

# Libraries as learning organisations: implications for knowledge management

*Priti Jain and Stephen Mutula*

## Introduction

The concept of a learning organisation is relevant to all twenty-first century organisations because of increasing complexity, uncertainty and change (Malhotra, 1996). Libraries can benefit significantly as learning organisations through reducing complacency; continuous learning, improvement and innovation (Michael and Higgins, 2002); being better equipped to deal with independent and distance learning (Brophy, 2005); serving as a source of competition (Fowler, 1998); promoting inquiry and dialogue; encouraging collaboration and team learning; establishing systems to capture and share learning; empowering people toward a collective vision; and connecting the organisation to its environment (Watkins and Marsick, 1993).

The term “learning organisation” is defined in many ways. Sutherland (2003) defines it as, “an organisation in which people at all levels, individually and collectively, are continually increasing their capacity to produce results they really care about”. Senge (1993) defines learning organisations as “organisations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured”. Skyrme (2003), writing from a knowledge management (KM) perspective, defines learning organisations as “organisations that have in place systems, mechanisms and processes, that are used to continually enhance their capabilities and those who work with it or for it, to achieve sustainable objectives – for themselves and the communities in which they participate”. Giesecke and McNeil (2004) were more succinct in bringing

into the definition the concept of knowledge which other definitions were merely implicit about. They defined a learning organisation as “an organisation skilled at creating, acquiring and transferring knowledge and at modifying its behaviour to reflect new knowledge and insights”. Sutherland’s and Senge’s definitions may be perceived as leaning towards continuous learning, whereas Skyrme and Giesecke and McNeil stressed infrastructure as the foundation of a learning organisation and KM, respectively.

Given the implicit and explicit aspect of KM in the definitions of a learning organisation, knowledge capital in the competitive operations of organisations becomes imperative. It is therefore prudent to suggest that a learning organisation is one that applies the principles of KM in harnessing its human capital. Consequently, the characterisation of a learning organisation may be perceived as similar to the characteristics of a knowledge intensive organisation.

Several authors (Skyrme, 2003; Michael and Higgins, 2002; Sudharatna and Li, 2004; Brandt, 2003) have all attempted to characterise a learning organisation as one that supports life-long learning and where all the employees exchange information and ideas freely. Openness, learning from mistakes, trust and imagination are tenets of such a learning organisation. These management processes include strategic planning; participatory management; employee empowerment; competitor analysis; performance measures; reward and recognition system with continuous update of their basic processes.

Tools and techniques also characterise learning organisations. These tools and techniques are learning

and creativity skills to support individual and group learning, problem solving, interviewing, brainstorming, organising information, implanting new knowledge into mental models etc. (Skyrme, 2003; Michael and Higgins, 2002; Sudharatna and Li, 2004; Brandt, 2003). Senge (1993) adds that learning organisations are characterised by systems thinking or holistic approaches. Systems thinking integrates disciplines and compares them to appreciate their relationships. System thinking or holistic perspective sees an organisation as a whole and the impact of actions is seen on all parts of the system (Skyrme, 2003). Senge (1993) also considers personal mastery as a characteristic of a learning organisation. Personal mastery refers to self-assessment and learning premised on the fact that organisational learning is dependent on its staff members’ learning efforts. Personal mastery has two components namely that, one must define what one is trying to achieve (a goal), and one must also have a true measure of how close one is to the goal. As a consequence, those, who equip themselves with a high level of personal mastery, always continue to learn. Learning organisations are also characterised by mental models, the ability to compare reality or personal vision with perceptions and reconciling both into a coherent understanding. Moreover, mental models imply a shared vision of a mutually desirable future; incentive infrastructure which are essential for encouraging adaptive and expected behaviour (Brandt, 1997; Senge, 1993).

Larsen (1996) points out that team learning also characterises a learning organisation. Team learning has personal and career benefits because each member of the team draws talent, experience and knowledge from a variety of other people. In addition, all

members of the team work for common goals, and teamwork gives greater insight into individual differences, enabling individuals to learn to work together cohesively.

### Learning organisation and KM

In a KM environment, the internet links people-to-people, people-to-business, people-to-information and people-to-culture where there is intensive creation, sharing and use of knowledge (American Library Association, 2003). Learning organisations are engaged as part of their business in knowledge creation. Consequently, from the perspective of all information and KM, it behooves librarians, to increasingly apply information management approaches because information has to be placed in a specific context to make it valuable to the user. Moreover, with the knowledge economy expanding as the use of internet increases in the business environment, effective KM in learning organisations takes centre-stage. Ardem (2006) notes that KM will become a major factor as business move to be more competitive, continue to downsize and try to determine how to best capture the knowledge of their staff.

Swan *et al.* (1999) established “a clear relationship” between a learning organisation and KM by defining KM as “... any process or practice of creating, acquiring, capturing, sharing and using knowledge, wherever it resides, to enhance learning and performance in organisations”. In Table I, we suggest

that learning organisations and knowledge-intensive organisations share similar systems and infrastructure, while bearing in mind that KM is a discourse of study while learning organisations are an entity or enterprise.

Learning organisation and KM are inextricably intertwined. Chase (1998) observes that KM is about enhancing the use of organisational knowledge through sound practices and organisational learning. Both KM and organisations learning involve one or more of the following; capacity building through project teams, assigning staff responsibilities where their talents can be optimised, creating knowledge databases, institutional repositories, mentoring, etc. Grey (1998) says KM concerns critical thinking, innovation, intelligence, learning, competencies and sharing of experiences. White (2004) perceives KM as a process of creating, storing, sharing and re-using know-how to enable an organisation to achieve its goals and objectives. The Organization for Economic Co-operation and Development (2003) observes that KM is the collection of organisational practices related to generating, and disseminating know-how; and promoting knowledge sharing within an organisation with the outside world.

### Challenges and opportunities for libraries as learning organisations

In the digital environment in which most libraries now find themselves, education especially, in university

environment is rapidly changing with academics increasingly adopting digital scholarship. Digital scholarship may include submission of articles, peer review and publication all done electronically; teaching using purely or blended electronic means, evaluation and assessment of academic work electronically, collaborative research in electronic means and electronic communications.

Digital scholarship processes are supported by a variety of content in the form of e-journals, e-books, institutional repositories, databases and digital libraries. Digital scholarship also enables the integration of various media such as text, graphics, animations, video and audio in teaching and research processes. Digital scholarship has been made possible by the rapid development of emerging technologies such as Web 2.0. O’Reilly (2005) refers to Web 2.0 as “the network platform, spanning all connected devices and applications that make the most of the intrinsic advantages of that platform, delivering software as a continually-updated service that gets better the more people use it; consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an “architecture of participation”, and going beyond Web 1.0 to deliver rich user experiences. Examples of Web 2.0 applications include digital commons, blogs, social networking sites, wikis, etc.

The other emerging technology that is influencing digital scholarship environments especially with regard to information and KM is the digital library. Digital libraries make information more available, raise its quality, and increase its diversity. They offer great user satisfaction; offer several ways in which libraries can improve services while reducing cost; provide instantaneous access to online information; offer 24/7 access to information so long as requisite infrastructure is in place; and overcome the problem of deterioration over time associated with physical media. Digital libraries demand information professionals and their institutions to provide the resources, including the specialized staff, to select, structure,

**Table I**  
*Commonalities of learning organisation and KM-intensive organisation*

Learning organisation	Knowledge-intensive organisation
Provides a learning culture	Provides a learning organisation environment
Has shared vision and culture of sharing	Has strong culture of sharing and creativity
Provides team learning	Provides team work
Key management processes present	KM process present
Availability of learning tools and techniques	Availability of KM technologies and tools
Applies systems thinking or holistic approach	A central knowledge repository
Personal mastery	Library expertise
Mental models	Knowledge mapping
Learning organisation strategy	KM strategic plan
Continuous learning	Regular update of knowledge
Incentive infrastructure	Motivation
Open system	Partnerships

offer intellectual access to, interpret, distribute, preserve the integrity of and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities (Digital Library Federation, 2004).

Digital scholarship in the university environment is also being influenced by the use of open source software especially with regard to providing e-learning platforms and also as infrastructure for developing institutional repositories. The major benefits of open software include: reduced costs and less dependency on imported technology and skills; affordable software for individuals, low-cost licensing implications; ability to customise the software to local languages. Moreover, in a digital scholarship environment, scientific journals that were a few years ago produced largely in print form are now rolled out first as e-versions before the print versions can appear. Libraries are also transforming their print collections into electronic formats through digitization or subscription to e-journals with or without print alternatives as a strategy to make them more accessible and to enhance resource sharing (Youngman, 2007).

With the transformation of what was largely a print environment into major digital collections, several issues arise that must be addressed such as integrity of the scholarly research process, intellectual property rights, privacy, security, etc. Libraries provide a critical role as institutional repositories with an open access infrastructure which promote e-research, interdisciplinary work and cross-institution collaborations. Stueart (2006) observes that the role of librarians has changed in parallel with changes in technology. Librarians are increasingly engaged in perfecting tools and procedures to enhance access by creating portals, gateways and hypertext links to scholarly resources. Similarly, Sutherland (2003) suggests that with swift changes in technology, increased customer expectations, service competition, changing organisational values, interdisciplinary studies, e-learning and the demand for digital resources, it is critical that libraries become learning organisations. Association of College & Research Libraries (2007) observes that

the transitions in the production, dissemination and retrieval of information provide ample opportunities for academic libraries to lead their institutions in pursuing new modes of academic research and productivity. The changing paradigms of knowledge production, expanding sources and modes of dissemination and faster and broader accessibility to a growing range of information all offer entrepreneurial opportunities to academic librarians. A Council on Library and Information Resources (2008) study explains that the problem of managing and preserving knowledge in these shifting realms of digital proliferation is enormous, and librarians need to be an integral part of the solution.

A Texadata (2006) study found that libraries do not have a monopoly on publicly available information and library users do not believe that libraries provide unique information. Miller and Hart (2006) postulate that in the future, “there will be much less focus on providing a learning environment, instead the library will be ‘an information source’, accessible from essentially everywhere”. Bennett (2003) notes that today’s academic library design should no longer be dominated by information resources and their delivery, but should “incorporate a deeper understanding of the independent, active learning behaviour of students and the teaching strategies of faculty meant to support those behaviours”. It is also important for academic libraries to redefine and expand their clientele by repositioning themselves to serve the entire world through the use of technology. Strong online services can raise the profile of the institution, its scholars and its collections. Institutional repositories, consisting of scholarly work of an institution and their special collections, can increase access to scholarship and archive collections. E-learning is another opportunity for libraries in teaching the use of a variety of information and communication technologies to facilitate student-oriented, active, open and life-long learning skills (University of Botswana, 2001).

Lewis (2007) presents what he calls a model of five strategic pieces “for maintaining the library as a vibrant enterprise worthy of support from our

campuses”. The five strategic pieces for libraries include: complete the migration from print to electronic collections and capture the efficiencies made possible by this change; retire legacy print collections in a way that efficiently provides for its long-term preservation and makes access to this material available when required. . . this will free space that can be repurposed; redevelop the library as the primary informal learning space on the campus – in the process partnerships with other campus units that support research, teaching and learning should be developed; reposition library and information tools, resources and expertise so it is embedded into the teaching, learning and research enterprises. . . this includes both human and, increasingly, computer-mediated systems. . . emphasis should be placed on external, not library-centered, structures and systems; and migrate the focus of collections from purchasing materials to curate content (Lewis, 2007).

Several sources (Senge, 1993; Brandt, 2003, Association of College & Research Libraries, 2007) note the skills and competencies that should characterise professionals working in a learning organisation including academic libraries. These skills include: team skills, public relations and communication skills, ability to think in terms of the enterprise (strategically), creative thinking, use of new technology and information tools effectively, ability to train and educate the client effectively, customer oriented, intellectual property attorney, publishing consultants, content managers and the capability of working effectively in partnership with faculty members and other stakeholders.

Transforming into learning organisations is a process. Giesecke and McNeil (2004) suggest a number of strategies to change culture, vision and objectives to become a learning organisation. These strategies include: commitment to change; connecting learning with the organisation’s operations; assessing organisational capacity; communicating the vision; modelling a commitment to learning; cutting bureaucracy and streamlining structures; capturing learning and sharing knowledge; rewarding learning; learning more about learning organisations; and continuously adapting and improving learning. They

further point out that a commitment to change is driven from the top to bottom with all library staff members expected to reframe their thinking with a positive attitude, having a clear vision and adapting to change whenever it is necessary. Giesecke and McNeil remind us that learning organisations flourish only when knowledge is shared so that staff can benefit both from individual and team learning.

The motivations for the transformation of academic libraries into learning organisations are many, especially in the context of KM in business environments. The Organization for Economic Co-operation and Development (2003) attests to the importance of KM as a way to enhance productivity and efficiency. Furthermore, as organisations make attempts to increase flexibility and mobility, they create new opportunities that demand integration of knowledge from the outside. Moreover, concerns for promoting life-long learning, sharing of knowledge by different units in organisations, realization that knowledge-enhanced organisations experience rapid creation of new knowledge and the improvement of access to knowledge bases are factors that increase efficiency, innovation, quality of goods and services and equity. Wimmer (2002) points out that knowledge-intensive environments are at an advantage where knowledge is created, shared, learned, enhanced, organised and utilised for the benefit of the organisation and its customers. Such knowledge should therefore be effectively managed to give libraries a competitive advantage.

## Conclusion

Today, the library has a central place and integral role to support higher education. As the higher education evolves, the library and librarians have to evolve with equal measure and develop digital collections tailored to the information age, investigate options to provide access to digital collections, develop custom portals that provide specialized searching options for high-value collections, such as dissertations and special collections, and expose library digital collections to the world via institutional repositories, search engines and portals. Libraries must

evolve into learning organisations and the challenge is for leadership and staff to recast their identities in relation to the changing modes of knowledge creation and dissemination, and in relation to the academic communities they serve.

To become a learning organisation, libraries should create the climate for change and innovation. Libraries should create learning environments by working collaboratively with other disciplines, particularly educators and community developers and be better equipped to cope with independent learning. Libraries must also empower their employees to be flexible in order to take advantage of new and interchangeable roles as facilitators, mentors, coaches and stewards. Finally, libraries need to promote a culture of knowledge-sharing, collective learning and collaboration.

## REFERENCES

- (The) American Library Association (2003), "Principles of the networked world", available at: [www.ala.org/ala/washoff/washpubs/principles.pdf](http://www.ala.org/ala/washoff/washpubs/principles.pdf) (accessed 15 March 2008).
- Ardern, C. (2006), *Records and Information Management: A Paradigm Shift?*, ARMA International, Toronto.
- Association of College & Research Libraries (2007), "Changing roles of academic and research libraries", available at: [www.ala.org/ala/acrl/acrlissues/future/changingroles.cfm](http://www.ala.org/ala/acrl/acrlissues/future/changingroles.cfm) (accessed 25 May 2008).
- Bennett, S. (2003), *Libraries Designed for Learning*, CLIR, Washington, available at: [www.clir.org/pubs/reports/pub122/pub122web.pdf](http://www.clir.org/pubs/reports/pub122/pub122web.pdf) (accessed 27 May 2008).
- Brandt, R. (1997), "On using knowledge: a conversation with Bob Sylwester", *Educational Leadership*, Vol. 54 No. 6, pp. 16-19.
- Brandt, R. (2003), "Is this school a learning organization? 10 ways to tell", *Journal of Staff Development*, Vol. 24 No. 1, Winter, available at: [www.nsd.org/library/publications/jsd/brandt241.cfm](http://www.nsd.org/library/publications/jsd/brandt241.cfm) (accessed 10 April 2008).
- Brophy, P. (2005), *The Academic Library*, 2nd ed., Facet Publishing, London.
- Chase, R.L. (1998), "Knowledge navigators", available at: [www.sla.org/pubs/serial/io/1998/sep98/chase1.html](http://www.sla.org/pubs/serial/io/1998/sep98/chase1.html) (accessed 8 May 2006).
- CLIR (2008), "CLIR workshop on future of academic libraries", available at: <http://sentra.ischool.utexas.edu/~adillon/blog/archives/88> (accessed 29 March 2008).
- Digital Library Federation (2004), "A working definition of digital library", available at: [www.diglib.org/about/dldefinition.htm](http://www.diglib.org/about/dldefinition.htm) (accessed 22 July 2007).
- Fowler, R.K. (1998), "The university library as learning organization for innovation: an exploratory study of college & research libraries", available at: [www.ala.org/ala/acrl/acrlpubs/crljournal/backissues1998b/may98/fowler.pdf](http://www.ala.org/ala/acrl/acrlpubs/crljournal/backissues1998b/may98/fowler.pdf) (accessed 28 April 2008).
- Giesecke, J. and McNeil, B. (2004), "Transitioning to the learning organization", *Library Trends*, Vol. 53 No. 1, pp. 54-67.
- Grey, D. (1998), "Knowledge management and information management: the differences", available at: [www.smithweaversmith.com/km-im.htm](http://www.smithweaversmith.com/km-im.htm) (accessed 28 November 2005).
- Larsen, K. (1996), "Learning organizations", available at: <http://home.nycap.rr.com/klarsen/learnorg/> (accessed 5 May 2008).
- Lewis, D.W. (2007), "Exploring models for academic libraries", available at: <http://acrlog.org/2007/03/12/exploring-models-for-academic-libraries/> (accessed 30 April 2008).
- Malhotra, Y. (1996), *Organizational Learning and Learning Organizations: An Overview*, available at: [www.brint.com/papers/orglrng.htm](http://www.brint.com/papers/orglrng.htm) (accessed 25 April 2008).
- Michael, T.S.C. and Higgins, S.E. (2002), "Nanyang technological university (NTU) library as a learning organisation", *Libri*, Vol. 52, pp. 169-82.
- Miller, R. and Hart, D. (2006), "The future of academic libraries", *University Times*, Vol. 38, available at: <http://mac10.umc.pitt.edu/u/FMPro?-db=ustory&-lay=a&-format=d.html&storyid=4295&-Find> (accessed 29 March 2008).
- O'Reilly, T. (2005), "Web 2.0: compact definition", available at: [http://radar.oreilly.com/archives/2005/10/web\\_20\\_compact\\_definition.html](http://radar.oreilly.com/archives/2005/10/web_20_compact_definition.html) (accessed 23 September 2007).
- (The) Organization for Economic Co-operation and Development (2003), "The learning government: introduction and draft results of a survey of the knowledge management practices in ministry/departments/agencies of central government", 27th Session of the Public Management Committee, Chateau de la Muette, Paris, 3-4 April 2003, available at: [www.oecd.org/dataoecd/54/2/33688562.doc](http://www.oecd.org/dataoecd/54/2/33688562.doc) (accessed 29 November 2005).

- Senge, P.M. (1993), *The Fifth Discipline: The Art and Practice of the Learning Organization*, Random House, London.
- Skyrme, D. (2003). "The learning organization", available at: [www.skyrme.com/insights/3lrmorg.htm](http://www.skyrme.com/insights/3lrmorg.htm) (accessed 31 May 2008).
- Stueart, R. (2006), "Digital libraries: the future of scholarly communication", paper presented at UB Library Auditorium, The University of Botswana, Gaborone, 10-11 August 2006.
- Sudharatna, Y. and Li, L. (2004), "Learning organization characteristics contributed to its readiness-to-change: a study of the Thai mobile phone service industry", available at: [www.fm-kp.si/zalozba/ISSN/1581-6311/2\\_163-178.pdf](http://www.fm-kp.si/zalozba/ISSN/1581-6311/2_163-178.pdf) (accessed 31 May 2008).
- Sutherland, S. (2003), "The public library as a learning organisation", available at: [www.ifla.org/IV/ifla69/papers/111e-Sutherland.pdf](http://www.ifla.org/IV/ifla69/papers/111e-Sutherland.pdf) (accessed 31 May 2008).
- Swan, J., Scarborough, H. and Preston, J. (1999), "Knowledge management – the next fad to forget people?", *Proceedings of the 7th European Conference on Information Systems, Copenhagen*, in Loermans, J. (2002), *Journal of Knowledge Management*. Vol. 6 No. 3, pp. 285-94.
- Texadata (2006), "White paper on the future of academic libraries", available at: [www.texadata.com/2006/03/whitepaper-on-future-of-academic.html](http://www.texadata.com/2006/03/whitepaper-on-future-of-academic.html) (accessed 21 March 2008).
- University of Botswana (2001), *University of Botswana eLearning*, University of Botswana, Gaborone.
- Watkins, K.E. and Marsick, V.J. (1993), *Sculpting the Learning Organisation: Lessons in the Art and Science of Systemic Change*, Jossey-Bass, San Francisco, CA.
- White, T. (2004), "Knowledge management in an academic library", available at: [http://eprints.ouls.ox.ac.uk/archive/00000815/01/Tatiana\\_White\\_KM\\_article.pdf](http://eprints.ouls.ox.ac.uk/archive/00000815/01/Tatiana_White_KM_article.pdf) (accessed 18 June 2006).
- Wimmer, M.A. (Ed.) (2002), "Knowledge management in e-government", *Proceedings of the 3rd International Workshop (KMGov-2002), Copenhagen (DK), 23-24 May*, Schriftenreihe Informatik #7, Trauner Verlag, Linz.
- Youngman, F. (2007), "Opening speech", presented at Digital Scholarship Conference, Library Auditorium, University of Botswana, Gaborone, 12/13 December 2007.

#### FURTHER READING

Bundy, A. (2004), "Beyond information: the academic library as educational change agent", paper presented at the 7th International Bielefeld Conference, Bielefeld, Germany, 3-5 February 2004.

**Priti Jain** ([jain@mopipi.up.bw](mailto:jain@mopipi.up.bw))  
University of Botswana, Private Bag 0022, Gaborone, Botswana.

**Stephen Mutula** ([mutulasm@mopipi.up.bw](mailto:mutulasm@mopipi.up.bw)) Department of Library and Information Science, University of Zululand, Kwadlangezwa, Kwa-Zulu Natal, South Africa.