AARE Melbourne 2010 Report

The AARE Conference in Melbourne was from the evaluation and anecdotal reports a success. There were over 800 registrations and presentations, with more than 100 international participants.

2010 Conference Awardees

Recently Awarded Theses

Upcoming Events

Gender, Sexualities and Culture in Australian Education Research Symposium and Collaborative Writing Workshop with Dr. Mary-Lou Rasmussen & Dr. Andrew Hickey
8th-9th April
BOOK NOW! [Click Here] (Free Event)

AARE Hobart 2011

8 May Closing date for abstracts for symposia, panels and papers
29 May Closing date for full papers for refereeing
June/ September AARE Award application dates
Please [click here] for awards and due dates

Source: AARE News No. 73 - March 2011
with a single grade or digit, summing up a wide range of activities. The authors of this timely book ask how fair that assessment is.
The New Year always meant changes to the AARE Executive as members finish their term, step into new roles or join the Executive. I’d like thank our retiring members of the Executive and those who have taken on new roles. Professor Joanne Reid (CSU) has stepped into the role of Past President after serving as President for two years. Jo has been exemplary in her commitment, enthusiasm and generosity to AARE.

Thank you also to Professor Annette Patterson (QUT) who has completed her term as Managing Editor of AER. Annette has led a landmark period in AER’s history, including the ISI ranking of AER and AER’s move to the Springer stable of journals. These initiatives will enable the wider distribution of AER and more streamlined administration through on-line journal submission.

An extremely hardworking QUT team supported Annette. Their silent but tireless contributions enabled the production of a high quality AER. On behalf of AARE, I want to express our sincere thanks to this group for their invaluable contributions: Cushla Kapitzke (Associate Editor); Mary Ryan (Book Reviews Editor), and Atholl Murry (Editorial Assistant).

Farewell also to Marie Brennan (Vic U) who has finished her term on the Executive and is moving on. She has played an invaluable role looking after our membership portfolio and to Karen Hawkins, formerly our ECR representative. Both will be sorely missed.

I’d like to welcome onto the AARE Executive Jill Blackmore (Deakin), former AARE President and Managing Editor of AER, who is stepping in to take up the reins of AER again. Welcome also to Joel Windle (Monash) who will be looking after the membership portfolio, and Carmel Patterson, our new Postgraduate Student Member. Continuing on the Executive as co-opted members are Kristina Gottschall (CSU) as ECR representative and Joanne Orlando (UWS) who is assisting with Research Development Coordination.

Jan Wright (UoW), Julianne Moss (University of Melbourne) and their support teams organised a wonderful conference and 40th birthday party in Melbourne. Preparations are already in train for the conferences in Hobart (2011) and Sydney (2012). AARE successfully bid to host the Asia Pacific Educational Research Association (APERA) conference in conjunction with our Sydney conference in 2012. We hope this exciting collaboration of AARE/APERA will be the beginning of deepening ties between AARE and education researchers from countries across the Asia-Pacific.
At the beginning of 2011, the AARE Secretariat was established in Canberra in new premises with Universities Australia and the Australian Council of Deans of Education (ACDE). The new AARE address is One Geils Court, Deakin West ACT 2600 (02 6285 8328). Our new location will enable AARE to build stronger links with the peak bodies in education and to strengthen our input into policy decisions that affect education researchers.

The establishment of the AARE Secretariat in Canberra has meant losing the services of Ruth and Peter Jeffery, whose company Professional Resources Services (PRS) looked after the AARE office in Cold stream for 20 years. I want to express our sincere thanks to Ruth, Peter and their daughter Wendy for their wonderful contributions to AARE over many years.

In December, Jo Reid and I attended the meeting of WERA (World Education Research Association). WERA brings together 27 national, regional and international research associations to advance education research to serve the public good. AARE members can present at WERA symposiums during the annual conferences of member associations and registration fees are usually reduced or waived. Check out the conference options and email me if you are interested [Click Here].

2011 marks AER’s move to Springer and on-line submission and review of articles. AARE members will have immediate access to AER using their members-only login through the AARE website (www.aare.edu.au) instead of waiting 12 months before it is available in many universities.

Your AARE login will also give you access to members-only areas of the website and let you update your contact details, personal information and SIG membership. All members were posted a letter with details about how to login and update their profile. I believe the initial teething problems with the new system have been fixed and I thank everyone for their patience and understanding. If you are still experiencing login difficulties, please do not hesitate to contact the Secretariat for help: aare@aare.edu.au or 02 6285 8328.

2011 has already been a politically busy year. AARE has taken a leading role in the campaign to stop the closure of the Australian Learning and Teaching Council (ALTC) by writing to the Prime Minister and leaders of the other main political parties [See More].

AARE has also established a ‘link-up service’ for colleagues who have lost precious books, files and research material in the recent floods, cyclone and fires to help them rebuild their professional lives as education researchers. Information about AARE’s ‘link-up service’ has been circulated to other peak education bodies. Please pass on this news to colleagues you know who might need support.[More Information]

Responding to ERA has been a priority Peter Goodyear has been in constant contact with other associations such as ACDE, HERDSA and ACSA to develop a united front. Peter’s report in this issue of AARE NEWS provides more detail on the ERA outcomes and the implications for education research.

During 2011, a key priority is to extend our current program of support for the development of education research. The highly successful Theory Workshop will be conducted again in 2011. The findings from our recent survey of members’ research training needs will be the basis for further initiatives. Please keep track of these developments through the AARE website (www.aare.edu.au).

Christine Halse
AARE President
Many SIGs held events at the AARE conference in Melbourne last year and began planning for 2011. As a result this year is looking like being an exciting year for SIGs. This is the first year in which events funded from the large SIG grants will take place. The Sociocultural and Activity Theory SIG held a pre-conference symposium in Melbourne and a follow up event on the 24-25 January (see next newsletter for details). The Gender, Sexualities and Culture SIG symposium with Mary Lou-Rasmussen and Andrew Hickey is to be held at Charles Sturt, Bathurst, on April 8-9 (see advertisement this newsletter).

There are a number of new SIGs that are now up and running. These include the Politics and Policy in Education SIG; the Sociology of Education SIG; and the Teacher Education and Research Innovation in Australia SIG. Some SIGs have had name changes, for example, the Contemporary Theory, Poststructuralism and Governmentality SIG has now become the Poststructural Theory SIG and the Doctoral Education Research SIG (DERSIG) is considering a name change that better reflects its focus on research into doctoral studies.

There is also to be a new SIG that has developed out of the work of the Tertiary Education and Equity SIG and conversations with others interested in the area of higher education (see below).

As indicated elsewhere in the newsletter the AARE website is currently undergoing renovations and the SIG site is one area that is currently being worked on and hopefully the recent changes to SIGs will be up to date in the very near future.

Large annual SIG grant

Each year AARE offers one large grant up to $3000 to one SIG or a consortium of SIGs to fund a significant SIG project (see below). If you have an idea please contact a SIG convenor with a suggestion or a proposal.

Grant Criteria

The project must promote the aims of AARE and of SIGs. These include:

- Addressing the research needs of education researchers at all career stages;
- Advancing high quality educational research in Australia and internationally;
- Promoting understandings of educational issues;
- Informing education policy;
Providing a research forum for education researchers to debate current problems and issues.

Conditions

Application is to be submitted by **20th May 2011** to the AARE office aare@aare.edu.au. Length should not exceed 1000 words.

The project is to be completed by mid May 2012

Funds are not available for prizes or to cover costs of conference registration

The project must be submitted by the SIG Convenor and supported by 10 SIG members who are also members of AARE.

The annual SIG budget of $500 is included within this amount

To be eligible a SIG must be registered by March 25th

SIGs that receive this grant are not eligible to apply for the following year’s grant

The SIG that receives this grant is expected to produce a 500 word article for AARE news on the project once it has been completed.

SIGs and ERA Journal Rankings

As indicated elsewhere in this newsletter the ARC is currently undertaking a review of journal rankings. SIGs may well want to contribute to this review by focusing attention on journals which (a) are of direct relevance to the SIG; well-known to its members, and (b) have been badly ranked in the ERA2010 exercise. (This could mean that SIG members view the journal’s current rank as too high or too low. It could also mean that the journal has been coded to the wrong FoR, or to too narrow a range of FoRs.) There may also be some journals of relevance to a SIG that have not yet been included in the ARC/ERA ranked outlets list - this is an opportunity to correct such omissions. As such SIG members in consultation with their convenors may wish to set up a process whereby members identify journals whose ranking merits a change. Having identified journals that are priorities for SIG action, members could share the effort of collating key data for each selected journal.

Proposed new SIG in Higher and Professional Education

After a preliminary meeting at the Melbourne 2010 conference, and subsequent discussions with the conveners of the Tertiary Education and Equity SIG, all members have decided to combine our various interests into a more comprehensive SIG on Higher and Professional Education. The scope of this new SIG will allow researchers within AARE to build critical mass and strategic focus in the areas of higher, professional and vocational education; and workplace and organizational learning.

The Higher and Professional Education SIG will explore a range of big questions facing these post-secondary sectors, including building a critical research agenda in student equity, globalization, knowledge, technology and other issues defined by the new SIG’s membership. This SIG aims to provide space for:

i) theoretical and methodological discussions across these diverse sites

ii) a focus for the innovative work of doctoral students and ECRs in these
cross boundary areas

iii) an alternative to the main focus of HERDSA conferences on school teaching and learning

iv) link researchers in vocational education into a broader community

v) making strong bids for funding from AARE for special events (eg. bringing out leading researchers to special focused forum).

This new SIG will apply for registration within AARE in March 2011. If you are interested in becoming a member, or would like to inquire further, please contact one of the co-conveners:

Alison Lee (Alison.Lee@uts.edu.au); Catherine Manathunga (c.manathunga@uq.edu.au); Sam.Sellar (Sam.Sellar@unisa.edu.au)

The Motivation and Learning SIG

Dr Lars-Erik Malmberg presents the invited Motivation and Learning SIG keynote at the Melbourne Conference

The Motivation and Learning SIG held a highly successful and well attended Invited Keynote session at the Conference. The keynote, "Within teacher stability and variability: An under-explored dimension of teachers' self-efficacy development", was presented by Dr Lars-Erik Malmberg, Oxford.

The Motivation and Learning SIG also provided awards for student presentations at the conference.

The 2010 Awardees were:

Ms Juliette Spearman, presentation entitled, Motivating Classroom Features for Girls and Boys Studying Maths and Science
Ms Yvonne Toh, presentation entitled, 2x2 Achievement Goal Framework in Learning and Coping
Report on AARE International Conference 2010, Melbourne
Jan Wright, AARE Conference Standing Committee

The AARE Conference in Melbourne was, from the evaluation and anecdotal reports, a success. There were over 800 registrations and presentations, with more than 100 international participants. There was an exceptionally strong academic program which we hope will be maintained in future years.

Many thanks go to Professor Field Rickards, Dean of The Graduate School of Education, The University of Melbourne for his support of the conference. Dr Julianne Moss and Dr Peter Ferguson from Melbourne University played a major role in the success of the conference providing an essential link with the local academic community, the Victorian education systems and with local students.

The Conference convenors struggled with the Open Conference System (OCS) this year and we extend our apologies to all of those who were caught up in the consequences of our struggle. Next year we will be using the Oxford Abstract Submission system which is better suited to our needs.

The CSC is very much indebted to the Special Interest Group convenors for their patience and for the role they played in abstract and paper reviewing.

The conference proceedings have now been collated and can be found by [clicking here]. For citation purposes, these papers have been edited by Dr Sarah Howard.

The podcasts of the keynote addresses from the 2010 Conference will shortly be available on the AARE website. The papers will be published in the Australian Educational Researcher

Exclusion and the making of difference
Roger Slee

Policy as numbers: Ac/counting for educational research
Bob Lingard (Radford Address)

Doing it by the numbers? Educational research and teacher education
Joanne Reid (Presidential Address)

Conference Birthday Party (Joan Warhurst)

A highlight of the 2010 Conference was the Birthday Party on the evening of Tuesday 30th November for conference participants and invited guests to celebrate 40 Years for AARE. Foundation Members, Life Members and Past Presidents were invited to attend this function. 11 Foundation Members attended, six of whom were also Life Members and five were also Past Presidents. Dr Ray Debus deserves a special mention, not only as a Foundation Member and a Life Member but also as
the only known person to have attended every AARE Conference. Two others, Professor Michael Dunkin and Professor Phillip Hughes, filled all three positions. There were in total 12 Life Members and 17 Past Presidents (see attachment). Each of the invited guests received a bottle of AARE Birthday wine and together they were invited to cut the Birthday Cake. For many of the older guests the party provided an opportunity for them to catch up with colleagues they had not seen for many years and post the conference there were many emails along the lines of the one below from Millicent Poole:

Thanks for a delightful reception. The Living Legends, Wine Award and book launch were memorable. Great to see so many familiar faces there and to re-configure them and myself as living legends!!!! The enthusiasm and energy of the next lot of up- and- soon – to –be new legends was palpable. Great atmosphere, but then educational researchers have always liked a drink or two. Please pass on my congratulations and thanks to those who did the hard yards along with yourself.

AARE Annual International Conference, Hobart, Tasmania
28 November – 1 December, 2011

Conference Venue
THE HOTEL GRAND CHANCELLOR
Hobart, Tasmania

Theme: Researching Across Boundaries

This year we are encouraging educational researchers to bring local, national and global perspectives to engage with the theme Researching Across Boundaries. Boundaries could include, though not be limited to: researching across sectors and agencies, workforce planning to address issues of regional disadvantage, the legacy and implications of recent reviews into schooling, higher education and the academic workforce, interdisciplinary research, and so on. Researching Across Boundaries may involve new approaches to teaching and learning, new forms of collaborative leadership and management and new approaches to meeting challenges in research methodologies, production and publication.

The conference venue in Hobart is right on the Hobart waterfront, and close to cafes, galleries and the spectacular Salamanca Place. For those who wish to organize research meetings, there are rooms in both the Hotel Grand Chancellor and the Woolshed next door suitable for smaller groups. Those interested in using this facility should contact the conference convenor.

Important Dates

8 May Closing date for abstracts for symposia, posters and individual presentations.
29 May Closing date for full papers for refereeing.
15 July Last day for notification of acceptance of abstracts.
29 August Early-bird (discount) registration rate closes. Presenter registrations close.
The website will be up early April.

The Conference Standing Committee will again oversee the conference organization in collaboration with a team from the University of Tasmania, coordinated by Jeanne Allen.

***** Call for Invited Symposia
Proposals for ‘Invited Symposia’ are sought from Special Interest Groups and individual members of AARE for presentation at the 2011 Conference. The symposia must have widespread appeal and take up contemporary issues for educational research in general or for specific fields of educational research. One free registration will be made available to each successful symposium. Up to eight symposia will be selected from submitted proposals, unsuccessful proposals will be timetabled in the main program. Further guidelines will be available on the AARE and conference websites. From the successful proposals, symposia will be selected to present as AARE symposia at BERA and AERA. The closing date for ‘invited symposia’ is 8th May 2011.
2010 Conference Award Recipients

Award for Doctoral Research in Education
Professor Bob Lingard (Chair), UQ
Professor Lyn Yates, Melb.
Professor Michael Singh, UWS
Professor Lesley Vidovich, UWA
Assoc Professor Helen Watt, Monash

2010 AWARDEE:
Dr Tyson Yunkaporta, JCU Ed D entitled, *Aboriginal Pedagogies at the Cultural Interface*

ACDE Postgraduate Student/ECR Best Poster Award
Professor Toni Downes (Chair), ACDE
Professor Peter Goodyear, USyd
Assoc Professor Helen Watt, Monash
Hon. Secretary Debra Cunningham, AARE

2010 AWARDEE:
Ms Zoe Morris, Monash, poster entitled, *Developing Teacher Professional Identity in a Digital Era*

Early Career Researcher Award
Assoc Professor Helen Watt (Chair), Monash
Professor Andrew Martin, USyd
Professor Tracey Bunda, Flinders
Dr Phil Riley, Monash
Hon. Secretary Debra Cunningham, AARE

2010 AWARDEE:

Betty Watts Indigenous Researcher Award
Assoc Professor Helen Watt (Chair), Monash
Professor Andrew Martin, USyd
Professor Tracey Bunda, Flinders
Dr Phil Riley, Monash
Hon. Secretary Debra Cunningham, AARE

2010 AWARDEE
Dr Gawaian Bodkin-Andrews, UWS, paper entitled, *Looking Past Positivity for*

**Postgraduate Student Research Awards**
Dr Caroline Mansfield (Chair), Murdoch  
Dr Sue Beltman, Curtin  
Dr Anne Price, Murdoch  
Hon. Secretary Debra Cunningham, AARE

**2010 AWARDEES**

**Ms Sunita Velayutham**, Curtin, ‘Development and validation of an instrument to measure students’ motivation and self-regulation in science learning’ (co-authored)

**Ms Yvonne Toh**, Monash, ‘2x2 Achievement Goal Framework in Learning and Coping’

**Ms Emily Berger**, Monash, ‘Children’s and Adolescents’ Concepts of Poverty: Association with Cognitive Development and Social Disadvantage’ (co-authored)

**ML-SIG Award for Student Presentations**

**Ms Juliette Spearman**, Monash, presentation entitled, *Motivating Classroom Features for Girls and Boys Studying Maths and Science*

**Ms Yvonne Toh**, Monash, presentation entitled, *2x2 Achievement Goal Framework in Learning and Coping*
Post Graduate Profile
Carmel Patterson, University of Technology Sydney

Since 2009 I’ve been a full-time PhD student and part-time lecturer at the University of Technology Sydney. My thesis focus of investigating high school teacher’s expertise, personal professional development and learning is outlined on http://carmelpatterson.wikispaces.com/

My methodology utilises hermeneutic phenomenology and I’m interested in discussing related design methods or professional learning research with those working in these fields through http://uts.academia.edu/CarmelPatterson

My research aims to shift the focus from competency certification to the significance of expert teachers’ personal professional development, and their unique learning needs. The research endeavours to bridge a gap by presenting new knowledge on expert teachers’ views of their personal professional development, and their unique representations of meaning for their own learning. The research focuses on expert teachers’ views in contrast to existing research, which predominantly deals with teachers at pre-service, novice, and leadership levels. From the shared interpretations of expert teachers’ views grounded in local practice, I aim to elucidate learning principles pertinent to these expert teachers in the Australian context.

I have been a conference delegate presenter at the 2010 DoctoRALnet forum at UTS, at the 2010 Manchester Metropolitan University methodology forum in UK and at the 2010 AARE conference where I commenced my executive committee postgraduate student member role. I was also part of the organising committee member of the 2010 UTS FASS post graduate research students conference [Click here]

What’s your story?
The AARE community would like to hear your story and share postgraduate student’s research and related experiences through the AARE newsletter and website.
Please write your 200 word bio that includes details about yourself, your work and your preferred contact modes. Then email your 200 word bio and a photo of yourself to the Postgraduate Student Member carmel.patterson@uts.edu.au
Susanna Mann

Designing for Mobile Learning beyond Online: Using Mobile Devices as mediating tools for informal learning in a Technology Museum

Institution: University of Sydney  
Awarded: 24 January 2011  
Supervisors: Professor Peter Reimann and Professor Peter Goodyear

Abstract

The aim of this research is to gain a better understanding of how to support learners in informal learning situations using mobile technology and a variant of the Learning-By-Design pedagogy. Specifically, the study analyses whether and how the use of mobile devices contributes to students’ learning over and above the support they receive solely from online collaborative learning activities and specially-crafted online learning resources. This inquiry into curriculum-oriented informal learning on the topic of “Evolution and History of Computers” adopts an in-depth exploratory approach, which is partially situated in a design and technology museum. It combines elements of quasi-experimentation with naturalistic observation, and quantitative with qualitative analysis.

In the quantitative approach, a quasi-experiment focuses on testing the knowledge that students have acquired. In the qualitative approach, an embedded single case study explores learners’ responses to various combinations of learning supports. This case study makes use of multiple sources of qualitative data analysis. As part of the qualitative research, a detailed video analysis of the interactions between students, museum artefacts, and the curator mediated by mobile devices is provided. Based on this analysis, a design model for mobile learning with five design factors, called the CAICA design model, is suggested.

In summary, this thesis makes contribution to learning research as well as to design research in the area of mobile learning. The empirical findings of this study allow me to conclude that mobile devices help learners to acquire factual content and conceptual structural knowledge in a way that goes beyond mere online learning.
acquisition of intellectual virtues

Institution: University of Western Sydney
Awarded: 9 December 2010 by UWS Research Studies Committee
Supervisors: Professor Christine Halse and Associate Professor Janne Malfroy

Abstract
In the last two decades, interest in doctoral education has prompted wide-ranging debate among stakeholders on the purposes of doctoral education in general, and the Doctor of Philosophy (PhD) in particular. Although this swelling interest has triggered an exponential growth in research and literature on doctoral education and the PhD, an integrated theorisation of students’ perspectives of the impacts that occur during the PhD process has not yet been developed. This thesis aims to address this gap in knowledge. Using grounded theory methodology and methods, the research examined the impacts of the PhD process from the perspective of 23 full-time students attending a large metropolitan university in Sydney, Australia. Through the simultaneous processes of data collection, constant comparison and theory generation, and working inductively and deductively (abductively), this thesis proposes that the learning students experienced as impacts of the PhD process can be theorised as the acquisition of Aristotle’s intellectual virtues of phronesis, sophia and technè. Specifically, through the complex processes involved in undertaking a PhD, students accumulate personal resourcefulness to develop phronesis (practical knowledge), enhance their cognition to acquire sophia (intellectual knowledge), and develop their research, workplace and career management, leadership, organisational, communication (written and oral), and project management skills to obtain the intellectual virtue of technè (productive knowledge).

Special Mention

Dr Eugene Sebastian, Director, International Strategy and Planning at Monash University recently received the 2010 award for Outstanding postgraduate thesis on an topic related to international education, for his University of Sydney PhD, "Protest from the fringe: Overseas Students and their Influence on Australia’s Export of Education Services Policy 1983-1996". The award is presented annually by the International Education Association of Australia at the Australian International Education Conference (AIEC). Eugene’s thesis is online at http://hdl.handle.net/2123/5833. More information about the IEAA thesis award is available at http://www.ieaa.org.au/content/?ids=Awards.

Recently awarded your thesis? Yes

Recently awarded your thesis?

The AARE community would like postgraduate students and beginning early career researchers to share the details of their recently awarded thesis.

Please email to the ECR Member kottschall@csu.edu.au the following details:

Your full name

Name of institution

Name of your supervisor(s)

Thesis title
200-word abstract

Awarded date details
Can Australia afford high quality educational research?

Peter Goodyear
Research development

In commenting on the portrait of Australian research painted by ERA2010, Margaret Sheil, Chief Executive of the Australian Research Council, said

“There is a strong correlation between excellence and areas that have won competitive research funding. The strength of medical science is not surprising, given these areas have had a separate funding council, a history of strong leadership and many successes (including most of our Nobel laureates).”1

It is disappointing, but not surprising, that Education features as one of the weaker areas in the ERA outcomes. As the ERA report itself notes, Education accounted for 5% of the national research outputs but received only 1% of Category 1 research income in the assessment period.2

Table 1 shows stark variations in funding. The data are presented at the level of ‘two digit FoRs’ – the broader category used in the ERA reporting. The research fields in Table 1 are listed in decreasing order of ‘average national rating’. The columns on the right use ERA Report data to show the levels of research income in each field – I have divided the raw volume of funding by the numbers of full-time equivalent staff in each field, evening out differences in the size of fields. These columns show the annual research income per FTE staff member and the annual Category 1 research income per FTE staff member, for each field (averaged over the years 2006-2008). Thus, Education (FoR13) staff were receiving average Category 1 funding of $3,698 per annum, compared with $63,197 for staff in FoR11BCH (Biomedical and clinical health sciences). Taking all the ERA-recognised research funding streams into account, FoR13 staff were still only receiving $16,863 per FTE per annum: which is not enough to fund a single PhD student. Bearing in mind the huge variations between universities in research income, many FoR13 staff must be managing with virtually no external research funding. While it may be presumptuous of us to look with envy at the resources available for medical research, it does no harm to look a little closer to home. On a per FTE basis, Studies in human society (FoR16) was enjoying double to quadruple the research funding flowing to those of us in FoR13; Economics and Psychology researchers (FoRs14 and 17) had five times the Category 1 funding that was coming to Education.

<table>
<thead>
<tr>
<th>Field of Research</th>
<th>Average national rating</th>
<th>Research income per FTE per year ($)</th>
<th>Cat 1 Res Income per FTE per year ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10BB Technology (biological sciences &amp; biotechnology)</td>
<td>5.0</td>
<td>62,271</td>
<td>18,806</td>
</tr>
<tr>
<td>04 Earth sciences</td>
<td>3.8</td>
<td>89,601</td>
<td>34,788</td>
</tr>
<tr>
<td>02 Physical sciences</td>
<td>3.7</td>
<td>70,121</td>
<td>47,068</td>
</tr>
<tr>
<td>03 Chemical sciences</td>
<td>3.5</td>
<td>80,012</td>
<td>42,344</td>
</tr>
<tr>
<td>05 Environmental sciences</td>
<td>3.3</td>
<td>118,797</td>
<td>41,303</td>
</tr>
<tr>
<td>07 Agricultural and veterinary sciences</td>
<td>3.3</td>
<td>144,629</td>
<td>72,730</td>
</tr>
<tr>
<td>01 Mathematical sciences</td>
<td>3.2</td>
<td>39,773</td>
<td>26,572</td>
</tr>
</tbody>
</table>
Table 1: Average national research quality ratings and research income (source: compiled from ERA2010 Report)


<table>
<thead>
<tr>
<th>Category</th>
<th>Average Rating</th>
<th>Average Research Income (GBP)</th>
<th>Average Research Income (AUD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11BCH Med &amp; health sci (biomed &amp; clinical health sciences)</td>
<td>3.2</td>
<td>152,005</td>
<td>63,197</td>
</tr>
<tr>
<td>06 Biological sciences</td>
<td>3.1</td>
<td>89,949</td>
<td>46,782</td>
</tr>
<tr>
<td>09 Engineering</td>
<td>3.0</td>
<td>90,771</td>
<td>33,047</td>
</tr>
<tr>
<td>21 History and archaeology</td>
<td>3.0</td>
<td>31,769</td>
<td>19,485</td>
</tr>
<tr>
<td>22 Philosophy &amp; religious studies</td>
<td>3.0</td>
<td>21,433</td>
<td>13,387</td>
</tr>
<tr>
<td>19 Studies in creative arts and writing</td>
<td>2.8</td>
<td>5,570</td>
<td>2,954</td>
</tr>
<tr>
<td>20 Language communication &amp; culture</td>
<td>2.8</td>
<td>17,805</td>
<td>8,981</td>
</tr>
<tr>
<td>08 Information and computing sciences</td>
<td>2.7</td>
<td>44,271</td>
<td>14,397</td>
</tr>
<tr>
<td>10MIC Technology (Math, Info &amp; Comp sci)</td>
<td>2.7</td>
<td>79,114</td>
<td>33,767</td>
</tr>
<tr>
<td>11PAH Med &amp; health sci (public &amp; allied health sciences)</td>
<td>2.7</td>
<td>73,024</td>
<td>22,220</td>
</tr>
<tr>
<td>18 Law and legal studies</td>
<td>2.7</td>
<td>11,678</td>
<td>6,036</td>
</tr>
<tr>
<td>12EE Built environment &amp; design (eng &amp; env sciences)</td>
<td>2.5</td>
<td>27,586</td>
<td>5,561</td>
</tr>
<tr>
<td>12HCA Built environment &amp; design (humanities &amp; creative arts)</td>
<td>2.5</td>
<td>17,760</td>
<td>6,249</td>
</tr>
<tr>
<td>17 Psychology &amp; cognitive sciences</td>
<td>2.5</td>
<td>38,423</td>
<td>19,396</td>
</tr>
<tr>
<td>13 Education</td>
<td>2.2</td>
<td>16,863</td>
<td>3,698</td>
</tr>
<tr>
<td>14 Economics</td>
<td>2.2</td>
<td>44,617</td>
<td>18,122</td>
</tr>
<tr>
<td>15 Commerce, management, tourism &amp; services</td>
<td>2.2</td>
<td>12,326</td>
<td>3,484</td>
</tr>
<tr>
<td>16 Studies in human society</td>
<td>2.1</td>
<td>36,212</td>
<td>13,686</td>
</tr>
</tbody>
</table>

The ERA rating scheme tries to express research quality by benchmarking against a notional level of ‘world standard’. Thus, a rating of 3 is used to indicate ‘average performance at world standard’, 4 means ‘performance above world standard’ and 5 means ‘outstanding performance well above world standard’. The UK’s long-established Research Assessment Exercise (RAE) also refers to world standards. The top grade in RAE2008 is a 4*, which denotes ‘Quality that is world-leading in terms of originality, significance and rigour’. 3* indicates ‘Quality that is internationally excellent in terms of originality, significance and rigour but which nonetheless falls short of the highest standards of excellence’.

What levels of research funding might correlate with international excellence in educational research? The RAE2008 dataset includes detailed information about research funding. Four institutions top the educational research list, as measured by the proportion of staff who are rated as 4* or 3*: The Institute of Education and King’s College (both parts of London University), and the universities of Oxford and Cambridge. These four have 338 FTE educational researchers between them and each has 65% of their staff in the top two bands. Table 2 compares the research income utilised by these top-rated centres of educational research with the average research income available to the Australian educational research community.

In short, top-flight educational research in the UK is resourced at the levels enjoyed by the ‘hard’ sciences in Australia.

Table 2: Comparative funding levels for educational research (source: RAE2008 and ERA2010; UK data 2004-5 to 2006-7; Australian data 2006-2008; GBP:AUD exchange rate July 1 2007: 2.36, Dec 31 2008: 2.10)

<table>
<thead>
<tr>
<th></th>
<th>Research income per FTE per year (all sources)</th>
<th>Cat 1/OST Res Income per FTE per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 4 UK</td>
<td>57,987 GBP</td>
<td>15,076 GBP</td>
</tr>
<tr>
<td>All UK</td>
<td>32,930 GBP</td>
<td>5,993 GBP</td>
</tr>
<tr>
<td>All Australian</td>
<td>16,863 AUD</td>
<td>3,698 AUD</td>
</tr>
</tbody>
</table>


Can Australia afford to pay for high quality educational research? The whole of FoR13 received $145m over the three years 2006-2008; about $53m in 2008. This is 0.08% of total national expenditure on education - eight cents on educational research for every $100 spent on education. Spread the costs of educational research across the whole population and it comes to $2.50 a head. That’s a year.


2 ARC (2011) ERA2010 National Report, ARC, Canberra, p141. Category 1 income is research income from programs listed on the Australian Competitive Grants register and includes sources such as the Australian Research Council and the National Health and Medical Research Council.

3 http://www.rae.ac.uk/submissions/submissions.aspx?id=45&type=uo