

PROJECT TITLE: *Redesigning curricula for worldwide business and management education*

RATIONALE FOR AND AIMS OF THE PROJECT

In order to manage businesses, institutions and organisations in our complex society towards resilient and sustainable technical, economical and social developments there is an urgent need to step outside our collective 'comfort zone' and develop new ways of thinking and acting in the interest of our future. Podolny (2009) claims that 'most business schools don't develop students' powers of critical thinking and moral reasoning'. It has become essential that current and future managers and leaders be equipped with knowledge and skills to deal with complex problems in a systemic, integrated and collaborative fashion.

Several issues have triggered a worldwide rethinking of business curricula. For example:

- There is much disquiet over the apparent silo-nature of much business and management education, in which individual courses are taught and discussed as if they operate as discrete activities.
- The link between theory and practice in current MBA programs is inadequate and fail to prepare graduates for the "real world" (Mintzberg 2004; Atwater, Kannan et al. 2008).
- Business management education emanates from a largely Western perspective through ideas put forward by scholars mainly from the US. Engwall (2007) points out that business schools teach diverse classes of international students whose cultural differences may be under-appreciated, and who may not readily relate to somewhat mono-cultural prescription of business and management.
- Traditional linear thinking approaches work against an understanding of how the different parts of an organization or business work together and underplay or ignore the multifaceted nature of complex problems. It has become essential to change the nature of the curriculum to emphasise the interconnectedness of the various aspects of businesses and organisational systems as a whole.

Addressing these issues requires a more holistic view of management. ***Systems design thinking*** offers a holistic and integrative way of appreciating all the major dimensions of a complex problem, and enables the formation of effective and long-term management strategies (systemic interventions) that focus on the root causes of problems rather than the symptoms. Systems approaches are important mechanisms to help achieve the attributes that industry wants from future graduates. This demand for a systems-based focus in business and management is very rapidly increasing in Australian society as well as globally. The main aim of this research proposal is therefore to **directly address the worldwide demand for redesigning business and management curricula**. This will be achieved by creating educational platforms that bring together the concepts systems, sustainability, economic and financial risk, social responsibility and social constructs (institutional, community) and enhancing the capability to use all the tools of our economic, business and legal systems in developing future leaders and managers that are fully equipped to be effective in a turbulent and complex 21st Century knowledge society.

APPROACH

The issues mentioned above create a significant pedagogical challenge in that current university education tends to be focused on discipline specific teaching which has no room for a wider systems approach. Didactic autonomous discipline based courses fail to foster a social networking culture that has been proven to enhance the process of deep learning, nor do they promote interactions with other students in other disciplines. To address this problem we need innovative curriculum designs and learning environments that address academic paradigms as well as industry requirements.

Redesigning the MBA

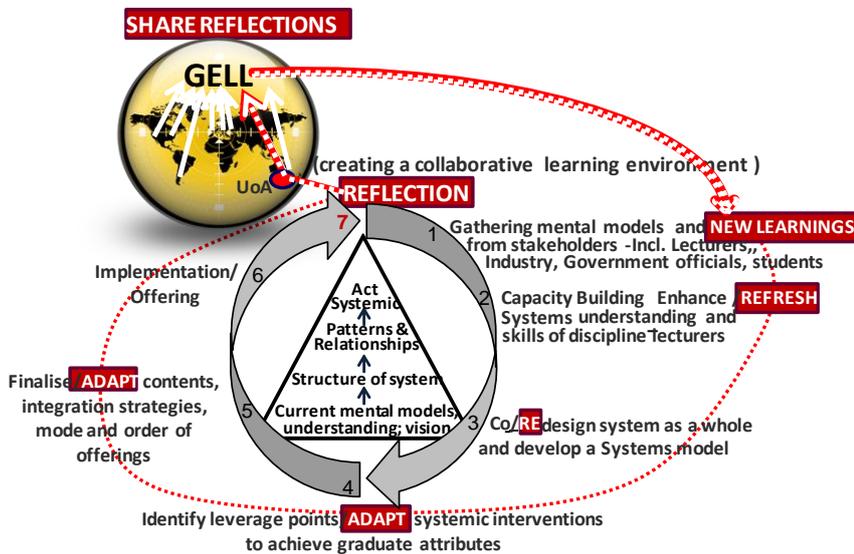
The approach that will be followed originated from Conversations of the International Federation for Systems Research in Austria (Bosch, Drack et al. 2009; Jones, Bosch et al. 2009; Bosch, Maani et al. 2010). Models developed during these Conversations of different types of content, modes of delivery and relevant tools for different types of students are currently being used to develop a systems based Adelaide MBA. At the same time the redesigning of MBA degrees in several other Universities in Australia and around the world are also taking place (Hull, Warwick, Oxford, Dominican, Queensland University of Technology to mention but a few) through a coordinated effort by the Project Leader in his role as Vice President of the International Society for the Systems Sciences (ISSS) – Portfolio: Systems Education.

In developing a cutting edge Adelaide MBA, the use of systems thinking at the early stages of the re-design points out that the Adelaide MBA program is regarded as a system in itself. In other words the MBA program is seen as multi-dimensional and holistic in which the courses are all highly interconnected (a system), rather than simply being regarded as the sum of its parts (a collection of courses). Such a systems perspective acknowledges that one particular course or module will be limited in terms of what it enables students to learn, but a program that

is informed by systems thinking would facilitate students' ability to learn by reflecting on the links between the parts (individual courses) in order to better understand complex multi-dimensional issues, the art of recognising interconnectedness and how to deal with multiple interpretations of business and management problems.

An Evolutionary Learning Laboratory (ELLab)

The above conceptualization of the Adelaide MBA requires special attention on how to create a learning environment in which both students and lecturers will be encouraged to focus on the links between modules. Systems thinking in graduate management curricula (including the MBA) is not yet mainstream anywhere in the world. The design and delivery will thus have to evolve over time for the MBA lecturers to learn more about how to effectively incorporate systems thinking into their particular disciplines/areas of interest and how to link with other courses to ensure relevance in an increasingly interconnected, multi-layered and unpredictable world.



The Adelaide MBA 'System' will be established as an Evolutionary Learning Lab (Figure 1). The ELLab (Bosch, Nguyen et al. 2013) is a systems based methodology and process for integrated cross-sectoral/ disciplinary decision making, planning and collaborations in dealing with complex problems and is used by all involved to develop a deep understanding of the 'system' (in this case the program contents and delivery), shared vision (learning outcomes) and skills for systemic continuous adaption and innovation (improvement of the MBA over time). The cyclic process includes different steps as shown in the figure, with a **reflection** at the end of each cycle.

Figure 1 The Adelaide MBA linked to GELL

Because no model or program design can ever be completely 'correct' in a complex and ever changing world, the only way to manage the 'new era' MBA would be by reflecting at regular intervals on the expected learning outcomes and decisions that have been taken on contents, integration and delivery modes and mechanisms. This reflection forms a collaborative learning environment in which the feedback informs the need for more capacity building (amongst lecturers involved), redesigning parts of the program and finding more innovative ways to offer the courses. Each of the other Universities will establish a similar ELLab for enhancing systems education in their business and management degrees.

Global Evolutionary Learning Laboratory (GELL)

The multi-platform learning and collaboration environment of the Collective Intelligence Enhancement Lab (CIEL – Por 2010) will be used to enhance the GELL. CIEL is an advanced socio-technical system, patterned on the Innovation Architecture framework . It has been successfully applied by its inventor, George Pór, in the European Commission, INSEAD, and the Climate and Development Knowledge Network, among other organisations. The Adelaide MBA will become part of GELL through the involvement of the systems lecturers in this proposed comprehensive national and international research project. GELL will provide an opportunity for the various ELLabs that will be involved in the project to share their reflections with other universities around the world in a web-based inter-cultural learning environment. New ideas and concepts from this learning experience will contribute significantly to increasing the level of performance in each participating University (to the benefit of the students). Linking with national and international partners in this way will also lead to sharing of courses, student and staff exchanges and forming formal partnerships with top business schools in the world with the view on collaboration and joint degrees.

ANTICIPATED DELIVERABLES AND OUTCOMES OF THE PROJECT

Flexible, state of the art MBA curricula

- That are and remain relevant through continuous improvement, adaptation and innovation;
- Closer links with practitioners in industry through the application of systems theory, knowledge and tools in real world contexts;
- Programs acknowledge the importance of cultural differences in business and management;

- Overcoming the challenge of fragmented curricula and managing competing demands;
- Lecturers become open-minded to alternative perspectives in other domains of knowledge and, by implication, receptive to critiques about embedded assumptions in their own spheres of expertise;
- Increased level of performance (to the benefit of students) through GELL - providing opportunities for educational institutions to share lessons learned in an inter-cultural co-learning environment;
- New ideas and concepts from an inter-cultural learning experience contributing to linking with international partners;
- The incorporation of courses and modules that will enhance personal and professional skills.

Quality programs that develop a high degree of work-readiness of graduates through developing

- The capability to better appreciate the need for a systems approach through their critical reflection on complexity in terms of both theory and their experiences of 'messes' (Ackoff 1981);
- An appreciation of the partial nature of management knowledge by exploring paradigm shifts in management and how systems ideas can be applied in the other MBA themes;
- The abilities to contextualize (systems thinking skills), identify issues, develop strategies, manage projects, convey the message (communication), build effective networks and work in teams (personal and collaborative skills), build resilience and being adaptable and socially responsible (dealing with change, complexity and impacts on the human dimensions of systems), and appreciate the need for lifelong learning (self learning capability). These attributes can be instilled through developing a deeper knowledge of systems thinking approaches, without having to become a systems scientist;
- The capability to appreciate all the major dimensions of a complex problem and ability to devise effective, long-term and systemic management strategies;
- The capability to use different systems methodologies in their own situations and exploring how the theory and practice can be useful/not useful in their particular contexts of application.

Business and government institutions (policy makers, managers and leaders)

- Understand the need for a new way of thinking, away from traditional linear to systems thinking;
- Make the right investment decisions in the face of a continually changing geo-political and socio-economic landscape;
- Deliver innovative solutions to cope with increasing change and uncertainty and can deal effectively with the challenges that complex socio-economic and business-financial issues tend to transcend the jurisdictions and capacities of any single organisation.

VALUE/NEED FOR PROJECT TO THE SECTOR OR A GROUP OF INSTITUTIONS

As mentioned above, several issues triggered a worldwide rethinking of business and management curricula. The recent economic crises especially have prompted renewed reflection about how far conventional business wisdom (and by implication, conventional business and management education) are to be blamed. "Management education has contributed to the systemic failure of leadership that led to the current financial crisis" (Podolny 2009, p.63). In their 2008 article in the Academy of Management Learning and Education journal, Atwater and his colleagues (Atwater, Kannan et al. 2008) reviewed some of the criticisms of business school education and discussed how a comprehensive treatment of systemic (systems) thinking might help to counter some of these and improve learning experiences. The main aim of this proposal will benefit current and future business and management education nationally and internationally.

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PROJECT TEAM

Prof Ockie Bosch (Project leader) Homepage: <http://www.adelaide.edu.au/directory/ockie.bosch>

Qualifications: BSc (Potchefstroom University - PU), MSc (PU), DSc (University of the North West)

Experience: Professor Bosch leads the Alliance for Systems Design and Complexity Management in the University of Adelaide Business School. He was previously Head of the School of Integrative Systems at the University of Queensland, where he was responsible for a highly successful repositioning of the School as a reference point for systems research and education in Australasia and beyond. Through his efforts systems concepts have been successfully incorporated in all discipline areas/Faculties with systems courses that value added and contributed significantly to the work readiness of students in any area of interest.

Through his role as Vice President of the International Society for the Systems Sciences (ISSS), active involvement in the International Federation for Systems Research and an academician of the International Academy for Cybernetics and System Sciences, Prof Bosch is a leader in research on the worldwide development of systems curricula for different types of students. He has played a major role in the redesigning of the Adelaide MBA to become a cutting edge 21st Century program. He is one of eight designers in five countries who, due to their recognition of the potential of ELLabs as an effective mechanism for dealing with complexity, are currently developing a sophisticated platform and virtual environment to enhance the effectiveness of GELL (through collective intelligence concepts).

Prof Bosch's current position is research intensive. His teaching at the University of Adelaide, Keio University in Japan, Sonoma University in California and the University of Patagonia is part of his research methodology to experiment in the ELLabs with different teaching and learning strategies to effectively instil the graduate attributes that employers want and that will create new era leadership.

Dr Nam Nguyen (project team member) Homepage: <http://www.adelaide.edu.au/directory/nam.nguyen>

Qualifications: BA (NEU, Vietnam), MA (Uni of Adelaide - UA), PhD (Uni of Queensland - UQ)

Experience: Dr Nam Nguyen is one of the founding members of the newly established Alliance for Systems Design and Complexity Management in the UA Business School. He has been awarded a number of nationally and internationally competitive academic fellowships and research grants worth more than \$1 million (including 3 UQ ResTeach Fellowship grants). He is also a Recipient of the prestigious 2011 Australian Leadership Award and a Vice President of the International Society for the Systems Sciences. Dr Nguyen has taught and published extensively in the fields directly related to this proposal (please see [homepage](#)).

Mr Damian Scanlon (project team member)

Qualifications: MBA (Uni of Adelaide)

Experience: Mr Damian Scanlon is the Director of the UA Business School's MBA. He has gathered extensive experience working in the corporate sector by spending 25 years in senior executive positions in the aviation, oil and banking industries. Prior to joining the Business School, Mr Scanlon was the Chief Operating Officer at the Adelaide-based science organisation, the Royal Institution of Australia.

Other members (collaborating institutions team members)

Several national and international collaborators are currently being negotiated with through the Systems Education Special Integration Group of the ISSS. Some of these include:

University of Hull Business Faculty, UK (**Professor Gerald Midgley, Dr Amanda Gregory**); Oxford Said Business School, UK (**Professor Rafael Ramirez**); Warwick Business School, UK; Malik Management Zentrum and University of St Gallen, Switzerland (**Dr Constantin Malik & Professor Markus Schwaninger**); Dominican University, US; Adelphi University Business School, US (**Dr Pamela Henning**); QUT Business School (**Mr Bob O'Connor**); University of Technology Sydney (**A. Professor Shankar Sankaran**); Business Systems Laboratory, Italy (**Professor Gandolfo Dominici**); University of Patagonia Faculty of Economics (**Professor Ricardo Barrera**); Keio University Graduate School of Systems Design and Management, Japan (**Professor Takashi Maeno**). The intention is to extend the GELL worldwide to all interested institutions as it becomes operational and known.