

Built environment

NEW PLANS
FOR CONSTRUCTION
INNOVATION

Curtin's research expertise in construction management is focusing on processes that encourage effective working relationships in the construction industry.

At the Faculty of Built Environment, Art and Design (BEAD), Curtin's newly appointed Chair in Construction Innovation has been developing research projects to address key problems experienced by the construction industry. Issues now being targeted by Professor Peter Love and BEAD researchers include the cost of architectural and engineering design errors, the sustainable re-use of materials, and inefficiencies in delivery methods that result from problems with alliance contracting, for example.

Among Professor Love's varied research interests are engineering forensics, information systems evaluation, and operations and production management. He currently has two projects funded through the Australian Research Council, one of which is delivering a new project management model to address the amount of rework that arises from design errors.

Together with Associate Professor Peter Davis, Professor Love also oversees projects for the Cooperative Research Centre (CRC) for Construction Innovation, of which Curtin is the Western Australian site. An inherent feature of the construction industry is that various groups work together temporarily and then disband. Because such fragmentation can inhibit the spread of innovation, Curtin's CRC projects involve researchers from BEAD and Curtin Business School working with government and industry partners to deliver industry-wide innovations.

For example, at Curtin's Graduate School of Business, Associate Professor Peter Galvin is collaborating with BEAD researchers and government organisations to develop a system that enables managers to identify possible knowledge-management issues when managing external contracts; and Associate Professor Davis is now working with the WA Department of Housing and Works to create a toolkit that can identify the best procurement strategy for specific construction projects.

At Curtin's Department of Economics and Finance, Associate Professor Siobhan Austen is also looking at procurement processes, but from a social policy perspective. The project involves researchers from the Queensland University of Technology, industry partner Rider Hunt and the WA Dept of Housing and Works, and is evaluating the impacts of current socio-economic policies 'leveraged' within procurement policies, and developing a mechanism for assessing proposals for the inclusion of social policies in construction projects.

"We also have a project with the University of Newcastle and Leighton Contractors looking at how to resolve disputes more effectively," said Professor Love.

"The range of projects demonstrates we're not simply focusing on financial improvements to the construction industry; we also look to identify social improvements that can transfer into the wider community."

