

Summary of Linkage Projects Applications for Funding to Commence in 2006

Victoria

RMIT University

LP0667843 Dr SA Bekessy; A/Prof IG Thomas; Prof JF Fien; Prof RR Wakefield; Dr CS Hayles; Prof LA Bennington; A/Prof B de la Harpe

Approved Project Title **Building Capacity for a Sustainable Future**

Project Title

2006 : \$104,000

2007 : \$107,000

2008 : \$125,000

Primary RFCD 3009 LAND, PARKS AND AGRICULTURE MANAGEMENT

APA(I) Award(s): 1

Partner Organisation(s)

Department of Sustainability and Environment

The Hornery Institute

Department of the Environment and Heritage

Victorian Schools Innovation Commission

Administering Institution RMIT University

Project Summary

The concept of sustainability has been proposed as a practical and useful concept capable of providing solutions to social, environmental and economic problems. Global interest in the concept also stems from the advantages that organisational change for sustainability can impart, including improved efficiency and profitability. The project will develop sustainability capabilities of graduates entering a diverse range of industries, enhancing the national skills base. The models and processes of institutional change developed in this project can be adopted by universities, governments and corporations throughout the world, enhancing Australia's reputation as a world leader in institutional and corporate sustainability.

LP0668231 Prof MC Burry; Prof Y Xie

Approved Project Title **Delivering Digital Architecture in Australia**

Project Title

2006 : \$78,000

2007 : \$78,000

2008 : \$78,000

Primary RFCD 4104 DESIGN STUDIES

APA(I) Award(s): 1

Partner Organisation(s)

Ove Arup Pty Ltd

Administering Institution RMIT University

Project Summary

Design, documentation, and off-site prefabrication of numerous recent major international architectural projects, were achieved with evolving integrated 3D digital methods. While Australian architects, engineers, manufacturers, fabricators, and constructors have participated in a few such projects using these technologies, generally, local understanding and uptake of the opportunities is still very low. Growth in this area means growth in an existing export rather than increasing reliance on importing these services and products. More fundamentally, it means a huge cultural dividend to Australia from greater affordable freedom of architectural expression.

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LP0667939 A/Prof HF Fehring; Prof JC Bessant; Mr JI Malley

Approved Project Title **A ten-year comparative analysis of work, benefit and skill trajectories of parallel cohorts of trade and bachelor graduates' working lives**

2006 : \$63,000

2007 : \$50,000

2008 : \$36,000

Primary RFCD 3402 APPLIED ECONOMICS

Partner Organisation(s)

Department of Education and Training, Victoria
National centre for Vocational Education Research LTD
Skilled Group

Administering Institution RMIT University

Project Summary

The identification and understanding of the job, skill and benefit trajectories experienced by young skilled workers will contribute to the development of improved national workforce policies. Employers could develop more effective recruitment, retention and training practices for different types of upwardly mobile skilled workers. Governments could improve policies to maintain and extend skilled workers, promote needed skilled trade and degree pathways to youth and develop more effective life long learning strategies for adults. Identifying the social reasons for job and skill change will also assist governments, employers and individuals to develop new educational approaches to improve recruitment, skill retention and market expansion.

LP0667834 Prof M Kalantzis; Prof MA Jackson; Prof WJ Martin; Dr W Cope

Approved Project Title **Towards the 'Semantic Web': Standards and Interoperability across Document Management and Publishing Supply Chains**

2006 : \$60,000

2007 : \$60,000

2008 : \$60,000

Primary RFCD 2801 INFORMATION SYSTEMS

APA(I) Award(s): 1

Partner Organisation(s)

Fuji Xerox

Administering Institution RMIT University

Project Summary

At a critical point in the development of the information economy, this project sets out to address the fundamental challenges of electronic standards and interoperability in the text and graphic media industries. These industries are a source of enormous and growing employment in Australia; their products also touch every person's life in profound ways. This project will develop an extensive industry-focussed knowledge base, and take this knowledge back to industry and the broader community through its proposed publications, conferences and workshops.

LP0668091 Prof DE Mainwaring; A/Prof DG McCulloch

Approved Project Title **New Nanoscale Up-converting Photoluminescent Materials for Passive Safety Visual Systems**

2006 : \$115,260

2007 : \$114,708

2008 : \$109,230

Primary RFCD 2914 MATERIALS ENGINEERING

APA(I) Award(s): 1

Partner Organisation(s)

Solar Safety Management

Administering Institution RMIT University

Project Summary

The demand for safety and security products is growing as the importance of providing an environment safer from natural, accidental or man-made threats increases in the community. Life safety applications in buildings and work environments as well as trains and planes for example are dependent upon the ability for non-powered passive systems to give efficient visual guidance in dangerous dark and smoke filled environments. This project will provide a practical demonstration of the successful implementation of nanotechnology to smaller Australian companies where it will overcome significant drawbacks in current manufacturing and yield new products which are activated in darkness by infrared radiation.

Summary of Linkage Projects Applications for Funding to Commence in 2006

LP0667848 A/Prof DE Siemon; A/Prof M Christie; Prof JF Fien; Mr TJ Evison; Ms DL Efthymiades

Approved Project Title **Building community capital to support sustainable numeracy education in remote locations**

2006 : \$126,000

2007 : \$140,000

2008 : \$130,000

Primary RFCD 3303 PROFESSIONAL DEVELOPMENT OF TEACHERS

APA(I) Award(s): 2

Partner Organisation(s)

Northern Territory Department of Employment, Education and Training

Administering Institution RMIT University

Project Summary

Numeracy for all is a national policy priority. It enables students to make choices that lead to healthy, productive and fulfilling lives for themselves and their communities. Despite some improvements, the gap between Indigenous and non-Indigenous achievement on territory-wide assessments of numeracy is growing. Indigenous elders believe their children and grandchildren have less literacy and numeracy skills than they do. As a consequence, new, more effective, and sustainable ways to improve Indigenous numeracy education are urgently needed. The proposed research will address this need by exploring a model for building community capital to support sustainable numeracy education in remote locations.

LP0667600 A/Prof Z Tari; Prof CJ Fidge; A/Prof AH ter Hofstede

Approved Project Title **An Integrated Infrastructure for Dynamic and Large Scale Supply Chain**

2006 : \$125,000

2007 : \$115,000

2008 : \$120,000

Primary RFCD 2801 INFORMATION SYSTEMS

APA(I) Award(s): 2

Partner Organisation(s)

Pakiwi Connections Pty Ltd

Administering Institution RMIT University

Project Summary

Efficient and scalable middlewares are an important part of our current competitive economy. This is particularly important in Australia where production and population centres are spread over large distances. As a result, inefficiencies in web-based disparate businesses are likely to have a strong impact on the national economy. This project will provide an integrated framework and solutions to urgently needed integration problems faced by current industries. The development of a reliable and flexible infrastructure will benefit small and medium-scale enterprises, as they will be able to participate in large-scale supply chains and expand their business, without having to invest in expensive new computer systems and software.

LP0667957 Prof LH Van Schaik; Prof G London

Approved Project Title **Procuring Innovative Architecture: using recognised exemplars to inform a government-wide model for building a sustainable community of innovative practice**

2006 : \$39,650

2007 : \$34,650

2008 : \$34,650

Primary RFCD 3101 ARCHITECTURE AND URBAN ENVIRONMENT

APA(I) Award(s): 1

Partner Organisation(s)

Department of Housing and Works WA

Ashton Raggatt McDougal

Administering Institution RMIT University

Project Summary

Enabling other Australian cities to understand how to develop and sustain a local innovative architectural culture that helps extend their competitive position in the global competition for creative people. A major benefit is the encouragement for local creative people to remain and contribute to these cities in what can be clearly understood to be a receptive climate. A further possible benefit lies in the enhanced capacity to attract creative talent from cities inside and outside Australia.

Summary of Linkage Projects Applications for Funding to Commence in 2006

LP0667588 Prof J Zobel; Dr A Turpin

Approved Project Title **Accurate Context-Aware Search for Managed Document Collections**

2006 : \$70,000

2007 : \$70,000

2008 : \$70,000

Primary RFCD 2801 INFORMATION SYSTEMS

APA(l) Award(s): 1

Partner Organisation(s)

Panviva Pty Ltd

Administering Institution RMIT University

Project Summary

Search is a key component of a vast range of computing applications. However, while search on large collections of general-purpose text is well-understood, and the best systems are highly effective, search on smaller or special-purpose collections is much less reliable and has attracted relatively little research. By identifying general ways of using context such as user history or prior page usefulness, the quality of search in such cases can be greatly improved. Products that make use of these principles will provide greater workplace efficiency and be able to locate information that other search tools cannot identify.