

**AUSTRALIAN SCHOOL LIBRARY ASSOCIATION BIENNIAL
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**The Smart School: Knowledge Management Working for your Future
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Abstract

The development of schools as inclusive, interactive and empowered learning communities has at its core the interrelationship of learning, information and knowledge construction. Knowledge management provides a rich and challenging opportunity for all school stakeholders - teachers, teacher-librarians, students and community – to engage in a shared learning process to construct a dynamic learning and information environment for school-based curriculum development and the innovative use of technology in meeting learning needs. This address explores the challenge of knowledge management initiatives for schools, and presents findings of current research into knowledge management processes and outcomes. The central role of the teacher librarian focuses on the creation of the school as an information-knowledge community, one that has knowledge construction, sharing and use at its heart.

Introduction

It is good to be on Australian soil. The horrific, dumbfounding events of the last several weeks with the World trade Centers in New York, a mere 45 minute train ride from my home, have left us in a state of shock. Underpinning this cowardly tragedy and rape of the innocence and freedom of humanity are ideas of hatred, retribution, destruction and the devaluing of all humankind. We are here today to celebrate the creative human endeavour, the freedom of ideas, to celebrate the development of meaning and learning, and to find ways that will enable us to build communities of understanding, not hate, in the complex global world in which we live.

"Can we, as school educators and information professionals, achieve the seemingly impossible? No, if we think and believe that it is impossible".

I am struck by the words of the American avant-garde composer John Cage (1922-1995). Cage was a daring composer, one prepared to challenge the conventions of the time, and who had an enormous influence on contemporary musicians and artists across the world. His works have sometimes been described as “jamborees of haphazardness”. Cage said:

"I can't understand why people are frightened of new ideas. I'm frightened of the old ones".

Whether we like his music or not, Cage demonstrated a wonderful ability to enable people to step outside of existing mindsets, to think outside the box, to make squares and circles work together in a myriad of ways. That is part of achieving the seemingly impossible. He challenges us to continually search for solutions, big and small, in the development of communities, global or local. Today I want to challenge you to think outside of your existing mindsets, to dance the ideas dance, in your journey of constructing your school community as an inclusive, interactive and empowered learning community. It has at its core the interrelationship of learning, information and knowledge construction. And herein lies the SMART SCHOOL.

As a young boy growing up in Charters Towers, North Queensland, I vividly remember when television came to town. It was a smorgasbord of primarily American fare, and programs like “The Beverley Hillbillies”, “My Favorite Martian”, “I love Lucy” and “Get Smart” took me to exciting worlds of fantasy, fun, and intrigue. They also took me away from constructing anything meaningful from the pages of notes we were required to copy from the blackboard in history and science classes, or from the forced feedings of William Makepeace Thackeray and Ion L. Idriess, (with all due respect to those fine authors) with little explanation of why we needed this, or what it even meant. This was torture, as far as I was concerned. And so the engagement, mystery, and captivation of television were a far cry from the supposed meaningful learning of the classroom. With intense curiosity, I dreamed of faraway places, and never in my wildest imagination would have

thought that some 40 years later, today I have opportunity to visit many of these places, at the moment on almost a monthly basis!

Get Smart! Remember Maxwell Smart and his antics? We are told that he wasn't a big success at spy school, failing Torture three straight years in a row. He also failed out of Spy Music School. But somehow, he graduated and became a full-fledged agent, though within two weeks of his start we know the Chief had become bald. Get Smart: What does it mean to "Get Smart"? In the television series, to "Get Smart" was the order given to the KAOS agents to Kill Smart. Now, I wouldn't recommend that as any kind of smart school strategy; however, one of the books I have enjoyed reading of late is "Since Strangling Isn't an Option" by Sandra Crowe. This book is a lighthearted look at a common problem providing advice and insights to help you stay sane while dealing with difficult people.

Let me talk about the word "Smart" for a minute. It has multiple meanings. I learned the word early in my life as a school boy – I was accused from the innocent age of 7 by my teachers as being a "Smart Aleck" – essentially an obnoxiously conceited and self-assertive person with pretensions to smartness or cleverness!! But "Smart" also means "brisk", "spirited", "bright", "knowledgeable", "shrewd", "witty", "clever", "pert", "saucy", "neat", "trim", "sophisticated", "intelligent". May be teacher-librarians should be called "the smart cards".

Knowledge and Information: semantics matters

To be smart is to be knowledgeable. My key claim is that a Smart School is an information age school where knowledge construction and knowledge use are the primary goals and the primary activity of the school. The creation of the school as an information-knowledge sharing community, one that has knowledge construction and knowledge use at its heart, is the central role of the teacher librarian. At the outset I make a distinction between the concepts of "information" and "knowledge". These are complex, slippery concepts, and I'm not about to enter a detailed epistemological debate at this point. However, I make the distinction in order to develop our understanding of where knowledge management fits into this framework. By "knowledge" I mean human knowing in all its forms: people's competencies, experiences, expertises, skills, talents, wisdoms, thoughts, ideas, intuitions, commitments, innovations, practices and imaginations - the stuff of the human mind - the intangible, tacit, implicit what-how-and why essence that makes us who we are, what we do, and why we do it. I like the statement by Churchman

(1971): “To conceive of knowledge as a collection of information seems to rob the concept of all its life. ... Knowledge resides in the user and not in the collection”. Knowledge requires a knower. Knowledge is indeed life.

By “information” I mean the formally published representations of people’s knowing, in some form, whether it be books, journals, web sites, videos, newspapers and the like, as well as less formally published records that exist as artifacts of our thinking and working: in a school environment this might mean the various documents, programs, procedures manuals, teaching materials and the like created as part of our work. As Meredith and Burstein (2000) argue, “A library therefore does not contain a body of knowledge; rather, it contains a collection of information that can be used to generate knowledge in a reader. When a knowledgeable individual externalizes their knowledge by writing it down, that knowledge becomes information, which when read and understood by another individual, becomes knowledge for that person”. Expressed simply, and not denying or dismissing its complexity, knowledge management is about taking the human face of information, *human knowing locked in the minds of people*, and the documentary face of information, *the tangible, published information artifacts* that have recorded the ideas of countless generations, and finding structures and systems to bring together this wealth of intellectual capital in order to maximize the information-knowledge environment of the school for knowledge construction and knowledge use.

I take some credit for getting this knowledge management focus going in Australian schools. It was at the ASLA conference in Geelong in 1999 that I first presented some rudimentary ideas about the emerging concept of knowledge management and what it might mean for schools (Todd, 1999a). This was followed by a series of papers in Scan (Todd, 1999b, c, d, e) and a paper in Access (Todd, 1999f), where I posited knowledge management as a dynamic management approach involving “the synergies of organisational and personal practices that effectively tap into, organise and utilise people’s competencies, experiences, expertises, skills, talents, thoughts, ideas, intuitions, commitments, innovations, practices and imaginations, and which integrate these as part of the information resources of an organisation to achieve its goals” (Todd, 1999b: 43). I posited knowledge management as an holistic management practice that enable individuals in organisations to interact with, utilise and add value to all the information, knowledge and wisdom that an organisation possesses. Since that initial conceptualization, my ideas have shifted slightly. In 2000, we posited knowledge management

as “conceptualising the organisation as an integrated information/knowledge system, and the management of the organisation for the effective use of that information and knowledge” (Southon & Todd, 2000). Since that time, I have shifted my viewpoint about what knowledge management is a little, to focus more sharply on its ultimate goal and direction. As I have indicated above, knowledge management is about taking the human face of information, *human knowing and wisdom residing in the minds of people*, and the documentary face of information, *the tangible information artifacts* that have recorded the ideas of countless generations, and establishing contexts, processes, structures and systems to bring these together to maximize the information-knowledge environment of the school *for knowledge construction and knowledge use*. (Todd, 2001) Since that time I have undertaken two knowledge management research projects. I want to take those ideas further today, and provide some thoughts on the critical question: why would we want to do this?

Knowledge management is all about making **actionable** all the information and knowledge that a school possesses or can access. But the critical question is: actionable for what, and for whom? WHY. We need to be very clear about what actually is our motivating force for knowledge management initiatives in schools. There are two perspectives that can shape our approach to knowledge management initiatives in schools, ones that I think each of you might wish to reflect on before you embark on any initiative. I have labeled these perspectives *Organisational Doing* and *Organisational Being*.

Organisational Doing

If we think about knowledge management primarily as a doing that is some extension of our professional information management role because it happens to be the in thing, or a good idea, then knowledge management is likely to become an add-on, an extra, and even running the risk of being perceived of as just another crazy idea that the teacher-librarian has taken on to assert his / her position and power in the school, to build a perception of versatility, authority and control over the systems and technology already in place for accessing and providing information in the school, and an intrusion into the personal lives of people in the school community. It is also easy to be captivated by some of the claims about knowledge management initiatives by leading lights in the field, and engage with missionary fervor in implementing knowledge management initiatives. For example:

- Stewart (1997) claims that knowledge management is a powerful force in organisations that contributes to organisational performance, competitive advantage and positioning, economic success in the market place, and economic sustainability;
- Prusak (1997: x) claims that the organization “that leaves knowledge to its own devices puts itself in severe jeopardy”, and asserts the importance of “working to build better environments for knowledge to be created and better methods of measuring and managing its outputs”;
- Nonaka & Takeuchi (1995:viii) link knowledge management to organisational success, claiming that organisations are successful because of their skills and expertise at “organizational knowledge creation”, that is, “the capability of a company as a whole to create new knowledge, disseminate it throughout the organization, and embody it in products, services, and systems”;
- Wiig (1993: xv-xvi) asserts that the “factors that lead to superior performance – organizational creativity, operational effectiveness, and quality of products and services – are all improved when better knowledge is made available and used competently where and when needed”;
- Choo (1998: xii) argues that the “knowing organization” is one “in which sense making, knowledge creating and decision making are linked as a continuum of nested information activities that integrate an organization with the information and knowledge to act intelligently”;
- Dawson (2000: xv) claims that “together, knowledge and relationships are the only true sources of sustainable competitive advantage. ... Becoming more effective at both sharing knowledge with clients and developing enduring profitable client relationships establishes a bedrock foundation for achieving sustainable competitive advantage in times of dramatic, ongoing change”.

Some of these viewpoints came out clearly in the study undertaken by Dr Gray Southon and myself (Southon and Todd, 2001, in press) in which we sought to establish librarians’ levels of awareness and perceptions of the term “knowledge management” and how these relate to information management, as well as identify key skills and understandings that are considered to be required in undertaking knowledge management. For some librarians in our study, there was some innate belief of “must do”, simply because this was perceived to be a new and important direction of the field,

and with a belief that some great outcomes might be achieved. This is a great start – and I don't want to dampen your enthusiasm. But “think before you leap” springs to mind! For some other librarians we surveyed, knowledge management was seen as merely “information management in new robes”; or “enhanced information management”; “information management given a sexy label”, one where “librarians are jumping on the knowledge management bandwagon for the wrong reasons, as a way of liberating their historical image, which is a negative stereotypical one, rather than jumping into it because they have some vision or goal for the organization”. Consequently, for some of the librarians in our study, the engagement of knowledge management initiatives was a way of shoring up some kind of professional ego: the search for status, recognition, acceptance, and value. If this is our rationale, we are approaching this whole exciting arena from the wrong perspective and for the wrong reasons, and with potentially disastrous consequences. And for a few others with an “organizational doing” mindset, the reaction was to dismiss any form of participation, either intellectual or practical, in knowledge management: “we're having enough problems doing (information management), without trying to take the next step to Knowledge Management”. Some librarians were already consumed with the overwhelming job of doing the day-by-day tasks, particularly in the wake of networked information technology and its implications for the library, and could only see barriers when those KM words were expressed: time, workload, money, expertise, and acceptance. In my view, I suspect the underlying factor here for a variety of reasons is Cage's notion of being “frightened of new ideas”.

Organisational Being

The *Organisational Being* construct focuses on what do we want our organization to be, to become. What do we want our school to stand for, to signify? This construct is futures oriented and goals directed, and constructed on people-centred characteristics of working together with a common set of beliefs and values to achieve these goals: sharing, building understanding, valuing knowledge and the intellectual capital of the school, enabling, interacting, and using. I would argue that the fundamental motive for knowledge management has to be **contributing to the development of the smart school, one where knowledge construction and knowledge use are not simply espoused in mission statements and policies, but are the essence of learning and the day-by-day practices in school.** From this perspective, knowledge management is part of multiple strategies and processes that enable the school to focus on its learning mission. This has

to be the philosophical and professional heart of knowledge management. And this brings us right back to what we are on about as a school community, and as teacher-librarians in that school community. We are about, as NicHolson (1997) posits, leveraging “ the intellectual capital locked up in key staff; **to learn** from and benefit from sharing information, processes, best practices, skills and competencies; to exploit the wealth of information in corporate records, reports, databases”. This learning must go beyond just the staff in the school doing the learning from this process, to the synergies of organisational practices that enable all the individuals in organisations to interact with, utilise and add value to all the information, knowledge and wisdom that an organisation possesses. That surely must put the focus on student learning.

Historically, teacher-librarians have built their professional platform on the concepts of “library”, “information”, “information literacy”, “information management” and “information technology”. Information. Information. Information. I have come to the view that while these are important concepts of our profession, they are not the defining concepts. They are not the hallmarks which define our role in the information age school, at a time when the burgeoning growth of information resources and information technology has shaken some of our fundamental ideas about education and society. I believe that a constructivist learning philosophy and practice centering on knowledge construction and knowledge use must define the role and practice of the school library. The development and use of human knowing, the construction of understanding and meaning is what learning is all about.

Speaking from a constructivist perspective, Wilson (1996:3) claims that learning which emphasizes “meaningful, authentic activities that help the learner to construct understandings and develop skills relevant to problem solving” is the central mission of the school. Hein (1991) emphasises “the idea that learners construct knowledge for themselves; each learner individually (and socially) constructs meaning as he or she learns. Constructing meaning is learning. There is no other kind”. These are powerful words. **Constructing meaning is learning. There is no other kind.** He goes on to say that “Learning is a personal and social construction of meaning out of the bewildering array of sensations which have no order or stature besides the explanations which we fabricate for them”.

It is only within a constructivist learning philosophy and practice centering on knowledge construction and knowledge use, that any knowledge management initiative across a school is likely to be perceived of as having value, and to be sustained with commitment of the whole school, and to succeed. There are two dimensions: knowledge construction, and knowledge use. I want to briefly discuss each – because they are central concepts in the professional work of the teacher-librarian, and central to any initiatives in relation to how we respond to the Knowledge Management movement.

Knowledge construction

Speaking at the IASL Conference earlier this year, I made the claim that there needs to be a fundamental shift from thinking about information skills and information literacy, and from the movement and management of information resources through structures and networks, to a broader focus on knowledge construction and human understanding, implemented through a constructivist, inquiry-based framework. This paper is available at the IASL Website: <http://www.iasl-slo.org/virtualpaper2001.html>. I want to repeat some of those ideas briefly, as they are critical to how we move forward with knowledge management initiatives. Teacher-librarians are about providing the best context and opportunities for people to make the most of their lives as sense-making, constructive, independent people. Access to information resources and information and critical literacies are the heartbeat of meaningful learning in schools. But it is not the hallmark of the 21st century school. They are important processes, and the overwhelming research evidence now available of the role and impact of these information scaffolds in learning confirms their integral place in learning. Let me assert this point loud and clear: The hallmark of a school library and its school in the 21st century is meaning making, the construction of knowledge and the development of human understanding. It is not its information literacy initiatives, collections, its systems, its technology, its staffing, its buildings. These are important. However, it is the actions and evidences that show that student learning, synonymous with constructing knowledge, meaning and understanding, is enhanced and fostered by the school library: that there is a real difference. **Evidence of knowledge construction is the distinguishing trade mark.**

In that paper, I argue that empowerment, connectivity, engagement, and interactivity define the actions and practices of the school library, and their outcome is knowledge construction: new meanings, new understandings,

new perspectives. This must be at the centre of our philosophy, the mandate for our role, and the driver of all our day-by-day teaching and learning actions. Let us make no mistake: information is not power. It is human understanding and knowledge that is power, and information is how you get it. Information is the stimulus to knowledge. The provision of information does not necessarily mean that our learners become informed. Information is the input; through this input, existing knowledge is transformed, and new knowledge - as understanding, meaning, new perspectives, interpretations, innovations – is the output. Herein lies the smart school.

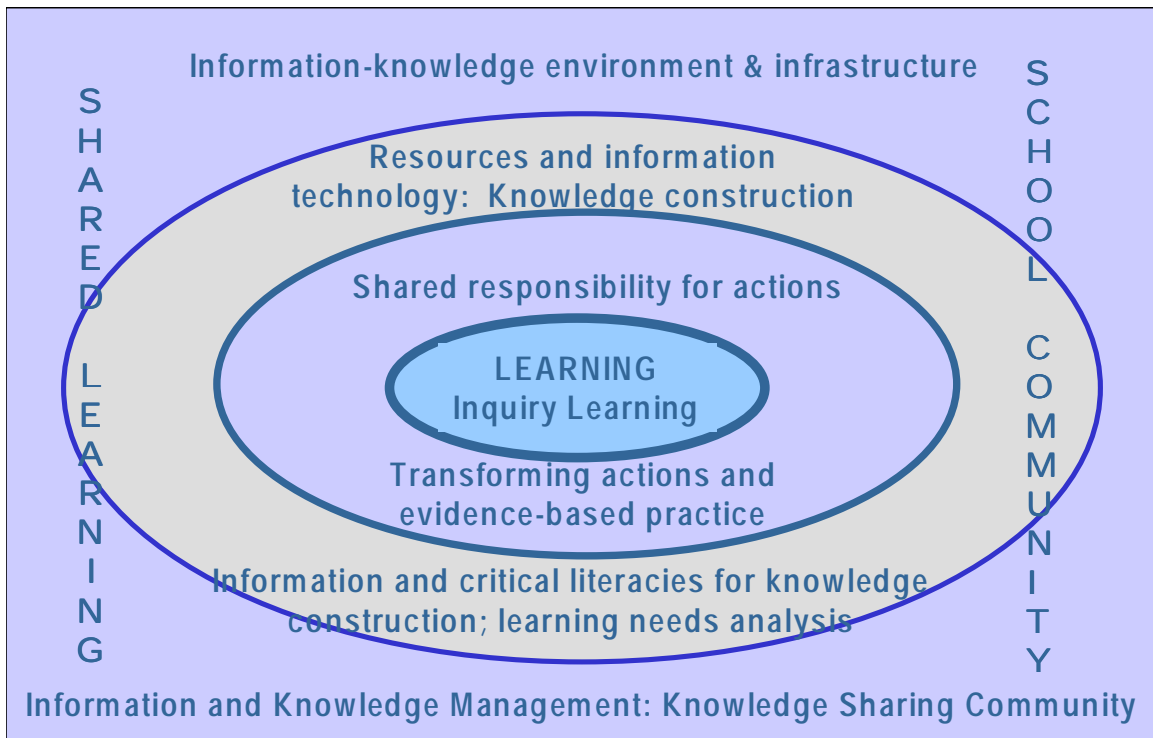
While I believe that we as a profession espouse a learning-centered practice focusing on engagement with information, and have built this around an information literacy mindset, I believe we need to articulate this more explicitly and differently in terms of a constructivist learning philosophy that centres on human understanding and knowledge construction. Why? In the first instance, I believe if we can do that, then we will be more in line with the thinking of the school – whose primary concern is learning, not necessarily libraries, nor information literacy. I think for many years we have advocated information literacy, but without mainstreaming it in a way that links others in a school with what they are endeavoring to do. We hope that everyone in a school cares about learning. We know, sadly, that every one in a school does not care about libraries or information literacy.

Let me give a simple example, as a slight digression. I have read numerous documents about teacher-librarians and their role. Indeed I have contributed to many of them over the years. Recently I read a major educational document that was positioning school libraries and information literacy. It was full of expressions like “the school library has a key role in supporting classroom literacy programs”; “the library provides information resources to support language development”; “the school library functions as the key foundation upon which to build effective information access”, and “teacher-librarians provide leadership in information literacy programs”. The subject of this discourse is “libraries” and “teacher-librarians”, and for any in the school community not interested in libraries or librarians, there is an immediate switch off! The various dimensions of constructivist learning and its outcomes, that is, knowledge construction, have to be the subject of our discourse; the ideas flow to libraries and teacher-librarians, and not the other way around. Libraries and their programs and services are the objects of the sentence, not the subject. Yes, it even comes down to the language we use, and how we actually structure our mission, our values and our services. We

need to be positioning what we do from a different standpoint – a constructivist learning viewpoint – where constructivist learning is the subject, and the work of the library is the predicate. This will also force us to articulate more precisely what the relationship is between the library and learning outcomes. For example, rather than saying “the library provides information resources to support language development”, we might want to say “the development of thinking scaffolds and language acquisition are enhanced by engaging students in the diverse information resources of the school library”.

I strongly believe that our mindset needs to shift to evidence-based, learning centered practice that has at its heart the central concepts of knowledge construction and human understanding. This should be the locus of our concern and the fundamental challenge that drives us. At the IASL conference, I expressed this in the following model, shown in the diagram below.

Interrelationship of learning, information, knowledge construction.



This model is my vision of teacher-librarians creating an information-knowledge environment for learning, one that focuses on information

connectivity and empowerment for knowledge construction and the development of meaning and understanding. At its heart is an educational philosophy and practice centering on a constructivist philosophy of learning, and which drives the transformative actions and evidence-based practices centering on knowledge construction and meaning making. This focus underpins the nature and scope of collaborations to achieve learning outcomes, and in the context of the educational role of the teacher-librarians, is likely to give emphasis to the information search process and the information and critical literacies to enable students to connect with, interact with and utilize information in the process of knowledge construction. This shapes and guides the selection of resources and how information technology is utilized across the school. The outcome is not information literate students or an information literate school – terms I am increasingly uncomfortable with - but a “knowledgeable” and “knowing” school – a community that knows and understands, and knows how to know and how to understand, and knows how to share this knowing – in other words, a **smart school**. And this focus must be central to what drives our role in managing the information-knowledge environment and its infrastructure to create a knowledge sharing community.

Knowledge management and the smart school

And here I come back to the question of today – knowledge management and the smart school. If we perceive a role for knowledge management in our schools, and one we as teacher-librarians can be integral to, if not lead that role, I would argue that it in the first instance needs to be positioned on a strong philosophical stance, and to me, the framework of constructivist learning and knowledge construction seems an appropriate stance. In this way, knowledge management is positioned as a part of learning, the core business of the school. It is not an add-on, but needs to be conceptualized holistically as part of a carefully articulated philosophy and practice. Knowledge management does not make sense in schools if it is not articulated in these terms. It will be transitory, labeled derisively as a fad, and you will be positioned as one jumping on the bandwagon, and who is wasting a lot of energy on something that might be perceived to be outside of the school’s core business.

Knowledge Communication, Knowledge Sharing and Knowledge Use

My preceding discussion clearly highlights that we need to have a strong understanding of the role of knowledge in our schools, and then begin to identify what knowledge management initiatives we want to leap into – in

other words, getting down to the nitty-gritty of knowledge management. Knowledge management represents a way of thinking that is quite unprecedented, and schools will need to take great care in establishing its focus. Knowledge management can take many forms, from complex software management packages, to simple strategies where people’s knowledge, experiences and expertises are identified and made accessible to contribute to the daily work of the school – learning. The knowledge management literature is filled with a plethora of knowledge management strategies and initiatives, mostly with little basis for selecting or interpreting them for a particular organization. This was evident in one of the recent studies I have been engaged in, where we sought input on the range of initiatives currently being undertaken by librarians across Australia. These are summed up in the following table:

<p>Fostering organisational participation and sharing of ideas: informal approaches</p>
<ul style="list-style-type: none"> • Reporting on conferences attended and synthesising and recoding these in useful ways • Selective and directional use of internet resources: “My Top 10 Web Sites” • Collaborative approach to ideas generation and problem solving; Brainstorming meetings to solve issues, • Sharing of best practices in school forums and establishing mechanism for recording these • Implement incentives to motivate knowledge creation, sharing and use • Lessons learned programs and • Social activities
<p>Establishing integrated systems and networks to share knowledge</p>
<ul style="list-style-type: none"> • Document tracking system • Intranet development • Development of full text searching for organisation’s internal file • Decisions database established • Intranet to link company sources of information together • Attempts to streamline related IT projects in the company and provide an interface • Staff yellow pages which capture skills, competencies,

<p>expertises staff are willing to share: “Soapbox”; “This is Your Life”</p> <ul style="list-style-type: none"> • Email sharing • Using electronic bulletin board
<p>Creating an infrastructure</p> <ul style="list-style-type: none"> • Establishing a knowledge management / knowledge sharing team • Looking at tools that will help the organisation locate artefacts of knowledge regardless of format • Developing and maintaining a policy manual and associated procedures • Recruitment of KM specialists to guide the organization in its strategy development • Purchase of KM software • Writing policy documents that include knowledge management
<p>Information capture and consolidation</p> <ul style="list-style-type: none"> • Establishing a system for staff to notarise documents • Thought mapping • Mapping work flows, professional networks, resource networks • Guidance notes attached to documents which capture senior expertise • Leverage of best practices • Business process documentation • Gathering information about how people do things
<p>Organisation-wide or Strategic Initiatives</p> <ul style="list-style-type: none"> • Preparation of a school strategic plan which articulates KM processes • Involvement of information staff in development of strategic plan

(Adapted from Southon & Todd, 2001 in press, Todd, 1999d)

In many of these cases, knowledge management initiatives represent an important beginning – establishing a culture of knowledge management, and gradually building to an organizational culture of knowledge creation and sharing, and looking at structures and systems for managing this. The choice of the initiating strategies must be based on your understanding of the

organizational culture and interrelationships, and be a natural extension of that. However, I think there is another approach we can take – one that puts primary focus on how technology and our leadership with learning, information and knowledge construction can create a constructive knowledge – information environment to support learning – one where the relationship between learning, information management and knowledge management. This is much more a long-term approach, where the starting point is student learning, rather than the identification, capture and management of people’s knowledge.

Case Study: Habitat (Rutgers University)

I want to briefly show some of the possibilities, centering on the use of information technology and a local intranet to create a holistic information-knowledge infrastructure, one that has constructivist student learning as its goal. This is one that I have been engaged in during my time at Rutgers. I have not been responsible for its technological development – just involved in the ongoing evolution of the ideas underpinning the construction and how it might be used by students and faculty. It is new, only on-stream in the last month, and in a state of continuing development.

The virtual space, Habitat, is a learning enhancement centre, an information portal, and a knowledge support and management centre for the whole learning community – students and staff. It is constructivist in the sense that it provides both the human, technical and knowledge-information infrastructure for students to actively engage in their learning, to take responsibility for their learning, to share their learning, and to be able to interact with a wide range of people. It also provides a range of intellectual scaffolds and technical tools that help learners interpret the multiple perspectives of the world they encounter through engaging with information and people. It is designed to be an integrated information-knowledge system for student learning. It is designed to be formational, rather than informational. That notion, formational rather than informational, has to drive knowledge management initiatives.

Habitat’s primary goal is to create an interactive learning space where students can engage with resources, with each other, with teaching staff in dynamic ways, and where both staff and students have an integrated knowledge and information infrastructure to manage their roles. It places emphasis on improving and enhancing opportunities for learning, by establishing a context for engaging in, interacting with, and utilizing people

and information in knowledge construction. As such, it is both a structure and a process of communication and construction. The platform of Habitat provides a mechanism for sharing of knowledge.

DEMONSTRATION OF HABITAT

At this point, I don't want you to get caught up in the scale, time, and cost involved in constructing this virtual space. I am providing it as an example of an holistic approach to knowledge management that is focused on student learning, and where the specific knowledge management dimension – people's competencies, experiences, expertises, skills, talents, wisdoms, thoughts, ideas, intuitions, commitments, innovations, practices and imaginations can be identified, and are integrated into a rich information resource for student learning. It goes beyond some of the typical and rudimentary knowledge management initiatives – such as staff yellow pages, resource bulletin boards, digital brainstorming, databases of best practices, network maps, community networks (Todd, 1999c). It takes information and knowledge to a point of sharing and use – to construction of understanding. At this point, imagine the possibilities: using technology to construct a virtual space **where the human face of knowing and the documentary information world intersect in dynamic and exciting ways to provide the best learning opportunities for students.** For those of you with a commitment to knowledge management from a constructivist learning perspective, I dare you to imagine!

Principles of Knowledge Management.

Against this backdrop, and in conclusion, I want to establish 7 key principles that I believe need to underpin any knowledge management initiatives in schools. Knowledge management must have a learning focus, an effectiveness focus, a people focus, an intellectual access focus, and a learning focus.

1. Without any further elaboration, I want to assert that a constructivist philosophy and practice of learning – one that centres on knowledge construction and knowledge use, has to be the long term driver and shaper of knowledge management initiatives. What we do in regard to knowledge management has to fit within a vision of creating an information – knowledge infrastructure that fosters knowledge development. The primary objective of knowledge management initiatives is NOT to change the culture of the school, no matter how problematic we perceive it to be. I think we are

on the wrong footing if we declare that our role in knowledge management is to create a knowledge sharing culture, or enhance the communication between people in our school, or some other similarly positioned role. An appropriately defined vision for knowledge management, centering on constructivist learning, successfully implemented, may well change the culture of the school. A vision about learning, not a vision about school culture, has to be the bottom line.

2. Have a long-term holistic vision for knowledge management. Think beyond an itchy-bitsy approach, with teacher-librarians doing the polka dot dance to arouse enthusiasm for knowledge management through isolated, well-meaning initiatives. Itchy-bitsy approaches only make sense if they are part of a staged program that has a clear vision driving them. I know that it is easy to jump in and do something. Yes, jump in and do something, but first understand the water, where it is flowing – otherwise you may well drown, rather than swim. After all, knowledge management is about swimming more effectively in this overwhelming sea of information and deluge of knowledge.

3. “Going with the flow” then means that knowledge management initiatives need to demonstrate an understanding of the deep cultural factors that underpin the way the world is understood by the school and the interpretation that is placed on knowledge. In the second Knowledge Management study undertaken by Southon and myself, we examined three organisations in Sydney to establish how they conceptualized their information and knowledge environment, the strategies they were using to address that environment, and how they were developing the expertise to sustain that environment. This study showed that the governing structures have a fundamental impact on the nature the nature of the knowledge and the knowledge culture of the organization. This affected the knowledge brought to bear on decision making, on what was considered to be “important” knowledge. You have to work within existing structures in strategic ways, for strategic purposes. You have to build on where the school culture is at, and understand the politics of an organization – not with a view to deliberately changing them – this may well be an outcome – but with a view to liberating knowledge that is locked away to the benefit of the school. To do this, you have to know what your community knows before you start.

4. Think outside the box or the circle, or, putting it another way, ““If you don’t change direction soon, you’ll always end up where you started”. The

natural tendency of those involved in knowledge management, especially teacher-librarians, is to focus on the capture, processing, codification, dissemination and promotion of the availability of knowledge, and try and fit this within the formal information structures and classification schemes designed for recorded information. We do need to be prepared to think outside the box, a little. Meredith and Burstein (2000) argue that at the group and organizational levels, knowledge management is largely concerned with knowledge sharing and knowledge communication. Given that knowledge management focuses on human knowing, it has no artifacts as such to manipulate and control, it “deals with people and how they interact with each other”. All communication, even the simplest information giving is interactive, and the aim of communication and knowledge sharing is to achieve a shared understanding. This means that we also have a vital role in articulating how the human dimension of knowing – experiences, skills, values, competencies, best practices - might actually be represented and accessed, and how this might relate to existing typologies and schemas for accessing information. Knowledge management is about contextualising human knowing for learning, rather than simply developing abstractions for accessing it to fit existing frameworks, and this might mean as systems we begin to rethink existing frameworks. Key questions still might centre around: Whose knowledge? What knowledge? How is this knowledge identified? How is this knowledge acquired / captured? How is this knowledge represented? How is this knowledge stored? How is this knowledge accessed? How is this knowledge retrieved? However, we must not feel constrained by existing / standard approaches to information organisation.

5. Show how people can learn and prosper. This will encourage ownership and voice. Knowledge management initiatives, as with any other initiative that the teacher-librarian undertakes, must be goal oriented and evidence based. Their ultimate sustainability rests on their ability to make a difference to student learning, and so some attention needs to be given to how you might establish and measure the benefits of your endeavours.

6. Get real. This requires: **vision and imagination** - reading the future, creating possibilities, generating scenarios; **engagement** - defining a common ground and a common starting point based on a vision for learning in your school; **alignment**: fitting with the structures and goals of the school; **commitment and passion** - for learning as a constructive interface between human knowing and the world of information; **leadership** -

involving people who have power to take action; **actions** – work out deliverables, processes, outcomes, and deliver; demonstrate rather than campaign or advocate.

7. Have a good time. That is the smartest thing you can do!!

Conclusion

The Smart School, then, is one where the day-by-day practices centre on knowledge construction and knowledge. The Smart Library is one where the teacher-librarian's philosophy and practices centre around the development of students as constructive learners, and the creation of an information-knowledge environment and culture that supports knowledge construction. A smart approach to knowledge management is a learning centred one: establishing initiatives that facilitate the interaction of the human face of knowing and the documentary information world in dynamic and exciting ways to provide rich learning opportunities for students. A very smart teacher-librarian is one who is able to foster knowledge construction and knowledge use as the essence of learning and the day-by-day practice of the school library. The Icelandic popsinger, Björk in her song "New Worlds" in her "Selmasongs" album, poses the key question:

**"If living is seeing
I'm holding my breath
In wonder – I wonder
What happens next?
A new world, a new day to see"**

And the author, N. Hill, (1883-1970) gives us our springboard to answering that question:

**"First comes thought; then comes
organization of that thought into ideas
and plans; then transformation of
those plans into reality. The
beginning, as you will observe, is in**

your imagination”.

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