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## **Wellness in Higher Education: A Transformative Framework for Health related disciplines**

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**ABSTRACT**

The perceived benefits of Wellness Education in University environments are substantiated by a number of studies in relation to the place, impact and purpose of Wellness curricula. Many authors recommend that Wellness curriculum design must include personal experiences, reflective practice and active self-managed learning approaches in order to legitimise the adoption of Wellness as a personal lifestyle approach. Wellness Education provides opportunities to engage in learning self-regulation skills both within and beyond the context of the Wellness construct. Learner success is optimised by creating authentic opportunities to develop and practice self regulation strategies that facilitate making meaning of life's experiences. Such opportunities include provision of options for self determined outcomes and are scaffolded according to learner needs; thus, configuring a learner-centred curriculum in Wellness Education would potentially benefit by overlaying principles from the domains of Self Determination Theory, Self Regulated Learning and Transformative Education Theory to highlight authentic, transformative learning as a lifelong approach to Wellness.

**Keywords:** Wellness Education, transformative learning, self-regulation

There has been no collation and classification of a distinct body of literature devoted to Wellness in higher Education. The mosaic of contributing theories and models presented in this review of literature presents a portrait of the emerging field of Wellness Education within the university setting. The concept of Wellness has evolved as a construct that is linked, yet not synonymous, with Health. Since the 1960's multiple definitions and models relating to Wellness have been developed. Additional to these is the construct of "psychological wellbeing", which may be considered as embedded in the Wellness construct. Paradigmatically, the Wellness construct differs from Health. Wellness stems from a salutogenic/fortigenic (strengths-based) perspective whilst Health continues to be framed, practiced and studied from pathogenic perspectives.

Optimum Wellness involves the development, refinement and practice of lifestyle choices and self-regulation that resonate with personally meaningful frames of reference. Personal transformations are the means by which our frames of reference are refined across the lifespan. It is through critical reflection, supportive relationships and meaning making of our experiences that we construct and reconstruct our life paths. Transformative Education facilitates changes in perspective which enable one to contemplate and travel a path in life that leads to self-actualisation.

The significance of self regulation is identified by Bandura (2005) in association with the acquisition of knowledge and skills, the achievement of potential and the level of progress in self development. Bandura notes that weak self-regulators do not achieve much progress in self development. Considering the self development theme running through Wellness Education, this has significant implications for effective Wellness curriculum design.

Assuming that learner success in both academic and lifestyle domains is optimised by authentic opportunities to develop and practice self regulation strategies, Wellness Education can, therefore, be seen as having broad implications for holistic lifestyle management outside the boundaries of formal education. The stronger lifestyle preferences and increased interest in health promotion that may be associated with Wellness Education provide key support for considering Wellness Education curricula as a fundamental component of all health-related disciplines.

To realise the transformative potential of Wellness Education in higher learning, it is necessary that curricula consider principles from the domains of both self-regulation and Wellness to create authentic learning experiences that function as the means to significant lifestyle choices. Systematic development and empirical examination of the Wellness construct have received limited academic investigation. Despite having a multitude of intended purposes, from the therapy oriented goals of the original authors of Wellness constructs to educative goals, most Wellness models are limited to the “what” of Wellness. Investigations of the “how” and “why” aspects of Wellness may serve to enhance existing models by incorporating behaviour modification and learning approaches in order to create more comprehensive frameworks for health education and promotion.

One caveat to note here is that, while the holistic approach encompasses the individual in the context of the family and community in which they live, this paper is primarily focused on the individual overcoming barriers to their own awareness. It argues for an integrated theoretical framework for optimum Wellness Education and, consequently, supports a learner-centred approach to Wellness Education that is synthesised from the re-contextualisation of established learning theory.

## **Wellness: Background, definitions and models**

Wellness has been described as the active process through which the individual becomes aware of all aspects of the self and makes choices toward a more healthy existence through balance and integration across multiple life dimensions (Corbin, Welk, Corbin, & Welk, 2009; Hermon & Hazler, 1999; Hettler, 1980; Lent, 2004; Ryff & Keyes, 1995; Witmer & Sweeney, 1992). An optimum level of Wellness is often described as “high-level Wellness” (Dunn, 1961). High-level Wellness encompasses the condition one perceives oneself to be in when opportunity and activity for self-actualisation is reached. Wellness may be an indicator of one’s self concept or sense of psychological harmony as successively and iteratively one attains satisfaction of basic physiological needs (Maslow, 1999) to those at a higher level of self-actualisation.

Wellness is best conceptualised as an ongoing process rather than an endpoint, that is, a state rather than a trait. In the context of this paper, which focuses on educational processes that facilitate university student Wellness, the following description of the Wellness construct has been synthesised from the literature to encompass a framework for exploring learning approaches:

Wellness is a state of being in which a person’s awareness, understanding and active decision-making capacity are aligned with their values and aspirations. A Wellness lifestyle is the commitment and approach adopted by an individual aiming to reach their highest potential. The outcome of a Wellness lifestyle is a capacity to contribute in positive and meaningful ways to one’s community, society and the welfare of the earth. An individual who adopts a Wellness lifestyle aims to balance the multiple dimensions of their health and wellbeing in concert with their environment. On a

continuum between low-level Wellness and high-level Wellness, individuals continually move between various states of physical, psychological and spiritual harmony and vary in their capacity to reach aspirations and goals.

Models of Wellness have developed concomitantly with a paradigm shift in the modern conceptualisation of health (Bandura, 2001). This shift started in the mid-20<sup>th</sup> century with the World Health Organisation definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organisation, 1999). The models of Wellness that have gained attention over the past decade continue to incorporate earlier ideas, however, are increasingly aiming to incorporate empirically derived evidence and reflect the continuing convergences across disciplines. Pragmatically, it is essential that there is clarity about what Wellness comprises, how to measure it and ways to effectively facilitate it at the individual and community levels if we are to enhance the human potential in concert with the rest of the living and non-living world.

Multiple models of Wellness appear in the published literature (Ardell, 2005; Adams, Bezner & Steinhardt, 1997; Eberst, 1984; Hettler & National Wellness Institute, 2003; Myers, Witmer & Sweeney, 2000; Prilleltensky, Nelson & Peirson, 2001; Travis, 2005; Travis & Ryan, 2004). A number of recurrent assumptions are apparent in these models, including Wellness as a multidimensional construct, balance and integration as critical to overall Wellness and the dynamic and incremental nature of Wellness for individuals. Several characteristics differentiate these models, for example some do not incorporate environmental or contextual factors whilst others do. At least one group, Prilleltensky et al., present Wellness as hierarchical as well as multidimensional. In this model, the individual is situated at the apex of a pyramid and their Wellness predicated by their family Wellness which, in turn, depends on the community

Wellness and, ultimately, the Wellness of society. To date, two of these models have been developed through empirical studies (Adams et al. 1997; Myers, Witmer & Sweeney, 2000) whilst the others have evolved from a more tacit knowledge base.

Several models of Wellness (Boyd & Cuddihy, 2002; Cohen, 2010) are employed in Universities in Australia. Further detailed elaboration of the Cohen model is available in his paper in this special edition. A brief explanation of the Boyd and Cuddihy (2002) model follows.

Figure 1 illustrates the original Hettler (1980) six dimensional model and the one adapted by Boyd and Cuddihy (2002) from Hettler and from the National Wellness Institute model (NWI, 2003) for use with university students in Australia. The Boyd and Cuddihy model has the Chinese Yin and Yang (also known as “T’ ai Chi”) symbol at its centre, representing the centrality of both “balance” and the interactions between forces of life and nature to the Wellness construct (Durlabhji, 2004; Heider & Lao, 1985). The fluid curves separating each dimension, are intended to represent the dynamics of each dimension whilst the permeable borders indicate the interactions between dimensions and between an individual’s internal and external contexts.

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Figure 1 about here

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A synthesis of each dimension, as articulated by the National Wellness Institute, follows:

- Physical Wellness encompasses the need for physical activity, understanding of diet and nutrition, discouragement of the use of harmful substances and personal responsibility for medical and self-care;



- Social Wellness encourages contributing to one's environment and community through involvement in preserving societal and natural environmental stability; it encompasses the quality of our relationships, satisfaction in our social roles, our sense of belonging, and feelings of love and acceptance;
- Occupational Wellness is founded on the principle of personal satisfaction and enrichment of life through work. Meaningful work which requires development is correlated to attitude and personal choice;
- Spiritual Wellness embodies the beliefs and attitudes towards nature and the meaning-making an individual undertakes to identify what has ultimate value to them. It is evident in the search for and understanding of how life is, or ought to be and thus the choice of direction and resulting feelings of life's purpose;
- Intellectual Wellness meshes together the state of one's knowledge, skills and creativity for problem solving and learning. Enhancement is possible through seeking challenges and actively striving to reach a potential and share with others;
- Emotional Wellness is representative of the awareness, understanding and management of one's feelings and behaviours related to these such as the ability to experience and express the full range of human emotions in appropriate ways including stress and relationship management (Hawks, 2004; NWI, 2003).

Given the definition of Wellness as a state of being in which a person's awareness, understanding and active decision-making capacity are aligned with a set of values and aspirations, the Figure 1 models have the characteristics of an heuristic which guides the study of interactions between learning and Wellness. They offer areas over which a university student

feels s(he) has control and, thus, may be able to manipulate in order to make choices about lifestyle in order to enhance her/his Wellness.

## **Higher education curriculum and learning**

An emphasis on student-centred learning environments in higher Education is evident in publications from political (Nelson, 2002), philosophical (Bandura, 2001) and educational domains (Brush & Saye, 2001; Vermunt & Verloop, 1999). The environments for such learning are designed to provide greater autonomy to students, with expanded opportunities and responsibilities for developing knowledge, skills, strategies and attitudes through engaging with resources including teaching staff and the content to be studied (Brush & Saye, 2001). Such environments aim to foster learning as change.

Powerful Learning Environments (PLE) have been likened to ecosystems and habitats in which elements and organisms impact on and are impacted by each other (Boekaerts, 2002). The processes and influences in self-regulation and self-management may be akin to the cycles of natural ecosystems. In nature, “disturbances”, such as fire, impact on balanced function causing a series of reactions which re-establish equilibrium. In PLE, cognitive dissonance may result in learner activities aimed at integrating new knowledge and skills into their repertoires in order to accommodate new ideas. Thus, appropriately integrated elements or instructional measures in PLE, provide opportunity for adaptation and learning, just as natural disturbances may provide adaptive advantage in some ecosystems (Young, Barab & Garrett, 2000).

Given that students’ approaches to learning are dynamic and influenced by learning contexts, an exploration of the influences of learning environments on student approaches to learning may contribute to understanding conditions necessary for facilitating deeper learning.

Vermetten et al. (2002) suggest that elements that contribute to PLE (as described in the constructivist literature) including “realistic contexts, co-operative learning, explication of thinking strategies, possibilities for applying knowledge, opportunities for active learning, assessments that appeal to real understanding, and ability to apply knowledge in diverging situations” (p. 283) can improve the depth of learning.

If learners tend to seek alignment between the environment in which they learn and the learning “habits” they have developed, then the affordances of learning environments must be considered in terms of design and deployment (Duffy, Lowyck, & Jonassen, 1993). As learners undergo change and growth of skills, they may be placed in environments with unfamiliar and complex cognitive, metacognitive, behavioural, emotional, social (Ge & Land, 2003) and political (Prilleltensky et al., 2001) territory. The heuristic role of the PLE framework in Wellness Education lies in its application to the design of a learner-centred curriculum that is intended to foster deep, self-regulated approaches by university undergraduate students studying the construct of Wellness. To achieve a learner-centred curriculum in Wellness Education, three constructs warrant consideration. These are Self-Determination Theory, Self-Regulated Learning and Transformative Education Theory.

### ***Self-Determination Theory (SDT).***

Self-determination theory (SDT) focuses on motivation and volition or control over behaviour under the influence of psychological need fulfilment within a social context. Self-determination is defined as the healthy development of one's sense of self and structured as a “dialectic” between innate human tendencies for growth and integration on the one hand and fragmentation and conditioned responses to social and environmental factors on the other (Ryan & Deci, 2000). The notion of an integration of these tendencies at the intrapersonal and

interpersonal levels is a core assumption of SDT and is fundamental to the Wellness construct. Further, the significance of balance and interaction between dimensions of Wellness similar to the relevance of social context to development of self-determination as described in SDT.

Self-defining activities have been shown to relate positively to both young adult and adolescent Wellness (Coatsworth et al., 2006). Creating opportunities for expressiveness, monitoring the “person-context” fit and enabling individuals to manipulate their activities to suit their developmental needs requires teaching flexibility and attention to diversity (Coatsworth et al., 2006). Curriculum construction is often carried out from a “content” perspective. Such design may result in learning materials and environments which ignore the needs, abilities, motivation, culture and support of learners. This disjunct may alienate students and reduce their chances for successful transformative learning.

Encouraging the design and construction of learning environments that meet the psychological needs for autonomy, competence and relatedness is one way of supporting the development of intrinsically motivated, self-determined and enduring behaviours. To ensure sustainable behaviours, construction of such learning environments must take into account the construct of Self-Regulated Learning.

### ***Self Regulated Learning (SRL).***

Over the past twenty years, a growing body of research originating from numerous diverse disciplines such as Education, health, psychology, anthropology and sociology has developed around the concept of self-regulation and contributed to the construct known as Self-Regulated Learning. In brief, self-regulation is the ability to develop transferable knowledge, skills and attitudes. In relation to academic pursuits, it reflects the manner in which students enact, adapt and sustain their pursuit of learning goals (Boekaerts, 1999).

The multifaceted nature of the SRL construct is best captured through the models that have been proposed by researchers such as Pintrich (2004) and Winne and Perry (2000). Variation exists across these models, often traceable to the theoretical orientation of the scholar; however, a number of aspects of SRL are common to all models (Puustinen & Lea, 2001). Shared assumptions are one common element and a synthesis of the description of these by Pintrich (1999) follows:

1. “active, constructive” assumption – learners actively construct their own meanings, goals and strategies, they are not passive participants;
2. “potential for control” assumption – it is possible for all learners to control their cognition, motivation and behaviour as well as some aspects of their environments;
3. “goal, criterion or standard” assumption – benchmarks against which comparisons are made that influence whether change is needed;
4. “mediators” assumption – self-regulatory activity is a means of linking the person and context to achievement and performance outcomes.

SRL theories reflect these assumptions and incorporate aspects of learning and context such as the social, affective, cognitive, metacognitive, cultural, and motivational elements into their theories with varying degrees of significance.

The journey towards clarification of SRL has engendered scholarship in many fields. It is noteworthy beyond the specific SRL research in that there is an interdisciplinarity evident in the scholarly literature which has enriched the development of this construct for research and practice alike. The interplay between research and practice is prominent in US and European (Boekaerts, 1999) regions, however, limited literature in the Australian context exists at this time.

Much of the research that is focused on postsecondary learners deals with a subset of elements of SRL such as motivation, volition and time management, while few studies across the whole process of self-regulated learning are evident (Alexander & Boud, 2001). Attention to SRL is a worthy pursuit in the Australian higher Education context given issues such as first year transition and the attention to quality and lifelong learning that have been key underpinnings for reform in the sector (DEST, 2002). The contribution that SRL makes to enhancing understanding of the design of learning environments and transitional curriculum models also offers significant benefits to designing university undergraduate Wellness programs and shaping higher education's role in facilitating transformative, lifelong learning.

### ***Transformative Education Theory (TET).***

Transformative Education Theory has evolved from a first wave of theory development along two related yet different perspectives (Boyd & Myers, 1988; Freire, 2000; Mezirow, 2000) to a second wave of theory building (Cranton, 2006; Dirkx, 2004; Taylor, 2006) which has attempted to expand on and/or integrate these divergent perspectives (Gunnlaugson, 2008). The bifurcation in perspectives is visible when comparing Mezirow's work, informed by psychoanalytic theory, with Boyd's work which emerges from depth (analytic) psychology of Carl Jung. The former is dominated by a more ego-controlled, rationalist, cognitive framework whilst the latter focuses on deeper emotional and spiritual dimensions encompassed by the psyche, inclusive of both the conscious ego and the unconscious or soul (Dirkx, 2000).

Although both perspectives share the notion of "disorienting dilemmas" (Dirkx, Mezirow, & Cranton, 2006, p. 132) that trigger a learning journey, a key difference between these two schools of thought lies in their perspectives about what it is that actually transforms (Dirkx et al., 2006). The rationalist approach emphasises that critical reflection on disorienting

dilemmas leads us through changes in our beliefs and assumptions to new meaningful structures or frames of reference (Mezirow, 2000). The alternate view is that a change occurs in our sense of who we are as we engage with the psychic energy that manifests from these experiences and the unconscious energy (sense of self) that arises in us (Boyd & Myers, 1988; Dirkx, 2006a; Dirkx et al., 2006). Our engagement is not necessarily analytical but may be through emotions, images internal dialogue (Dirkx, 2006b). Dirkx coined the term “individuation” (p. 1) as the outcome of transformational learning in which the learner gains “a deeper understanding, realisation, and appreciation of who he or she is” (Dirkx, 2000).

The transition to adult life often involves personal transformation, including disorienting dilemmas, as students move from a safe school environment to take on complex work, study and social responsibilities. Transformative learning equips students with the understanding and skills necessary to make a success of this transition. When students are led to a deeper understanding of concepts and issues, their fundamental beliefs and assumptions may be challenged, leading to a transformation of perspective or worldview. Students who understand transformative learning may be better able to recognise the common stages of transformative change and have the tools to assist them during this process.

As curriculum writers construct appropriate learning experiences, they should be guided by the powerful, motivational forces that may be harnessed out of personal “disorientating dilemmas”. Based on transformative learning, Wellness Education curriculum writers must consider each element of a framework from the learner perspective in order to identify appropriate and context specific elements. In addition to Self Determination Theory, Self-Regulated Learning and Transformative Education Theory, as part of creating PLE for Wellness Education curriculum, its design may also consider other influences.

*Other influences on learners and learning.*

The American Psychological Association describes a set of 14 psychological principles (see Table 1) influencing learners and learning (APA, 1997). These principles have been synthesised from educational and psychological research, formulated through wide consultation and subjected to considerable review. The first principle sets the view of learning adopted in the principles, stating that, “Successful learners are active, goal-directed, self-regulating, and assume personal responsibility for contributing to their own learning.” (p.343)

The APA principles are grouped into four major domains: 1) cognitive and metacognitive; 2) motivational and affective; 3) developmental and social; and 4) individual differences. They are intended to be considered as a set rather than individually isolated factors in mutually exclusive domains. These 14 principles, although originally defined for the purposes of secondary school learning apply equally to adult learners. Research into self-regulated learning using the APA principles has been conducted by phenomenologist Barbara McCombs with college students in pre-service teaching courses and confirms their applicability in university learning environments (McCombs, 2001).

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Table 1 about here.

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Despite the existence of these principles, educators and institutions continue to struggle with the notion of student-centred approaches to teaching. The value of these principles for current research is that they elaborate on considerations across cognitive, metacognitive, affective and behavioural dimensions. Appropriate use of these influences in curriculum writing



may lead to what proponents of SDT, SRL and TET desire, namely, lifelong learners who strive for autonomy, competence and relatedness.

## **Measuring Wellness**

Although numerous institutions in the USA offer Wellness Education courses, the exploration of the learning processes used and outcomes of the course experiences do not appear to have been reported in the literature. In order to develop a deeper understanding of the factors which enhance the effectiveness of Wellness Education in university environments it is, therefore, necessary to examine the approaches, impacts and barriers for students in such courses. The few Australian universities that have devoted any curricular space to Wellness Education appear to have done so mostly to provide a community or vocational focus on Wellness as a “non-illness” construct rather than as positive health. No published research on Australian Wellness Education has been identified. Further, there appears to be very little research in Australian higher Education that seeks to identify how Transformative Education Theory may play a role in Wellness Education curriculum design.

The complex and yet elusive clarification of the Wellness construct, coupled with the diversity of fields of research and multiple models of Wellness, has resulted in a proliferation of Wellness testing instruments. Evidence of empirical analysis of these instruments is scant, however, studies have been conducted which attempt to validate some of the available inventories. Efforts to establish content and construct validity have mainly been with university and secondary school student populations. The available inventories all purport to be instruments designed for use by the individual for the purpose of self-assessment.

Most of the Wellness inventories and validation studies have been developed and conducted in the United States with university student populations (Adams et al., 1997; Harari et al., 2005; Hattie et al., 2004; National Wellness Institute, 2004; Owen, 1999; Palombi, 1992; Stewart, Rowe, & LaLance, 2000). There do not appear to be similar inventories specifically customised for the Australian context nor are there instances of studies designed to test reliability and validity with Australian university students.

If Wellness inventories are to be used as an educative tool, the establishment of reliability and validity measures serves to provide information to academics and others when selecting from amongst the options.

### ***Wellness constructs and education research.***

A study of the relationships between academic success, as measured by Grade Point Average (GPA), and Wellness scores on the 50-item version of *Testwell* (National Wellness Institute, 2004) highlights relationships between all six dimensions of Wellness and GPA. Although only two dimensions (emotional and intellectual) were statistically significant, findings suggested that there were positive relationships for all dimensions (DiMonda, 2005).

The usefulness of Wellness constructs in a Chiropractic course were reported in a study which sought to evaluate a new unit designed to emphasise evidence-based practices for health promotion and prevention to mid-course 2<sup>nd</sup> year students before clinical placement (Hawk, Rupert, Hyland, & Odhwani, 2005). Outcomes of the study indicated the value of an experiential learning pedagogy in a context in which students explored their own personal Wellness and sought application of theoretical foundations in their own lives. As future practitioners, the need for practical application of the concepts embedded in the Wellness construct provided an authenticity for students whose future professional lives would also be

certain to incorporate Wellness outcomes for clients. The findings of this action research showed that some of the challenges in Wellness curriculum for students in the Chiropractic course lay in integrating and facilitating active learning strategies, particularly through exploring research and statistics, and especially in cases where students were unfamiliar with evidence-based decision-making.

Research on the perspectives of 1<sup>st</sup> and 2<sup>nd</sup> year medical students from a 4-year degree course focused on the stress reduction and personal Wellness aspects of a Wellness course elective. The findings suggested that the benefits of a Wellness program incorporated into the curriculum for their students fostered active approaches to developing personal strategies for coping with the stresses of university life (Lee & Graham, 2001). In a similar finding to the Hawk et al. (2005) study, direct experiences of these medical students in a Wellness curriculum led students to consider the role of Wellness in both their own personal lives in the lives of patients that they would encounter in the future. was an aspect that this cohort of Students commented that the legitimisation of “Wellness” through the curriculum was much appreciated as they sought to find time to use self-care strategies to cope with the medical education program stressors (Lee & Graham, 2001). The issue of demands on time for students to allocate to Wellness was raised as a barrier in this study and the authors noted this as a benefit of making the Wellness course an explicit part of the curriculum (p. 658).

A study exploring health behaviours and psychosocial well-being of Chinese students from across year levels in Hong Kong universities contended that there is a need for health education programs in universities since active pursuit of healthy lifestyles is limited and health risks increased with the transition issues faced by these students. The findings of the study indicate that, although students valued health, only a small proportion actively pursued a healthy

lifestyle involving regular exercise and good nutrition (Lee & Yuen Loke, 2005). The authors urged curriculum planners to integrate Wellness topics as credit requirements to help produce “well-rounded and health-conscious university graduates” (p. 218). Studies involving students in explicit Wellness courses, such as that conducted by Aaskegard (2000), showed significant changes to physical fitness and nutrition behaviours. Where learning materials and activities regarding healthy lifestyle choices were matched to stages of change, students were significantly more motivated and likely to alter their lifestyle behaviours (Frucht, 1998).

A study to examine the Wellness differences between traditionally (17-23 years) and non-traditionally (24-51 years) aged university students was conducted by counsellors at a USA university with first and second year undergraduate students from across courses (Hermon & Davis, 2004). The model and instrument used in this study was the “Wheel of Wellness” model (Myers et al., 2000) and corresponding WEL Survey. The researchers found that significant differences existed between students (n=155) in these age groups relative to the self-regulation aspects of engagement in physical exercise, self-care, realistic beliefs and sense of control. Non-traditionally aged students had lower levels of engagement with physical exercise, higher levels of self-care, greater perceived self-control of their lives and more realistic beliefs about themselves than traditionally aged students (Hermon & Davis, 2004). The number of non-traditionally aged undergraduate students in Australian universities is a significant factor for consideration in Wellness Education programs as the personal contexts of students must be accounted for in curriculum that aims to be authentic and engaging for all students.

### ***Wellness Education as part of university curriculum.***

Wellness Education provides opportunities for students to engage in learning self-regulation skills both within and beyond the context of the Wellness construct (Becker,

McMahan, Allen & Nelson, 2004; Ryan & Deci, 2000). Through engagement with the principles of balance and integration across all dimensions, students may begin to explore proactive, self-directed approaches to lifestyle management (Ardell, 1986; Diamond, 2001; Eberst, 1984).

A number of studies in relation to the place, impact and purpose of Wellness curricula in University environments have documented several perceived benefits experienced by students of Wellness including the value of an experiential pedagogy applied to a personal context in which students sought to utilise theoretical foundations of the curriculum in their own lives (Hawk, Rupert, Hyland, & Odhwani, 2005). The authenticity provided by the Wellness construct for future practitioners was also perceived a useful as they considered the role of Wellness in their future personal and professional lives (Hawk et al., 2005; Lee & Graham, 2001). Additionally, the fostering of students' active approaches to developing personal strategies for coping with the stresses of university life and the legitimisation of time allocated by students to pursue self care strategies were positively perceived (Lee & Graham, 2001).

Other studies relating to Wellness Education curricula have noted the challenges of integrating and facilitating active learning strategies, particularly in relation to research and statistics, and where students were unfamiliar with evidence-based decision-making (Hawk et al., 2005); the benefits of making Wellness Education an explicit part of the curriculum to address the barrier of students' limited time for performing Wellness-based activities (Lee & Graham, 2001); the need for health Education programs in universities, to address students' limited active pursuit of healthy lifestyles and their increased health risks relating to transition issues (Lee & Loke, 2005); and the lower engagement with physical activity, yet higher levels of self care, perceived self control of their lives and realistic beliefs about themselves exhibited by students aged 24-51 years as compared to students aged 17-23 years (Lee & Loke, 2005).

The most common recommendation from literature examining Wellness in higher learning was that curriculum design should foster personal experiences, reflective practice and active, self-managed learning approaches in order to legitimise the adoption of Wellness as a personal lifestyle approach. As we ask students to develop critical and reflective thinking skills and encourage them to care about the world around them, they may decide that some degree of personal or social transformation is required. Students will need the tools of transformative learning in order to be effective change agents; otherwise, students may feel disempowered, become pessimistic about the future, fear change, or develop a degree of cynicism towards those who promote change. We are living through a period of transformational change in society and culture. Students will be better able to understand and deal with such change if they understand the nature of transformation and the impact it has on individuals, groups, organizations and nations. Wellness Education curriculum writers must recognize that these changes mean that the world around the learner must also change. Transformative change means that power is being distributed differently and so, in order to be sustainable, all the participants in the process must be aware that “deep changes” may occur and beliefs, strategies and structures which were in place may never be the same again (Evans, Hanlin & Prilleltensky, 2007).

## **Conclusion**

Literature investigating the place, impact and purpose of Wellness Education supports its potential for creating positive change in the personal and professional lives of undergraduate students, particularly in health disciplines. Gaps in the current literature, however, present challenges to educators and institutions. There is a paucity of research relating to the empirical clarification, measurement and implications of cultural, environmental and gender influences

relating to Wellness, particularly within the Australian context. It is also important to note that none of the current Wellness models actually address the educative framework necessary for an individual to learn about and thus become aware of or understand and make choices about their own Wellness.

Transformative Education Theory has its focus on the adult learner engaged in significant processes of change. Adult learning has been described as a process involving “deep, structural shift in basic premises of thought, feelings, and actions” (Kitchenham, 2008, p. 104). In many cases the motivation for change is a “disorienting dilemma”. The outcome of this may be a change to our beliefs, an assessment of their contexts (including personal, relational and collective) (Prilleltensky, 2008) or an informed agreement about the meaning of our experiences and the actions and decisions we take as a result of the insights we reach (Mezirow, 2000). The environments in which transformative learning takes place have significant impacts on learning outcomes. The manner in which learning environments are constructed and operationalised is fundamental to fostering learning transformations. These Powerful Learning Environments are not bound by “classroom walls” nor are they restricted to the physical dimension of the learner’s world.

Further, incorporating broader aspects of student life contexts beyond the academic domain, as occurs in Wellness Education, may enable connections to be made with the decision-making processes that students engage in when adapting and adopting various learning strategies and approaches. Student perceptions are a rich and significant data base for the measurement of their experiences, activities, practices and behaviours. Wellness Education for undergraduate university students offers a context in which to confirm possibilities suggested by the literature in a practical, Australian context.

The literature reviewed in this paper would suggest that learner success is optimised by giving learners authentic opportunities to develop and practice self regulation strategies. Such opportunities include learning experiences that provide options for self determined outcomes; require skills development; recognise principles of successful learning; and are scaffolded according to learner needs rather than in generic ways. Wellness Education curriculum writers must construct the curriculum as an integrated whole, with identifiable branches that elaborate dimensions of a Wellness model whilst knitting together a roadmap through learning goals, experiences and assessments.

By configuring a learner-centred Wellness Education curriculum, based on the principles of Transformative Education Theory, on the motivation embodied in Self-Determination Theory (SDT) and incorporating the principles of Self-Regulated Learning, it is suggested that Wellness educators can construct authentic learning experiences that initiate the lifelong learning processes fundamental to Wellness.

The need for a framework that links the learner perspective within a Wellness Education model is clear. While no model currently exists which integrates such a holistic approach, a model of Wellness that fits with the context and meets needs for teaching within the constraints of the university educational environment is warranted.

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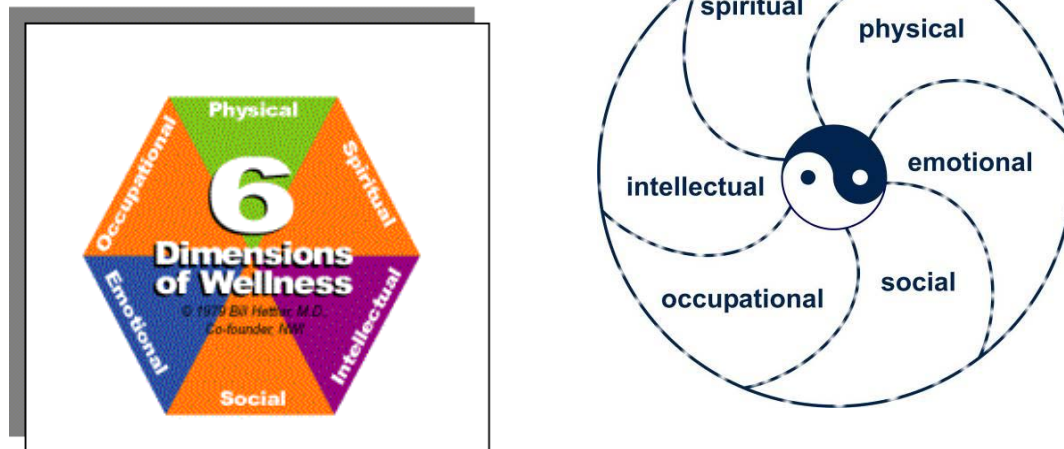


Figure 1: Hettler’s Six Dimensions of Wellness and the Boyd & Cuddihy adaptation of the model

Note. From NWI (2003). Copyright 1979 by the National Wellness Institute. Adapted with permission from the author.

*Table 1: APA Psychological Principles for Successful Learning*

<b>Cognitive and Metacognitive Factors</b>	
1. Nature of the learning process.	The learning of complex subject matter is most effective when it is an intentional process of constructing meaning from information and experience.
2. Goals of the learning process.	The successful learner, over time and with support and instructional guidance, can create meaningful, coherent representations of knowledge.
3. Construction of knowledge.	The successful learner can link new information with existing knowledge in meaningful ways.
4. Strategic thinking.	The successful learner can create and use a repertoire of thinking and reasoning strategies to achieve complex learning goals.
5. Thinking about thinking.	Higher order strategies for selecting and monitoring mental operations facilitate creative and critical thinking.
6. Context of learning.	Learning is influenced by environmental factors, including culture, technology, and instructional practices.
<b>Motivational And Affective Factors</b>	
7. Motivational and emotional influences on learning.	What and how much is learned is influenced by the learner's motivation. Motivation to learn, in turn, is influenced by the individual's emotional states, beliefs, interests and goals, and habits of thinking.
8. Intrinsic motivation to learn.	The learner's creativity, higher order thinking, and natural curiosity all contribute to motivation to learn. Intrinsic motivation is stimulated by tasks of optimal novelty and difficulty, relevant to personal interests, and providing for personal choice and control.
9. Effects of motivation on effort.	Acquisition of complex knowledge and skills requires extended learner effort and guided practice. Without learners' motivation to learn, the willingness to exert this effort is unlikely without coercion.
<b>Developmental And Social</b>	
10. Developmental influences on	As individuals develop, there are different opportunities and constraints for learning. Learning is most effective

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learning.	when differential development within and across physical, intellectual, emotional, and social domains is taken into account.
11. Social influences on learning.	Learning is influenced by social interactions, interpersonal relations, and communication with others.

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**Individual Differences**

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12. Individual differences in learning.	Learners have different strategies, approaches, and capabilities for learning that are a function of prior experience and heredity.
13. Learning and diversity.	Learning is most effective when differences in learners' linguistic, cultural, and social backgrounds are taken into account.
14. Standards and assessment.	Setting appropriately high and challenging standards and assessing the learner as well as learning progress – including diagnostic, process, and outcome assessment is integral to learning.

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Note. Adapted from the APA (1997)