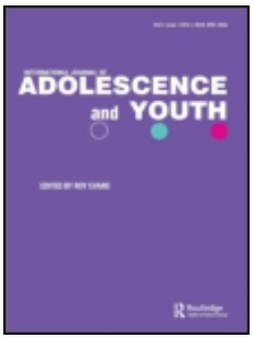

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The student well-being model: a conceptual framework for the development of student well-being indicators

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The importance of student well-being to positive youth development is widely accepted, despite little consensus on what it means for youth to be well in school. The student well-being model (SWBM) provides a framework for the development of student well-being indicators based upon a case study of a New Zealand secondary school involving critical analysis of New Zealand education policies, and qualitative investigation into New Zealand students' and teachers' perspectives and experiences on well-being. This exercise illustrates a process that can be replicated elsewhere to capture the academic, social and cultural milieu of individual schools and to support effective monitoring of student well-being in practice. Future research agendas based on the SWBM, such as psychometric analysis of the SWBM, as well as explorations of its viability as a practical pedagogical tool to facilitate reflection upon, identification of, communication about, and enactment and monitoring of student well-being are discussed.

Keywords: well-being; youth; school; indicators; conceptual model

Background

In recent years, the definition and measurement of young people's well-being have become issues of widespread interest and importance (Ben-Arieh & Frønes, 2011; Benson & Scales, 2009; Diener & Seligman, 2004; Ereaut & Whiting, 2008; Fraillon, 2004; Frønes, 2007). Evidence can be found in a rapidly expanding theoretical and empirical literature base on what it means to be well (for example, Bornstein, 2003; Diener & Seligman, 2004; Dolan, Peasgood, & White, 2008; Gilman & Huebner, 2003; Kuh, Kinzie, Buckley, Bridge, & Hayek, 2006; Land, Lamb, Meadows, & Taylor, 2007; Moore, Lippman, & Brown, 2004; Pollard & Lee, 2003; Proctor, Linley, & Maltby, 2009; Ryff & Leffert, 1999; Sirgy et al., 2006; Taillefer, Dupuis, Roberge, & Le May, 2003; Wood, Froh, & Geraghty, 2010). An increased focus on monitoring the well-being of youth can also be found at the policy level. Particularly since the United Nations (1989) articulated the Convention on the Rights of the Child, there have been numerous calls not only to include well-being in national and international statistical accounts (for example, Cameron, 2010; Diener, Kesebir, & Lucas, 2008; Huppert et al., 2009; New Economics Foundation, 2009; Stiglitz, Sen, & Fitoussi, 2009; United Nations, 2009), but also to develop positively framed youth well-being indicators that involve more than current health status or future earning potential (see Ben-Arieh, 2006; Diener & Seligman, 2004; Lerner, 2004).

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Despite significant attention to conceptualising and evaluating well-being in academic and in policy circles, well-being remains a narrowly defined, if not undefined, term in education, complicating efforts to plan for and monitor it effectively (Ereaut & Whiting, 2008; Fraillon, 2004; Konu & Rimpelā, 2002). Frequently, evaluations of youth well-being in the school context involve quantifiable metrics such as grades, test scores, attendance records, or number of visits to the school counsellor or the principal's office. Following the introduction of the Global School Health Initiative (World Health Organization, 1998), however, there has been increased attention in the education sector to conceptualising student well-being in broader terms. Examples of emerging policy and programming relate student well-being to constructs such as physical and mental health, risk reduction and resilience, and have also focused on conditions, contexts and climates that facilitate healthy schooling such as safety, challenge, support, relationships and engagement, for example (Allensworth & Kolbe, 1987; ASCD, 2011; Barnekow et al., 2006; Board, 2008; Buddeberg-Fischer, Klaghofer, Reed, & Buddeberg, 2000; Buijs, 2009; Catalano, Hawkins, Berglund, Pollard, & Arthur, 2002; Cullen et al., 1999; Huppert et al., 2009; Jones, Fisher, Greene, Hertz, & Pritzl, 2007; Miller, Gilman, & Martens, 2008; M. Morrison, Harrison, Kitson, & Wortley, 2002; Parsons, Stears, & Thomas, 1996; US Center for Disease Control, 2010; Vieno, Perkins, Smith, & Santinello, 2005; Windle et al., 2004; World Health Organization, 2011; Youngblade et al., 2007). With broader conceptualisations emerging, positively-framed models are needed that integrate theoretical and empirical scholarship across disciplines, that represent a more holistic view of student well-being, and that address well-being's relationships with enhancing educational experiences (for exceptions, see Durie, 1994; Konu & Rimpelā, 2002; Seligman, Ernst, Gillham, Reivich, & Linkins, 2009; Spoth & Greenberg, 2005; Waters, Cross, & Runions, 2009)

Determining how emerging conceptualisations of student well-being relate to and resonate with students and to their educational experiences is thus an important research agenda. Important questions must be addressed. How do students and educators define and experience well-being? How do we measure well-being in educational contexts, particularly in relation to operating assessment programmes? How do educational experiences influence understandings and experiences of well-being? These are weighty questions that tap into larger issues of what is important, valuable and meaningful. Particularly given its attention in media, advertising and, recently, public policy agendas, it is likely that students and their teachers come to the classroom equipped with a fundamental sense of what constitutes well-being (see Boehm & Lyubomirsky, 2009; Brown & Ryan, 2003; Emmons & McCullough, 2003). However, as Frankl (1963) has argued in his theoretical work on meaningful life and living, articulating innate knowledge about an abstract concept such as well-being, and clearly acting upon it within existing structures and practices, may be more difficult. Through theoretical and empirical investigation, our aim was to develop a model that could assist students and educators with understanding well-being, communicating about it in accessible, here-and-now, and concrete terms, and working to integrate it into educational experiences. A second aim of the study was to develop a grounded framework to support research and evaluation efforts focusing on the development of student well-being indicators that can inform curriculum design, and policy and programming development.

Methods

A framework that can guide the development of quality student well-being indicators depends upon a grounded conceptualisation of well-being, but also on an understanding of

the school environment (Ben-Arieh & Frønes, 2011; Cohen, McCabe, Michelli, & Pickeral, 2009; Meyer, 1997; Oakes, 1989; Rumberger & Palardy, 2005). This paper presents the student well-being model (SWBM), informed by the theoretical and empirical literature, and refined through application of the framework to a specific case study. To illustrate the process of developing student well-being indicators, the SWBM is used to frame examples provided from data gathered from critical analysis of New Zealand's national curriculum statement, the *New Zealand Curriculum for English-medium Teaching and Learning in Years 1–13* (NZC; Ministry of Education, 2007), and from a qualitative case study of how well-being is understood and experienced by students and educators at a New Zealand secondary school.

New Zealand is well suited for a study of student well-being. For example, the New Zealand Ministry of Education explicitly uses the term well-being in its formal mandates for Early Childhood Education, English-medium and Maori-medium schooling (primary and secondary) and higher education (Ministry of Education, 1996, 2007, 2008, 2010). Moreover, New Zealand's education system is one based heavily on local governance, allowing individual schools considerable flexibility to give effect to the formal education policy. Thus, an understanding of how well-being was defined and applied in the intended curriculum can be considered alongside how that curriculum was taught by educators and learned by the students (Cuban, 1992).

Setting and participants

The case study took place at Mountain View High School (MVHS; not the real name), a co-educational state (government-funded) secondary school in a New Zealand South Island city (~350,000). In New Zealand, a compilation of demographic factors such as household income and parental educational qualifications, known as a school's decile rank, informs how the Ministry of Education allocates its funding (Ministry of Education, 2012). At the time of the study (2009) MVHS was ranked by the Ministry of Education as Decile 5 out of a possible 10, and thus considered to be one of the 50% of schools countrywide, with the highest proportion of students from low socio-economic communities (Ministry of Education, 2009). Approximately 800 students were on the school roll and roughly 60 teaching staff were employed at MVHS. The student body drew from a small group of international students (70–80 per year from 10 different countries), and other non-New Zealand native students, who were living in New Zealand on a semi-permanent basis. In addition, the school housed a special learning needs unit, and an Adult and Community Education facility. Together, these contributed to the socio-economic, cultural and ethnic diversity of a student body that was roughly representative of the population of New Zealand.

Classroom observations, interviews, students' journal entries, along with classroom, school and national curricula provided the data collected during 35 visits throughout the 2009 school year. Forty-nine Year 13 students (33 females, 16 males, age range 17–21), and their teacher, agreed to be observed in their English class and during school-related activities. Classroom observations took place in two Year 13 English classes with the same teacher: Year 13 English and Year 13 Independent English. Twenty-four students attended Year 13 English, a class designed for students interested in pursuing university-level study. Twenty-five students were enrolled in Year 13 Independent English, which provided a more individual programme for students' learning. In addition, the researcher led a three-day unit on giving and receiving feedback using well-being as a content focus (Soutter, 2011). For their efforts, students earned credits towards their English Literacy

qualifications, and visual, written and auditory data informed research questions relating to students' understandings and experiences of well-being.

Focusing on a small sample of students provides a level of detail that reflects a New Zealand influence to the proposed conceptual framework. However, a broader conception of the senior secondary student framed the analysis, one that did not specify particular levels of engagement, focus, culture, gender, or educational objective. Future empirical work may provide insight into the extent to which these variables or others such as the school's decile ranking influence how students and teachers view and experience well-being. Nevertheless, this particular case provides an important starting point for future validation and refinement of student well-being indicators and for future consideration of their applicability to more generalised populations.

Results

What is known about well-being in the literature?

The foundational elements of the SWBM were identified through an extensive multi-disciplinary review of the well-being literature (see Soutter, Gilmore, & O'Steen, 2011). Research questions that guided this review include:

1. What disciplinary perspectives have contributed to research on well-being, and how is well-being conceptualised by these different points of view?
2. What are the key understandings about well-being that emerged from this review – and what are the areas of alignment among them?

This study revealed that while well-being has historically been the purview of philosophers, multiple disciplinary points of view can be found in the contemporary literature. These perspectives have created a wide range of terms used in relation to or interchangeably with well-being. Table 1 summarises the terms found in the literature emanating from the fields of economics sociology, psychology and the health sciences, along with objective and subjective indicators used in contemporary research to study and monitor well-being (for a thorough discussion, see Soutter et al., 2011).

The review revealed well-being's multi-dimensionality, as evidenced by the diversity of terms used to discuss and measure it. However, common themes emerged. These themes are represented by terms chosen because they were considered broad enough to be accessible to other fields of study and familiar enough to those seeking to translate research into practice. Many resemble constructs developed by others (for example, Allardt, 1976, 1989; Fromm, 1974, 1976; Konu, Alanen, Lintonen, & Rimpela, 2002; Konu, Lintonen, & Autio, 2002; Max-Neef, 2002; Max-Neef, Elizalde, & Hopenhyan, 1989). These themes constitute the seven domains of the SWBM: Having; Being; Relating; Feeling; Thinking; Functioning; and Striving.

These seven domains are considered both uniquely and collectively important to well-being; each domain represents a specific dimension of well-being, worthy of considered attention in school. However, areas of alignment among them are reflected by their organisation into three overarching categories: Assets; Appraisals; and Actions. Specifically, Having, Being, and Relating are considered to be Assets for well-being. These are the external, interpersonal and intrapersonal variables, conditions and circumstances associated with well-being, and may be immediately utilised, accessible, or invested for later use. Thinking and Feeling comprise the Appraisals category. These are the cognitive and affective interpretations of how and why Having, Being, and Relating are valuable to well-being. Actions include the Functioning and Striving domains. These

Table 1. Well-being descriptors and constructs observed in the economics, sociology, psychology and health professions literature.

	Economics	Sociology	Psychology	Health Professions
Terminology used in relation to well-being	Wealth	Quality of life	Happiness/pleasure	Health-related quality of life
	Happiness	- descriptive	Subjective well-being	Physical and mental health
	Welfare	- evaluative	Psychological well-being	
	Utility	Social indicators	Life satisfaction	
	Capabilities and freedoms		Authentic happiness	
			Positive youth development	
			Developmental assets	
			Flow	
			Meaning	
Objective indicators	Gross domestic product	Educational qualifications	Rates of depression	Practitioner report
	Inflation rates	Truancy rates	Mental health	Blood tests
	Employment rates	Poverty/crime	Risk behaviours	Epidemiological data
	Trade deficit	Youth pregnancy	Genetic/birth factors	- mortality
	Cost of living index	Level of democratic governance	- personality	- morbidity
	Ecological footprint	Social cohesion	- birth order	- life expectancy
	Level of freedom	Religious involvement	Relationship types	- health status at birth
	Capabilities		Number of relationships	Health insurance data
	Cost/benefit analysis			Healthcare costs
				Number of carers
Subjective indicators	Happiness measures	Domain-specific life satisfaction (e.g. work)	Life satisfaction (cognitive and affective appraisals of specific or global domains of life)	Self-rated health (number of good health days and bad health days
	Preferences and decisions under risk and uncertainty	Social trust	Relationship quality	Carer's quality of life
	Inter-temporal choice	Attitudes or beliefs about phenomena	Flow	Faith in healing
	Time discounting	Perceived neighbourhood quality	Goal orientation	
		Distance impacts (e.g. commuting time)		

Note: Data for Table 1 were gathered from a review of the terms *well-being*, *happiness*, *life satisfaction*, *quality of life*, *youth, adolesce**, *high school*, and *secondary school* from the following databases: Education Research Complete, EconLit, PsychInfo, and Web of Science, as well as the World Database of Happiness (Veenhoven, 2009). A more thorough discussion of the literature review and methodology employed is provided elsewhere (see Soutter et al., 2011).
Source: Adapted from Soutter et al. (2011).

relate to the actions and motivations that influence purposeful engagement with and pursuit of well-being Assets. For example, material and immaterial possessions, intrapersonal traits and characteristics, and supportive relationships gain value through cognitive and affective Appraisals by individuals and by societies. Their use to motivate and orient goal-directed, meaningful and purposeful Actions qualifies them as Assets to enhance and sustain the well-being not only of individuals, but of the wider social and environmental ecologies of which they are a part.

To illustrate, consider access to computers and information technology (ICT) in schools. Research suggests that ICT access facilitates teaching and learning, although its value may depend on the types of programmes available for student use, and the extent to which students in other schools working towards similar qualifications have similar or different access (Hattie, 2009; OECD, 2010). Further, computer use may lead to well-being or ill-being depending upon whether it supplements or short-cuts learning, whether the information accessed is developmentally or topically appropriate or inappropriate, or whether funding ICT complements or competes with other valued resources. Thus, what one has is an asset only if it is valued as such and, if it can be used wisely, thoughtfully, and meaningfully in ways that have beneficial outcomes that extend beyond the self. Those contributions may, in turn, be utilised by other people, collectives, or institutions as assets to enhance and sustain well-being at a personal, societal and environmental level.

For a pedagogical example, consider the subject of English. In the NZC, English is one of the eight learning areas identified as 'part of a broad, general education' that is 'both ends and means: valuable in itself and valuable for the pathways it opens to other learning' (Ministry of Education, 2007, p. 16). Depending upon the ways in which the material is presented, however, students may or may not appreciate the value of understanding how literacy gives access to opportunities 'to participate fully in the social, cultural, political, and economic life of New Zealand and the wider world' (Ministry of Education, 2007, p. 18). Students may perceive the value of English as a means to 'gain credits', or see English as a venue for enjoyment, an opportunity to experience the feeling of being 'over the moon' about learning (Soutter, O'Steen, & Gilmore, 2012). English may be discussed as a vehicle for functioning well; communicating effectively may circumvent some of the many cognitive and affective errors and misjudgements people make on a daily basis in the marketplace, for example. Students are thus better prepared to use their Assets, to *function* as it were, and to *strive* towards appropriate and meaningful goals. If, however, English is presented as a skill set or knowledge base to retain solely in order to reflect back on a summative assessment for qualifications, then the value of academic credit acquisition may drive their efforts. As a result, the Asset potential of that knowledge for use in ways that enhance and sustain well-being in broader and more complex ways is diminished.

These examples further highlight the simultaneously objective and subjective nature of well-being. Taken together, the terms identified in Table 1 present a picture of well-being that involves both affective and evaluative elements, as well as conditions and circumstances that may facilitate or thwart the well-being of the individual. To illustrate, consider two indicators of well-being commonly cited in the literature – wealth (objective) and happiness (subjective). Research that has explored how countries rank in terms of life satisfaction or happiness reveal that, in general, more money leads to higher life satisfaction ratings, and that this relationship reaches a point of diminishing returns (Biswas-Diener, 2008; Diener & Biswas-Diener, 2002; Diener &

Oishi, 2000; Easterlin, 1974). However, given that some countries reside far above the linear regression showing the wealth–happiness relationship, some reside far below; the relationship between these two variables are neither purely linear nor are they the full picture of well-being (Easterlin, 1974, 2005; Stevenson & Wolfers, 2008). Questions about how to weight subjective and objective criteria remain, and are currently being addressed in the positive psychology literature (Seligman, 2011). This continued debate reinforces our contention that well-being is a multi-dimensional construct that emerges as individuals interact with others, their environment, and the conditions and circumstances in which their life unfolds. Undeniably this contributes the emergence of multiple interpretations of how it should be defined and used, as well as the importance of exploring how well-being is understood and experienced across diverse populations and contexts (Ereaut & Whiting, 2008; Fraillon, 2004; Knight & McNaught, 2011; Pollard & Lee, 2003; Rose & Rowlands, 2010).

The student well-being model

With domains that contribute independently and collectively to student well-being, the SWBM represents a view of wellness in school derived from a systems view of human development (for discussion regarding sytems thinking in relation to education, see Benson & Scales, 2009; Csikszentmihalyi & Csikszentmihalyi, 2006; Davis & Simmt, 2003; Davis & Sumara, 2006; Davis, Sumara, & Luce-Kapler, 2008; Horn, 2008; Lerner, Dowling, & Anderson, 2003; Mason, 2008; K. Morrison, 2008; Roeser & Galloway, 2002; Theokas, 2005; Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000). Parrot's (2002) conceptual model of a complex system provides a useful visual representation to illustrate how individual elements of the SWBM relate to one another as a working entity (see Figure 1). According to Parrot (2002), a series of locally acting heterogeneous components give rise to higher and more global-level entities through their actions and interactions, a concept understood as emergence. In such a system, each level that 'emerges' also interacts with previous levels in a series of feedback loops.

The SWBM also draws from Bronfenbrenner's (1979) model of human development, in that the seven domains and three categories are considered to be embedded or 'nested' in the multiple and intersecting spheres of students' lives, such as the classroom, school, family, community, and natural and built environment (see also Davis & Simmt, 2003; Davis & Sumara, 2006; Earls & Carlson, 2001; Eccles & Roeser, 2011; Lerner & Overton, 2008). Thus, the relationships between the elements of the system (domains and categories) may resemble, or they may differ across but have influence upon, different spheres of a student's life. In addition to being experienced in multiple contexts, student well-being is also considered to evolve across the developmental trajectory. At different stages of life, particular domains may be more emphasised than others, or they may be identified by a different set of indicators appropriate to the conditions and circumstances of the time. Collectively, however, they play an important role in giving shape to the well-being of the young person who will continue to learn throughout her lifetime. As depicted in Figure 1, the SWBM draws from Roeser and Galloway's (2002, p. 40) principles of 'lifespace' and 'lifespan' to illustrate that student well-being is not a static phenomenon. It is influenced by the multiple contexts in which it is experienced in the present and will be in the future.

The importance of the SWBM is that it takes complexity as a given. The individuals as well as the contexts in which they interact are recognised as complex systems themselves, with unique although generally patterned characteristics that continue to shift and adjust in

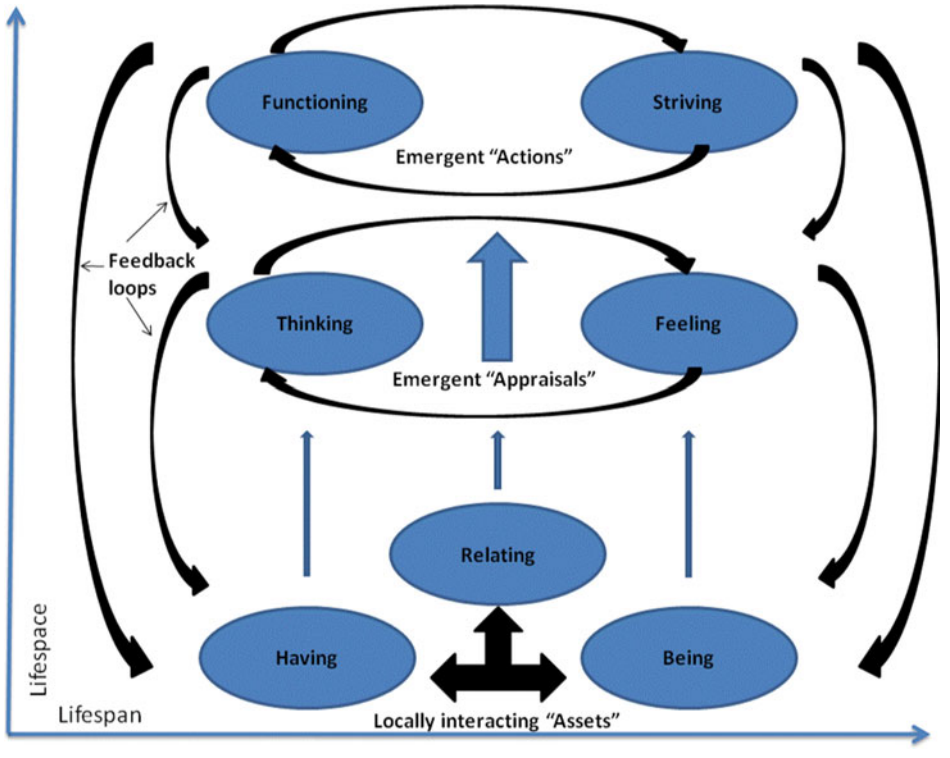

Figure 1. Student well-being model. Note: Adapted from Parrot (2002) and Roeser & Galloway (2002).

dynamic interchange (Davis & Simmt, 2003; Davis & Sumara, 2006; Enomoto, 1997; McQuillan, 2008). The ways in which the domains and categories will be interpreted and realised by individuals and by groups will differ, sometimes dramatically. One benefit of a model such as the SWBM in educational contexts is that it can be used as a communication tool to help individuals identify what the domains and categories mean to them and henceforth communicate with others that may interpret them similarly or differently. Sharing perspectives and experiences of well-being at the individual level lays an important foundation for envisioning, communicating about and creating schooling practices that facilitate student well-being for all students.

Student well-being indicators through the lens of the SWBM

For each of the seven domains of the SWBM, a brief overview is provided along with key questions framing the research in this area. This is accompanied by a table that illustrates examples of findings from three studies drawing upon three different sources – the multi-disciplinary well-being literature, the NZC, and New Zealand senior secondary students (the tables provide only a brief summary of findings; for a more thorough discussion, please refer to the original research: Soutter, 2011; Soutter et al., 2011, 2012; Soutter, O'Steen, & Gilmore, 2012). Each domain concludes with examples of student well-being indicators considered to be in alignment with the research related to this domain.

Table 2. Examples of Having informed by the literature, NZC, and New Zealand students and teachers.

Research foci in the economics, sociology, psychology and health sciences research	NZC terminology in alignment with research	Examples from student and teacher data relevant to research
Standard of living	Resourceful	Books and learning materials are up to date and accurate
Gross domestic product	Contributors to the economic well-being of New Zealand	'Qualified' and 'Professional' teachers
Employment status	Effective users of communication tools	ICT access
Income		Students are engaged in paid employment
Capabilities and resources		
Opportunities		
Tools		

Well-being Assets

Having. The Having domain represents the dimension of well-being that relates to resources, tools, and opportunities, typically external to the individual, and gained either through one's efforts or through gifts or exchange (Table 2). Examples of well-being indicators discussed in the literature include those that are material (e.g. computer, house, trust fund) or immaterial (e.g. skill set developed through years of swim lessons, information), but most require money or another unit of exchange to obtain, have access to, or utilise them. Sen's (1999) and Nussbaum and Sen's (1993) work on capability theory have informed understanding about the importance of how and/or if one uses what one has; it may be immediately available or accessible, or put aside as an investment for later use. Debate over wealth's impacts on levels of happiness, and the implications of privileging standard of living and gross domestic product as measures of personal and societal well-being are focal points of discussion in the research that informed the development of this domain in the SWBM.

Student well-being through the lens of this domain involves possessing or having access to technological tools such as computers and educational software (ICT), books, and other hard-copy materials. Students learn from teachers who are perceived to be motivated in their work, instead of being there 'only for pay at the end of the week' (Soutter et al., 2012). Teachers are highly qualified and are able to provide relevant information for the assessments and evaluations by which students' academic progress will be measured. Having also refers to a safe, pleasant, and well-maintained learning environment. This involves the provision of buildings and grounds that are structurally sound, clean, and equipped to address and maintain the integrity of all students' developmental, physical, socio-emotional, and cultural needs. Also related is access to feasible and affordable services and programmes such as pastoral care and counselling, nutritious meals, dental and healthcare, recreation and leisure, as well as civic, cultural, and service opportunities.

Being. The intrapersonal is the focus of the Being domain, distinguished through its specific attention to the self across the developmental trajectory – who one is, has been, and will be (see Table 3). Research examining aspects of one's genetic make-up, as well as

Table 3. Examples of Being.

Research foci in the economics, sociology, psychology and health sciences research	NZC terminology in alignment with research	Examples from student and teacher data relevant to research
Autonomy	Positive in own identity	Having one's 'reality' acknowledged
Identity	Resilient	Self-awareness
Integrity	Values integrity	Independence
Demographic variables	Manages self-competently	Personal agency
Health status	High expectations	Manages judgements
	Cultural diversity	Opportunities to take on adult-like responsibilities and roles
	Inclusion	
	Physical well-being	
	Autonomy	
	Independence	
	Individualism	

the socio-cultural and historical circumstances and conditions of one's life that influence one's sense of self and identity, provide important insight into what it means to 'be' well. Development of indicators related to Being well requires consideration of some of the following key questions in the research. To what extent does one's well-being remain stable, fluctuate, or alter significantly throughout one's lifespan or across spheres of life? Are autonomy and independence equally important to well-being? How do demographic factors such as race, ethnicity or social class relate to subjective and objective indicators of well-being? Is student well-being something to be 'managed' within school structures or by educators, or an experience constructed from the ground up by students themselves?

Being well entails having one's 'reality' recognised and respected by valued members of the school community. That is, students feel 'known for whom they are' and believe that they are 'taken seriously' by others. Schools that support well-being establish clearly defined expectations and provide opportunities for students to assume esteemed roles by consistently encouraging self-ownership of and responsibility for ideas and actions. Educational experiences at well-being-enhancing schools provide opportunities for students to act autonomously, under supportive but reasonably hands-off supervision. Students are encouraged to make informed decisions with confidence, while remaining mindful of how their independent actions impact on those around them. Teachers support students' well-being in this domain by providing regular and constructive feedback, clearly articulating the skills, competencies and dispositions students will be expected to demonstrate through formative and summative evaluations.

Relating. This domain represents research on relationships, and includes the interpersonal connections experienced, felt and aspired, and which influence experiences, emotions, thoughts and choice of actions (see Table 4). Research situated within the field of place-based education has contributed to understandings of relationships to place. Relationships as meaning are also explored here, with particular attention to outcomes of having one's sense of meaning disrupted or challenged through life events. Well-being is also explored, as are experiences of transcendence: feeling connected to other people, places, ideologies or beliefs. In the literature, the influence of relationships on well-being is examined in light of several considerations. Is well-being enhanced through quantity or quality of personal

Table 4. Examples of Relating.

Research foci in the economics, sociology, psychology and health sciences research	NZC terminology in alignment with research	Examples from student and teacher data relevant to research
Interpersonal relationships	Reliable	Teacher–student relationships
Relationships to place	Relates well to others	- mutual respect
Relationships as meaning	Connected to the land and environment	- friendship
Transcendence (connections to someone/something beyond the self)	Member of and engaged in communities	- 'being known'
	International citizen	Cultural affiliations are honoured and respected
	Values diversity, equity and ecological sustainability	School reputation
	Uses languages, symbols and texts competently	
	Treaty of Waitangi	
	Experiences coherence	
	Contributes to the well-being of New Zealand – social, cultural, environmental and economic	

relationships? How might integration of different worldviews into curricula contribute to a sense of connection to a particular context or locales? Is knowledge fixed or fluid? Is there a distinction between knowledge and the knower?

Relating well according to the SWBM denotes experiencing a sense of place within the school's physical and socio-cultural context. All students – regardless of need, ability, sexual orientation or identity, worldview, background, or aims – have access to all spaces, information, and activities. Cultural affiliations are acknowledged and celebrated. Beliefs and ideologies are expressed freely and received openly. In the SWBM, student–teacher relationships are defined as respectful and adult-like, and hold characteristics associated with friendship. However, generational distinctions are maintained in that adults and youth respect the wisdom and insight the other has to offer the relationship. For example, instead of negotiating the power dynamics of a traditional hierarchical relationship, teachers and students offer mutual support for goals, interest in the other's needs, and concern for their well-being. Relating well supports other well-being assets, in that it affords opportunities for students to be known well enough to have their identities affirmed, and to allocate other resources such as learning materials or educational experiences suitable for a student's individual needs.

Well-being Appraisals

In the SWBM, the Feeling and Thinking dimensions are viewed as mutually enhancing elements of well-being. Affective appraisals complement cognitive appraisals in multiple studies seeking to gauge people's sense of well-being. As Seligman (2011) argues, while subjective ratings are commonly interpreted as evaluations of affect or mood, questions such as 'How satisfied are you with your life' involve a large portion of transient mood, but also a much smaller portion as evaluation (Diener, Kahneman, Arora, Harter & Tov,

2009). However, each of these domains is independently addressed to highlight their importance in education as they are experienced across spheres of life.

Feeling. Research focusing on happiness and depression has been complemented in recent years by scholarship addressing the full spectrum of affect (see Table 5). In addition, there has been growing attention to the facilitative effects of emotions on well-being in the literature, thus sparking interest in curricula designed to enhance positive affective states such as contentment, joy, or gratitude. Recent progress in neuro-imagery and a growing trend towards cross-disciplinary collaboration have further advanced the field, raising questions about emotions' influences not only on how one feels at the moment, but on well-being across 'lifespace' and the 'lifespan' (Roeser & Galloway, 2002, p. 40).

Students that are well regularly experience positive emotions. They are also emotionally literate, capable of recognising, expressing, and managing their feelings. Schools nurture students' well-being when they provide support for and encourage students to experience and express a full spectrum of emotions, and to have those expressed emotions received appropriately by members of the school community. All subjects in the school curriculum seek to develop in students an appreciation for the positive aspects of life, and for the ways in which others have contributed to their learning and development. Well-being-enhancing schools thus give considered attention to how students feel, and work to incorporate affective appraisals into all educational experiences.

Thinking. Thinking-related scholarship explores phenomena related to cognitive appraisals, as well as those related to cognitive strategies, decisions and errors (see Table 6). Cognitive appraisals of one's life are a frequently employed metric to complement more objective measures of well-being as evidenced by a plethora of metrics based on subjective appraisals of one's quality of or satisfaction with life. With clear attention to the importance of thinking well for short-term and long-term well-being in the literature, and as a foundational philosophy of education, important questions in this domain concern the directionality of the relationship between well-being and Thinking. Thinking well is assumed to relate to well-being; can enhancing multiple dimensions of well-being influence the effectiveness of how one thinks? In addition, in an era of compartmentalised scheduling and assessment-driven learning, to what extent to is granting considered attention to student choice and decision-making desirable or even feasible in today's schools?

Students that are well are satisfied – with school, and with the multiple spheres of their lives. The Thinking domain represents student well-being in terms of thinking constructively, creatively, mindfully, and contemplatively. In addition to active

Table 5. Examples of Feeling.

Research foci in the economics, sociology, psychology and health sciences research	NZC terminology in alignment with research	Examples from student and teacher data relevant to research
Full emotional spectrum	Values respect	Being happy
Socio-emotional education	Mental well-being	Being content
Pastoral care (e.g. counselling, support services)		Having others 'know what you're going through'
		'Private' aspect of well-being

Table 6. Examples of Thinking.

Research foci in the economics, sociology, psychology and health sciences research	NZC terminology in alignment with research	Examples from student and teacher data relevant to research
Curiosity	Enterprising and entrepreneurial	'Using big words'
Creativity	Literate and numerate	Proper grammatical usage
Decision-making	Critical and creative thinker	Effective decision-making
Mindfulness	Informed decision-maker	Choices
Meta-cognition	Values innovation, inquiry, and creativity	
	Thinks competently	
	Learns to learn	
	Mental well-being	

engagement in the cognitive tasks typically associated with everyday educational experiences, thinking well requires time, continued questioning, collaboration, cross-disciplinary study, and a degree of non-linearity and iteration that traditional schooling models based on strict scheduling and compartmentalised school subjects typically prevent. Students learn to learn, and develop the meta-cognitive strategies necessary to broaden their skill sets as well as their repertoire of tools needed to solve expected and unforeseen problems. Thinking well also involves the opportunity to make informed decisions from a wide range of choices available. While independent decision-making is considered important, open-minded reflection about the diverse perspectives, worldviews and ideologies held by others also plays a salient role.

Well-being Actions

Functioning. Scholarship organised under functioning explores the activities, behaviours and involvements individuals experience and with which they are engaged (see Table 7).

Table 7. Examples of Functioning.

Research foci in the economics, sociology, psychology and health sciences research	NZC terminology in alignment with research	Examples from student and teacher data relevant to research
Characteristics of involvements	Enterprising and entrepreneurial	NCEA assessments
- breadth	Contributes to the well-being of New Zealand: social, cultural, economic, and environmental	Efficiency in involvements
- depth	Participates competently in a range of life contexts	Manageable behaviour
- volition	Active seeker, user, and creator of knowledge	Tidiness
What is done	Values community and participation	Timeliness
How it is done	Engaged citizen	Focus
'Flow'	Employed and/or employable	
Grit		
Determination		

Researchers examine both volitional and obligatory involvements, as well as questions about how the number and breadth of one's involvements impact on well-being. Recent attention in this area has focused on characteristics of well-being-enhancing engagement and achievement such as grit (Duckworth, Peterson, Matthews, & Kelly, 2007), determination, persistence or optimal functioning. Their work raises questions similar to those in the Relating domain. Does breadth, depth, or length of engagement matter more to wellbeing? How important is student choice for functioning well?

Students who are functioning well engage with educational experiences that transcend disciplinary, generational, cultural, or ideological boundaries, and that require students extend themselves beyond immediate and comfortably familiar contexts. Functioning well in school is not a solitary endeavour; educational experiences integrate the expertise of students, teachers, peers, and community members and are typically focused around developing 'enduring understanding' through engagement with and critical reflection upon essential questions (Wiggins & McTighe, 2005). While student interest initially drives effective inquiry, expectations for collaborative exchange of ideas within learning communities involves continuous negotiation of the individual in relation to others. Schools that support student well-being provide numerous opportunities for students to experience what Csikszentmihalyi (1991) and colleagues (Csikszentmihalyi & Hunter, 2003; Csikszentmihalyi, Rathunde, Whalen, & Wong, 1993; Csikszentmihalyi & Schneider, 2000) have described as a state of 'flow.' In such schools, efficiency and close adherence to scheduling may be sacrificed to allow students to gain in-depth understanding and insight that comes from 'uncoverage', rather than coverage of material (Wiggins & McTighe, 2005).

Striving. The Striving domain is represented by the empirical and theoretical scholarship on the influences, processes, content and outcomes of one's future aims (see Table 8). Motivation and goal theories constitute a large part of the literature in this domain. Achievement is another construct that receives considerable attention in this domain. In addition, age-old questions regarding relationships between process and product, future and present are explored. These questions have been largely situated in debate between Hedonic and Eudaimonic well-being.

Striving well involves more than meeting short-term academically-related objectives such as credit accumulation or degree qualification, or longer-term aims related to the local or global marketplace. Similar to Dewey's (1964) view of the 'means–ends' continuum, striving entails continual negotiation between past experiences, present circumstances, and future interests. The focus is on the procedural aspects of *learning* over the utilitarian aspects of *earning*. Consideration of a more transcendent purpose than meeting individual needs places

Table 8. Examples of Striving.

Research foci in the economics, sociology, psychology and health sciences research	NZC language in alignment with research	Examples from student and teacher data relevant to research
Motivation	Motivated	Product orientation
Goals	Values excellence	Credit acquisition
Future orientation	Future focus orientation	Secure employment
Eudaimonia – 'the well-lived life'	Sustainable future	Striving for others
Transcendence	Development	

an emphasis on Eudaimonic, over Hedonic, well-being (for discussions of the distinctions between this philosophical view of well-being, see Keyes, Shmotkin, & Ryff, 2002; Peterson, Park, & Seligman, 2005; Ryan, Huta, & Deci, 2008; Seligman, 2002). Educational experiences that support success in daily and ongoing achievements, while continually setting sights on the next step, further encourage youth to develop strategies that keep them motivated in the face of adversity. Students who are striving well see challenges as desirable and inevitable parts of life rather than things to be avoided at all costs.

Discussion

The seven domains described above present a comprehensive view of what the literature, along with New Zealand education policy and New Zealand students and teachers, consider important dimensions of student well-being. The SWBM's seven domains – Having, Being, Relating, Feeling, Thinking, Functioning, and Striving – represent specific aspects of student well-being and can be used as indicator categories. The examples used to define them can be considered possible indicators for monitoring student well-being in relation to educational experiences. Table 9 presents a summary of indicators derived from the data discussed above. While the previous sections addressed domains independently to highlight their unique contributions to student well-being, they are combined together in the following to illustrate their collective importance. Considerations of these findings are discussed below.

Considerations for future research based on the SWBM

The breadth and depth of examples provided in Table 9 suggest that the SWBM represents a more holistic conceptualisation of student well-being than is typically employed in this era of school accountability and standardised assessments. While many of the examples here are unique to the participants studied, they nonetheless provide an important view into the multiple dimensions of well-being in school, and the importance of drawing upon a framework that reflects well-being's complexity.

In this study, the SWBM frames one view of how well-being may be defined and monitored in the school context; it represents what were considered most relevant in monitoring and evaluating well-being of MVHS students. The extent to which the indicators generalise to other settings or contexts must be examined in the course of future research that may yield additional data to inform the development of valid, technically reliable student well-being indicators that can generalise to diverse populations and contexts. For example, students, educators, parents, and school community members may utilise the SWBM as a communication tool to facilitate discussion about how the indicators offered here reflect local settings and mores, align with identified in their guiding formal educational mandates, and resonate with their own perspectives and experiences. A working definition of well-being applicable to other sectors could evolve from this model, as well. For example, school psychologists may offer a more clinical practice standpoint, athletic coaches and performing arts directors may provide a competition or performance perspective, or school administrators could present a management point of view.

The process of developing student well-being indicators based on the SWBM has the potential to be an empowering and enlightening exercise for youth and for those who work with them. With years of experience to reflect upon and share, students offer particularly valuable insights, and could contribute both as researchers and as agents for positive school

Table 9. Examples of student well-being indicators.

	Indicators
Having	All students work with highly qualified teachers who receive appropriate release time and funding to continue their training and maintain a sense of purpose and enthusiasm
	Quality informational resources are available for student and teacher use
	Quality and safety of physical plant
	Buildings and grounds are accessible and meet students' developmental, physical, socio-emotional and cultural needs
	Allocated funding to school is sufficient to meet instructional needs, and to provide extended learning opportunities such as curricular, athletic, cultural, spiritual, artistic events
Being	Expectations for student behaviour and responsibilities are clearly defined
	Opportunities to assume valued and/or esteemed roles in the school/larger communities
	Encouragement of self-ownership and responsibility for ideas and actions;
	Opportunities for students to act autonomously under supportive, but reasonably hands-off supervision
	Students are physically healthy, nourished rested and fit
Relating	All students experience a sense of place within the school's physical and socio-cultural environment
	Cultural affiliations are acknowledged and celebrated
	Beliefs and ideologies are expressed freely and received respectfully
	Student–teacher relationships are characterised as respectful, consistent and mutually supportive towards educational and personal goals
	Parents/*whanau* and community members actively and meaningfully connect with school staff through a variety of means
	Students engage daily with educational experiences that transcend disciplinary, generational, cultural, or ideological boundaries, and that require that students extend themselves beyond immediate and comfortably familiar contexts.
Feeling	Students experience positive emotions
	Students feel supported and encouraged to experience and express a full spectrum of emotions
	All subjects in school curriculum are designed to develop in students an appreciation for the positive aspects of life and for the ways in which others have contributed to their learning and development
	Students seeking emotional support have opportunities to do so discretely, but also to discuss openly
	Conditions and circumstances that hinder feeling well are recognised as impacting on young people's lives, on a personal and interpersonal level
	Students have access to resources, information and support groups that facilitate feeling well
Thinking	Students are satisfied with school
	Students ask questions during and outside of class, verbally, visually, and in writing 'What if?' 'How else?' 'So what?' Examples of commonplace questions in classroom discussions
	Students have opportunities to make informed decisions, and have adults and peers give their decisions considered attention
	Curricula and scheduling allows for collaboration, cross-disciplinary study and time for students to think mindfully, constructively, creatively and contemplatively.
	Students have opportunities to demonstrate their knowledge, skills, and competencies in a variety of formats
Functioning	Allocated time in school reflects a balance between engaging with the national, school and classroom curricula, and providing opportunities to extend learning or follow alternative pathways to understanding
	Students have opportunities to experience a sense of timelessness in their work

Table 9. (*Continued*)

	Indicators
Striving	Students are not interrupted unnecessarily and arrangements are made to continue as appropriate Numerous and diverse opportunities are offered for students to participate in activities related to civic engagement, service learning, cultural celebrations Educational experiences support success in daily and ongoing achievements, while continually setting sights on the next stage in the learning process Challenges are framed as important and inevitable and are welcomed rather than avoided Students plan for and participate in higher education or further training Students meet school and national benchmarks and progress at least one year's growth for every year in school

change. Inviting students to share their thoughts about what well-being means to them could take any number of forms, including focus groups, council meetings, questionnaires and interviews, or academic assignments that use well-being as a content focus.

The potential benefits of integrating student well-being indicators derived from the SWBM into existing assessments also deserves consideration. It is acknowledged that a student's ability to demonstrate she meets performance benchmarks in mathematics and literacy is a critical component of her present and future well-being. However, with a positively framed approach to evaluation that includes multiple domains of indicators, attention is granted to students' particular strengths and capacities that may not be reflected by test scores or discipline records. Doing so may reveal a host of competencies overshadowed by more traditional measures of student success.

Methodological considerations

To understand the complex interplay of factors that facilitate and hinder student well-being, the field requires a multidimensional approach to research methods and data collection. Table 10 illustrates examples of potential sources of information for two domains, Having and Relating, as well as both quantitative and qualitative approaches that might be used to collect it. There is growing acceptance that triangulating data sources and combining compatible research methods provide a more thorough, if not more accurate, picture of the topic of inquiry (Bogdan & Biklen, 2007; Denzin, 1978; Lincoln & Guba, 1985). In the case of the possible data sources listed above, accessibility of information will be varied (i.e. currently enrolled students in regular attendance), thus it is important to align methods with purpose. Researchers conducting data collection in schools must be mindful of operating structures and ethos, and find ways to integrate their efforts into daily routines. Students and teachers choosing to engage in action research projects have tremendous insights to offer, but time may be limited. In order to develop appropriate protocols, questionnaires or surveys, school-based researchers may wish to collaborate with research teams or consultants to support their efforts to gather and analyse information. Depending on how the SWBM is used, it will be necessary to tailor data sources and methods as appropriate to the needs of those employing it.

In the literature on social indicators and well-being studies, the importance of a distinction between types of indicators is stressed (Ben-Arieh & Frønes, 2011; Frønes,

Table 10. Examples of data sources for Having and Relating indicators.

	Indicators	Current or potential source of information
Having	All students work with highly qualified teachers who receive appropriate release time and funding to continue their training	Number of teachers holding highest qualifications
		Percentage of staff with multiple content area certification
		Number of support staff with certified credentials
	Quality informational resources are available for student and teacher use	Instructional expenditures per pupil that meet or are above the benchmark level as defined by the Ministry
		Number of students per computer
	Quality and safety of physical plant	Annual survey and code inspection
	Buildings and grounds are accessible and meet students' developmental, physical, socio-emotional and cultural needs	
Relating	All students experience a sense of place within the school's physical and socio-cultural environment	Student, teacher, school management, community leader reports. Surveys, focus groups, interviews
	Cultural affiliations are acknowledged and celebrated	
	Beliefs and ideologies are expressed freely and received respectfully	
	Student–teacher relationships are characterised as respectful, consistent and mutually supportive towards educational and personal goals	Student, teacher, school management reports. Surveys, interviews
	Parents/*whanau* and community members actively and meaningfully connect with school staff through a variety of means	Use of school website, email, texting, telephones, classroom blogs
	Students engage daily with educational experiences that transcend disciplinary, generational, cultural, or ideological boundaries, and that require that students extend themselves beyond immediate and comfortably familiar contexts	Analysis of syllabi, assessment-related documents. Surveys, interviews, focus groups, observations

2007; Sirgy et al., 2006). In general, indicators are classified depending upon whether they reflect the means, the process or the end in achieving the objective of a particular set of policies, programmes, or projects. Despite their separate classifications, they are also related in important ways, and collectively serve a broader purpose. With an appropriate balance between the different types of indicators, links between the means and ends are more likely, which helps to support further research and planning related to the goals. The explosion of interest in well-being in the academic community has yielded numerous quality instruments that can be considered for use in measuring student well-being indicators. However, the use of measurement tools may not suit all populations or

programmes equally. Thus, careful consideration of instruments that are appropriate to the majority of participants is necessary. Again schools may wish to collaborate with researchers or consultants if they are seeking to develop indicators independently.

As a general framework that can be applied to different school settings, the SWBM offers schools a means of developing a multi-method approach to evaluation that involves a combination of site-appropriate objective and subjective indicators of student well-being. For example, instead of seeking a direct relationship between input factors (i.e. allocated funding) and output factors (i.e. adequate yearly progress), funding allocated to schools could be critically examined for how it influences multiple domains of well-being via multiple pathways. Questions may relate to how financial support provides students with identified well-being assets such as material resources (e.g. books, computers), immaterial resources (e.g. extra-curricular support, school trips), or relational resources such as qualified staff with whom students feel connected. Quantitative data may then be compared with measures of students' academic performance, but also with qualitative data that explores other domains. Again, there are questions to consider. How do students think and feel about the resources provided through the funding? Would students prefer to attend a motivational speaker or a cultural celebration? Is it preferable to have numerous older computers or fewer state of the art machines in order to accomplish what is expected of students? Incorporating students' and practitioners cognitive and affective appraisals of the value of the funding into the equation provides a far broader-scope measure of well-being.

Conclusion

Over the past decade, empirical and theoretical research on well-being has significantly advanced understanding of what it means to be well. This work has, in turn, created a solid foundation from which to develop quality measures of student well-being, and interest in finding ways to do so is growing (for examples, see Barnekow et al., 2006; Huppert et al., 2009; Konu & Lintonen, 2006; Mayer, Mullens, Moore, & Ralph, 2000; Meyer, 1997; New Zealand National Party, 2012; Pinkus, 2009; Suldo, Riley, & Shaffer, 2006).

The domains and categories that comprise the SWBM represent emergent themes from a multi-disciplinary review of the well-being literature (Soutter et al., 2011). The SWBM was further refined through critical analysis of New Zealand educational mandates (Soutter et al., 2012), along with a qualitative study of New Zealand students' and teachers' perspectives and experiences on well-being (Soutter, 2011; Soutter et al., 2012). The SWBM is structured in such a way to facilitate the processes of reflection upon, communication about, and enactment of student well-being with considered attention to the individual domains involved as well as the relationships among them. Drawing upon data gathered from a case study of a New Zealand secondary school, student well-being indicators are illustrated that represent examples of what students, teachers, and the guiding curriculum identified as important representations of student well-being, and organises these meanings into the seven domains and three categories of the SWBM. Exploring students' conceptualisations of student well-being through a detailed case study, such as that offered in this paper, illustrates how the SWBM can be used to understand and offer practical suggestions for integrating facilitative conditions for student well-being in educational practice.

Development of quality indicators to inform educators, researchers, and policy-makers depends upon grounded models of student well-being that are relevant to today's schooling structures and ethos, and that resonate with today's students, teachers, and

school communities. The SWBM is introduced as a complement to existing interpretations of well-being that focus on cognitive-related or health-related indicators. Informed by the well-being literature, New Zealand education policy, and senior secondary students and teachers in New Zealand, the SWBM establishes a foundation for researchers and for educators to stimulate thinking about how to assess student well-being and the desired outcomes that may be realised by doing so. It is our hope that considered attention to student well-being – in education research, practice, assessment, and policy – may serve as a reminder that learning to be well is learning to live.

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