Our Mission:

To improve educational outcomes for all learners, especially young people and those from disadvantaged backgrounds.

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Welcome to the summer 2013 issue of the IERI Newsletter. In this issue, research updates from each of our four themes are reported. This research comes from diverse disciplines such as music education, early childhood education, teacher professional development in grammar, and health education, highlighting the true interdisciplinary nature of IERIs research and the collaborations among members and associates.

Congratulations to IERI Member and Dean of Education Paul Chandler and his team on the awarding of $31 Million from the Federal Government’s Education Investment Fund to establish an Early Start Facility within the University. In conjunction with a $7 Million donation from the Founder and Director of the Abbott Foundation, Christopher Abbott, and $6 Million support from UOW, the $44 Million project will radically transform educational, health and social outcomes in regional, rural and remote communities through providing a core facility at UOW to connect with around 40 initial Early Start Engagement Centres across New South Wales. It will provide opportunities for innovative interdisciplinary research in these communities using cutting edge technology and reframe policy and practice in areas such as school readiness, physical activity and health, information and communications technology, literacy and numeracy, and Aboriginal education. More details on this exciting initiative will be provided in the next issue of the IERI Newsletter.

Congratulations also to IERI members on the excellent results in the Excellence in Research for Australia (ERA) 2012 Evaluation. All of the 4-digit Field of Research (FOR) Codes that IERI members contributed to increased in their ranking. Specific highlights include:

- Receiving a ‘4’ (above world standard) in Public Health and Psychology placing UOW in 3rd and 6th position nationally in these disciplines.
- Receiving a ‘3’ (at world standard) ranking for Curriculum and Pedagogy and Specialist Studies in Education, respectively placing UOW in 6th and 7th position nationally in this code.

I would like to thank all those involved with the IERI seminars in 2012, especially Garry Hoban, Kathryn Harden-Thew, Alex Miller, and Jenny Reynolds. They have been an outstanding success, with over 27 different seminars involving UOW, national, and international speakers. Our average attendance was 20 people with a high of just under 50! Please go to the IERI webpage for details of this year’s seminars.

Congratulations to Professor Jan Wright who recently received the Distinguished Fellow Award from the Australian Association for Research in Education for outstanding service to educational research. Jan is a former President of the Association and has chaired the AARE Conference Standing Committee since 2009. Well done Jan on this tremendous achievement.

I would like to wish all of our partners and collaborators a successful 2013 and IERI looks forward to continuing to work together to improve educational outcomes for all learners, especially young people and those from disadvantaged backgrounds.

Warm regards,
Tony Okely
Class enrolments provide evidence that many students do not continue to study music in secondary schools after the mandatory subject finish in Year 7 or 8. Attrition rates increase from years 9-12, resulting in smaller numbers of students taking music subjects for their HSC. Although this trend suggests students have little interest in music, many students listen to or create music in their personal time outside of school through technology. Although students directly and indirectly understand the social, cultural and artistic benefits of music and technology, why are so few students choosing to participate in music past Year 8 in school?

To address this problem, Dr. Steven Capaldo, in collaboration with Associate Professor Sue Bennett from the Faculty of Education at the University of Wollongong, designed a mixed methods research study focusing on the following four items: 1. Examine students’ choices about studying music in school, 2. Understand student engagement with music outside of school, 3. Explore how and why students create and listen to music through technology, 4. Evaluate student musical development through their use of technology. Data is being collected via an online survey and focus group interviews with the students.

Last year the researchers implemented the survey into every stage at a local secondary school as a pilot study. Additionally, they undertook focus group interviews with each year level at the school. Based on feedback from the pilot study, the survey has been developed and re-worked. The next phase of the study will take place in schools in Sydney.

The data from the pilot study survey and focus group interviews is being analysed, but some initial findings suggest that the results will help inform researchers further about the reasons why students are actively engaged in music using technology outside of school, yet seem highly disinterested in music offered at school even though technology appears to be included in their classes.

As the next phase continues, it is hoped the study can further explore and provide clearer evidence regarding these questions. Technology is used increasingly in classrooms, but it seems to be used in a scattered approach. It is important to realise that just because technology is being used, that does not mean the teaching is more successful. It is hoped that by surveying a large participant sample across all secondary stages from different schools, data can be collected to further inform researchers, teachers and other educators about students’ overall musical and technological consumption.

Funding
UOW Faculty Research Grant
UOW University Research Committee Grant

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Dr Steven Capaldo is currently Lecturer in Music Education in the Faculty of Education at the University of Wollongong. Previously an Assistant Professor of Music Education and Instructor of Conducting at the University of Victoria in BC Canada, Steven was the founding conductor of the University of Victoria Don Wright Symphonic Winds and taught subjects in Music Education and Conducting at undergraduate and post-graduate levels. In 2012, Steven was appointed Music Director and Conductor of the Sydney University Wind Orchestra. He also provides professional development opportunities for music educators through clinics and workshops in Sydney and the Illawarra. Steven’s initial research while an ECR in North America focused heavily on conducting pedagogy, ensemble techniques, and compositional methods but has evolved to include a greater focus on technology and student engagement in music since returning to Australia.
An early childhood program to increase physical activity and motor development

Many preschool children are not engaging in enough physical activity and are not showing sufficient motor development. Currently in Australia, less than 1% of preschool children meet the physical activity recommendations of three or more hours per day, and less than 6% show appropriate levels of motor development proficiency. These levels are very concerning given that physical activity and motor skill proficiency are directly related to several health problems.

To address the poor physical activity levels among preschool children, Dr Rachel Jones, in collaboration with Professor Tony Okely from the Faculty of Education at the University of Wollongong, developed a child care centre-based physical activity and motor development program called “Jump Start”. This program was initially trialled in 2009. Ninety-seven preschool children from two centres were recruited. At the end of 6 months, children who participated in the program showed significantly greater increases in physical activity and motor skill proficiency, than children who did not participate in the program.

In 2012 a translational pilot randomised controlled trial was implemented in preschools in Tasmania. This trial involved four preschools and 150 preschool children. All children aged 3-5 were involved in the program. The 6-month program was implemented entirely by Early Childhood Educators. The translational trial aimed to further test the efficacy of the program as well as the validity of the program which was assessed by: (1) the ability to train early childhood Educators to deliver Jump Start; (2) the consistent implementation of Jump Start across intervention sites; (3) the effectiveness and cost-effectiveness of Jump Start; and (4) the ability to recruit and retain participants throughout the six months.

This project is significant for many reasons. Evidence-based programs that are cost-effective and that can be easily implemented in early childhood settings are urgently needed given the low levels of physical activity and motor development among preschool-aged children, making this project very timely. Additionally, if the project outcomes are successfully met, this program can be easily circulated into early childhood policy and practice, resulting in increased access to an effective program in a setting that has not been widely targeted.

This project will also provide further evidence-base for the effectiveness of Jump Start in a real world setting, hopefully leading to an ARC-Linkage Grant in 2013.

Funding
UOW Research Partnership Grant

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Dr. Rachel Jones’ received her PhD in 2004, and since then has worked in the Faculty of Education, University of Wollongong, as a Research Fellow. Her research is primarily focused on physical activity and healthy lifestyle interventions for preschool children. She is interested in educating families about physical activity and healthy eating and thereby helping them to modify their lifestyles and improve their quality of life. She is also interested in implementing programs for overweight and obese children within school and community environments.
Enacting curriculum: towards a multimodal methodology

As the new national English curriculum moves into the implementation phase, attention is turning to how teachers and students are working with grammar in classrooms. Previous research has revealed that classrooms are complex, multimodal environments, in which teachers use an array of resources, such as interactive whiteboards, books, charts, voice and even their own bodies to scaffold the students’ understandings. With this in mind, and drawing on previous FRC and URC funded projects, the current study sought to develop a new methodological framework capable of being shared with and used by researchers working in a variety of areas in order to understand how teachers enact curriculum.

To achieve this task, Dr. Pauline Jones, in collaboration with other IERI researchers Professor Bev Derewianka and Dr. Honglin Chen from the Faculty of Education at the University of Wollongong, developed a project in which the researchers worked with teachers in primary and secondary schools and observed how they taught grammar to their students. The main source of data for this project is video observations of grammar lessons. In addition, the researchers completed a follow-up visit with each teacher, during which they discussed the practices observed and provide some feedback to the teachers from the video observations.

Initial findings include an observation that the pedagogic approach that teachers take to grammar varies at specific points during schooling. This was found to impact the resources and activities the teachers use. In early years it became apparent that carefully designed games were used to assist students to practice identifying language features. The use of specially written songs at aid in the learning of aspects of grammar also featured in the early years. During mid primary however, more abstract worksheets were found to be used to assist students to discover or take up grammar points and to link these to the texts being used in the classroom setting. Finally, in the later years, student requirements include students using their knowledge of grammatical patterns to compose complex texts comprising language and image. Throughout the years, teachers’ explanations of the grammar has woven these resources together, which is of interest to us. The analytical framework is currently under development, managing such a variety of data in a principled, theoretically informed way is a major challenge.

The team has published several articles and conference papers from this research, and a key feature of the project is a “sharing symposium” which occurred in November. Schools involved in the project came together to present their work, and several members from the Department of Education and Communities, Catholic Education Office as well as other academics and school executives also attended. This symposium was also being used to launch ‘Educational Semiotics’, a new website which helps bring together researchers and teachers working on similar projects around the world. A further symposium for researchers was proposed for January 2013.

It is hoped the framework developed by this study will assist the researchers to understand how teachers’ content knowledge and knowledge about teaching and learning come together to implement curriculum change. The team is currently working on a larger competitive ARC funded project.

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Funding
UOW Faculty Research Grant

Dr. Pauline Jones is a senior lecturer in the Faculty of Education at the University of Wollongong, working in the area of Language and Literacy Education. Her research interests are classroom discourse, educational semiotics and English pedagogy. Pauline has published in these areas in national and international journals and books. She currently supervises HDR students investigating online discourse, academic writing, English curriculum, education for EAL/D students. Pauline is president of the Australian Systemic Functional Linguistics Association, and is a former ESL teacher and curriculum consultant.
Health education is a key area of personal and social development of children and young people. Teachers are key agents in the delivery of health education in primary and secondary school settings, so understanding what they bring to the health education classroom, their capacities and their knowledge gained in their pre-service training, seems crucial. However, there is currently little research being undertaken in this area.

To address this gap in the current body of health education knowledge, Professor Jan Wright, in collaboration with Dr. Gabrielle O’Flynn both from the Faculty of Education at UOW, have designed a study to investigate how prepared fourth year HPETE (Health and Physical Education) students feel to take on the task of teaching health education. Their focus will be on how the students’ final professional experience interacts with their teacher education and personal experiences to shape their understanding of their role as health education teachers.

To undertake this study, the researchers will be using a qualitative approach. Between 15 and 20 final year HPETE students will be recruited via lectures and email to participate in the project.

Data will be collected through focus group and individual interviews after the students complete their professional experience, and through the collection of programs, unit plans, lesson plans and materials from the students’ portfolios. This data will be analysed for emerging themes and discourses using QSR Nvivo software.

As an overwhelming amount of the research in the field of Health Physical Education (HPE) is in the area of physical education, the current study will contribute valuable knowledge to the important, yet under researched area of health education. The study will serve as the first step in an application for ARC funding to examine health education curriculum as national curriculum and in its various forms across all states and territories and to investigate the translation of health education curriculum and policy by bureaucrats and teachers.

**Funding**

UOW Faculty Research Grant

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Professor Wright’s research draws on feminist and poststructuralist theory to critically engage issues associated with the body, health and physical activity. In all her work there has been a close attention to the body as central to subjectivity and as necessary to an understanding of the self. This theme has been taken up in both studies of movement-based pedagogies and published papers examining media constructions of gender, health and physical activity. Jan is committed to making a difference to the ways the subject, physical and health education is conceived in curriculum and policy and how it is taught in schools. This can also been seen through her contributions as a member of the Advisory Panel to the Australian National Curriculum – Health and Physical Education.
Aboriginal-state relations are a topic of intense debate in Canada and Australia, but often overlooked are the sites of such contestations—that is consultations. Consultations are the processes by which organizations meet with Aboriginal communities to discuss actions that could potentially adversely affect Aboriginal rights. Currently, many consultations are problematic in practice because they are: tokenistic, as Aboriginal communities do not have veto; couched in a Western law system that does not include Aboriginal legal traditions; perpetuating power dynamics that disadvantage Aboriginal communities; and ineffective in reconciling stakeholder interests, evidenced by ongoing litigation.

Under supervisor Dr. Valerie Harwood, UOW Education PhD student Ashley Sisco is investigating how e-learning can make consultations more: meaningful; compatible with Aboriginal legal traditions; equitable; and effective in achieving reconciliation. In collaboration with the Carcross/Tagish First Nation community in Canada and the Narungga Point Pearce community in Australia, Ashley is developing e-learning programs to help organizations to better consult with the Aboriginal communities according to their respective community protocols.

Ashley Sisco is an Education PhD candidate with the University of Wollongong, conducting her research cross faculty with the Faculty of Law. She holds a Master’s Degree in Canadian Studies (Carleton University) and an Honours Specialisation Anthropology Degree (University of Western Ontario). Ashley has over 9 years of research experience, including fieldwork in the Canadian Arctic and Mexico, and collaborating with Aboriginal communities across Canada. As a researcher with a prominent Canadian think-tank 2006-2012, she published articles on Aboriginal and Northern issues; facilitated meetings with Canada’s Aboriginal relations leaders; and presented research at conferences and meetings. In 2011, she represented Australia at the Pacific Asia Network of Canadian Studies (PANCS) Conference in South Korea, where she was awarded best presentation. Subsequently, she represented PANCS at the 20th European Seminar for Graduate Students in Canadian Studies in the Netherlands.
NEWS AND EVENTS

IERI Members are URC Grant Winners

Congratulations to Dylan Cliff and Rachel Jones, who along with colleague Markus Hagenbuchner in the Faculty of Informatics were successful with their interdisciplinary project “Artificial neural networks to predict activity type and energy expenditure in preschool children: a feasibility study”.

Congratulations to Irina Verenikina and Rose Dixon for their project “How can iPads facilitate learning, communication, social skills and positive behaviour in students with ASD?”.

Congratulations to Shirley Agostinho, who along with Sharon Tindall-Ford and Sahar Bokosmaty were awarded funding for their project “Handing control over to the learner to manage split-attention in digital instructional materials: does movement aid learning?”.

Congratulations to Stuart Woodcock, who is a CI on another successful interdisciplinary project led by Xiaoping Gao in the Faculty of Arts titled “The effects of motivation, learning strategies and learning contexts on the acquisition of Chinese as a second language”.

IERI Member Collin Webster Successful NIH Grant Recipient

Congratulations to Collin Webster who along with colleagues from the University of South Carolina (including Michael Beets and Russell Pate) were awarded a NIH/NHLBI R21 grant for SUS717,550 from the US National Institutes of Health. These are widely regarded as the most prestigious research grants in the area of health. Collin’s role as a co-PI will be to oversee the staff training component of the intervention (and associated assessment of implementation). The title of the project is “Physical activity and nutrition intervention in after school programs”.

Congratulations to Paul Chandler and the Early Start Team

The University of Wollongong was successful in the recent round of EIF funding winning $31M in federal government funding for the Early Start Project. We congratulate Professor Paul Chandler and the other IERI member involved in the application (Ian Brown). It will represent a unique opportunity for interdisciplinary research.

IERI Members Honglin Chen, Bev Derewianka and Pauline Jones awarded Economic and Social Research Council Grant

Congratulations to Honglin Chen, Bev Derewianka and Pauline Jones who were CIs on a recently announced Economic and Social Research Council Grant (the UK equivalent of Australia’s ARC). The grant, led by colleague and Faculty of Education Visiting Professorial Fellow Debra Myhill (from the University of Exeter) will undertake a three year longitudinal study to investigate the development of metalinguistic understanding and its relationship to writing skills.

Congratulations to Dr. Sarah Howard

Congratulations to Sarah Howard on her recent grant success as a CI on an ARC Discovery Project and OLT Innovation Grant awarded to colleagues at the University of Sydney. The details of the grants are:


Calvo R, Howard SK. Driving curriculum and technological change to support writing in the engineering disciplines. Office of Learning and Teaching Innovation and Development Grant 2012-2015. $219,000.
Congratulations to Shirley Agostinho

Congratulations to Shirley Agostinho who, along with colleague Sharon Tindall-Ford was recently awarded a UOW Research Partnership Grant for their application titled “Annotate to understand: investigating how eReader annotation tools can enhance learning”. This project is in partnership with Pearson Australia and aims to explore how learners can use the Pearson Reader annotation tools to manage their cognitive load.

2012 HDR Student Conference – Not Mission Impossible

For the third year in a row IERI has sponsored the Faculty of Education’s HDR Student Conference which was held on Monday 24 September 2012. The theme of the day-long conference was ‘Not Mission Impossible’. With twelve postgraduate student presentations that highlighted significant stages and findings in the students’ research, the day was designed to showcase the Faculty’s student body. Also of significance for attendees were three faculty-led workshops covering a range of topics beneficial to both qualitative and quantitative early researchers. The Conference was again led by student run committee, with mentoring from IERI member, Dr Lisa Kervin.

IERI Seminar Series

Most Wednesdays of the year, IERI holds an hour long seminar over the lunch break. These seminars generally feature visiting international academics and can range in topic from Physical and Health Education, to Music Ensemble Conducting, to Classroom Grammar. This is a great opportunity to hear about work being undertaken around the world. Everyone is welcome to attend and a light lunch is provided. For more information about the exciting seminars for 2013, please see our website: www.ieri.uow.edu.au/

Futures Summit 2012

The recent 4th Regional Development Summit for the Illawarra held at the Innovation Campus on 8th-9th November 2012, included a feature session highlighting IERI researchers. This was the first Summit dedicated to fostering collaborations between the University and workplace sector. The title of the symposium was Education, Skills Development and Social Engagement. The purpose was to identify possible collaborations between IERI researchers and industry that may lead to collaborative research projects. A unique feature of the symposium was that it was jointly presented by IERI members targeting research and the National Workforce Development Agency targeting skill development.

The symposium was divided up into three sections—several brief talks by key researchers, separation into two break out groups followed by a plenary discussion. After an overview by Assistant Professor Garry Hoban, the audience heard brief talks from key IERI members who research in areas related to industry and workplace learning. The University researchers who presented were Tony Okely, Sarah O’Shea, Andrew Sense and Valerie Harwood. They were followed by Sue Beitz from the National Workforce Development Fund.

A highlight of the session was the in depth discussion facilitated by two break out groups—one focusing on research opportunities with UOW and another focusing on skill development opportunities with the National Workforce Development Fund. Organiser of the conference, Rochelle Waren, said it was the most interactive of all the symposiums. As a result of the symposium, several new research collaborations were identified with plans in place for “New Partnership Grants” that may lead to ARC-Linkage applications.
**RECENT PUBLICATIONS**


Stone C, O'Shea S. Transformations and Self Discovery; Stories of Women Returning to Education. Open Universities Australia.


