

Promoting Undergraduate Student Conference Attendance has Benefits for All!

Ian J Turner, Department of Biological, Forensic and Sport Science, University of Derby, Kedleston Road, Derby DE22 1GB
E-mail i.turner@derby.ac.uk

Background and rationale

Degree students studying Biological and Forensic Sciences at the University of Derby have a significant independent study component in their programmes. This is especially true in the third year of study (level 6) where students undertake a double module (30 credits) conventional research project. In this project students design, implement and write up their own piece of research for the first time. This project is a compulsory module for all students (approximately 65) and is summatively assessed.

Wherever appropriate student projects link to ongoing research activity by members of academic staff within the subject area, thus providing students with meaningful context for their work. The ethos of this approach reflects our School of Science's aim to provide 'teaching enriched by research' and our Faculty objective of enriching its core value of challenge and innovation through a raised profile for research, consultancy and scholarship.

A fundamental part of science is the presentation of one's work to fellow scientists. The importance of presentation skills is already identified within our Biological and Forensic science programmes and reflects the QAA Biosciences Benchmark (2007), sections 3.4 and 3.8. Undergraduate attendance at conferences though supported has never been developed as a key proficiency that allows skills identified through the school PDP scheme to be refined, and permits students to see the progression and importance of their research. However, encouraging students to attend research conferences would provide them with a more authentic research experience and an opportunity to meet others in their subject area, and might enable collaboration with other HE institutes, industry as well as employers and other graduates / students. It could even lead to a potential publication in an undergraduate research journal such as Bioscience Horizons (<http://biohorizons.oxfordjournals.org/>).

Importantly such activity would also help promote the University of Derby as a centre of excellence for the development of student research and could create research links and data to support staff research interests.

How to do it

Support to fund final year students' conference attendance and presentation of the results of their projects was provided by a University of Derby 'Teaching Inspired Research' fund. This proved key support to help pay conference admission fees. This funding has been in part maintained by the department for subsequent years. Although not essential a small amount of funding can help students who are under financial pressure to attend conferences.

Preparation

Initially a lecture/workshop was delivered as part of a compulsory research skills module in second year (level 5). The following areas were covered:

- The importance of conferences to scientists;
- Conference logistics;
- Poster creation; and
- Upcoming relevant conferences in relevant disciplines.

Conference attendance

In final year students receive the following direct support associated with conference attendance:

- Finding a relevant conference to attend;
- Funding for poster creation, conference fees, accommodation and travel; and
- Guidance and help with poster creation and abstract submission.

This is delivered through the lecture series that support students in their project work.

In addition, the students were encouraged to attend the Department's Biological Sciences Research Group seminar series to reinforce the importance of research and communication.

Alongside this student support, in 2008 the University of Derby hosted the West Midlands Forensic Inspired Research Network (FIRN) Student Conference. Designed purely for undergraduate students to present and showcase their work to academics, industry and peers. This event supported by

several regional and national companies provided a unique opportunity for University of Derby students of all levels to experience a conference first hand.

Troubleshooting

Timing – Finding conferences to coincide with undergraduate project submission can be problematic. Some relevant conferences occur very early into the project period, meaning students are often unsure of the 'success' of their study.

Construction - Generation of abstracts and posters is a daunting prospect for many undergraduate students. Support and guidance from staff is essential mostly in the form of proof reading and advice.

Does it work?

Case Study 1 – A student success

An undergraduate student at the University of Derby was encouraged to take their work (on forensic document analysis) to the annual SET for Britain conference at the House of Commons (Jan 07). A meeting with their local member of parliament at the event led to a subsequent meeting with the member of European Parliament in Brussels, and sometime later a question posed to the European Parliament on their project. Once the conference had highlighted the significance of their work a media story was released by the University of Derby, this was picked up by regional news, national press and national radio. The work has subsequently been written up for a publication and been published (Mehrban & Turner, 2008).

Case Study 2 – A conference success

The FIRN undergraduate conference hosted by the University of Derby was a massive success and achieved one of its principle aim of generating a culture where undergraduate students can present their work to peers, academic or industry and enrich their personal skills.

Over 50 delegates attended the event from The University of Derby and several partner institutions as well as local and national employers. Feedback from the conference (see examples below) highlights the usefulness of such events. Interestingly many attendees were 2nd and 1st year students who also benefited from attending the conference. It motivated them with regards to their own studies and strengthened the importance of conference attendance.

- "In my opinion it would be beneficial to students if there were more opportunities/forums like this to network and to gain experience of presenting posters or giving presentations. It provides a means to bump ideas off each other for areas of similar interests" Sam Dennis, 3rd Year BSc Forensic Science with Criminology
- "It made me feel more confident about my own study next year, being able to observe the final product gave me more of an insight as to what was expected of me" Sabrina Solou, 2nd Year BSc Forensic Science

Industry and employees present at the conference were also very impressed with students and the quality of their work. The conference helped strengthen links and generate ideas / involvement for future student research projects.

Key benefits

Supporting undergraduate conference attendance over a period of one year has resulted in 30 students attending conferences, 6 poster presentations and 4 oral presentations.

Two publications (one in print, one in preparation) have resulted from undergraduate work presented at student conferences. In both cases the strength of the reaction from peers and or industry highlighted the significance of the work.

For Students:

- Promotion of a research culture;
- Development of PDP and essential skills as outlined by subject benchmarks;
- 'Value added' achievements to supplement their degree when CV building;
- A wider view and understanding of science and research; and
- An opportunity to meet other scientists and employers.

For Staff:

- Publication of work in academic journals or conference proceedings; and
- The use of student projects to develop research interests and inform teaching.

For the University:

- Raised reputation amongst other institutions and industry; and
- Graduates who are better scientists and whom have a more positive view of their time at the institution.

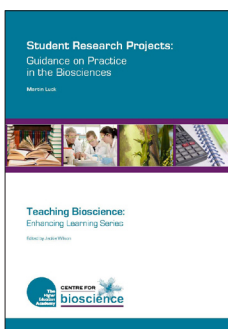
Further developments

In future, we plan to involve current students (who have benefited from attending conferences) in helping to deliver workshops on conference attendance to 2nd year students. We hope this will further emphasise the potential benefits of attending a conference and instil in 2nd years the belief that it 'could be them'. Conference attendance will remain an optional non assessed component of project work with a focus on 'value added' benefits for students who participate.

References

Mehrban, N. and Turner, I.J. (2008) A Comparison of the Identifying Features in Original Signatures and Electronically Scanned Signatures. *Journal of the American Society of Questioned Document Examiners* 11, 1. Available (abstract) at www.asqde.org/journal/Abstracts%20vol11%20no1.pdf

Additional materials



This case study was written to accompany the Teaching Bioscience: Enhancing Learning guide entitled *Student Research Projects: Guidance on Practice in the Biosciences*, written by Martin Luck and published by the Centre for Bioscience. The associated website (www.bioscience.heacademy.ac.uk/resources/TeachingGuides/) contains a downloadable version of this case study

Case Study published October 2008



Centre for Bioscience
Room 9.15 Worsley Building
University of Leeds, Leeds, LS2 9JT
Tel / Fax: 0113 343 3001 / 5894
Email: heabioscience@leeds.ac.uk
Web: www.bioscience.heacademy.ac.uk