

E-scholarship: A model to lead strategic change



Cathy Gunn

Centre for Academic Development
The University of Auckland

Sustained investment in e-learning in different national contexts has lead to a common conclusion; that integration of technology supported teaching and learning strategies into mainstream practice has not reached full potential because levels of engagement by academics vary. Some instances of e-learning demonstrate a level of excellence that proves the potential exists. Yet dissemination of these innovations and the institutional systems required to facilitate wider engagement remain patchy. In other cases, the use of e-learning systems by a critical mass of tertiary teachers focuses primarily on administrative functions. This paper describes the application of three established models as the basis to define the concept of e-scholarship. Articulation of this concept through a systematic and institutionally supported program is proposed as a means to address the challenges identified by a group of leading e-learning practitioners. Nationally funded initiatives are finding emergent social networking tools and strategies to be common ground for both teaching and e-research. This could prove to be a key factor to motivate wider engagement at both individual and organisational levels. The New Zealand tertiary sector provides the context for this development. Design based research is the underlying methodology.

Keywords: e-scholarship, dissemination of innovations, design based research, viable systems, distributive leadership, capacity development, social networking

Introduction

New Zealand's universities are in a similar situation to tertiary institutions elsewhere with respect to development and integration of e-learning and e-research tools and strategies. The national Tertiary Education Commission has sponsored sector-wide infrastructure and collaborative development initiatives (TEC, 2007). Institutional strategies highlight the importance of excellent teaching, learning and research environments, and acknowledge the significant benefits offered by information and communications technologies (see e.g. Clyde & Delohery 2005). Infrastructure, enterprise systems and support networks for mass uptake of online teaching strategies and collaboration tools are major ongoing investments. A high level of engagement in national e-learning initiatives such as the eXe Project (eXe Project 2007), Flexible Learning Leaders in New Zealand (FLiNZ 2007), and Implementation of National e-Learning Guidelines (eLG 2007) concurrent with e-research capacity development initiatives such as BestGrid (2007) and the Kiwi Advanced Research and Education Network (KAREN 2007) provide evidence of the tertiary sector's key role in leading innovation.

With the necessary infrastructure, tools, strategies and re-usable resources reaching a stage of maturity that supports dissemination beyond the development environment, the focus is shifting to capacity development within institutions. While this has been a priority for some time, many years of experience underlie the shared understanding that investment in e-learning may not achieve full potential because the goals of long-term sustainability and engagement by a critical mass of staff have yet to be realised (see e.g. Littlejohn 2003, p35). A recent collaborative research study with colleagues from across the national tertiary sector identified a number of barriers that need to be addressed before these objectives can realistically be met. The findings guided development of a strategy through which this may be approached (FLiNZ3 2007: Distributed leadership project). Following a summary of these barriers and strategies, the paper outlines an e-scholarship concept that draws on the established models of capacity development (Horton 2002), distributive leadership (West-Burnham 2004), and viable systems (Beer 1994) to devise feasible ways to overcome the identified challenges. The explicit requirement of a theoretical basis and the goal of continuous improvement points to the design based research approach as a suitable methodology for implementation, monitoring and collective engagement with the proposed solution.

Barriers to e-learning strategy implementation

Analysis of the key challenges identified by a sector-wide group of leading e-learning practitioners revealed many that are common across roles and institution types. At a general level, these include:

- The need to revise organisational structures, policies and perceptions to facilitate the diffusion of e-learning innovations;
- Finding the means to promote innovative educational methods that challenge established culture and practice with limited evidence of positive impact;
- How to bridge gaps in continuity, sustain momentum and promote shared ownership of different instances of e-learning innovations;
- Working with limited resources and influence to promote e-learning capacity development;
- How to be effective as a leader without formal authority in a traditionally hierarchical culture;
- Managing expectations against the reality of experience in a constantly changing environment;
- How to establish and maintain effective, multi-directional communication channels to promote shared understanding and disseminate e-learning experience to all levels of an institution;
- How to motivate academics with limited time and conceptions of e-learning to experiment and engage with innovations in the face of competing priorities.

Analysis of these individuals' experience reveals many creative and context specific ways to address the challenges. A common factor across cases is the need to accommodate the views of different stakeholders in strategy implementation plans that address them all in productive and realistic ways. A common pitfall is where strategies designed to promote the uptake of e-learning have met barriers or acted as a deterrent at practitioner level. Flows of information to allow internal contradictions to be identified do not always exist. Acknowledging leadership as a collective activity that includes leading practitioner experience may be key to solving this problem. However, it presents a significant cultural challenge in traditionally hierarchical institutions. Methods designed to address the challenges have to integrate with existing institutional systems and structures as far as possible. Otherwise the change may be too radical to gain traction. The method now proposed to move strategy implementation forward is based on established academic values, organisational models and a solution that arises from an in-depth analysis of current practice.

A methodology for change

A description of the three models used to inform the e-scholarship approach follows. Evidence-based examples illustrate their application to e-learning and e-research capacity development initiatives.

Viable systems

The viable systems model described by Beer (1979) analyses flows of information and communication channels that support implementation of institutional strategies. Application of this model aims to identify areas where progress is impeded, to direct effort to address the barriers and by doing so, to facilitate organisational learning. University e-learning and teaching excellence strategies typically encounter both cultural and structural barriers. These barriers arise from many sources, though most are related to the interaction between established institutional or disciplinary practice and priorities, and the need to respond to changing circumstances. The size and complexity of organisations makes it hard to identify the flows of information that do occur, and establishing new ones to facilitate strategy implementation a considerable challenge. Focus on the experience of leading e-learning practitioners and associating this with a situational analysis allows impediments to strategy implementation to be identified as they are encountered and creates opportunities to identify ways in which they may be addressed. Communication with stakeholder groups from across an institution is critical to development of strategy implementation plans that accommodate all perspectives. However, the structure of most tertiary institutions is better designed to facilitate flows of information from the top down than the multi-directional ones that the viable system model requires. While e-learning strategy implementation has been a work in progress for some time, e-research is an emergent area for which strategy is still being formulated. Opportunities for emergent communication, information access and collaboration tools to strengthen the teaching research nexus are only now being recognised. The e-scholarship concept thus offers potential to lift the boundaries between the two familiar discourses of teaching and research. In terms of maintaining a viable system, this common ground between teaching and research may prove to be the facilitator of a significant and positive strategic development step.

Distributive leadership

A distributive model of leadership has evolved within the education sector to address limitations identified with the concept of the individual as leader in the contemporary context. Anderson and Johnson (2006) outline contemporary ideas of leadership, including distributed and distributive models. The distributive leadership model recognises leadership as an emergent property of a group or network of

interacting individuals rather than an individual activity. Leadership development is situated within the context of professional practice through a process of action, analysis, reflection, mentoring and feedback. West-Burnham (2004) offers a rationale to support the distributive leadership concept.

...leadership development is too heavily focused on the career of the individual and ignores the potential that exists in every organisation. Morally and practically, the emphasis on the leader is inappropriate and needs to be replaced by recognition of leadership as a collective capacity that is reflected in structures, processes and relationships. (West-Burnham 2004)

The underlying assumption is that educational institutions and their internal divisions have become too complex to be effectively led by individuals, that considerable leadership capacity exists and needs to be empowered. The practice of promoting excellent researchers or teachers into leadership positions has proved less than ideal as a way to develop leadership potential and ensure continuity. Developing the potential of leading practitioners into institutional leadership capacity is a logical alternative. Creation of a network of these leading practitioners with senior managers, academic practice and leadership professionals is proposed as a systematic and sustainable basis for distributive leadership capacity development. Implementation of this approach is the subject of a current initiative sponsored by the Carrick Institute's Leadership for Excellence Grants Scheme, (The Carrick Institute 2006).

Capacity development

A general definition states that capacity development initiatives involve an organic process of growth and development by which individuals, groups and organisations improve their ability to perform their functions and achieve desired results over time (Horton 2002). Similar to the viable systems model, the capacity development process aims to identify and address those factors that most severely hamper progress towards achievement of strategic goals. The core methods used in this process are organisational analysis, monitored strategy implementation, organisational and individual development through situated learning. This moves beyond the information flows of the viable system model to focus on culture and practice related barriers encountered by people in different positions within an institution. Strategies used to promote capacity development include information dissemination, education and training, facilitation and mentoring, networking, reflection and feedback to promote learning from experience.

Although Horton writes in the context of research and development organisations and draws on literature from the business sector, the model is sufficiently generic to provide a basis for analysis of capacity development initiatives in the educational sector and its institutions. Horton notes that current understanding of the capacity development process grew from analysis of the experience of models that failed to achieve targets because they were based on flawed assumptions. While failure may be too strong a term for the context of e-learning capacity development, there are obvious parallels with the limited success of many previous initiatives (Zemsky and Massey 2004). Horton's model offers a systematic basis for analysis of shortfalls and pointers to ways greater success might be achieved in future.

Capacity development in the New Zealand context

Applying the capacity development model of analysis to the context of the New Zealand tertiary sector offers valuable insights into the barriers that impede progress towards integration of technology supported educational methods. It also provides a systematic process through which many of these barriers may be addressed to promote achievement of strategic, institutional and individual objectives related to e-learning.

The generic process for planning capacity development initiatives is simple. However, many complexities arise when it is applied to the institutional structure, culture and political environment in which an initiative is situated. The process involves:

- An institutional or sector-wide audit to assess current goals, performance levels, constraints and opportunities for development;
- Mapping of the capacity development initiative in terms of objectives, stakeholders, roles, resources, activities, assumptions and underlying logic;
- Development of a plan to monitor activities, outcomes, progress towards, and continuing relevance of goals;
- Definition of timeframes, milestones, reporting and dissemination activities.

Horton (2002) identified a number of critical success factors for capacity development initiatives. These are listed in Table 1 with data relevant to New Zealand tertiary institutions. This sector specific information is derived from a number of sources, including the current literature, various documentary sources and recent interactions with a cross section of leading e-learning practitioners. It must be noted that opinions on levels of achievement and challenges related to each of these success criteria to vary according to the institutional roles, perspectives and experiences of the person expressing them. Soliciting different opinions on these criteria is one useful method to gather information for the initial audit phase of the capacity development process. Acknowledgement of different valid perspectives on strategic and implementation initiatives is a key to the effective articulation of strategic objectives at different organisational levels. Hence it is also a way to promote mutual understanding among the range of different perspectives that are likely to exist. In the case of a university, these perspectives may align with positions in a hierarchy. For a sector-wide analysis, they might relate to government, sector, institution and individual. This breadth of understanding serves the need to identify and address barriers, and to devise incentives and rewards to accommodate, and perhaps to reconcile, the variety of competing interests that exist within the capacity development context.

Situational analysis

Universities in New Zealand tend to put greater emphasis on research than on teaching. Most institutions also have established reputations for e-learning innovation and teaching excellence, both within the enterprise learning management system environment and beyond. However, scope for wider engagement and the need to respond to constantly changing circumstances are readily acknowledged. The teaching-research nexus is a significant focus for research-intensive institutions. Potential to raise this to a new level of engagement is anticipated with recent developments in online collaboration tools and high-speed communication networks. These tools and technologies are proving to be common to both research and teaching environments. While the high value and time allocated to research is already well established both institutionally and nationally, most staff resources are otherwise fully committed, leaving little time for experimentation with new technologies and teaching methodologies. In this respect, the New Zealand tertiary sector faces challenges that are common to other national contexts, i.e.:

- Finding efficient ways to balance the demands of teaching and research that offer potential to raise productivity in either or both areas;
- How to integrate real world research into large scale teaching environments;
- Finding strategies to promote a culture of experimentation where new techniques and knowledge are applied using a grounded approach such as design based research;
- Effective and sustainable methods for further dissemination of teaching and learning innovations across departments, faculties and institutions.

It must be acknowledged that, at present, many teaching and learning innovations exist in isolation. This effectively prevents potential for wider benefits from spreading across the institution, and risks a total loss of investment if the staff members responsible leave. There are considerable challenges facing individuals who do aim to disseminate their work if institutional support is not forthcoming. In a general sense, these challenges arise from systems that do not readily provide the structures and resources necessary to support such dissemination and place a lower value on innovation that does not lead directly to discipline based research outputs. While it is not suggested that all innovations are applicable to every teaching context, a considerable body of evidence shows that many can be reused or adapted to a range of useful purposes beyond the development environment, (Gunn, Woodgate & O'Grady 2005). The learning object economy described by Campbell in chapter 3 of *A sustainable approach to e-learning*, (Littlejohn 2003) achieved a level of success, and ongoing developments, e.g. The Carrick Exchange, (2007) and the SPEEKS Project (2007), aim to address challenges encountered in this domain. The tendency for institutions to support only those strategies and initiatives that can be scaled up to the level of enterprise systems is a common barrier to dissemination of otherwise excellent innovations that offer more specialised and therefore less uniform application. A shift in institutional thinking and a wider spread of resources is required if significant areas of growth are to be encouraged rather than limited or shut off. It may be well to remember that many of today's enterprise systems began as small, localised developments. In terms of the teaching-research nexus, the ability to bring current research into classrooms and the curriculum is limited by many factors, including class size and the 'production line' models of course design and teaching that exist in some institutions, particularly large ones. It is expected that at least some of these limitations can possibly be addressed through use of the new generation of communication technologies and collaboration tools (e.g. BestGrid 2007).

Table 1: Tertiary e-learning capacity development: Success factors in the New Zealand context

Critical success factor	Current status	Acknowledged challenges
The external and institutional environment is conducive to change.	<p>eLearning development and integration reflects international trends and is identified in the literature as offering educational and administrative benefits. National funding supports collaboration within communities of practice. Pressures of scale, funding and diversity demand innovative approaches to maintain quality standards. Tools, technologies and strategies have matured to a level that supports dissemination beyond the development environment. Collegial tradition supports collaboration.</p>	<p>Tendency for developments to be technology driven and not seen as relevant to educators' needs. Well-intentioned strategies and policies may not be accompanied by effective implementation plans. Resources and time are limited, conflicting pressures, incentives and rewards are present; Culture and organisational structure may not be conducive to innovation of this nature. Change happens slowly in this environment yet technology facilitates rapid progress. Institutions compete rather than collaborate on some levels.</p>
Leaders and managers provide relevant strategic leadership	<p>Most tertiary institutions have strategies to promote investment, innovation and integration. High-level appointments reflect the value placed on e-learning, provide representation and leadership from a position of knowledge.</p>	<p>Ideal leadership models challenge established structure. Communication channels do not work to facilitate mutual understanding between leaders and practitioners'. Conflicting priorities hinder strategy implementation.</p>
Appropriate and accessible innovations are available and being developed.	<p>International trends provide common standards for learning and content management systems, learning object repositories, learning designs, open source initiatives, easy to use tools and templates. Local initiatives contribute to these international trends.</p>	<p>Innovation is 'double-edged' and demands high up front investment. Established culture may not reward innovation. Some strategies require further investment for use beyond the development context. New skills are required for access and effective use.</p>
e-Learning development and integration initiatives are owned and driven by key internal players.	<p>Early adopters and innovators generally develop solutions to specific educational challenges then make them available for dissemination, reuse and re-purposing for different contexts. Professional units and champions are available to support strategic development initiatives.</p>	<p>There is a tendency to a 'one size fits all' policy driven approach by institutional management. Incentives and rewards are less powerful than other areas, e.g. discipline-based research outputs. Early adopters may not aim to disseminate their work. Skills and conceptions may limit engagement.</p>
Adequate resources are available for developing capacity and implementing change.	<p>Most institutions devote resources to e-learning capacity development in both centralised and localised plans. Governments and other national funding sources are available. Many resources are available as open source or free of charge to end-users.</p>	<p>Resources are always going to be limited and different priorities govern allocation. Unknown resource requirements due to nature of innovations. Time is a key limiting factor that cannot be increased except with additional resource allocation. Common reactions to change.</p>
A critical mass of staff are engaged and committed to the capacity development initiative.	<p>Institution-wide initiatives aim to raise overall levels of skill and engagement with e-learning tools and strategies. Tools and strategies for e-learning are proving common to research and administrative aspects of academic work. Exposure to technology comes from many different directions and serves many purposes.</p>	<p>Interest, motivation, and engagement vary for many reasons, some grounded in experience, others in the lack of it. A degree of resistance remains from early exposure to user-unfriendly tools and techniques. An element of compulsion may lead to resistance as an acknowledged reaction to change. Engagement is a variable factor.</p>
Capacity development and change initiatives are well managed.	<p>The level of resource and expertise devoted to management of e-learning initiatives has increased considerably in recent years. A disciplinary knowledge base and discourse derived from experience is growing to facilitate effective management.</p>	<p>Strategic goals may be broadly stated and give little guidance to the management function. Common limitations (e.g. flows of information) and competing priorities (e.g. teaching and research) need to be addressed. Wide engagement in professional development is hard to achieve. Some management is ad hoc, appropriate models are emergent.</p>

Development and change is articulated and understood at all levels within the organisation.	Systematic approaches are in place in many institutions and appearing in the literature. Experience is growing as the basis for organisational learning. Strategy implementation plans are being designed to address emergent issues at all levels.	Organisational structure and culture must adapt to the purpose. There are few established channels for communication across levels within a hierarchy, particularly from the bottom up, or across disciplinary 'silos'. Incentives and opportunities to view innovation from different perspectives remain limited.
A grounded approach with continuous evaluation to support learning from experience is applied.	The emergent nature of the field, past speculation and prevailing academic culture recognise the need for a grounded approach. Collective experience across sectors and disciplines supports this approach.	An explicit basis in theory, reflection and evaluation are often neglected aspects of e-learning innovation. Speculation has proved to be a risky basis for investment yet history shows this experience has been frequently repeated.
Sustainability and succession planning are key elements of capacity development initiatives.	As e-learning becomes institutionalised, continuity and sustainability come into focus and are accommodated. The community provides its own mechanisms such as open source, shared repositories and literature.	Innovation often depends on committed individuals with no provision for dissemination or succession planning. The process of integration into practice, policy frameworks and culture can be slow, challenging and cumbersome.

While many opportunities exist, the most significant factors preventing academics from engaging in these areas may be conceptual and cultural (Gunn, Woodgate & O'Grady). Although in practical terms, it is the time, requisite skills, resources and incentives that are judged to be lacking, evidence shows that these limitations can be overcome where the motivation to do so is present. The challenge is then to identify and activate the right motivational factors. In order to do this, established analysis techniques (Pascale & Sternin 2005) can be used to identify successful initiatives and to reveal the prevailing influential factors in a given context. Realistic capacity development goals can be derived from this and other aspects of the situational analysis, although achievement of these goals involves the complex and often slow process of organisational learning. Most universities have established central service units that play a proactive role in supporting engagement with educational innovations, best practice in research informed teaching, and to assist individuals and groups of staff with management of sometimes conflicting career goals. There has been much debate in the literature in recent years about the most effective methods for these units to go about achieving their strategic and professional development objectives (e.g. McWilliam 2002).

Generally speaking, there has been a shift away from the centrally provided activity model to a more sustained and contextualised way of working with staff across an institution. Fostering discipline or theme based communities of practice (e.g. Cochrane & Klyte, 2007; Lai et al 2006) is one productive method, although the self generating and sustaining nature of such communities makes the concept hard to present to an institutional system that demands measurable outcomes and timeframes as accountability measures. Both the capacity development and distributive leadership models support working in this way with situated learning in authentic professional contexts as the basis of sustainable development initiatives. The viable systems model provides the means to identify whether an institutional context is fully supportive of its strategic aims at the level of practice, and where it is not, to devise strategies for improvement. Together, these models may point to a practical way of defining the dominant model of academic practice for the social and professionally networked environment.

The e-scholarship concept

This conceptual and situational analysis precedes the question of how to design and manage e-learning capacity development initiatives that will foster both the individual interest and the organisational commitment required for their success. While some useful examples can be found in the literature, the nature of capacity development initiatives demands context specific articulation. There may be many common features, but the culture and character of each institution or national sector adds an element of uniqueness. The initiative now described is tailored to suit the context of a large, traditional and research focused university in New Zealand. The initiative is defined as an E-Scholarship Program with two principal aims:

- To promote leadership development through professional practice; and,
- To achieve sustainable development and diffusion of technology supported innovations that align with institutional teaching, learning and research goals.

While the e-scholarship concept itself is relatively new, the initiative is designed to integrate with existing institutional systems and structures, making many 'touch points' with change in the manner described by

Flowers (1997). It is reasonable to assume that aspects of these systems and structures will be modified as a result of implementation, as organisational learning is an expected result. Consequently, it is important that these touch points occur in places where power resides and that suitable evidence can be produced to justify the shape and form of necessary changes.

A program for e-learning leadership development

The starting point is a program of leadership development and support for participant defined and institutionally sponsored e-scholarship initiatives. In the context of a research-focused institution, it is a significant challenge to promote engagement in initiatives that are predominantly teaching and learning focused. Hence the choice to focus on scholarship, in particular, how emerging strategies and technologies designed to facilitate research collaboration can bring real world research into classroom and thus strengthen the teaching research nexus. The initial plan is for engagement in a year-long program. Although short in some respects, this timeframe reflects an institutional norm for sabbatical leave and secondment to special duties, so should be perceived acceptable to prospective participants, heads of departments and institutional leaders alike. The first iteration of the program requested financial support from a Vice Chancellor's Strategic Development Fund and aims to involve 10 academic staff members who are already involved in significant e-learning or e-research initiatives.

The situational analysis revealed that many of these innovators are keen to disseminate their work beyond the development environment but have no resources or readily available methods to facilitate achievement of this goal. Central service units are well placed to support these goals, though few have used this approach in the past to support e-learning development initiatives. The distributive leadership model supports this collective approach involving innovators, central service units, senior management contacts and acknowledgement of strategic importance. The participants define the specific focus and goals for participation in conversation with the representational program management group.

Leadership and communities of practice

The program also involves collaboration with the university based Excelerator Leadership Institute, whose programs reflect and promote distributive leadership principles. The overall aim is to foster communities of practice around these innovations so that both central and peripheral participants (Wenger 1998) can benefit from involvement. Peripheral participants in this case include all other institutional players with an interest, whether active or indirect, in the strategic development. Three central development units coordinate the program while the Leadership Institute facilitates activities, fulfils a mentoring role and works alongside the e-scholars throughout the year in a way that is similar to their existing programs and supported by a research based leadership development philosophy. Selection of participants and program activity planning involves consultation with representatives from major committees responsible for IT, e-learning, e-research and teaching and learning quality, heads of academic departments and peers. This is designed to serve the dual purpose of informing these stakeholders of the practical steps involved in implementation of strategic objectives of this nature, and of forming networks across institutional sectors that are not normally in direct communication. The players may share some common purpose in relation to strategic objectives and therefore stand to benefit from exposure to different perspectives.

Factors taken into consideration during selection include the strategic importance of proposed E-Scholarship initiatives and the ability of applicants to achieve the stated goals. Participation in the program is negotiated with Deans and Heads of Departments and factored into workload to acknowledge the strategic importance of initiatives in practice as well as in principle. The need to guarantee this tangible support is evident to participants in other institutional programs such as an accredited Academic Practice Certificate and grant funded Teaching Improvement initiatives. Each E-Scholar is assigned a person in a senior role within their department or faculty as a collegial mentor, e.g. an Associate Dean Teaching and Learning, or Head of Department. This further addresses the key success factor from the capacity development model of fostering understanding of different institutional perspectives on leadership and innovation. It also facilitates maintenance of the viable system model as sustained personal contact allows different perspectives to be learned and fully appreciated. This relationship also allows management or institutional issues that arise to be addressed through established institutional channels. Participants are expected to produce one or more publications as a result of their participation in order to share their experience within the international academic community and to preserve continuity in meeting the widely shared priority goal of performance based research outputs.

Conclusion

Conceptualising and implementing a process to translate isolated e-learning innovations and broadly stated strategic objectives into sustainable capacity development initiatives represents a continuing challenge to tertiary institutions. This paper identifies appropriate theoretical models and describes the results of a situational analysis that were used as the basis to design a solution for application within the New Zealand tertiary sector. Three models used to ground the capacity development process were presented along with justification of their relevance to prevailing circumstances across that sector. The first stages of the solution have been systematically applied, i.e.:

- Identification of an appropriate theoretical basis for the capacity development initiative;
- The initial institutional audit stage of the capacity development process using the viable system concept as a key method of analysis and with reference to a relevant sample of sector-wide information;
- Development of a detailed solution that addresses the challenges identified at the audit stage and incorporates the kind of flexibility and closely monitored progress that supports grounded development at every stage;
- Initial discussions on implementation of the solution with key stakeholders and application for institutional support in the form of dedicated funding and re-allocation of existing resources;
- Agreement in principle that the distributive model of leadership is appropriate, identification of opportunities to leverage existing institutional priorities to promote further development and implementation of this concept.

For the following stages of confirmation of participation by identified leading practitioners, establishment of cross faculty networks, individual goal setting, progress monitoring and achievement, the e-scholarship program is proposed. The program is designed to promote the concepts of distributive leadership and professional development through communities of practice. At institutional level, reference to the viable system and capacity development models is expected to promote the organisational learning that will both facilitate and result from the strategy implementation process. The generic aspects of the e-scholarship model that incorporates these wider organisational, individual and leadership development processes support its application to any educational context. Differences can be expected to arise from the culture, practice and circumstances of the development environment. However, the process itself is proposed as an appropriate means to approach strategy implementation focused on innovative academic practice in the contemporary context. Much research and consultation has gone into the design of this initiative. What now remains is to evaluate through implementation the relevance of each underlying assumption and component part, the degree of success in integrating the full program into institutional structures and systems, the overall impact and the expected and unexpected outcomes. These outcomes will provide the focus for subsequent publications.

Acknowledgements

This paper draws on the experience of initiatives funded by The Tertiary Education Commission in New Zealand (*Flexible Learning Leaders in New Zealand* led by Nola Campbell at The University of Waikato) and the Carrick Institute in Australia (*Distributive Leadership for Learning and Teaching: Developing the faculty scholar model*, led by Dr Geraldine Lefoe, University of Wollongong). Collaboration on the Flexible Learning Leaders Round 3 Project with colleagues Andrea Barr, Iain Doherty, Bronwyn Hegarty, Paul Left, Terry Neal, Mark Nichols, Mark Northover, Merrolee Penman, Winnie O'Grady and with Joline Francoeur from the Excelerator Leadership Institute is gratefully acknowledged.

References

Anderson, D & Johnson, R, (2006). Ideas of Leadership Underpinning Proposals to the Carrick Institute, [accessed 30 July 2007] http://www.carrickinstitute.edu.au/carrick/webdav/users/siteadmin/public/grants_leadership_occasionalpaper_andersonandjohnson_nov06.pdf

Beer, S. (1979). *The Heart of the Enterprise*, Wiley.

BestGrid website, accessed 30 July 2007 at http://www.bestgrid.org/index.php/Main_Page

Carrick Exchange Project website, accessed 30 July 2007 at <http://www.carrickinstitute.edu.au/carrick/go/home/rin/pid/381>

Clyde, W., & Delohery, A. (2005). *Using Technology in Teaching*. New Haven and London: Yale University Press.

Cochrane & Klytge, (2007). eLearning Guidelines website, accessed 30 July 2007 at http://elg.massey.ac.nz/index.php?title=E-Learning_Guidelines

Excelerator Leadership Institute website, accessed 30 July 2007 at
http://www.excelerator.co.nz/page/excelerator_5.php

eXe Project website, accessed 30 July 2007 at <http://exelearning.org/>

Flexible Learning Leaders in New Zealand website, accessed 30 July 2007 at <http://www.flinz.ac.nz/>

Flower, J. (1997). *Touching what is, touching what might be*, Change Project, accessed 25 June 2007 at
<http://www.well.com/~bbear/change8.html>

Gunn, C., Woodgate, S. & O'Grady, W. (2005). Repurposing learning objects: A sustainable alternative?
Association of Learning Technology Journal, ALT-J, 13(2), 189-200.

Horton, D. (2002). *Planning, implementing, and evaluating capacity development*, Briefing Paper No. 50, International Service for National Agricultural Research. Accessed May 23, 2007 at
<http://www.isnar.cgiar.org/publications/briefing/Bp50.htm>

Karen network website, accessed 30 July 2007 at <http://www.karen.net.nz/home/>

Lai, K., Pratt, K., Anderson, M. & Stigter, J. (2006). *Literature Review and Synthesis: Online Communities of Practice*. Dunedin: Faculty of Education, University of Otago, published by New Zealand Ministry of Education, accessed 10 August 2007 at
<http://educationcounts.edcentre.govt.nz/publications/downloads/lrs-online-com.pdf>

Littlejohn, A. (Ed.) (2003). *Reusing Online Resources: A Sustainable Approach to E-learning*. London and Sterling VA: Kogan Page, p35. <https://doi.org/10.4324/9780203465677>

McWilliam, E. L. (2002). Against professional development. *Educational Philosophy and Theory*, 34(3), 289-300. <https://doi.org/10.1111/j.1469-5812.2002.tb00305.x>

Pascale, R. T. & Sternin, J. (2005). Your Company's Secret Agents. *Harvard Business Review*, May, 73-81.

SPEEKS (2007). *Strategies and Practices for Embedding eCDF Knowledge and Systems* Project website accessed 10 August 2007 at <http://elf.ac.nz/moodle/course/view.php?id=14>

TEC (2007). *Information on funding sources and funded initiatives*, The New Zealand Tertiary Education Commission, accessed 27 July 2007 at
<http://www.tec.govt.nz/templates/StandardSummary.aspx?id=451>

Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*, Cambridge University Press. <https://doi.org/10.1017/CBO9780511803932>

West-Burnham, J. (2004). *Building leadership capacity – helping leaders learn*, Retrieved 15February, 2006, from www.ncsl.org.uk/media/F7B/92/randd-building-lead-capacity.pdf

Zemsky, R. & Massy, W. F. (2004). Thwarted innovation: What happened to e-learning and why?
<http://www.irhe.upenn.edu/Docs/Jun2004/ThwartedInnovation.pdf>

Dr Cathy Gunn

Centre for Academic Development
 The University of Auckland
 ca.gunn@auckland.ac.nz

Please cite as: Gunn, C. (2007). E-scholarship: A model to lead strategic change. In *ICT: Providing choices for learners and learning. Proceedings asciite Singapore 2007*.
<https://doi.org/10.65106/apubs.2007.2798>

Copyright © 2007 Cathy Gunn.

The author assigns to asciite and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to asciite to publish this document on the asciite web site and in other formats for *Proceedings asciite Singapore 2007*. Any other use is prohibited without the express permission of the author.