

Collated examples of impact identified by the UK Centre for Bioscience in 2009-10 arising from a number of Centre activities

1. Example of Impact prompted by a Centre event – Level 6

(This individual is offering to share their work with other key contacts at our annual key contacts meeting)

"I thought I would talk about a little project I initiated after attending one of the events about differentiated learning (stretching the able) run by the Centre for Bioscience."

On the Pharmacy programme at Kingston choosing the most able students to do a more specialised physiology/pharmacology module resulted in these students performing better on average in this module than on a core phys/pharm module where they were taught with the rest of their cohort. When less able students were also admitted onto the specialised module the more able students did not do better in this module than in the core module.

I guess a title for this might be something like "Differentiated learning: the Kingston MPharm experience"

All the best
Nick

2. Impact following Differentiated Learning event in January 2009 – Evidence of Level 5, perhaps 6 (Wales)

"Thank you for that, that's very useful!! Thank you as well for organising such a SUPERB meeting. It was really very inspiring and I have shared a lot of the ideas raised with the department here, and we are adopting or investigating a lot of them further."

Things we have taken forward from the meeting and started to implement in the School are:

Closer involvement with the UROP scheme for providing excellent students with research opportunities. Students who are identified as excelling during year 2 are specifically targeted with information about schemes such as UROP and charity-funded placements. This existed before, but now we are specifically focussing it towards the higher-achieving students.

The potential for exceptional students to be funded to attend conferences is in our Teaching Strategy discussion document.

We are trying to set up an internal "Journal" of student research for exceptional Final Year Projects. Students will also be encouraged to submit work to Bioscience Horizons where this would be appropriate.

Most significantly, however, the concept on which the meeting was based is the key focus for our Teaching Strategy document for revising and developing our entire Bioscience teaching. The strategy is subtitled "Recognising and Rewarding the Elite", and this developed from my report on the meeting to our Learning and Teaching Committee. The idea behind this strategy was reported in our Annual Programme Review to the University and has been cited as an example of "Good Practice" to be circulated to all Schools within Cardiff University. Although the title there was changed to "Recognising and Rewarding Excellence".

If you'd still like me to send a short quote then let me know and I'll send one on to you by return. But it's nice to see that **the meeting has had a very significant impact on our approach to teaching here at Cardiff.**

Steve Rutherford, Cardiff University

3. Impact following Creativity event - Impact Level 6

"I am currently working with Dr Lottie Hosie at the University of Chester exploring the use of two creativity tools in teaching Bioscience to undergraduate students. The project was inspired by last years HEA 'Creativity in the Sciences' workshop (29th April 2009, Glasgow University). Consequently, we were wondering whether you would be interested in a project report for the Bioscience Bulletin?

We have just finished our data collection (student surveys following the introduction of the techniques and at the end of the module and focus groups) and are currently writing up our findings and would like to give something back considering where the project originated."

[these individuals are now preparing an article for a future issue of our Centre's newsletter]

4. Teaching of Bioethics to Bioscience Students – University of Manchester (links to ESD) – Impact Level 5

"The availability of Ethics events and related resources led by the UK Centre for Bioscience, has had a marked impact on the development and delivery of a final year bioethics unit to final year students in the Faculty of Life Sciences at the University of Manchester.

Originally, when thinking about delivering a bioethics course, it was really useful firstly to attend ethics events (at Bristol, Leeds and Leicester) to learn about the courses being delivered and the varied teaching and assessment approaches being used. In particular, it was useful to talk with 'like-minded' people and to be able to discuss issues that I was concerned about in terms of assessment. The resources made available by the UK Centre for Biosciences in terms of case studies have proved to be an excellent resource. Also an opportunity to present information on my course at the Belfast and Cambridge meeting has proved to be essential for subsequent course development.

Prior to developing the Bioethics Unit, I was aware of previous attempts to run such a course in Manchester. In particular, concerns were voiced by colleagues in relation to how to get the best out of students in terms of assessment. More specifically, there was a feeling that students would not write essays on their ethical views, but more on what they felt would get them better marks. I think discussions during the meeting at Leicester were essential for crystallising my thoughts in terms of developing 3 modes of assessment, including a debates session. The three modes of assessment have proved essential in encouraging the students to develop different aspects of ethical argument.

A final year unit that started with approximately 50 students, now has the challenge of possibly going up to approximately 200 students. To meet these student numbers and still deliver the unit in a manner that encourages student engagement and debate, we will be developing videoing of debate arguments prior to question and answer sessions. This idea

is based on some discussion and presentations at the Cambridge event where students videoing and presenting ethical arguments was used. This represents a further example of the benefit of running regular events and the availability of resources by the UK Centre for Biosciences in providing a forum to meet the challenges of delivering an essential area of the curriculum.”

Some comments from students’ feedback on the unit which illustrate the benefit of the way it is delivered:

“Continuous assessment actually helped to remain fully involved and interested in all areas.”

“The debate is really useful to a grasp of several topics”

“Really enjoyed the course. Educated me in a different manner.”

“The unit was very enjoyable and informative. It helped me see things from other perspectives and to analyse both sides to everything.”

“The course has been a real eye opener of our responsibilities as scientists to the public”

“The break up of assessment eg debate and exam was a welcome change to the exam essays in other modules”

“Interesting module - a change from the norm!”

Dr Caroline Bowsher, Faculty of Life Sciences, University of Manchester

5. Impact of Centre resources – audit tools for Employability and External Examining

a) Employability (Scotland) – institution-wide impact (at least Level 5)

By email:

“It has been some time since I contacted you so I thought you might like to have an update on how we have been using the Audit Tool.

My colleague and I are engaged on a project to support academics who are going through Subject Health Review. Here is an excerpt from the SHR handbook:

Subject Health Review will explore how Employability skills have been embedded and used across programmes and how graduate attributes, including those relating to Employability, are effectively promoted. (UWS Academic Office Subject Health Review Handbook 2009/10)

We decided that we needed some kind of toolkit and have since developed a Mapping Employability Toolkit. Your Audit Tool is an important feature of this toolkit, which also includes a template for mapping core modules against the CIHE competencies and a sheet that students might use to record evidence of how they meet those competencies and/or development needs they have identified.

We are encouraging academics to include the mapping exercise in the Programme Handbook along with the Student Employability Profile for their subject and aspire to encouraging them to map the competencies with optional modules; this would enable students to select modules that might help them address their development needs.

To date we have shared the Toolkit with the following subject teams:
Languages/Nursing/Music/Sport/Digital Art/Mathematics/Chemistry/Education/Media.

The Programme Leader for Childhood Studies has embraced it fully and found that while the audit tool revealed considerable strengths it also enabled them to identify gaps that they have since taken steps to address. In particular they successfully put forward a proposal to the recent Graduates for the 21st Century Development Awards (an initiative within UWS led by the Gs1C Steering Group) to develop 15 weekly tutorial packs to support students to develop reflection on the CIHE competencies and to develop a graduate employability portfolio.

The other teams are at various stages of working with the Toolkit and the response has been very positive. Maths felt that the Audit Tool might help them to promote the benefits of including a Maths module in other programmes, for example.

My manager is keen for us to present a workshop based around the Toolkit at the QAA Scotland Enhancement Themes conference next March and I wondered whether this is something you would like to be involved with?

I have attached the Toolkit ([Mapping Employability Toolkit.docx](#)) and would be delighted to hear your thoughts and comments and to discuss any involvement you might like to have with regards to the Enhancement Themes workshop.”

(Careers adviser, University of the West of Scotland)

**b) Employability audit (Example of impact in England – University of Gloucester)
– Level 3 or 4 Impact, and the potential for higher in due course**

“Our Careers Centre has recently undertaken some work auditing employability awareness in the university and we would now like to use your Employability Audit tool on a pilot basis with some academic staff.”

Details of how the curriculum audit tool was subsequently used:

“A quick update on our plans for using the course audit tool!

One lecturer in our Faculty of Health and Social Care is going to carry out the audit when he has finished his marking. I will be contacting colleagues nominated by other faculties to try and get a representative from each faculty across the university to do the same.

On June 17th the university is holding a teaching learning and assessment conference for staff. This is an annual event and this year the Careers Centre has been asked to deliver a workshop on an employability related theme. Our theme is ‘The employable Gloucestershire Graduate’ -soon to be known as the EGG.

We will be introducing the Biosciences form during the sessions and are planning to use twenty of the questions from the audit form in an 'active learning' session where workshop attendees will be asked to look at these questions (pinned up around the room) and to self assess their courses by sticking some pre printed labels on a grid which they will take away. We plan to follow this up after the event by meetings with staff to go through the more detailed audit in more detail.

I will keep you posted on how we get on", Careers service, University of Gloucester

c) External Examining (Example of impact at institutional level in England – University of London) – Level 5 (use of a modified version of our resource to collect evidence to inform institutional policy review)

"I am the Quality Manager for Review and Evaluation at the External System (University of London).

We have recently conducted a Thematic Review of our External Examiner Process and in order to provide some background for the Review Panel we have used your audit tool to run an online survey.

(I had been searching for examples of external examiner audits or surveys and came across your website.)

The survey commenced on the 1st December 2009 and will run until mid January 2010. I have attached a copy of the questionnaire so you can see how we had to alter the terminology slightly to suit our purposes and how we moved away from a scoring system. The link was sent to 91 External Examiners and so far 31 have completed it. These interim results have already been presented to the Review Panel who have found the modified survey extremely useful.

The final output of the review will not be ready until mid-January and when the results have been through governance I will update you on any resulting actions."

Update June 2010 - I contacted you in December 2009 to let you know how we were using the External Examining Audit Tool.

I just thought I would let you know that the survey results were distributed internally in January 2010 and the paper has been through the first stage of governance and is publicly accessible here:

http://www.londonexternal.ac.uk/quality/comte_zone/esac/esac9/documents/ESAC9-5_thematic_review_report.pdf *[the Centre for Bioscience is mentioned in point 13 and at the beginning of the survey].*

It consists of the final review report with the survey results as the Appendix.

Corporate Performance and Quality Directorate, University of London

6. General impact arising from engagement with various activities over a number of years

Impact Levels 4 and 5 (impact extends beyond the individual and their institution)

“There have been many Bioscience articles and workshops over the years that have helped inspire me to be creative and active in my approaches to learning and teaching. Backed up by events/workshops.

Key points/highlights for me are the Ped-R event at Leicester Uni (March 2009) that provided genuine practical, evidence-based examples of L&T initiatives. Take your pick from there - but Chris' and Mark's were really useful presentations for me. The assessment for learning event in 2005 was also influential as it came at a key point in my career when I was applying for a senior post internally to focus on learning and teaching. The event and the networking (particularly in this case collegial advice) genuinely changed my career path - something for which I am grateful.

My most used resource is certainly Paul Orsmond's book on self and peer assessment. I have used this (and distributed it) at many staff development events both internally and nationally. This included our VC's staff development events when you kindly supplied the number of copies I needed and I have directed so many people to the online resource. I often circulate articles from Bioscience Education. My most recent 'push' has been David Adams' articles about enhancing laboratory work through enquiry based learning, but as I say this is the most recent from a long line of useful articles that help me to teach new academics about pedagogy and work to help professional development of those that are more experienced.. “

Mark Langan, Manchester Metropolitan University
