



Faculty of Education

Research News

SEPTEMBER/OCTOBER, 2005 – ISSUE 5

SUCCESSFUL GRANTS

The following staff have been successful in receiving a **University Small Grant for 2006**.

Shirley Agnostino - Investigating how learning designs can be represented to facilitate dissemination and reuse of innovative pedagogical strategies in university teaching - \$3,000

Irina Verenikina, Jan Herrington - The affordances of computer play in developing children's ability for higher order thinking - \$7,500

Karen Malone, Valerie Harwood - Growing up on the South Coast: a study of young people in their urban environments - \$7,500

Mohan Chinnappan has been awarded \$5,000 UoW New URC Partnership Grant for the following project with the Catholic Education Office. The combined budget (kind and cash from both parties) is \$20K. Title: Secondary mathematics teachers' algebraic knowledge and practice in the System of Catholic schools in the Diocese of Wollongong.

Lori Lockyer has been awarded a University International Link Grant with the University of British Columbia in Canada for her project "A collaborative evaluation program to assess the impact of medical education initiatives."

Brian Ferry & Gwyn Brickell have been awarded two grants:

1. \$ 77 000

Environmental Science Experiences for Schools aims to create a dynamic centre for science education, conservation teaching and research. It will focus on three major conservation issues: birds as a measure of biodiversity; biological control of Bitou Bush and Boneseed; and monitoring and recovery of *Zieria granulata* (an endangered plant). The project will conduct two residential programs for gifted and talented students at Killalea State Park and in cooperation with university partners and the development of a suite of e-learning resources. The project encourages other teachers of science to replicate the initiatives in their own local areas and will disseminate information through a website, workshops, NSW Department of Education and Training newsletters and conferences of the Illawarra Science Teachers' Association. Partner organization"

Barrack Heights Public School (Barrack Heights) NSW

Flinders Public School (Shellharbour) NSW

Lake Illawarra High School (Lake Illawarra) NSW

Lake Illawarra South Public School (Lake Illawarra South) NSW

Minnamurra Public School (Minnamurra) NSW

Mount Warrigal Public School (Warilla) NSW

Shell Cove Public School (Shell Cove) NSW

Shellharbour Public School (Shellharbour) NSW

Warilla High School (Barrack Heights) NSW

Warilla North Public School (Lake Illawarra South) NSW

Warilla Public School (Warilla) NSW

Windang Public School (Windang) NSW

CSIRO Entomology

Killalea State Park

NSW Department of Environment and Conservation, Conservation Programs and Planning

NSW Department of Environment and Conservation, National Parks Division

NSW DET, Illawarra Environmental Education Centre

University of Wollongong, Faculty of Education

University of Wollongong, Faculty of Education, emlab

University of Wollongong, School of Biological Sciences

2. \$120 000

Improving High School Science by Showcasing Student Projects in Science Fairs aims to enable students to showcase their own research and develop science communication skills through science fairs. The project will foster research skills, encourage critical thinking and give teachers better capacity to sustain student research in the classroom. The project will support a regional 'Student Research EXPO' that includes other subject areas, such as maths, information technology and geography. The communication of skills and knowledge will work on a 'train the trainer' model as well as professional development workshops for teachers and students. This will be based on the EXPO concept, www.studentresearchexpo.tk, a best practice model for school-based science fairs concept. Partner organizations:

Illawarra Senior College (Port Kembla) NSW

Keira High School (Fairy Meadow) NSW
Smiths Hill High School (Wollongong) NSW
St Joseph's Regional High School (Albion Park) NSW
St Mary Star of the Sea College (WOLLONGONG) NSW
St Paul's School (Albion Park) NSW
Australian Nuclear Science and Technology Organisation
BHP Billiton
Illawarra Science Teachers' Association (ISTA)
University of Wollongong, Faculty of Education
University of Wollongong, Faculty of Science

Peter Kell is part of team of 6 researchers from the North Sydney Institute of TAFE who were awarded a research grant from the National Centre for Vocational Education Research (NCVER) in the grants for quality in offshore VET. The NCVER awarded the NSIT/UoW team \$97,000 to conduct research on quality assurance in offshore VET programs in China.

ADDITIONAL SUCCESSFUL FACULTY GRANT

Phil Pearson and **Tony Okely** received funding of \$9,020 for their successful Faculty Research Grant entitled "Feasibility of a physical activity program in meeting the needs and interests of adolescent girls during school sport".

ENVIRONMENTAL SCIENCE EXPERIENCE FOR SCHOOLS

Emlab and **Brian Ferry** and **Gwyn Brickell** have been successful in partnering with Stuart DeLandre from the Illawarra Environmental Education Centre, the School of Biological Sciences and other local schools for an ASISTM (Australian School Innovation in Science, Technology and Mathematics) grant to run until the end of 2006.

Project Name: 'Environmental Science Experience for Schools'

Description: 'Environmental Science Experience for Schools' aims to create a dynamic centre for science education, conservation teaching and research. It will focus on three major conservation issues: birds as a measure of diversity; biological control of Bitou Bush and Boneseed; and monitoring and recovery of *Zieria granulata* (an endangered plant). Emlab will be involved in designing and developing a web-based learning environment to support students and teachers whilst taking part in environmental education activities and data gathering within Killalea State Park. The web-site will become a growing repository for data collected over time as well as a source of contemporary, practical and useful ideas for teachers and students suitable for use within their own schools.

CONGRATULATIONS TO RESEARCH STUDENTS ON AWARDS

Matt Attencio, candidate for PhD, won the award for the Best Presentation under the "Understanding Our Society" conference theme for his presentation entitled "Crunk', 'Crackin', and 'Crossovers': Young people's engagements with sport, physical activity and health discourses" at the HDR Student Conference held on 29th September 2005. There were 8 presentations in each theme. Each winner was

awarded a certificate and \$500. The other presenter from the Faculty was **Judy Lavery** whose presentation “What meaning....What priority? Young people’s views on life after homelessness” was well received by the audience.

Eric Brymer submitted his thesis entitled “ Extreme Dude! A Phenomenological Perspective on the Extreme Sport Experience” and both examiners have commended this as an outstanding thesis. The Thesis Committee has noted this at their meeting. Congratulations to Eric on this wonderful effort!

Ken Silburn, candidate for Doctorate of Education and Head Teacher Science at Casula High School has received news of an award of a Premier's Scholarship for next year. He is hoping to be able to travel to US to complete a course on "modeling physics" and PASCO summer school for five weeks in June- July 2006.

CHILD OBESITY RESEARCH CENTRE (CORe) UPDATE

Child Obesity Research Centre: Report for Sept-Oct 2005

1. Professional Officer

- Joanne Perry left her job as Professional Officer for full-time work.
- Appointed Lauren Puglisi as Professional Officer in August 2005.

2. Scholarships

- Lauren Puglisi received an ACHPER student scholarship.

3. Publications

- Trost, S.G., Way, R., Okely, A.D. (in press). Predictive validity of three ActiGraph energy expenditure equations for children. Medicine and Science in Sports and Exercise. Accepted August 2005.
- Plasqui, G., & Westerterp, K.R. 2005. Accelerometry and Heart Rate as a Measure of Physical Fitness: Proof of Concept. Medicine. and Science in Sports and Exercise. 37 (5), 872-876.
- Plasqui, G. Joosen, A.M.C.P., Kester, A.D., Goris, A.H.C. & Westerterp, K.R. 2005. Measuring free-living energy expenditure and physical activity with triaxial accelerometry. Obesity Research. 13, 1363-1369.

4. Successful Grant Applications

- Phil Pearson was successful in gaining a Faculty of Education Grant of \$9020. Title ‘The feasibility of school-based physical activity interventions for adolescent girls’.
- Guy Plasqui, along with Tony Okely as co-investigator, was successful in the Health and Behavioural Sciences Small Grant Scheme - \$2305. Title ‘Feasibility of a structured activity protocol for use in the whole room calorimeter with pre-school aged children’.

5. Presentations

Dylan Cliff will be presenting on ‘The efficacy of a physical activity skill-development program for overweight and obese children’ at the 2005 UOW HDR Student Conference on the 29th of September.

6. Writing workshop

Members of CORe participated in a Writing Day at Wollongong Surf Leisure Resort – Breakers Function Centre. It was a great opportunity for people to have time specifically designated to their research. With the venue off campus the daily interruptions of telephones and email were avoided and much writing was achieved. Due to the success of this writing day

a writing retreat will be organised for two days with an overnight stay, sometime early next year.

7. Helping Kids to be Healthy Workshop

On Tuesday the 20th of September Dr Tony Okely and Jane Cleary will be presenting information at Fairy Meadow Demonstration School as a part of 'Helping kids be Healthy' workshop. Dr Tony Okely will be providing information on a number of issues related to the child obesity problem and Jane Cleary on ways to manage and treat childhood obesity.

Dr Tony Okely (Director)

CONFERENCE PRESENTATIONS

Dr Deslea Konza and Dr Rose Dixon attended the AASE (Australian Association for Special Education) 30th National Conference "Making Meaning: Creating Connections that Value Diversity" in Brisbane 23rd - 25th September 2005

Dr Rose Dixon – The Quality Teaching Paradigm: How does it apply to children with special needs? Curriculum Research

Dr Rose Dixon has taught in Universities and Schools for over 25 years. Her particular interests are in the social skill development of people with intellectual disabilities and early intervention for young children with disabilities and developmental delay. The model of Quality Teaching was introduced to NSW DET schools in 2003. Schools were supposed to use the model to improve teaching practice and hence student learning. The purpose of this paper is to report on the results of a qualitative study that determined how this model of pedagogy will apply to children with special needs, particularly children with moderate intellectual disabilities. Data was collected using qualitative methods including semi-structured interviews, observations and document analysis. The results of the study provided greater understanding about special education with relation to the Quality Teaching model. In particular, how do the principles, policies and practices that guide the operation of the special education classroom equate to the Quality Teaching Model, distinguishing the attributes, personal belief systems motivations of special educators and assessing whether these perspectives fit into the Quality Teaching model.

Dr Deslea Konza – The Impact of Teacher Behaviour on the Engagement of Students with Attention Difficulties Curriculum Research

Dr Deslea Konza has taught students with a range of special needs from preschool to secondary level, included those associated with blindness, profound hearing impairment, intellectual disabilities, physical disabilities and multiple disabilities. She is currently Primary Director and Coordinator of postgraduate programs in special education at the University of Wollongong. This paper draws on the results of a year-long study of the time-on-task of ten primary-aged students diagnosed with ADHD to identify those teacher behaviours which accompanied the highest percentages of time-on-task. Narrative recording of classroom activity on a minute by minute basis over observation periods ranging from ten to forty minutes allowed the calculation of average percentages of academic engaged time. Average time on task of each student varied from 14% to 95%. Examination of teacher behaviours during those lessons when time on task was assessed as 70% or above revealed that certain teacher behaviours were consistent with high levels of time-on-task on the part of the students with a diagnosis of ADHD. These behaviours were analysed into important themes for effective instruction of students with attention problems. The main focus of the presentation will be on a

discussion of these themes: how the teachers organised the classroom and student seating; how the teachers managed instruction, (including the use of visual aids) for tasks of different demand; how the teachers managed feedback and instructional support during independent activity; how, in some cases, teachers taught self-cueing strategies; and importantly how the teachers used language for instructional and management purposes.

Ken Cruickshank and **Honglin Chen** have recently presented at the ALAA conference held in University of Melbourne (25-28 September). The paper is entitled *Preparation and proficiency: co-requisites or opposing goals? A comparison of IELTS and Internal EAP pathways to tertiary study in Australia*. The abstract is attached. I have also been elected as treasurer of the ALAA (Applied Linguistics Association of Australia), serving as a member of Executive Committee.

Abstract

The question of assessing entry to tertiary study in English is not a simple one. Universities have traditionally relied on proficiency tests such as IELTS or TOEFL. In the past few years, Australian universities have established internal EAP (English for Academic Purposes) courses and tests and have accepted a range of alternate pathways into tertiary study. Internal The situation with the profusion of pathways into university study is complex and the question is not so much, however, whether university students have specified levels of proficiency in English, but to what extent tertiary entry requirements are effective in ensuring that students will succeed students' success in tertiary study. Problems have been identified, on the one hand, with the reliance of universities on single proficiency test scores for entry to tertiary study and, on the other hand, with reliance solely on achievement in EAP preparation courses. This paper reports on findings from the first stage of a comparative study of IELTS and alternate pathways into university entry. The first stage of the study aims to document the range and frequency of different pathways that NESB students take for entry to tertiary study. It also addresses the question of the extent to which courses associated with these pathways meet the demands for test preparation and/ or preparation for tertiary study. The aim of this paper is thus to identify the distinctive features of the IELTS and internal EAP tests. This paper draws on Stage 1 data from document analysis and surveys of staff and students at one Australian university. Sample tests, course outlines and other related documents are analysed to identify how notions of proficiency and effective preparation are realised in the tests and documents. A second stage of the study, involving in-depth individual and focus group interviews will be carried out in mid-2005. The findings shed light on the relative strengths and weaknesses of proficiency tests, internal university tests (and their related preparation courses) and other pathways as means of entry into university study. They also have implications for the choice of requirements for entry to tertiary study, for the design of preparation courses and provision of ongoing support for students. We will make tentative conclusions about whether notions of proficiency and broader issues of preparation for tertiary study are complementary or competing.

PUBLICATIONS

Dr Brian Ferry's ARC project was published in the first edition of the Journal of Learning Design. **Ferry, B., Kervin, L., Cambourne, B., Turbill, J., Hedberg, J., Jonassen, D.,** (2005). Incorporating real experience into the development of a classroom-based simulation. *Journal of Learning Design*, 1 (1), 22-32. www.jld.qut.edu.au/Vol_1_No_1

Abstract

This paper reports on the design of an on-line simulation that enhanced pre-service teacher practicum experience in the important area of literacy teaching. Research with more than 200 users of the simulation showed that it developed pre-service teacher understanding of complex classroom situations associated with the teaching of literacy by giving them the opportunity to slow down or accelerate classroom events, revisit and reflect on critical decision points and replay events in the light of new understandings. This gave pre-service teachers time to think critically about complex teaching situations which relied on the teacher's ability to tune into children's experiences, engage with them in dialogue and negotiation as well as utilise a range of indirect instructions such as questioning, modelling and prompting. Pre-service teachers reported that their experience with the simulation enabled them to more fully appreciate the impact of subtle changes that experienced teachers made during lessons.

Publications

Journal of learning design, Vol. 1, No. 1* ISSN : 1832-8342 12-21 Incorporating real experience into the development of a classroom –based simulation. **Brian Ferry, Lisa Kervin, Brian Cambourne, Jan Turbill**, John Hedberg and David Jonassen Abstract Full Paper

56-76 An investigation of computer generated knowledge retention activities in computer-based training with adult learners. **Doug Reid**, D. Michele Jacobsen and Larry Katz Abstract Full Paper

UPCOMING CONFERENCE

The Innovative Technology Schools Conference is being held from 30 November – 2 December 2005 at the University of Wollongong. Further information is available at the following website:

<http://itsc.apple.com.au/>

RESEARCH STUDENT CONFERENCE ATTENDANCE

From June 13-15, 2005 **Peter Donnan**, an off-campus doctoral student, received faculty support to present a paper in Hong Kong at the first International Conference on Enhancing Teaching and Learning Through Assessment. A major theme of the conference was that assessment is an integral part of institutional education where alignment between teaching, learning, curriculum and assessment is essential. At the conference a new website, the *Assessment Resource Centre*, was launched. The expanding site includes current issues in assessment such as:

- * Technology in Assessment
- * Assessment for Large Classes
- * Assessing Life-long Learning
- * Assessing Group Work
- * Self- and Peer-assessment
- * Quality Assurance and Enhancement

Constructing assessment criteria, methods of assessing learning outcomes, providing constructive feedback and references and bibliography are other topics accessible through the Assessment in Action link. The site will also include over 100 abstracts of the conference presentations that cover a wide

variety of topics in assessment, contributed from educational practitioners from all over the world. The abstract, ‘Conceptualising assessment for online delivery: Educational developers’ perspectives’ (Donnan, Brickell & Brown) from the University of Wollongong will be included. Ongoing assessment practice contributions are also being invited. The site can be accessed at: <http://www.polyu.edu.hk/assessment/arc/>

Summary and report on 14th European Conference on Reading – Zagreb, Croatia by Val Skender, candidate for Doctorate of Education.

The 14th European Conference on Reading, with its theme “Literacy Without Boundaries” will be remembered for many things: a) the venue - Zagreb is a beautiful city of many faces; old, new, historical, modern, warm hearted people and enthusiastic young students and Croatia is a country that needs to be experienced: b) the management – I take my hat off to the Croatian Reading Association and the members of the conference organising committee whose dedication and hard work paid off in a truly remarkably organised and executed conference. Nothing was too difficult for them to do for the numerous conference participants.: c) the presenters – with over 100 presenters from 41 different countries from all continents, it was truly inspirational to see and hear about so much good work going on around the world in the fields of education and literacy: d) the overarching theme “Literacy Without Boundaries” helped to solidify and affirm that what I am doing in my research is the right, the positive way to go: and e) the networking opportunities – meeting people around the world who are working on similar issues, with a similar passion, is an unforgettable experience.

Each presentation for the conference was categorized into one of 15 sub-themes which included: *Literacy and Democracy, Literacy and National Minorities, Multilingual Literacy, Reading and Writing for Critical Thinking*, reflecting concern regarding the purposes of literacy instruction and addressing the needs of those who may in some way be excluded, or on the margins of the wider society. *Pre-school Literacy, Early Literacy, Reading Teachers and Teaching Strategies, Adolescent and Adult Literacy, Reading Difficulties and Intervention Programs* reflect the ongoing concerns in studies, policies, instructional processes and program developments on literacy issues. The sub theme of *Literacy and Lifelong Learning* is a relatively new theme that had a small number of presenters one of whom talked about a literacy college program in Kyrgyzstan whose main goal was life-long reading. The sub-theme of *Literacy and Libraries* was strongly supported by the Croatian participants demonstrating ways in which libraries in Croatia are addressing the issues of literacy. Another sub-theme involved *Literacy and Literature* where the importance of the type of literature, was discussed. One theme centered on the publication of the Grimm’s fairytales, how they have changed over time and why they are still important for today’s children. Other sub-themes included *Schools where literacy thrives, Literacy and Technology, Assessment of Language and Literacy Development and Free Papers*.

The paper I presented on *Literacy in ESL in the New South Wales Stage 6 English Curriculum*, within the sub-theme of *Assessment of Language and Literacy Development*, was received with great interest and enthusiasm from countries now going through similar curriculum development processes that NSW experienced in the late 1990’s early 2000. The most interested countries being the Scandinavian ones. I was very surprised to hear the participants explaining how ESL study is growing in many European countries like Norway and Sweden. My presentation was on Tuesday 2 August at 3.30pm, a rather unfortunate time as it was the second last day of the conference so I did not expect many participants to stay. However, the room was full, and due to unforeseen circumstances (one of the

other presenters not showing up), I was given 50 minutes for my presentation which was used successfully to answer many questions about what was and is happening in NSW.

I thoroughly enjoyed the conference in Zagreb as a presenter, a session chair and general participant and would love to participate in the International Reading Conference in Budapest in 2006, as well as the 15th European Conference on Reading in Berlin in 2007. I think that Australians working in the areas of Literacy and Education have a lot to contribute both on the European as well as the world stage, due to our work in critical literacy in particular.

Rob Peterson presented two papers at the Association for the Advancement of Computing in Education (AACE), E-Learn World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education in Vancouver, BC, Canada: *Developing an Internet-based community for special education in Bulgaria* and *The state of the art of design-based research*. He attended the conference after a one-month visit to Bulgaria for data collection. He returns to Wollongong early November.

Vinathe Sharma-Brymer participated in the 8th UKFIET International Conference on Education and Development with the main theme “Learning and Livelihood”. The UK Forum for International Education and Training hosted it at the University of Oxford, UK between 13 and 15 of September 2005. CfBT managed the conference for UKFIET.

Vinathe reported that papers/presentations were done under 21 sections with sub-themes. I sent in my full paper, titled ‘To act or not to act: Linking “Actionable Space” with human rights and education’ in the first week of August as specified by the Section Committee. I presented my paper under ‘Education and Human Rights’ section that was convened by five academic staff of University of Birmingham, being the first speaker on the first day of the conference.

I covered all the main points of my paper following a power point presentation method. Well-known researcher Lyn Davies chaired my session. My supervisor Dr. Christine Fox was present among the audience. Lyn Davies acknowledged the new theoretical construct that I offered called ‘Actionable Space’ related to the problematic of researching women’s experiences of their education and being educated. Several people from the audience showed interest in the new construct. I distributed copies of my paper to a few noted academics and am approaching them for a feedback.

During the conference, I attended several sessions such as Gender Education and Livelihood: Competing Frameworks, Education, Globalisation and Livelihoods, Literacy and Livelihood, Educating and Training out of Poverty, School Family and Community Relations in a Changing World.

Several papers from the above sessions gave me insights and provided guidelines to structure the arguments in my thesis, with references, different approaches and perspectives. The papers presented under the sections Gender Education and Livelihood: Competing Frameworks, Education and Human Rights, Literacy and Livelihood particularly benefited my study.

I interacted with noted researchers writing in the area of comparative education, gender and education with different frameworks, whose work I am referring to in my thesis. Being my first international

conference outside Australia, this was a very useful and insightful conference for my research study.

CALL FOR PAPERS

1) International Reading Association 21st World Congress on Reading 'Building Literacy Bridges' Budapest, Hungary 7 - 10 August 2006 www.reading.org Call for program proposals now.

2) Checkpoint Literacy 15th European Conference on Reading Berlin, Germany, August 5-8, 2007 www.dgls.de

3) Literacy UKLA (United Kingdom Literacy Association). Call for papers for a themed issue of Literacy on 'Teacher Education and Development' Final submission date 30th November 2005 www.blackwellpublishing.com/literacy/submiss.htm

4) Journal of research in Reading UKLA. Call for papers forthcoming special issue of the Journal of Research in Reading 'Reading and Literacy in Developing Countries' - closing date for receipt of first drafts of papers for this special issue is March 31st 2006. Please submit papers for this special issue to: Dr Amos Paran - a.paran@ioe.ac.uk