Interdisciplinary Educational Research Institute (IERI)

ieri.uow.edu.au

Overview
The mission of the Interdisciplinary Educational Research Institute (IERI) is to improve educational outcomes for all learners, especially young people and those from disadvantaged backgrounds. IERI draws together researchers from education, psychology, health sciences, linguistics, sociology, and graphic design to conduct multidisciplinary research in one or more of its four intersecting themes. These are: Learning, Design, and Technologies; Physical Activity and Nutrition; Languages and Literacy; and Social Inclusion.

IERI has a national profile for its interdisciplinary approach to addressing some of the major challenges facing education in today's society. It is committed to closing the achievement gap among disadvantaged students across a broad range of educational outcomes. It does this by building on existing partnerships between schools, industry, government and the University of Wollongong.

Key People
The Director of IERI is Associate Professor Tony Okely who also coordinates the Physical Activity and Nutrition Theme. Other theme coordinators are Dr Lisa Kervin (Languages and Literacy), Professor Wilma Vialle (Social Inclusion), and Associate Professor Sue Bennett (Learning, Design, and Technologies). Other senior researchers include Professors Lori Lockyer, Paul Chandler, Jan Wright, Barry Harper, Brian Ferry, and Associate Professors Garry Hoban, Valerie Harwood, Ian Brown, Stuart Johnstone and Steven Roodenrys.

Selected Projects and Partnerships
IERI researchers are currently leading a number of projects funded from nationally competitive grant schemes such as the ARC, NHMRC, Heart Foundation, and Foundation for Children. These include: online, early childhood, school- and community-based interventions to prevent child obesity, and understanding and promoting physical activity and reduced sedentary behaviour; an investigation of digital knowledge creation among young adults and research into university teachers' learning design practice; the development and implementation of the Australian Curriculum: English; and the psychological, educational and sociological development of young people from indigenous and socially disadvantaged backgrounds.

IERI has strong and innovative partnerships with industry and educational organisations. Some of these partners include the NSW Department of Education and Communities, the Catholic Education Office, the Association of Independent Schools, NSW Department of Juvenile Justice, Commonwealth Departments of Health and of Education Employment and Workplace, Apple, WIN TV, Australian Health Management, Big Fat Smile, and Janison Solutions.

Case Study
With an Australian Research Council Linkage grant, Associate Professor Ian Brown, Professor Lori Lockyer and Associate Professor Peter Caputi have partnered with Professor Jim Tognolini from Pearson Foundation Australia to undertake a major study to develop a criterion-referenced tool to measure students’ multiliteracy learning within technology rich, multimodal domains. While there is acknowledgement that multimodal learning in schools is occurring, a valid measurement and diagnostic tool, which can provide reliable scores and accurate diagnostic information, does not exist. This team will develop a cutting-edge tool to enable teachers to guide decisions about learning.

Dr Dylan Cliff’s innovative research, funded by a National Heart Foundation Postdoctoral Fellowship, will provide a greater understanding of children’s sedentary behaviour or “sitting” – which is an independent risk factor for health, separate from physical activity. His research program focuses on improving measurement techniques, investigating the patterns of this behaviour, and examining the social and personal factors that influence children’s sitting behaviour. This cutting-edge research will help to inform strategies to reduce sedentary behaviour, in order to enhance children’s health and development.

International Partnerships
IERI has a number of collaborations with the following highly ranked international institutions and organisations:
- Stanford Prevention Research Centre, Stanford University
- Brown University
- University of Manchester
- ETH Zurich
- University of British Columbia
- University of Michigan

Key Competencies
- The design and development of educational technology interventions to investigate learning and teaching outcomes
- The development and evaluation of policy in literacy education and its implications for practice
- Objective measurement of physical activity and nutrition in young children, children, and adolescents
- Design, implementation, and evaluation of early childhood and school-based interventions
- Design, implementation, and analysis of longitudinal studies.
## UOW Research Themes

| Environmental Sustainability Past, Present and Future | Innovative Materials, Engineering and Manufacturing | Health and Medical Research | Information and Mathematical Sciences | Society, Policy and Culture |

## UOW Research Strengths

- Australian Health Services Research Institute
- Centre for Archaeological Sciences
- Centre for Health Initiatives
- Centre for Medical Bioscience
- Centre for Medical Radiation Physics
- Centre for Medicinal Chemistry
- Centre for Statistical & Survey Methodology
- Engineering Manufacturing
- Engineering Materials Institute
- GeoQuEST Research Centre
- Information & Communication Technology Research Institute
- Institute for Conservation Biology & Environmental Management
- Institute for Innovation in Business & Social Research
- Institute for Mathematics & its Applications
- Institute for Social Transformation Research
- Institute for Superconducting & Electronic Materials
- Institute for Transnational & Maritime Security
- Intelligent Polymer Research Institute / COE for Electromaterials Science
- Interdisciplinary Educational Research Institute