Welcome to the Summer issue of the IERI Newsletter. Much has been happening in the Institute in the past three months, culminating in some outstanding achievements by our members and their collaborators in the recent ARC funding announcements.

Joseph Ciarrochi has been awarded an ARC Future Fellowship for his longitudinal research into the development of personal vulnerabilities and well-being in adolescence. In addition, Joseph, along with Patrick Heaven and Stuart Johnstone, were successful with a separate Discovery Grant for this Project.

Valerie Hanwood won Discovery Grant funding for her research which examines the educational aspirations of young people who are impacted upon by low socio-economic status and disengagement from school.

A number of IERI members were also chief investigators on ARC grants awarded to other institutions. Congratulations to Jan Wright who, along with colleague Suzanne Fraser from Monash, Jane Maher, and Alan Petersen were funded for a study which looks at the impact of child obesity prevention education on Australian mothers and families. Jan was also involved in a project that will analyze, from a socio-cultural perspective, eating disorders among pre-teen boys and girls. This was awarded to her colleague Christine Halse from the University of Western Sydney.

Dylan Cliff and Tony Okely, were part of a successful Discovery Project awarded to their colleagues at Deakin University (Kylie Hesketh, Jo Salmon, Anna Timperio, and Nick Andrianopoulos) which will examine the determinants of children's physical activity and sedentary behaviour from early to middle childhood.

Finally, Jan Wright and Hongin Chen were involved in a successfully funded Linkage Project (led by former IERI Member and now University of Sydney academic Ken Cruickshank) which will investigate the development of language resources across sectors, schools and communities.

I am also delighted to announce that Trina Hinkley, from the Centre for Physical Activity and Nutrition at Deakin University, will be joining IERI as a post-doctoral fellow in 2011. Trina is an outstanding early career researcher in the area of young children's physical activity and IERI look forward to seeing her research continue to flourish over the next few years.

On behalf of all IERI members and students, thank you for your support for our research in the past year. We look forward to continuing to work with you to achieve our Mission. We wish you and your families a healthy and safe Christmas and all the best for a successful year in 2011.

Warm Regards,
Tony Okely
Physical activity and nutrition program provides rich evidence base for future practice

Researchers in IERI’s Physical Activity and Nutrition theme in collaboration with the Universities of Newcastle and Sydney have developed a rich evidence base from an intervention for pre-pubertal overweight and obese children and their parents.

At each of two study sites three different variations of the intervention were administered. These included: a family-focused dietary program for parents, a child-focused physical activity program for children, and a combined program involving both activity and dietary components. The programs were implemented over six months, and the study included assessments at 12 and 24-month follow-ups, providing a comprehensive evaluation of the interventions.

The dietary program was based on the Health Belief Model, aiming to provide parents with the skills and the self-efficacy to make simple changes in their everyday life such as reading food labels, appropriate portion sizes and the preparation of healthy snacks in order to bring about changes to their family’s food habits. One of the advantages of the parent dietary program was that dietitians guided a group setting where parents were able to share their food experiences and learn from each other.

The physical activity program focused on improving fundamental movement skills and self-confidence, and providing a positive social environment with support, praise and encouragement for children. Both the dietary and physical activity programs involved ‘home challenges’ in addition to the face-to-face educative components facilitated by accredited practicing dietitians, physical educators and primary school teachers.

The findings demonstrated a significant reduction in weight status, along with a reduction in the speed of weight gain with all variations of the program. Long-term benefits were most effective in the dietary and combined dietary and physical activity programs. Thus, the study has developed a strong evidence base to support the interventions, which is something Chief Investigator, A/Prof Tony Okely, said is lacking in the community. “What is really missing at the moment are evidence-based programs, people can say ‘well we’ll start up this program or that one’, but there are very few around internationally that are evidence-based”. The project team is interested in taking this evidence to the next level by translating the program to user-friendly community application, something they believe is a real need in the community. An industry partnership would allow this to happen, making the program available to health workers or people from community organisations.

Funding Acknowledgement
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Publications


Cliff DP, Okely AD, Morgan PJ, Steele JR, Jones RA, CoIivasas K, Baur L. Movement Skills and Physical Activity in Obese Children: Randomized Controlled Trial. **Medicine & Science in Sports & Exercise.** 2010; doi: 10.1249/MSS.0b013e3181e74f1d.


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Researchers question the effects of behaviour disorder diagnosis on children living in disadvantaged communities

IERI researcher, Dr Valerie Harwood, is joining forces with Professor Julie Allan from the Institute of Education, University of Stirling, Scotland in an exciting new project investigating the effects of diagnosis on behavioural disorders of children living in severely disadvantaged communities in Scotland and Australia. In both of these countries there is an increasing trend for high numbers of children to be diagnosed with behavioural disorders such as Attention Deficit Hyperactivity Disorder (ADHD). Interestingly, Australia has much higher rates of diagnosis of behavioural disorders than Scotland. The researchers have been interested to better understand these differences, and to investigate how health and education professionals interpret child behaviour that is influenced by poverty and disadvantage.

The project has received funding from the Australian Academy of the Social Sciences. A pilot study was completed in July 2010 in one local jurisdiction in Scotland. This involved interviews with child and youth health and welfare professionals and school psychologists. These interviews explored the health and education professionals’ perceptions of behavioural disorders and the application of diagnostic categories, as well as their perceptions of the children and young people with whom they work and their understanding of current approaches to behaviour management. Preliminary findings reveal that Scottish health and education professionals interviewed in this jurisdiction were hesitant to apply diagnostic explanations of behaviour and instead emphasised the importance of social and cultural impacts of disadvantage on the behaviours of children and young people.

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Academy of the Social Sciences in Australia
Stirling Institute of Education, University of Stirling
IERI, University of Wollongong

Publications


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Profiling Postgraduates
Nici Humphry

Nici is a PhD student in the Faculty of Education researching educationally displaced young people. Her project, titled "Reconciling educationally displaced young people with education" involves an ethnographic study of some of the most disadvantaged and excluded young people in our society. Nici spent 12 months in four Youth Off The Streets schools observing and interviewing over 100 staff and young people. She initially explored the impact of damaging relationships on their lives through their 'stories'. She is now in the final stages of her thesis analysis, drawing primarily on the work of Michel Foucault to critically analyse the environments in which these young people live. As part of this Nici is exploring how Youth Off The Streets schools offer different ways of thinking about and doing schooling compared to mainstream schools which have previously failed to engage these students. In addressing the question of how this is possible, her research presents a range of theoretical and practical possibilities that become available for what she refers to as 'educational reconciliation'. Nici is supervised by IERI members Dr Valerie Harwood and Professor Jan Wright and is travelling to the UK over the Australian summer to present her work at the University of Sterling. The seminar will be presented to an audience of education and health professionals as part of Dr Valerie Harwood's larger comparative study exploring Poverty, inequality and child behaviour.

‘There is an increasing trend for high numbers of children to be diagnosed with behavioural disorders’.

In December 2010, Dr Valerie Harwood and two IERI PhD students Nici Humphry and Sam McMahon will be presenting their research to a multidisciplinary research meeting at the Institute of Education, University of Stirling, Scotland. The meeting will assist in the development of a multidisciplinary research network into the medicalisation of child and youth behaviour. This meeting promises the genesis of future research into the effects of behavioural diagnosis of children and young people on a larger scale.

The project seeks to span the multi-sectoral policies of education, child and youth justice and child health and welfare. It also engages scholars from the disciplines of general practice medicine, education, law and criminology and child welfare studies.
‘Slowmation’ provides innovative way for school and university students to engage with science concepts

Less than a decade ago, having school or university students make a mini movie to explain a science concept was unheard of, due to the expense of equipment and the time required to facilitate production. However, times have changed, as nearly all students have access to digital cameras, iPods, and computers that are preloaded with movie making software. This exponential growth in personal digital technologies has made it possible for students to create what are called “Slowmations” (abbreviated from “Slow Animation”) which are animated mini-movies using their own digital technologies. Students need to engage and understand a science concept in order to make the animated mini movie to explain the concept. This simplified way of making an animation provides a new way for students to learn science concepts by having them make their own narrated animation to explain it.

To create a slowmation students take digital still photos of 2D or 3D models that are manually moved and link these together to make an animation. This means the mini movie produced shows the models moving in slow motion and students then can enhance the explanation by adding narration, text or music. The process of slowmation is versatile as it is applicable to multiple learning environments from early childhood through to adult education and the process is compatible with different computer and equipment technologies, both Mac and PC.

Slowmation was created by Associate Professor Garry Hoban who is the project leader of the ARC Discovery Grant ‘Generating Science Content Knowledge through Digital Slowmation in a Knowledge-building Community of Preservice Teachers’. This project is a collaboration between the University of Wollongong, Monash University and the University of British Columbia. Over the last three years more than 1000 slowmations have been made by pre-service teachers in their teacher education programs as a new way to learn science concepts. A practical outcome is that some graduates are now using slowmation in school classrooms by encouraging children to make their own animations of science concepts.

Research on the slowmation process has shown that students not only find the learning activity engaging, but the creation process helps them to develop an understanding of a science concept as they reflect upon it in multiple ways. Theoretically, when creating the animation, students make meaning as they think about the relationship between what they are making (the animation) and the object they are trying to represent (the science concept) through designing and making a progression of semiotic transformations. A feature of the slowmation process is that students are checking and discussing the accuracy of different representations of the concept in different ways such as background research of the concept, storyboarding the concept, modeling the concept, digitally photographing the concept and then making the animation itself.

The slowmation project has won numerous awards including the Australian Learning and Teaching Council citation for outstanding contribution to teaching and learning, an international technology leadership award, and best paper awards from the Society for Technology and Teacher Education and the EDMEDIA World Conference. The web site, www.slowmation.com has free examples, instructions and suggestions for teaching. The idea has also now branched into storytelling with an Indigenous perspective.

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Selected Publications

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Do popular magazines influence children’s food choices?

Understanding the effects of young people’s exposure to magazine advertising on their food consumption is an under researched area. Professor Sandra Jones and her team at the Centre for Health Initiatives have been researching this issue for the last five years. More recently Professor Jones, who is also an associate member of IERI, approached Dr Lisa Kervin to add her expertise in Literacy and take the research to the next level. Together they were successful in applying for an ARC Discovery grant to investigate how children interpret commercial messages about food and the ways children learn food behaviours and values through exposure to these messages in magazines.

Magazines such as K-Zone, Total Girl, Girl Power and D-Mag are read by large numbers of children. For this reason the study explored food messages presented in all issues of the top-selling Australian children’s magazines over a 12-month period. Their findings point to the large numbers of food advertisements, competitions, coupons, and product placements in the magazines.

What makes this study unique is the cross-disciplinary investigation of children’s awareness and understandings of commercial food messages. Such interdisciplinary research has produced a novel methodology of exploration. Sessions with students from two schools engaged young people in ‘friendship pairs’ to share dialogue around their understandings of the food content in magazines. The students were also encouraged to consider the purpose of the magazine content. Other activities saw the students make actual food choices by using coupons to select snacks from an in-class store. The store served four products; the advertised product, a similar product, and two healthy packaged products.

One of the significant findings of the study so far is that children who were exposed to magazines which contained food advertisements and promotions exhibited a higher preference for advertised foods and a higher likelihood of purchasing those foods. Another finding was that children aged six to 12 have difficulty identifying food advertisements and promotions in children’s magazines as ‘advertising’, and do not clearly identify these as being persuasive in nature.

The project is truly interdisciplinary, bringing together literacy and educational theories with knowledge of marketing techniques and children’s food-related knowledge and behaviours. The study has implications for policy, such as submissions to advertising codes and regulations, as well as practical implications for parents, teachers, schools and parent associations. There is also further scope to explore food advertisements in other mediums of media in the future.

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Publications

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Profiling IERI Members
Dr Dylan Cliff

Dr Dylan Cliff is a National Heart Foundation of Australia Macquarie Postdoctoral Research Fellow in IERI’s Physical Activity and Nutrition Theme. His background is in physical and health education, and he completed his PhD in 2008 on a National Health and Medical Research Council child obesity treatment trial, where he examined changes in children’s physical activity, fundamental movement skills, and self-esteem. Following this he undertook a Postdoctoral Research Fellowship in the Faculty of Education at the University of Wollongong. Dylan’s goal is to improve young people’s health by contributing to an evidence base that informs practice and policy focused on promoting physical activity and reducing sedentary behaviour among children and adolescents. He is currently leading a Foundation for Children funded project evaluating after-school physical activity and healthy lifestyle interventions among low active and overweight children. Dylan is also a co-investigator on a National Heart Foundation grant examining the accuracy of different motion sensors for measuring physical activity and estimating energy expenditure among preschool children. Likewise, he is a co-investigator on an Australian Research Council Discovery Project awarded to colleagues at Deakin University exploring the early childhood determinants of changes in physical activity and sedentary behaviour over 3-years. During his fellowship, Dylan will also examine the relationships between physical activity, sedentary behaviour and recreational screen time, and diabetes and cardiovascular disease risk factors among overweight children.
Design discussion panel with Steve Heller and Lita Talarico from the School of Visual Arts
New York
International guests Steve Heller and Lita Talarico from the School of Visual Arts, New York recently accompanied panel members Marius Foley (RMIT, Melbourne) and Sue Bennett (IERI, UOW) in a discussion panel titled: Educating the Next Generation of Design Thinkers. Questions such as ‘what makes a great design thinker?’ or ‘can design thinking be taught?’ were discussed. IERI associate, Grant Ellmers (UOW) facilitated and chaired the discussion.

Thai Princess visits
Her Royal Highness Princess Soamsawali of Thailand visited the University of Wollongong on Thursday the 30th of September. During her visit she took special interest in an IERI physical activity project in action. Designed by PhD student Jacquiokelly and supervised by A/Prof Tony Okely, Dr. Rachel Jones and Dr. Dylan Cliff the Wollongong Sport Program (WSP), aims to promote physical activity in the after school hours among children aged 8-11. Students from the program along with Dr. Dylan Cliff are pictured presenting a gift to the Princess.

First HDR student conference a success
The Faculty of Education supported by The Interdisciplinary Educational Research Institute (IERI) hosted the Higher Degree Research (HDR) Student conference - a first event of its kind held by the Faculty. The conference was organised by HDR students to publically showcase higher degree research from the Faculty of Education. The conference brought together 11 HDR student presentations along with a keynote presentation from Professor Lori Lockyer on ‘publishing in the era of ERA (Excellence in Research in Australia)’ and a ‘writing for publication’ workshop with Professor Jan Wright and Dr Valerie Harwood. HDR student Sam McMahon led the team of HDR student volunteers who seamlessly facilitated the event. The conference provided opportunities for HDR students to peer-review conference papers, present research, further their own writing and organise the event.

PhD Student Van Tran wins award
Congratulations to PhD student Van Tran who was announced the runner-up in the University of Wollongong Three Minute Thesis Final competition for her research titled: ‘They are to blame, not us: the authoritative voice in quality issues of postgraduate education in Vietnam’.

IERI hosts international guest Professor John Reilly
IERI hosted International presenter Professor John Reilly from the University of Glasgow who spoke about the complexities of obesity prevention. He highlighted the over-simplification of obesity in both UK policy and media, calling for more evidence-based practice. John holds a personal chair in Paediatric Energy Metabolism at the University of Glasgow and leads the child energy balance research group at the Royal Hospital for Sick Children in Glasgow.

Grant success
Congratulations to Garry Hoban and Wendy Nielsen who received an ALTC Competitive Grant for their project “Promoting New Ways of Teaching and Learning in Science Education with Student-created Digital Animations”. Well done Garry and Wendy, we wish you all the best with this project.

IERI member named Vice-President
Congratulations to Honglin Chen who was recently elected as Vice-President of the Applied Linguistics Association of Australia (ALAA). ALAA is the national organisation for applied linguistics in Australia and aims to provide leadership in applied linguistics and support the development of teaching, learning and research in the field. ALAA includes national and international members and is affiliated with the Association Internationale de Linguistique Appliquée (AILA).

Early Career Researcher retreat
On 22-23 November, nine members of the Physical Activity and Nutrition Theme travelled to Melbourne to take part in the second Early Career Researchers Retreat with their colleagues from the Centre for Physical Activity and Nutrition (CPAN) at Deakin University. CPAN is the largest and most successful group in Australia working in behavioural epidemiology aspects of nutrition and physical activity and it was a wonderful opportunity to spend time with them. Sessions were very interactive and included aspects such as developing your niche area, mentoring, how to write a competitive fellowship application, work-life balance, building professional service and translating your research. The event was a great success and we look forward to potentially hosting the next retreat in early 2012.

Imagine internship takes place
The Imagine internship program got underway in August aiming to empower adolescents to become social leaders in their schools. Twenty-two school students from 11 schools participated in the first of two days of training in social and emotional learning as part of the Australian Character Study. Students in the program are pictured with A/Professor Joseph Clarricoth.