

AUTC PHYSICS PROJECT - Team Meeting
AIP Congress, ANU

Monday 31 January 2005

Present:

David Mills	Project Leader
Manju Sharma	Project Leader
Alberto Mendez	Project Officer
Brian James	Steering Committee
Michelle Livett	Steering Committee
Judith Pollard	Steering Committee
Marjan Zadnik	Steering Committee
Susan Feteris	Working Party
David Low	Working Party
Alex Merchant	Working Party
Geoff Swan	Working Party
Kate Wilson	Working Party
John O'Connor	Expert Advisor

Agenda

- David informs team that the Carrick Institute is set to rubber stamp the stage 1 report, giving the green light to its publication. This will occur as soon as the few outstanding formatting issues are resolved – printing in middle to late February.
- The publication of the stage 1 report and its distribution was discussed. List of recipients:
 - 2 or 3 to each physics department (dependent on size of dept)
 - Alan Robson and Adrian Lee
 - AIP
 - Overseas – IoP (UK), AAPT - ??? (US)
- A short summary of issues raised at HOD meeting provided by David, Manju and Brian:
 - physics is one of the few disciplines where the main expectation of honours students is that they will continue on to postgraduate study
 - self selection starts very early (usually in the 1st year)
 - what is the advantage of getting an honours degree (as opposed to a 3-year one) if you aren't going on to postgraduate study? i.e. what does it mean to be a 4th year physicist?
 - wariness of a number of HODs in sharing – this hopefully can be overcome by the way it's approached, i.e. only putting up summaries of resources on web, not the actual full resource
 - AIP has a Physics Forum on the web for Q&A but it is not used frequently
 - possible development of a physics education specific professional development course for staff – to count as teaching qualification and accredited by AIP
 - the coupling between high school and university subjects:
 - do student expectations, experiences and prior knowledge transit nicely from one to the other?

- how to deal with such a range in a single class?
 - can we (and should we) teach service and interest subjects the same way as we teach majors?
- sessional staff and demonstrator training
- Resource sharing and other ideas for stage 2 of project:
 - in AIP accreditation there are listings of lab facilities and resources – could be useful to look through and collect some of this, before approaching departments with an enquiry about possible sharing
 - should look at international websites with established resource sharing infrastructure
 - the Maths Institute and ACCESS-GRID both have electronic sharing of honours courses – advantages (broader range of choices), disadvantages (often students are not at the same level at the end of 3rd year)
 - an agreement on what content is required at all levels? i.e. developing Australian resources, instead of using overseas textbooks
 - impractical as HUGE resources would be required
 - such a book for service students could be a more practical start (and departments might be more willing to develop service than mainstream)
 - too much for stage 2 but perhaps the level of interest could be gauged, possibly leading to an investigation of what would be involved
 - need to identify good practices more clearly than in report – they can possibly be summarised on project’s webpage, with contact person information attached and a link to the specific good practice webpage
 - Roger Lewis (HOD, Wollongong) would like representatives from the project team to come to his department and spend a day (i) looking at their setup, and (ii) discussing the stage 1 findings with his staff
 - other HODs may also be interested in similar visits!
 - Deb Kane’s idea (at HOD meeting) of physics specific units in staff development courses is worth investigating – surveying the interest of physics departments would be a good start, BUT:
 - need to make sure that T&L centres are not alienated or undervalued
 - need to value the benefits of the courses as they currently stand (networking, contacts, inputs from other discipline areas, etc)
 - need to conduct graduate/employer interviews ASAP!
 - brainstorming ideas for national workshops:
 - PER, can it make a difference?
 - good practices, research projects, etc – how are they managed?
 - John O’Connor mentioned an issue that he’s noticed at Newcastle, and which he believes is mainly specific to physics:
 - do some students get put off physics by the very tough marking?
 - do they then continue on in other areas, where they get better marks for the same effort?
- Michelle and Judith briefly discussed the presentation and workshops at the PEG sessions of the AIP Congress (dissemination of the stage 1 report).
- Discussed the possibility of submitting a short abstract, presentation to the upcoming HERDSA conference. Decided to focus on one aspect of project – maybe on methodology, possibly on angle “Changing the Nature of Physics”