed Robinson, Niko Pavlopoulos, Priya Urs

The Public International Law Pro Bono Project (the 'PILPBP') is in its second year as a Faculty run project, having won a Provost's Education Award in its first year (2018).

The PILPBP enables UCL Laws PhD and LLM students, under the direction of Laws Faculty, to engage in cutting edge legal research – assisting leading human rights courts and NGOs in tackling some of the world's most pressing and difficult challenges. In 2018/19, the PILPBP is doing research for the Inter-American Court of Human Rights, Redress, and the International Committee of the Red Cross. In 2017/18, the Project also did research for the World Refugee Council and the Syrian Legal Development Programme.

The PILPBP works to achieve several objectives:

1. Enhance the learning experience of LLM and PhD students by connecting their classroom learning to 'real- world' problems and developing their skills and knowledge through practice-led research – mapping the dimensions of the Connected Curriculum.
2. Fully integrate Laws PhD students into Faculty teaching by developing their research supervision skills and linking their spheres of expertise to teaching and research outputs.
3. Enable graduate students and Faculty, working together and using their collective expertise, to help address some of the most pressing and difficult global challenges – mapping the principal themes of the UCL 2034 strategy.

The core of the PILPBP is collaboration between Laws Faculty, PhDs and LLMs. Participants learn from each other, with several layers of feedback built into research projects to enhance that learning. The problem-focused nature of the research also promotes experiential learning. All in the service of humanitarianism.

This presentation will provide a brief overview of the PILPBP's work and working methods, and the Connected Curriculum / UCL 2034 dimensions of our work.

72. Micro presentation: Using 'sensory history' in inclusive pedagogy

Faheem Hussain

The study of the past is much dependent upon the accessibility and examination of textual sources and material remains. However, little attention has been paid to enter the study of the past through inter-sensoriality that offers possibilities of knowledge extension through the embodiment and use of olfactory, auditory, visual, gustatory and tactile inputs. The use of 'sensory history' as an approach to the study of the past in an initial teacher education program opens multiple pathways for teachers to access and approach the curriculum materials. This approach is at the multi-disciplinary crossroads of anthropology, sensory studies, psychology and history that offers teachers an opportunity to engage with the past in multiple ways.

This pedagogic research is based on a Teacher Educator's attempt to promote inclusive teaching and learning within a diverse ethnic and linguistic group of pre-service RE trainee teachers from 12 countries. For educators and faculty this approach can help them to differentiate the content, process and product of curriculum materials that caters to teachers' learning needs and previous knowledge. The use of senses as an entry point to examine social and cultural constructions of the past can also ensure the engagement of diverse learners that is not restricted to the cognitive domain alone but also includes affective and psycho-motor dimensions of learning. This inclusive approach situates a teacher's sensory experience at the centre of learning that results in widening classroom participation and takes into account a learner's previous knowledge and experiences.

73. Self-directed learning and self-reflection

Jarmo Kikstra, Chris Brierley

Introduction.

In traditional education, attainment goals are set by faculty and students ought to show their competence by performing successfully on examinations (read: an exam or essay) set out by the same faculty. In this workshop, it will be argued that assessing students in this way is not conducive to what should be the integral value of education: the development of the student.

Fundamentally, students should be compelled to take ownership of their education. This does not simply mean planning their study load. Rather, students should actively weigh the importance of certain goals in how they relate to their personal development. Goals should be personalised.

This goal-setting should then be accompanied by self-reflection. By attempting to assess themselves, students learn how to critically look at their development. What are they particularly proud of? What can they still improve? And then how will those points of improvement translate to personal goals in the next term? Development does not end at the end of term. The student should be in charge of their development.

PDP-SER cycle.

In the workshop, the implementation of the Personal Development Plan (PDP) – Self-Reflection Report (SER) cycle is proposed.

Implementing this cycle allows for students specifying their own path within their studies – most likely per term. It is based on well-established literature on reflection cycles. However, the PDP-SER cycle is more than just that.

The PDP, which is written at the beginning of each period, allows students to describe what they think they should learn, and most importantly why they think they should. Then, students can propose how they think they can reach these learning goals.

During the term, students execute the plan and collect evidence along the way to be able to prove (not just to faculty but also to themselves) whether they have achieved these goals. If needed

because of new insights, students can update their plans.

The SER, which is composed at the end of each period, is more than just a set of checkboxes or a marking matrix with learning achievements. Self-reflection is the most fundamental skill in recognising development and allowing for further personal growth. This self-reflection goes beyond quantifications and beyond a reflection on the student's progress: it should show that the students is in charge of appreciating what they have learned over the past semester.

Mentors or academic tutors can assist students in the formulation of their goals and assess whether their self-reflections are appropriate. Workshop.

The workshop will start with an introduction that explains the PDP-SER cycle as a creative way of assessment as well as a way of engaging students with the curriculum. Central to the workshop will be how such a system allows for personalised and inclusive education

After the introduction each individual taking part in the workshop will be asked to formulate their own personal goals for the end of the academic year. The presenter will be walking around to guide this goal-setting and provide support in thinking about why participants would like to reach this goal and how they aim to achieve this goal (in other words, the presenter will act like the mentor/academic tutor).

When all participants have been successful in articulating one or more goals for themselves, the presenter will try to bring some findings together and reflect on the process based on input from the participants.

Normally, the participants (who are analogous to the students) would now start their study period and during the process and at the end of the process reflect upon their progress towards these goals. Since that is not possible on such a short timescale, the participants will be asked whether there is a previous goal they had in mind, relating to the goal they articulated. The participants will be given some time to reflect on why they did or did not achieve that goal and how it is relevant to their achieving the goal for the upcoming period.

The workshop is concluded with a longer centralised discussion on whether the participants see such a PDP-SER cycle being implemented in their environment. What would be the main benefits? Are there any obstacles?

Material.

Personal examples of PDPs and SERs will be provided for reference and to further look into for the ones interested.

74. [Architecture beyond sight: Starting from blindness and visual impairment to design architectural education differently](#)

Alan Penn, Jos Boys, Mandy Redvers-Rowe

This radical initiative is exploring how engaging more directly and creatively with disability can positively disrupt the visual, graphic and 'abled' culture of much architectural and built environment education, as well as offering the potential to open up a more diverse set of designing, making and representational approaches. It grew out of a thought experiment by Dean of the Faculty of Built Environment, Alan Penn, that enabling more disabled people to study and practice architecture would be an innovative way of challenging current educational and professional norms.

To do this we decided to start from blindness and visual impairment – perhaps assumed the most 'extreme problem' in architectural education and practice - precisely because the subject is so visually oriented. The aim was to take the design of the built environment beyond a focus on vision, by exploring differently visual, sensory and non-visual modalities; led by enabling more creative blind and visually impaired people to study and practice architecture.

This idea was initially tested in a three-day intensive research and design workshop, bringing together 5 blind and visually impaired artists and an architect, with 5 sighted educators and practitioners. This explored the opportunities and challenges for blind and partially sighted people wanting to study architecture, in order to co-design a short course, as well as a longer-term development strategy. Through

a pilot one-day design project, we also explored alternative modes of design analysis, creation and communication.

In this 50-minute interactive session we will first describe the work to date, to show some of the lessons learnt from the blind and visually impaired participants in designing built space. We will then ask workshop attendees to experiment with some of the design techniques developed – detailed observation through touch and other senses, tactile sketching, word pictures, performative descriptions, and scale and full size model making. This will be supported by two of the project's blind and partially sighted participants.

Finally we will indicate intentions for the future, outlining the kind of educational provision and support that can positively enable disabled people to study and practice architecture.

75. [How to build a living curriculum to promote inclusive learning for your students](#)

Anne Preston

The value of Higher Education to individuals, communities and societies in the UK and internationally is increasing as our universities continually strive to prepare our students to face the opportunities and challenges of the future. A key challenge is designing, developing and subsequently embedding high quality programmes to support inclusive teaching and learning approaches to embody these demands. This presentation reports on work which draws on the principles of a Living Curriculum to promote inclusive learning for students and citizens. A Living Curriculum repositions "learning as a continuous conversation within a dynamic curriculum that is integrated with, and takes advice from, the world our students live in" (Marshall & Scott, 2012). I will share insights from its design and application with Engineering students learning at the interface of Cultural Heritage and Computing Science in Egypt. A key part of the student experience was learning about participatory design and human-centred approaches to support their own learning about what it means to be inclusive. I'll also offer takeaway ideas from the Hilali Toolkit to support attendees



in the development of their own and their students' living curricula.

76. Implementing change: A practical guide

Helen Matthews, Eleanor Millan

Inspired to change your assessment, or design a new module with inclusive and creative assessment? This session will explain when and how to go about submitting a successful proposal for formal approval and address some common myths about what is and is not allowed. Don't let 'zombie regulations' put you off.

77. An insight into UCL medical school student opinion on preparation for summative assessments and feedback on OSCE and SBA examinations

Anjali Gondhalekar, Alison Sturrock

Background:

A recent survey at UCL medical school has noted that in every year group, over 70% of students believed that they did not have equal access to assessment resources as their peers. This has

triggered an amnesty at UCL medical school encouraging a pooling of resources between students to re-establish equity.

This project aimed to evaluate student perceptions on the amnesty, and the actions taken by the medical school to support their learning and provide greater equity amongst their peers. The project also focused on considering ways of improving the feedback provided in future examinations by UCL medical school.

Methodology:

Face to face questionnaires were disseminated to medical students in years 4, 5 and 6 and students were invited to attend focus groups. Topics explored included the introduction of an amnesty; the student's views about their access to learning resources and of the assessment process in general as well as about the feedback students receive after summative assessments.

Results:

410 students responded to our questions regarding feedback. 66% of UCL medical students believed that they did not have equal access to assessment resources as their peers, and supported the

establishment of an assessment resource amnesty.

The scheme proved successful with 59 submissions of assessment resources and 67% of students believed that feedback provided was acted upon by UCL medical school faculty.

Discussion & Conclusions

UCL medical school is taking active steps to work in close collaboration with UCL medical students to bridge the feedback gap (Murdoch-Eaton and Bowen 2017) and both provide equity in learning resources available and also to tailor summative feedback to the needs of their students to better support their learning needs through the formation of an educational alliance (Bowen, Marshall and Murdoch-Eaton 2017; Telio, Ajjawi and Regehr 2015).

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78. Shared experience of black history undergraduates

Savannah Blake, Asmara Clark, Ruqiyabi Awan

The presentation seeks to highlight the shared experience of Black History undergraduates in Queen Mary University of London. The unintended consequences of promoting diversity through active recruitment of BME students, without considering notions of 'belonging' and 'inclusion' are explored. The paradigm in historiography and its pedagogy

has transferred from the examination of the 'Great Man' to studies of the marginalised and decolonised histories. Yet, we have found that BME students still lack a sense of 'belonging' within the School, hence impacting their attainment.

These issues concerning our experiences within the School will be discussed; the recent Royal Historical Society, Race, Ethnicity and Equality Report and wider related literature. Whilst some attribute the BME attainment gap to the student's inherent inability, we possess a few more nuanced reasons for the disparity and this feeling of isolation. This includes the lack of BME historians, discrimination, the dynamic of teacher-student relationships, decolonising the curriculum and the lack of support for both non-traditional research and post-graduate education aspirations. Any solution requires lecturers to self-evaluate and consider how they can begin a “race talk”.

79. 'Inspire: Pathways to success'

Alvena Kureshi, Laura Wisniewski, Nnenna Kanu

A common factor that is thought to contribute towards the BME attainment gap is a lack of diversity in staff with limited role models in education. As a result, a reduced sense of belonging is often experienced by BME students. In an attempt to reduce this gap in the Faculty of Medical Sciences, we have designed a monthly seminar series called 'Inspire: Pathways to Success'. The primary aim of this initiative is to increase visibility of successful BME staff amongst students and increase BME students' sense of belonging. The presentation will outline the format of the seminar and we shall discuss the impact this has had on BME students that have been in attendance. This work is part of the HEFCE funded BME attainment project. Future interventions to reduce the attainment gap in the Faculty of Medical Sciences will also be presented.

80. Transitioning to UCL

Tim Beasley-Murray, Viki Burnage

In response to feedback from students through the NSS, the Education Strategy promises 'to move towards personalised student support, from first contact to graduation and beyond.' The Introductory Programme (IP) will form part of that first contact and is designed to provide students with an academic, pastoral, social and physical orientation of UCL.

The IP has an online component that will be offered to students approximately 1 month before their arrival at UCL and an offline component that students undertake early on during the first term.

The online component centres around a number of 'objects' in and around UCL. An 'object' can be a person, a place, a building, an item, and through telling the stories behind these objects in an interactive and engaging way, we aim to provide students with a feeling of place and belonging before they arrive at UCL.

Students that participate in the online component will then be invited to join the offline component sometime during their first term where, within groups, they will be given the challenge of developing ideas for new objects. The very best of these can then feed in to future versions of the online component.

81. An interactive and inclusive approach to learning mathematics

Eleni Katirtzoglou, d'Reen Struthers

Two of the main barriers for learning mathematics are:

- student perceptions about their mathematical ability, and
- student perception about learning mathematics.

Recent research shows that the belief, that mathematics requires an aptitude that cannot be taught, is prevalent among professional mathematicians and can also explain the under-representation of women in mathematics. Furthermore, students believe that learning

mathematics is a solitary activity and shy away from engaging in mathematical discussions with their peers. Removing these barriers and changing student perceptions is essential for creating an inclusive learning environment, where every student feels comfortable to take risks, make mistakes and learn from them.

In order to empower students to learn mathematics and reach their full potential I designed the Round Table teaching strategy. The strategy involves an interactive teaching and learning process where students learning takes place during solitary individual work, as well as peer-instruction within the classroom and under teacher guidance.

In this presentation I will discuss the learning activities as well as the mindset interventions I designed in order to create an inclusive learning community, to boost student confidence and to gradually transform students from passive learners to risk takers.

I will share my experience from the successful implementation of the round table model at LSE. Currently, I am experimenting with implementing some components of the model into a large first year ancillary mathematics course at UCL and investigating, in collaboration with d'Reen Struthers, its impact on non-mathematics students. As the data collection will still be 'in process', the presentation will ponder the findings to date from student feedback and tutor reflections.

82. Engaging undergraduate students in research - a case study in connecting the curriculum

Johanna Donovan

One of the greatest assets in working in a large research-lead institution is access to cutting edge research and the scientists behind it. However, engaging students in an inclusive way with researchers in topics that often require a lot of in-depth, technical knowledge can be intimidating for students, and a challenge for educators. Here we describe how we did this for a cohort of Y1 Applied Medical Sciences students.

The topic was on a new and rare type of kidney disease in Central America. For the task the students were asked to work in groups to research and make posters on what they think the cause was.

They then had to present their posters as though in a scientific conference, where they present to researchers in the department. Whilst this may seem an intimidating task, it had many advantages as the nature of the topic required limited specialist knowledge, it had introductory literature in the popular press, with experts researching this topic in the division and it also complemented our basic physiology module. We also implemented several strategies to make it easier for students to approach the task, by improving their assessment literacy, using peer feedback and making the assessment an informal inclusive process.

Whilst there were also unexpected challenges, it was a really interesting and fun process for both the students, educators and research staff involved and something on which we are keen to expand.

83. Assessment of group work; IPAC methodology and software

Maria del Pilar Garcia Souto

Group work activities are now quite common in the landscape of the Higher Education, as they present numerous educational benefits for the students (Oakley, Felder and Brent 2004). However, when it comes to assessing the output of this group work, giving the same mark by default to all members of the group is detrimental. Both staff and students have concerns about the fairness of this method of assessment (Conway, Kember, Sivan and Wu 1993; Garcia Souto, Kane, Hughes, Searles-Bryant, Gibson 2016; Garcia Souto et al 2017), and it also leads to poor student experience and numerous complaints of 'free riders' or 'passengers' (Kelly 2015). A way of addressing these issues is to use the IPAC methodology to assess the group work (IPAC stands for Individual Peer Assessment of Contribution to group work), i.e. give an individual mark to students that participated in a group work activity based in part to their contributions as seen by their peers.

IPAC methodology is not new and it has been reported in the literature to be successful and beneficial, and tackles associated problems to group work (Oakley, Felder and Brent 2004; Conway, Kember, Sivan and Wu 1993; Kelly 2015). However, there is still a scepticism and uneasiness

among those staff inexperienced on the use of the methodology about giving "power" to the students to influence the final marks, which in part comes from not knowing how students typically rate their peers. This presentation provides insightful information by reporting significant statistical analysis on a large data set of the typical IPAC marks given by the students to peers and selves in several group activities run in 2017/18 and 2018/19 across UCL. I also present the software that we are currently using at UCL to implement this practice in a way that is easy and time efficient for the staff. This is of interest to anyone organizing and running assessed student group work activities, and that is using or might want to use in the future the IPAC methodology.

The author would like to thank the IPAC users that kindly provided data for the analysis presented in this paper.

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