The 2015 Teaching Academy Awards for Educational Enhancement and Innovation

Innovative teaching to inspire learning
Contents

Introduction 3

Winners of the Educational Innovation Award 4

Winners of the Supporting Student Learning Award 8

Winners of the Educational Leadership Award 11

Winners of the Research Informed Teaching Award 13

National Teaching Fellows 14

Birmingham Education Fellow 14

HEA Senior Fellows 14
I am delighted to be able to congratulate all of this year’s winners of the Teaching Academy Awards for Educational Enhancement & Innovation, as well as the recipient of the Birmingham Education Fellowship and staff awarded National Teaching Fellowships and Senior HEA Fellowships this year.

One of the major aims of the Teaching Academy is to recognise and reward inspiring and innovative teaching, and learning support provided by our staff, that enhances the student experience. The Awards for Educational Enhancement & Innovation are open to academic and professional services staff and nominations come from their peers. These Awards are complementary to the VC/Guild of Students Outstanding Teaching Awards that are nominated by students.

Ten awards were made across four categories - Education Innovation, Educational Leadership, Research-informed Teaching & Supporting Student Learning. The numbers of awards for each category vary depending on the nominations received and as you will see there is representation from the Colleges as well as Academic Services. The winner of each Award will receive £1,000 (or an equal share, if the award is made to a team) and the Awards will be advertised for next session in June/July 2016. This booklet outlines the activities of each of the award winners and showcases the approaches they have taken. Another aim of the Teaching Academy is to share good practice across the University and these citations will be available on the Teaching Academy website.

Once again, congratulations to all of the winners and I hope everyone enjoys the Awards event this evening.

Professor Jon Green
Director of the Teaching Academy & Deputy Pro-Vice-Chancellor (Education)
Winners of the Educational Innovation Award

CAFS team (Professor Giles Perryer, Upen Patel, Dr David Attrill, James Kelly and Professor Deborah White), School of Dentistry

The clinical assessment and feedback system

The ‘Clinical Assessment & Feedback System’ (CAFS), recently developed by the School of Dentistry, is an intuitive tablet app that records ‘live’ every aspect of student performance while they are treating patients in the dental hospital and makes minimal impact on the smooth running of clinics. The app is used by 80 teachers and up to 300 students and these students undertake over 60000 dental procedures per year. All the users of CAFS have a personal iPad. CAFS enables personal and individual assessment by recording each and every dental procedure undertaken collects patient feedback, records teachers grades and their feedback and enables students to enter personal reflections on every treatment session. The data analysis that CAFS affords has allowed a major improvement in how students are supported. An intuitive and customisable ‘dashboard’ shows how well a student is doing in every aspect of their work and, uniquely, enables students to compare themselves to their peers. CAFS can be used to identify students who are having difficulties and staff can also praise high achievement. The technical members of the team have created a system ready for CAFS to be deployed to other dental schools worldwide.
Paul Foxall and Debbie Carter have been involved in developing and widening staff use of interactive polling systems – these encourage student participation and active learning, especially in lectures. Realising the potential for students to use their own web-enabled devices in the classroom, as well as the previously used ‘clickers’, they assembled a group of interested staff who participated in a trial, negotiating licenses of ResponseWare for 6 months. Online training materials were developed; bespoke training sessions and hands-on technical support were provided as well as valued advice on the pedagogic aspects of using voting systems in the classroom. A TurningPoint User conference was organised to bring together academics and learning technologists from around the UK. Project funding from CLAD allowed the purchase of 500 ResponseWare licences. A Polling User Group (PUG) has been set up for polling practitioners to learn, inform and collaborate on a local, national and international level – this work will be presented at the next TurningPoint UK Users conference. The work that Paul Foxall and Debbie Carter have done has put the University at the forefront of the development of polling software in the UK and has enhanced the student experience in lectures.
Dr Ellie Chowns and Dr Tom Hewitt teach a masters-level Development Management module, which attracts a diverse cohort of students, with 90% being international students. Many of these students have little or no background in the subject, nor work experience. In order to support all students, the curriculum design and delivery was changed based on previous experience, a literature review and student feedback, including an innovative Chinese language focus group. Informed by the concept of the ‘flipped classroom’ the teaching sessions have been changed so that half the class time is used for small group work and collaborative learning, followed by plenary discussion of emergent themes. This is supported by the use clickers and ResponseWare to encourage active participation in sessions. One of the assignments was redesigned to provide better formative feedback and to identify students who are having difficulties. For the first five weeks, students write a short critical review of their reading each week and bring a copy of this to class to discuss in small groups. This gives students rapid, criteria-focused feedback, from peers and tutors. Students then write a summative essay drawing on this work. A second assignment was redesigned to emphasise ‘detectives, translators, diplomats’ skills and is now a group project on the topic ‘a strategy to achieve one of the sustainable development goals in the country of your choice’. English language support is diagnosed and addressed early on in the course, including the adoption of a diagnostic test and expanded provision of streamed department-specific language lessons.
Dr Nicola Wilkin is leading a project that enables bespoke, consistent and immediate feedback for students in EPS in their mathematical studies by means of questions and teaching materials on a commercial computer algebra system, Maple TA. Traditional approaches to computer assessment of quantitative questions only evaluate a numerical answer, classifying it as right or wrong. The computer algebra approach is much more powerful in promoting student learning as it supports evaluation of, and feedback on, the algebraic method used to derive the answer. After a successful pilot of the approach in Mathematics, Dr Wilkin scaled up the approach to address the needs of all Schools in EPS by developing a thoroughly tested, broad-ranging question bank and associated materials, with contextualisation of the mathematical techniques into the individual science and engineering disciplines. This was achieved through working with a team of twelve student interns. The European Vice President of Maple TA visited the University during the internships and was very impressed. He is keen to further employ these students to write material as part of a joint commercial educational research project between MapleTA and UoB. The outputs of the project will transform the ability of mathematics-based disciplines across the College (and beyond) to access formative assessment and feedback as and when they need it.
The MSc Programme in Railway Systems Engineering & Integration recruits students of different nationalities, varied backgrounds and variable levels of railway experience. The course team created a new experiential learning activity that brought together current students, alumni and staff in a setting where the new students could gain an understanding of the nature of railways and of railway work, and also work with and get to know the other students and staff. Everyone travelled by train to Wirksworth in Derbyshire, where they spent the weekend replacing 72 sleepers on the railway, manually. The students were instructed by University of Birmingham staff and by expert volunteers of the railway. As well as this, the students and course team shared all the domestic duties throughout the weekend. The students were immersed in railway language and safety culture. They began to think of themselves as a team that has to work with others for best performance and they accepted that the course is tough, both physically and intellectually. To date, five weekends have been spent in this way and the activity has become an integral part of the programme induction for all railway engineering novices.
Enhancing student learning on the internal workings of the European Parliament

Dr Julian Paenke teaches a second year module on ‘Europeanisation’. EU policy making can be difficult to grasp for undergraduate students, and the internal workings of the European Parliament seem particularly impenetrable. Dr Paenke involved two highly experienced practitioners in his teaching - a former member of the European Parliament and the Head of Brand and Corporate Sustainability at Alcatel-Lucent, a corporate lobbyist in Brussels, shared their experiences with students. A simulation exercise was developed in which students assumed roles of committee members of the European Parliament’s Legal Affairs Committee. After learning about the rules and workings of the committee, the students were asked to discuss an existing legislative proposal by the European Commission. The session included political statements made by the committee members, followed by a focussed hearing and an amendment session, in which students brought forward their proposed amendments. This approach shows the positive impact of using experiential student learning. The students took the exercise very seriously and gave Dr Paenke very positive feedback.
This team from Library Services, the Academic Skills Centre and Registry have substantially enhanced the referencing and plagiarism support available to students and staff. After reviewing existing support they began improvements to the advice and guidance available by securing the discontinuation of ‘Birmingham Harvard’; this required careful and thorough negotiation with several stakeholders. The team devised a wider communications plan and developed a high profile intranet page to bring together all resources across the University together in one location. A University intern helped to develop plans for enhancing the well-used and highly valued iCite guide that makes up part of referencing support. There are now working examples for over 130 reference types in Harvard, Vancouver and APA styles and new guides for Oscola, MHRA, Chicago and MLA. An online tool called ‘Cite them Right’ has been adopted that allows students to build their own references to a recipe and the Epigeum Interactive Plagiarism course has been embedded into Canvas. Meetings with students have shown that they are often confused and anxious about referencing correctly in order to avoid plagiarism. The enhanced offering developed by this team gives students further clarity and allows them to aim for consistency and good academic practice.
Dr Jerry Pritchard has been Head of Education in Biosciences for four and a half years. His constant energy, enthusiasm and engagement keeps the School excited about teaching and at the forefront of pedagogical developments. Jerry strongly supports the development of new teaching methods, encouraging creativity and innovation. He has led the use of iPads as electronic field notebooks and has trialled alternative exam structures to enhance critical analysis. Under Jerry’s leadership the School regularly holds workshops and open teaching meetings to focus on areas of interest e.g. a recent workshop on ‘What are lectures for?’ explored different approaches and importantly, included students who enthusiastically gave their views. Regular contact with students and listening to them is another reason that Jerry is a strong, visible, educational leader. A keen user of Twitter, he engages students on his modules with live feeds on Canvas and during lectures, and encourages staff to spread the word about the exciting undergraduate programmes using social media. Jerry is also a keen supporter of outreach and ensures that the School’s teaching excellence is experienced outside of the School – once again this year the School provides evening lectures for the public, which are extremely popular. Jerry’s passion for teaching is contagious and under his leadership the School is now ranked 2nd in Biological Sciences and 4th in Biochemistry for overall satisfaction within the Russell Group based on the 2014/15 NSS results.
Dr Nicola Gale and Dr Nicki Ward are engaged in a project funded by the Education Enhancement Fund that is pioneering in its approach to understanding the impact of discrimination and exclusion on the lives and learning of LGBTQ students. Their project methodology has been strongly collaborative, with students on the steering committee, and getting involved in presenting findings to colleagues and other students. This staff-student collaboration sets this study apart from others in this area, as is the fact they are looking across academic disciplines and attempting to explore disseminating best practice. Drs Gale and Ward have been feeding into the wider University via the Inclusive Curriculum Working Group and the response to the project shows the impact being made: over 1000 staff and students at UoB completed a survey sent out by Drs Gale and Ward, indicating the importance of these issues for a significant proportion of the UoB community. They are undertaking dissemination activities with HR, through the Teaching Academy and Library Services as well as in talks to students. A presentation at the Teaching & Learning Conference in a session on the Inclusive Curriculum is still being talked about. Project findings have also been presented at two LGBT History Month events and there is interest at the national level including the establishment of a network ‘LGBTQ Inclusivity in HE’ and internationally, with invitations to present at conferences. Dr Gale was also awarded one of only 40 places on the prestigious Stonewall leadership programme. Drs Gale and Ward have both shown a remarkable degree of research-led, high impact educational leadership that will benefit the entire UoB community and beyond.
Winners of the Research Informed Teaching Award

The PSIBS/Sci-Phy-4-Health team:
Professor Mike Hannon (Chemistry), Ann Smith (Chemistry), Dr Iain Styles (Computer Science), Dr Rob Neely (Chemistry), Dr Hamid Dehghani (Computer Science)

Innovative cross-College integrated PhD programmes

The PSIBS/Sci-Phy team have created and implemented highly innovative cross-College integrated PhD programmes in Physical Sciences of Imaging in the Biomedical Sciences (PSIBS) and Physical Sciences for Health (Sci-Phy-4-Health). These are nationally unique as the only doctoral programmes to truly embed physical science, computer science and biomedicine in every project and are internationally recognised as among the most exciting and innovative PhD training programmes. These 4-year training programmes cut across School, College and disciplinary boundaries and create cohorts of students who are scientists with a remarkable interdisciplinary skills-base. This is accomplished through collaboration with over 20 industrial and public sector partners and incorporates an extensive transferable skills programme. The bespoke first year training programme covers a wide range of topics from basic chemical synthesis to real life applications in hospitals. Each student has three supervisors, a mentor and ‘buddy’ student. The programme’s success is dramatically demonstrated by the employment statistics for the students. The students have also won many prizes and awards at international conferences for their research presentations.
National Teaching Fellows, 2015

Dr June Jones - Institute of Clinical Sciences
Dr Christine Szwed - School of Education

Birmingham Education Fellow, 2015

Dr Patricia Lalor - Institute of Immunology and Immunotherapy

HEA Senior Fellows, 2014/15

Dr Anke Buttner - Psychology
Dr Armin Grunbacher – History
Dr Marios Hadjianastasis – CLAD/LS
Dr Mike Kennard – Business School
Dr Rebecca Mitchell – EDACS
Dr Karl Nightingale - Institute of Biomedical Research
Dr Petia Petrova – CLAD/LS
Nicola Taylor – Academic Writing Advisory Service
Dr Emma Tyler – Modern Languages
Dr Crayton Walker – EDACS