

Heads of University Biological Sciences

<http://www.biohubs.org.uk>

Spring Meeting and AGM

Biosciences Curricula and Employability

Weetwood Hall Conference Centre University of Leeds

20th and 21st May 2008

Tuesday 20 May

Widening participation and retention

Sarah Tatum (Foundation Degree Forward)

Foundation degrees and their likely impact on University Biosciences

[See presentation](#)

Q&A

Rob Smith:

FE colleges are seeing a new market which will be in competition with HE; how will this affect price – it is cheaper to provide Foundation Degrees year on year. This group is concerned about reward for teaching degrees – will it be affected?

Sue Tatum:

Government funding is a big issue and subjects with less employer engagement will be more affected. Further Education Colleges are cheaper so employers might go there for Foundation Degrees. Current fees for full time students at university is £3,075, and at FE College £800 or less. There is a real untapped opportunity to work with employers.

Mark Macnair:

Has anyone has managed to get co-funding?

Peter Heathcote:

Foundation Degrees are aimed mainly at people in employment. However, day release fees are not paid and this should be taken into account when considering the number of students to be funded.

Chas Chowdrey:

HEFCE funding will be taken from one place to give to another as the total funding from HEFCE will not increase. How do we go about developing Foundation Degrees with employers?

Sue Tatum:

Foundation Degrees have enabled students to realise they are capable of taking on new challenges. Employers in private sector are pleased if they can get 2 years work out of a person. We have to be more entrepreneurial, however if there is no need for a Foundation Degree she advised against running one.

Peter Spencer-Phillips:

Is there any experience of employment-led modules being incorporated into standard degrees?

Sue Tatum:

Not in Bioscience but in other areas.

Dr Pauline Balac (University of Huddersfield)

Attracting non-standard students into University science: Year 0 Foundation Science and Women into Science

[See presentation](#)

Peter Watkins:

Do you market this as stand-alone course or as part of a 4-year degree?

Pauline Balac:

It has to be seen as an integral part of a 4-year degree, otherwise the LEA will not fund it, so be careful with wording and treat as year 0.

Rob Aitken:

Curious about the choice of 'A' level topics to make up the curriculum; have they been picked as they sit comfortably with existing subjects, or because of interest?

Pauline Balac:

Most universities would accept it as a Foundation Year, and she has had no problem with the topics.

Rachel Tobbell:

How important is the female only issue?

Pauline Balac:

This is very important as a lot of women have low confidence, Asian women in particular, and they feel comfortable with own gender.

Paul Hayes:

Are you able to continue with family-friendly time-tabling in subsequent years?

Pauline Balac:

No, first year only, but students have organised childcare etc by the second year, once they have made a start they are more confident.

Rachel Tobbell (UK Resource Centre for Women in Science, Engineering and Technology, Bradford)

Retaining women in SET: problems and progress

[See presentation](#)

Peter Heathcote:

Women at postdoctoral level do not like having to fight for grants and to get published.

Rachel Tobbell:

Has heard parallel comments in relation to the private sector.

Unknown:

Men are prepared to work all hours but women are not prepared to make the sacrifice.

Sue Tatum:

Women spend more time on quality whereas men produce more in quantity.

Stephen Oliver:

Fellowship panels get very few applications from women. Are we doing it the wrong way round? Perhaps women should have a chance of applying for a Fellowship at the start of a career break.

Rachel Tobbell:

Daphne Jackson Fellowships used to be considered low grade but they may be a solution. It is difficult to have a break and to get back in to science. Dorothy Hodgkin Fellowships allow people to keep in touch. Women also need part-time work on return from a break.

Nicola Woodroffe:

There has been some small improvement in numbers in the Women Professors' group, but feels there should be an acceptance that a woman's CV is not as full as others and that the person's history should be taken into account.

Rachel Tobbell:

In areas where change has been driven by women wanting flexibility, men benefit too, but women do not have time to continue to provide the impetus as well as doing their regular jobs.

Lorraine Maltby:

Outlined schemes that are available in Sheffield which provide protected time for research for women returning from career breaks.

General discussion about widening participation and retention

Rob Aitken commented that women do not apply to research intensive universities. Trevor Hocking queried whether there was any difference relating to ethnicity, e.g. Chinese students are very focussed.

Rachel Tobbell remarked that all public bodies that decide policy (HEFCE, Research Councils etc) are mostly run by men, only 26% female. There is an issue regarding the fact that science is being run by one half of the population, creating a self-perpetuating world. She runs a mentoring programme and finds that women are not aware of public bodies and what they do, but at the end of the mentoring sessions they are more likely to apply. A cultural change is needed but this is very difficult. Sue Tatum added that whilst these discussions had focussed on a research career route, we must not forget about other career routes, teaching etc. Stephen Oliver noted that many women have taken other career routes rather than stay in research.

Nicola Woodroffe commented that it is important to receive feedback from applications when unsuccessful. Women academics take on more pastoral roles and feel they are not as valued as men. Rachel Tobbell noted that the report observed that men have lower expectations, which comes back to confidence, as women are more reliant on supervisor feedback. One reason why the difference is less in Bioscience is that there are more women supervisors.

National issues: BSF, IOB, RAE and REF

Prof David Coates (University of Bradford)

The BioSciences Federation and the Institute of Biology: an update on developments

[See presentation](#)

Verbal update covering the current situation:

In the Chairman's absence, Peter Heathcote briefly explained the background to the formation of the BSF and noted that David Coates is an Executive member of the IoB. Proposals for a merger between the BSF and the IoB have recently been developed by both organisations. The view of both Executives is that a merger is necessary as the biosciences need a single voice. The primary roles of the merged organisation would be in the formulation of policy and in influencing policy-makers. The Chairman would like members of HUBS to consider the proposed merger and provide feedback as to how HUBS should participate, i.e. become an integral part of the new body or stay separate but affiliated to it.

Dr Jonathan Adams (MD, Evidence Ltd)

Research Assessment Exercises us all

[See presentation](#)

Stephen Oliver:

Concerned that "Thomson" is the guardian of what gets included in RAE.

Jonathan Adams:

Thomson include 8,500 journals in the Web of Science. This has been very Anglophone but is currently changing; it has also been US centred, but there is now Asian coverage.

Lorraine Maltby:

Is RAE fit for purpose?

Jonathan Adams:

The RAE has run out of steam and needs a change. Not had time to evaluate effect of report on changes for 2008. HEFCE do not yet know how it will look but it will undergo evolutionary change, with peer review being essential. The system needs to incorporate interpretation of numbers and peer review together.

Peter Heathcote:

The Leiden group showed it had not achieved anything by simply pushing up the number of articles published in high quality journals.

Jonathan Adams:

Numbers cannot be used on their own, but they help to make a decision and support management. The Dutch only used numbers.

Mark Macnair:

Should not worry about results from REF as it has to generate a sensible outcome.

Jonathan Adams:

Rating journals is dangerous. A good indicator is one that emerges naturally.

Mark Macnair:

Some journals have a half-life of 20-30 years and articles are still being cited; others are more short lived.

Wednesday 21 May

Employability, professional courses and accreditation – the future or a threat?

Brian Rankin (President of the Forensic Science Society and Head of Centre for Forensic Investigation at the University of Teesside)

The growth, limitations and standards of forensic science courses in Universities

[See presentation](#)

Rob Smith:

Many of the courses are of insufficient value. From a University's perspective one of the concerns is whether the requirements of a Biology degree are being moulded too much by industry; we would be concerned that a course must have a good biological content.

Brian Rankin:

Industry still has the view that getting good science comes first, with forensics added on.

Rob Smith:

There is a concern about interpretation of data, e.g. through Bayesian statistics. It is necessary to have good interpretation skills in order to do forensic science effectively.

Ian Turner:

Derby has a list of 30+ forensic courses, which is not what is required.

Brian Rankin:

It diminishes the value of the courses to have some subject combinations.

Mark Macnair:

Is there a market for forensic scientists?

Brian Rankin:

Not all students become CSI's. There are two career paths: (i) in Police (starting as CSI crime, then senior, then SSM); (ii) in Forensic (support scientist, then reporting officer, then senior, then team + lab). University of Teesside has a good base with 10 new people, 9 from Teesside. Students learn communication and reporting skills as well as forensics.

Peter Heathcote:

Foundation Degrees – what is the role of Forensic Science Society in this?

Brian Rankin:

They support Foundation Degrees. Teesside offers Diplomas.

Professor Hardial (Chas) Chowdrey (University of Westminster)

IBMS accredited BSc (Hons) Biomedical Science courses; Graduate Prospects

[See presentation](#)

Peter Heathcote:

The role of Institute of Biomedical Sciences is known, but to what extent is the Health Professions Council involved?

Chas Chowdrey:

14/15 universities have programmes approved by HPC. Resource issues are current problems. Courses are audited annually.

Peter Heathcote:

Pre 1992 universities are running courses but not making any effort to get them accredited. One reason to do BioMedical Science is that it provides an alternative route into medicine; a high proportion of biomed applications come through clearing.

David Coates:

It is confusing to have both Biomed Sciences and Bioscience courses.

Peter Heathcote:

It would help if there was a digest to incorporate all data.

David Coates:

There should be a clear benchmarking statement.

Margaret Culshaw (University of Huddersfield)
Pharmacy with Biosciences – a natural Symbiosis?

[See presentation](#)

Lorraine Maltby:

Is there any explanation for the sudden increase now after a dip in interest?

Margaret Culshaw:

New roles were identified in the NHS future plans for pharmacists, expanding the range of services provided. However the full training takes 5 years so there is a short term shortage, and recruitment has been very poor over the last few years.

Lorraine Maltby:

Once the need has been met, what then?

Margaret Culshaw:

The Royal Pharmaceutical Society of Great Britain reports that we are not producing too many pharmacists. Part of the business plan is to carry out in-house predictions.

Chas Chowdrey:

The provisional accreditation allows you to recruit students, but then there are three years of uncertainty.

Margaret Culshaw:

The web site must show that only provisional accreditation has been given to the course. This is no different from other accredited courses as existing ones would only be accredited up to 5 years and all are subject to annual monitoring.

David Adams (Director of the HEA Centre for Bioscience, University of Leeds)
Working with the Centre for Bioscience

[See presentation](#)

Unknown:

It would be useful to make small amounts of money available to visit CETL facilities.

Peter Heathcote:

What is your perception of how well you are interacting with the sector?

David Adams:

There appear to be hotspots, Leeds for example are very enthusiastic. He would like to be able to identify departmental representatives elsewhere and notify academics of those representatives. 2000 individual academics are sent information. He would welcome any suggestions on how to improve communications as they are putting effort into this area.

Peter Heathcote:

It is important to explore activities in relation to validation and accreditation.

Ian Turner:

Impressed with journal (www.bioscience.heacademy.ac.uk/journal) - 10 days from submission, through review, to acceptance.

Paul Hayes:

Do you have a model in mind for the Dynamic Laboratory Manual? Will it be difficult to create something of this sort that covers the broad range of biology?

David Adams:

The model is the example created by the Bristol Chemistry CETL. We are meeting with discipline groups to explore possibilities and BBSRC have a continuing interest. We would welcome the support of BSF and is keen to maintain momentum.

Paul Hayes:

Can you expect to cover the 25 disciplines?

David Adams:

There has been a very positive exchange between disciplines.

Professor David Coates (University of Bradford)

Biosciences coexisting with the professions: optometry and pharmacy in Bradford

[See presentation](#)

Brian Rankin:

The comments re regulation/validation/accreditation are very valid and critical.

David Coates:

Optometry are very strict. The General Optical Council is in collaboration with accrediting bodies.

Chas Chowdrey:

IBMS – although institutes insist they are helpful it leads to confusion. HPC know exactly where they are. Professional bodies say we are unhelpful but they are confrontational.

Peter Heathcote:

Accreditation is a protection of the resource but it is a delicate balance and can be counter-productive. No complaints are heard from Engineers.

Margaret Culshaw:

Colleagues in nursing report a better experience.

David Coates:

In the School of Health there is a joint process with Royal Pharmaceutical Society, which carries out the 5 year review of accreditation at the University. Some of the outside bodies are fixated on the protected status of members.

Margaret Culshaw:

The pool of accreditors may not know about the set-up at Universities: there is a very different make-up of people involved.

Open Discussion

Wider use of accreditation: Optometry/Pharmacy/Forensics/Science/IBMS-HPC

Rob Smith felt that tensions are arising within universities because training comes into universities from outside, requiring some change to traditional university teaching. Professions are constrained by the need to ensure provision of service to customers. There are cost constraints related to accredited courses.

Peter Heathcote noted that he has seen a switch to courses with obvious career prospects, brought about by tuition fees. The traditional academic model probably still holds for Russell Group as what drives them is different.

David Coates queried whether it is possible to have both in the same institution, or in a unit of an institution? He has Biomedical Science that is strong in research but does not fit so well with vocational courses as they operate differently. He felt it was not possible to have generic institutions but institutions with specific focus should be developed. Peter Heathcote noted that you become vulnerable if you get too focussed.

Peter Heathcote asked pre-1992 universities to help provide data to support the view that Biosciences are as costly, with consumables, as Physics and Chemistry. Chas Chowdrey observed that although there is HEFCE money, the actual division of funding means some departments are underfunded, but this depended on internal budgetary models. He commented that molecular biology is very costly, and this is not taken into account by HEFCE. Mark Macnair noted that the TRAC-T data should show there should be the same funding for Physics, Chemistry and Bioscience.

Spring 2009 Meeting

Peter Heathcote asked for views regarding the Spring 2009 meeting: David Coates would like to revisit the BSF/loB issue; how does HUBS membership want to participate?

David Coates commented that Biochemistry Heads meet as a group within Biochem Soc and are not able to act independently. He was not aware how the RSC worked. Peter Heathcote noted that if we are embedded within a Society it might pursue a policy that is not suitable for all. He felt the loB should not be able to give accreditation. Mark Macnair remarked that the only reason for having an accredited degree is if you can only do it if it is accredited. Until there is a body which says 'I need a Chartered Biologist' it would be mad to go into accreditation route. David Coates commented that there is no requirement for accreditation and it is not a good thing to do. Some value to validation from within central body; if no obvious conflict then OK.

Chas Chowdrey:

Do you want to maintain independence from the loB/BSF and use for other things, or be part of it?