Towards Self-Sustainability in Education

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Abstract

Education is an empowering method of causing change. It plays a significant role in personal human development by developing the learning capacity of individuals. However, personal development tends to be perceived as a separate discipline on its own.

This paper points out that education is actually for personal development. It argues that knowledge associated with personal development such as wisdom related knowledge should be embedded in courses more actively to draw desired behavioural patterns for self-sustainability and survival in this rapidly changing world. Self-sustainability is addressed from a behavioural perspective where desirable behavioural patterns that allow individuals to be retained or sustained for longer periods are considered sustainable qualities. Research is overwhelmingly in support of new ideals for workers to achieve long term sustainability in order to face the challenges in the 21st century. Emerging trends are explored and the development towards self-sustainability is discussed.

Introduction

One of the fundamental challenges for the 21st century is about finding ways to expand learning in order to achieve the Millennium Development Goals (MDG) (The Commonwealth of Learning, 2006). According to Kamla Chowdhry, Earth Charter Commissioner,

"a paradigm shift is required to address the barriers associated with the MDGs" (2003, p. 2).

Many leaders and researchers have called for the need to awaken, and explore the spiritual dimensions of humankind so that universal principles can be drawn from the various traditions which can then help to build a unified global community (Huitt & Robbins, 2003; Likhotal, n.d.; Bernsein, Charrier & Eichler, 2004; Chowdhry, 2004). The Nobel Peace laureate Ang San Suu Kyi of Burma (Bernsein, Charrier & Eichler, 2004), and the President of Costa Rica, President Oscar Arias (BBCWorld, 2006) have also called for a universal set of ethics based on basic human principles to serve as a foundation for human development in the 21st century. It is believed that the focus on the common qualities will form a foundation upon which similarities and differences can be bridged to build cultural coherence. Spiritual knowledge could provide the paradigm shift required, however, the importance given to this in the past has been minimal or has been ignored (Chowdhry, 2003).

Nevertheless, many environmentalists and green authors stress the urgency to preserve the fundamental values that form the basis of human civilisation (Green Cross International, 2002). They highlight the need for sustainable development not only from an ecological perspective but also from an educational perspective. They see individual spirituality to be an essential linking agent between peace and sustainability where without it neither peace nor sustainability can be successful (Linking sustainability, spirituality and peace-building, 2006). Robert Stewart, Director of Canadian Centres for Teaching Peace also highlight that peace education must be taught to everyone to build amicable relations between human beings and to foster greater understanding in society (2004).

If spirituality or peace education is taught, it would be considered as wisdom related knowledge for personal development as the knowledge would help to mould and shape one's personality for improved social well-being. According to Dr. Abdul Kalam, former President of India, education is about building character (Sri Ramakrishna Math, 2006). Dr. Stephen Covey, the author of his best selling book "The Seven Habits of Highly Effective People" also supports this view and highlights that character building is the

primary foundation of success (Holmann, 1996). However, it is not clear if the objective of building character is fully realized in education as the knowledge associated with personal development tends to be perceived as a separate discipline on its own. Knowledge associated with developing desired behavioural patterns are not actively embedded in courses to cause positive behavioural patterns unless the course is associated with behavioural aspects. This is essential if we are to achieve sustainability from an environmental point of view, however, steps towards sustainable environmental changes need to start with the self first to achieve self-sustainability. This is because positive behavioural changes gained by individuals through education are automatically passed to the environment at large through personal contributions. This is supported by Boyatzis and Akrivou (2006) who believe that the

"ideal self is the driver of intentional change in one's behaviour, emotions, perceptions and attitudes" (p. 625).

This paper addresses self-sustainability from a behavioural perspective where desirable behavioural patterns that allow individuals to be retained or sustained for longer periods are considered sustainable qualities. Considering education is an empowering method of causing change, this paper points out that knowledge associated with personal development should be embedded in courses more actively to draw desired behavioural patterns and to empower them towards self-sustainability and survival in this rapidly changing world. Emerging trends are explored and the development towards self-sustainability is discussed.

Converging trends

There has been evidence of converging trends across the industry such as in computer systems, science, telecommunications, integrated sensors, mobile phones to PDAs and smart phones, in ubiquitous computing, genetic based health care, molecular economy in disciplines such as chemistry, biology, chemical engineering, biomedical engineering, polymer science and so on (Jackson, 2006).

Converging trends are also seen in the economic front where we have witnessed the convergence of currencies in Europe with the emergence of the Euro currency (Delegation of the European Commission to Australia, 2004; Jayaraman, 2004). In Australasia, we have had talks about the convergence of the New Zealand and Australian currencies and the merging of the two nations (Matangi Tonga Online, 2006). While the decision was aborted, the steps taken to merge the economic and monetary policies are an indication that people believe the convergence of economies would lead to harmonizing results. It appears the trends are converging in an effort to bring businesses, communities and people together.

From a religious perspective, the convergence of religions into a universal form of ethics has been highlighted by many world leaders as an important requirement to heal the world and bring global peace (Huitt & Robbins, 2003; Bernsein, Charrier & Eichler, 2004; Chowdhry, 2004). Many have suggested that in order to seek sustainable solutions, a consolidation of core moralities of all faiths and religions is required to bridge the differences in society (Meeting World Leaders on Faith and Development, 2002). Development models with the use of philosophical tools would be useful to enable people to internalise and reflect, thus allowing opportunities of more human divinity to emerge. It is believed that development models with

"the inclusion of norms of spirituality will assist in closing the gaps between rhetoric and reality" (Meeting World Leaders on Faith and Development, 2002, p. 8).

From the perspective of cognitive development, it is believed that a change in thinking is required to foster innovative thinking in a world of transformative change (Anti-knowledge, 2005). Anti-knowledge (2005) points out that cognitive convergence will accelerate the advancement in various areas of technology such as in nanotechnology, biotechnology and information technology. This would imply that a converging shift in our thinking is required. Kessler (2000, cited in Huitt & Robbins, 2003) suggests the 'spiral approach' to personal development with seven pathways to achieving enhanced meaningfulness and connectivity. However, it needs to be noted that Kessler's 'spiral approach' also shows the seven pathways *converging* to

form a core pathway to achieving deep personal meaning and connection. Therefore cognitive convergence is essential to improve personal connectivity and human learning. The concept of cognitive convergence in relation to the development of the mind can be further explained with an analogy as follows:

The mind is like a wild horse that wanders. In order to gain control of the horse (i.e. the mind), the rider needs to take a firm hold of the reins and steer the horse skilfully in the preferred direction. Similarly a firm control of the wandering mind is required to gain focus. Cognitive convergence (or convergence of our wandering and diverging thoughts) is required to enable the mind to gain focus, thus enabling the self to be in control of the words and actions that follow.

When focus is gained, the learning capacity improves. Cognitive convergence (as per the analogy above) contributes towards personal development as it would influence the thinking that affects the behavioural patterns that follow. However, cognitive convergence needs to be underpinned by wisdom related knowledge to serve as foundational support so that the self can drive personal change with a sense of awareness.

Self management and personal development

Over the years there has been a shift towards adopting self-management strategies across the industry. Examples of such strategies are Do-It-Yourself kits, downloadable software with self-installation instructions, online facilities for placing shopping orders and managing one's own websites and so on. Such moves by organisations have been the result of economic expansion and globalisation. Organisations have tried to shift the task of customer management over to the customer in an effort to reduce market delivery times, target their marketing efforts more efficiently and maximize profits at the same time.

At a personal level the self-management strategies have shifted the thinking towards the self whereby individuals have been led to raise questions about themselves such as 'What should I buy online?', 'What are my preferences?', 'How shall I portray myself online?' and so on. This has contributed to the development of inward journeys to explore oneself, thus allowing opportunities for personal development.

From a behavioural perspective, self development and management strategies provide the means for selfsustainability where the skills gained from applying the strategies enable individuals to develop desirable qualities that allow them to be retained or sustained for longer periods. Therefore the knowledge base that governs behavioural patterns at a deeper level should be taught to draw desired behavioural patterns in order to preserve the fundamental values in human civilization. Such knowledge should serve as foundational knowledge in education. It is believed that self-management is the new ideal for workers where they are empowered to be entrepreneurial and self-reliant (Holmann, 1996). Holmann also points out that personal development helps to build personal security by providing the means for independent thinking (1996). This would require a shift in thinking to the self to restore self-reliance, stimulate innovative and independent thinking and expand learning. One approach would be to have a form of education that provides universal principles from which inner-awakening, self-transformation and self awareness can be enhanced.

Without inner transformation, it is not possible to bring about true change as true change in the thinking, must occur at a spiritual level. Knowledge that will enable people to make the necessary changes within must be provided so that more of peoples' inner positive qualities can be brought to the surface. Lyndale (2004) believes that intuitive knowledge or wisdom is required to invoke peoples' own divinity within them, as without it people will end up becoming alienated from the world. Despite all the education that is available currently, people are still seeking ways to best manage their lives. There is hunger for knowledge that is beyond what is taught in schools i.e. knowledge that will provide people the "tools for living" i.e. to help them understand human interactions, manage their own emotions, and enable them to gain sustenance at a deeper level.

Personal development can also be viewed from a different angle where the self is viewed as an organisation with strengths and weaknesses. The strengths are considered as the marketable qualities and the weaknesses are qualities, which need to be addressed. In order to withstand external forces the defences at the emotional and spiritual level need to be strong. Building them is what personal development is all about. In researching Peter Drucker's work, Rosenstein (2002) has learnt that one of the basic principles for self-development is to identify the strengths and weaknesses within the self so that improvements can be made where required. When the internal defences are built and the necessary changes are made within to address the weaknesses, behavioural changes become evident over time. This could be viewed as building capacity for the self or sustaining the self.

Sustainability

Sustainability is defined as the ability

"to cause little or no damage to the environment and therefore able to continue for a period of time" (Cambridge Dictionaries Online, 2007).

Bonnett (2006) believes education could develop the desired positive attitudes and behavioural patterns towards sustainable development. However, we are

"sorely in need of clearer thinking about which education matters, how and when" (Wolf, 2002, p. xiv).

While many have called for a universal set of ethics, there have been controversial debates about the kind of education that matters and the cultural sensitivity involved. Sternberg (2002) believes the academic skills that we gain from public education is not sufficient as many of the educational programs are focused on the acquisition of knowledge as opposed to teaching learners about how to use the knowledge.

Statistics New Zealand (2006) report that cultural indicators such as 'purpose' is designed to measure the sustainability level of the cultural sector. This implies that when effort is made to meet the *purpose*, sustainability is automatically achieved. It also implies that this sustainability indicator could be used to measure progress towards achieving the purpose. Whether sustainability is to do with the organisation, environment or the world at large, the dynamics associated with sustainability needs to start with the self. From a spiritual perspective, it can be argued that self-sustainability is tied to a purpose also (referred to as the purpose in life) where it is believed that there is a purpose or a reason tied to each and every birth of an individual. Boyatzis and Akrivou (2006) identify this purpose as a sense of calling which is

"driven by one's passion, values and their operating philosophy" (p. 627).

Michael Bonnett (2006) believes the essence of sustainability comes down to

"intrinsic authentic human consciousness" (p. 265).

However, human consciousness needs to be well grounded by strong principles, values and ethics to withstand the forces of human existence in order to achieve sustainability because

"ethics is the foundation for sustainability" (Likhotal, n.d., p. 123)

This point is explained further with an analogy below:

In order for a tree to sustain and withstand harsh weather conditions, it must be well grounded. Similarly, individuals need to be well grounded in ethical principles to withstand the harshness of human existence.

Wisdom related knowledge or education based on the knowledge of self-hood can help to provide the sustenance needed for self-sustainability where attitudes and desired behavioural patterns are aligned with the principles of sustainability.

According to Swami Vivekananda (2006) a form of education that builds character, strengthens the mind and expands the intellect, to enable one to think independently is very much needed. Such an education can contribute to self-sustainability, which in turn can lead to the sustainability of the environment at large.

Figure 1 below illustrates the development towards self-sustainability. The input of knowledge (i.e. wisdom related knowledge) is shown as a requirement to cause introspection and reflection about the self. Self-reflection is the key to discovering more about one's self, one's interests, one's qualities and purpose (i.e. key to gaining self-knowledge). Continuous self-questioning and reflection paves the way for possible self-realisation and self-transformation and to discover one's purpose in life. According to Boyatzis and Akrivou (2006), a person's discovery of their purpose (or calling) helps them feel that they are fulfilling a promise of some higher being or life force. Normally personal interests will steer people towards the direction that best utilises their unique set of qualities, which automatically places them in a position where they are able to seek or meet their purpose in life. However, many seek their interests without having this awareness and there are also many who spend years searching for their purpose in life (i.e. their identity).

If the self is viewed as an organisation, then striving to meet the purpose in life is synonymous to striving to meet the mission of an organisation because mission statements explain the purpose of the organisation's existence. Therefore if the principle behind the cultural indicator 'purpose' is applied to the self, then it would imply that striving towards our purpose in life will eventually lead us towards self-sustainability. Boyatzis and Akrivou (2006) contend that when the self strives towards the personal vision, the self automatically drives sustainable intentional change. They also argue that,

"personal vision at the individual level and shared vision at the collective levels are the real drivers of change" (p. 635).

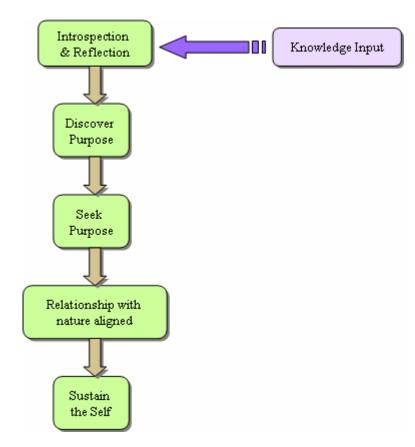


Figure 1 Development towards self-sustainability

Figure 1 above also illustrates that when we strive towards our purpose, we automatically become aligned with nature and gain its support. The relationship between purpose and nature is explained with an analogy below:

Consider a rose bush growing in your garden. Its true purpose is to provide a floral display of beauty to the environment (i.e. on land). If it was to be uprooted and placed in a pool of water, the plant would not be able to sustain itself and will eventually die. Its characteristics, made up of the five elements of nature come together in a unique form to enable the plant to meet its purpose which is to live on land, not in water. When the plant is placed in water, it is not able to meet its true purpose (i.e. to provide floral display on land) and so loses nature's support to sustain itself. Therefore a rose bush cannot survive like a lotus plant in water unless its characteristics are transformed.

As human beings, we are unique in our characteristics and we are built to meet a particular purpose also. We are bound by nature in someway or another, as we are dependent on it for survival and support. Bonnett (2006) believes that,

"our relationship with nature, whatever its kind, is an important aspect of our own identity – and thus our self-knowledge" (p. 270).

If we strive for a purpose other than our true purpose, then sustainability becomes questionable or unstable. Self-awareness of who we are and what our purpose is in life are useful as this will enable us to utilise our qualities in the best way possible to achieve self-sustainability. Therefore it is important to find out what our purpose in life is so that the forces within the self are automatically aligned with nature to achieve self-sustainability.

Building Capacity for the Self

Achieving self-sustainability is akin to building capacity for the self or building the inner resources (or defence forces) within oneself. The methodology is inwardly reflective and explorative. The dimensions at which the reflections of the self can be extended are wide and deep with its many facets open for self-analysis. Regular inward journeys are required to help identify and address areas within for improvement. So the personal drive to build one's own capacity is against internal barriers rather than external ones. The inward journeys can be an interesting one depending on the degree of analysis carried out and the depth at which the reflections are extended. Viewing oneself objectively as an observer is much needed to facilitate the cognitive convergence towards the self to improve the quality of personal performance.

From an educational perspective, self-reflection helps to build metacognitive capabilities of learners. According to Worrall and Bell (2007), metacognition is a lifelong process.

"Metacognition is necessary for constructivist learning in that how a learner attempts to develop meaning and understanding is influenced by their prior knowledge and beliefs. If learning with understanding is characterised by the development of connections then the learner must engage in reflection." (Dart, Boulton-Lewis, Brownlee and McCrindle, n. d., p. 5)

Reflections and connections are important as this will lead to enhanced metacognition (Baird, 1991). Biggs (1994, cited in Dart et al., n. d.) also points out that,

"deep approach to learning requires the learner to be both reflective and metacognitive" (p. 5).

Therefore it is useful if metacognitive processes are built into courses to develop metacognitive capabilities. This would not only serve as an opportunity for learners to build self-capacity but it would also contribute to character building which education is believed to be all about (Sri Ramakrishna Math, 2006). Assessment activities can be designed in a way that causes self-reflection and deeper approach to learning. However, in order to build one's capacity, assessment activities must be tied to the experiences relating to the self so that

the application of inner resources can be assessed. According to von Wright (1992), learning activities that develop and support the use of metacognitive skills facilitate the adoption of deep or transformative learning.

From an organisational perspective, when each and everyone's capacity increases, business performance increases as well. It is one way of building tacit knowledge within an organisation which can help to develop a competitive edge that cannot be easily duplicated by competitors.

Self-knowledge

When the methodology for building self-capacity (as explained above) is practised regularly, self-knowledge is gained over time. Self-knowledge is knowledge gained from self-reflection or self-exploration of the self (i.e. our own thoughts, words and actions) where we become the object of our own analysis and evaluation. The source of knowledge therefore is from the self. It is knowledge that helps us understand who we are, what our purpose in life is, our characteristics, our identity, our emotional states and other personality traits. It is knowledge that will help us understand ourselves which will in turn help us understand others. Below are a couple of definitions about *self-knowledge*:

"Commonly used in philosophy to refer to one's particular mental states, including one's beliefs, desires, and sensations. Also sometimes used to refer to knowledge about a persisting self – its ontological nature, identity conditions or character traits" (Stanford Encyclopaedia of Philosophy, 2003).

"Knowledge of one's self, or of one's own character, powers, limitations, etc." (Zimmerman, 2001).

Researchers have discovered that the approaches taken by the self to understand the self can lead to distinctly different results when compared to approaches taken by science or third parties as observers, and this has sparked new debates and insights (Debiec & LeDoux, 2003). Debiec and LeDoux (2003) argue that we tend to learn more about ourselves from others than from ourselves which leads one to believe that we are highly dependent on others to help make decisions on our lives. This is precisely the practice that we need to shift away from if we are to restore self-reliance back to the self through self-management strategies (Holmann, 1996). Our thinking needs to shift towards the self particularly towards our own thoughts, words and actions to build self-capacity and gain self-knowledge.

If Debiec's and LeDoux's (2003) research findings show different results between approaches taken by the self and science or third parties, then this raises further questions about which view represents the true self accurately. Table 1 below outlines the differences or benefits that the self has over others (as third parties) with regard to understanding or viewing the self.

Viewing the Self	Viewing Others
The self has the benefit of knowing one's own feelings, emotions, thoughts, etc.	One does not have the benefit of knowing another person's feelings, emotions or thoughts unless the Self expresses or articulates it. Viewing of others is often left to personal judgment, which may or may not be accurate.
The self has the benefit of knowing and understanding personal circumstances and experience.	One does not have the benefit of knowing another person's circumstances or past experiences in order to form an accurate view of the person's situation unless other approaches are considered.
The self has the ability to reflect on physical and emotional states (non-visible) at any moment. This provides more information.	Reflections of others are limited based on what's physically visible or portrayed externally.

Table 1 Differences in viewing the self personally versus by others

From the perspective of the subjective self, Debiec and LeDoux (2003) believe that,

"observational and experimental data cannot replace personal experience, and cannot substitute for anything as evident as the 'I''' (p. 307).

If views from scientific studies or a third person's view as observers are different from personal views of the self, then it is all the more important that the self adopts a practice of viewing oneself objectively as an observer in order to compare and rationalise any decisions that result from the two observations.

Conclusion

Research is overwhelmingly in support of a new set of ethics with new ideals for workers to achieve long term sustainability for Planet Earth. It is believed that this will help to build cultural coherence and preserve the fundamental values for sustainable development of the humankind. However, steps towards sustainability need to start with the self to achieve self-sustainability first so that collective transformed behavioural patterns that emerge from everyone contribute towards the sustainability of our environment and the world at large.

Converging trends across the industries are paving the way towards innovative ways of living. From an educational perspective, the trends highlight that cognitive convergence towards the self is important to achieve innovative thinking and expansion in human learning. Introspection and self-reflection is crucial for personal development. Striving towards our purpose in life will lead us towards self-sustainability. However, in order to foster sustained and continuous development towards positive behavioural patterns, the support of wisdom related knowledge is required to raise self awareness, develop independent thinking and expand learning. A form of education that will cause inner awakening and contribute to self-sustainability is much needed to foster cultural coherence.

References

- Anti-knowledge. (2005) The cognitive convergence, retrieved January 15, 2007 from http://www.anti-knowledge.com/convergence.htm>
- Baird, J. (1991) Individual and group reflection as a basis for teacher development, in: P. Hughes (ed.), *Teachers'* professional development (Hawthorn, Vic.: ACER) pp. 95-111.
- Biggs, (1994) Student learning research and theory: Where do we currently stand?, in: G. Gibbs (ed.), Improving student learning: Theory and practice (Oxford: OCSD) pp. 1-19.
- BBCWorld. (2006, Oct 1) Second debate: Peacemakers (United Kingdom: British Broadcasting Corporation).
- Bernstein, J., Charrier, B. & Eichler, L. (2004, February 5-6) The ethical dimensions of the evolving security and sustainability agendas in the Mediterranean and the World at large, in: *Proceedings of the Earth Dialogues Barcelona* (Spain: Barcelona).
- Bonnett, M. (2006) Education for sustainability as a frame of mind, *Environmental Education Research*, 12:3/4, pp. 265-276, retrieved March 8, 2007 from the Professional Development Collection database.
- Boyatzis, R. E. & Akrivou, K. (2006) The ideal self as the driver of intentional change, *Journal of Management Development*, 25:7, pp. 624-642, retrieved May 4, 2007 from www.emeraldinsight.com/0262-1711.htm
- Cambridge Dictionaries Online. (2007) Retrieved Oct 19, 2007 from http://www.dictionary.cambridge.org/define.asp?key=80363&dict=CALD
- Delegation of the European Commission to Australia. (2004) The Euro and the European monetary union, retrieved January 17, 2007 from

http://www.delaus.ec.europa.eu/pressandinformation/speeches/speech_CERC_euro_200404.htm

- Chowdhry, K. (2003, July 22-24) Achieving millennium development goals: A view from Gandhi's window, in: *Proceedings of the Avard National Seminar*, Wardha.
- Chowdhry, K. (2004, Feburary 5-6) Healing the Earth: Bridging science & spirituality, in: *Proceedings of the Earth Dialogues Barcelona*. Retrieved March 11, 2007 from <http://www.earthdialogues.org/2004/barcelona/doc/bio/KamlaChowdhry.pdf>

- Gertler, B. (2003) Self-knowledge, *Stanford Encyclopedia of Philosophy*, retrieved February 9, 2007 from <http://plato.stanford.edu/entries/self-knowledge/>
- Green Cross International. (2002, February 21-23) Globalisation and sustainable development: Is ethics the missing link? retrieved March 11, 2007 from http://www.earthdialogues.org/documents/synthesis.html
- Holmann, J. (1996) How to create job security in a dejobbed world, retrieved August 23, 2007 from < http://www.newwork.com/Pages/Opinion/Holman/Dejobbed%20world.html >
- Huitt, W. G. & Robbins, J. L. (2003) An introduction to spiritual development, in: *Proceedings of the 11th Annual Conference, Applied Psychology in Education, Mental Health and Business* (Valdosta, GA: Valdosta State University). Retrieved August 21, 2007, from <htps://chiron.valdosta.edu/whuitt/brilstar/chapters/spirituality.doc>
- Jacek, D. & LeDoux, J. E. (2003) Conclusions: From self-knowledge to a science of the self, *Annals of the New York* Academy of Sciences, 1001, pp. 305-315.
- Jackson, S, A. (2006) A convergence of interests, retrieved January 15, 2007 from http://www.rpi.edu/president/speeches/ps022106-convergence.html>
- Jayaraman, T. K. (2004) Is a single regional currency a viable solution? RBF first research symposium, retrieved August 23, 2007 from < http://www.usp.ac.fj/fileadmin/files/schools/ssed/economics/speeches/tk_RBF_SPEECH_Single_currency_July _15_2004.pdf >
- Kessler, R. (2000) The soul of education: Helping students find connection, compassion, and character in school (Alexandria, VA.: Association for Supervision and Curriculum Development).
- Likhotal, A. (n. d.) The Earth Charter as a vehicle of transformation, *The Earth Charter in Action: Part IV Democracy, non-violence and peace*, retrieved March 11, 2007 from <http://www.earthcharterinaction.org/pdfs/TEC-ENG-PDF/ENG-Likhotal.pdf>
- Lyndale, W. (2004, November 3) Religions and the millennium development goals. Whose agenda? in: *Proceedings of the Conference Religion and Development*, The Hague.
- Matangi Tonga Online. (2006) NZ rejects common currency proposal, retrieved January 17, 2007 from http://www.matangitonga.to/article/spnews/nz/currency071206.shtml
- Meeting World Leaders on Faith and Development. (2002, October 6-8) Canterbury, England, retrieved January 10, 2007 from http://www.wfdd.org.uk/events/CanterburyMeeting_WorldLeaders_Faith_Development.pdf
- Rosenstein, B. (2002) The process of self development. *Information Outlook*, 6:5, p. 42, retrieved May 4, 2007 from Academic Search Premier database.
- Senge, P. M. (2003) Reflections. *The SoL Journal on Knowledge, Learning, and Change,* 5:1, pp. 1-11, retrieved February 15, 2006 from http://reflections.solonline.org>
- Sri Ramakrishna Math. (2006) Education, spirituality and we: An interview with Dr. Abdul Kalam, President of India, retrieved January 17, 2007 from http://www.sriramakrishnamath.org/magazine/vk/2006/06-5-1.asp
- Statistics New Zealand. (2006) Cultural indicators for New Zealand, retrieved April 8, 2007 from http://www.stats.govt.nz/analytical-reports/cultural-indicators-2006.htm
- Sternberg, R. (2002) It's not what you know, but how you use it: Teaching for wisdom, *Chronicle of Higher Education*, retrieved November 22, 2006 from http://www.selfknowledge.org/resources/press/highered_sternberg.htm
- Stewart, R. (2004) Is peace achievable? What is the formula for peace? retrieved May 4, 2007 from <http://www.peace.ca/formula.htm>
- The Commonwealth of Learning. (2006) Learning & living with technology: The Commonwealth of Learning and the Millennium Development Goals, retrieved November 10, 2006 from http://www.col.org/>
- Vivekananda, S. (2006) Education (Chennai: Sri Ramakrishna Math).
- von Wright, J. (1992) Reflections on reflection, Learning and instruction, 2, pp. 59-68.
- Wolf, A. (2002) Does education matter?, Myths about education and economic growth (England: Penguin Books).
- Worrall, L. & Bell, F. (2007) Metacognition and lifelong e-learning: A contextual and cyclical process, *E-Learning*, 4:2, pp. 161-171.
- Zimmerman, M. (2001) Definition of self-knowledge, retrieved August 23, 2007 from http://www.selfknowledge.com/86359.htm