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Student wellbeing at school: The actualization of values in education

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Abstract

The notion of student wellbeing is interpreted within the Aristotelian concept of human flourishing (*eudaimonia*). In other words, providing for student wellbeing means orchestrating such conditions and influences as are needed for actualization of student potential, whether it be cognitive, affective, social, moral, ethical or spiritual. Consideration of student wellbeing in this chapter will focus on the necessity of providing those conditions under which student potential can develop and flourish. Recent educational research has afforded evidence of the influence of schools on student wellbeing and academic achievement. At the same time, it has also evoked recognition of the importance of attending to and providing for the affective, cognitive and social developmental needs of students. This concurs with recent findings of neuroscience that emphasize the synergy between the affective, cognitive and social dimensions in learning, maturation and human judgement. This means that the values embedded within the learning context have a vital role in determining the quality of the educational experience. Taking values to the heart of the educational endeavour begins with valuing students and orchestrating those conditions wherein students can develop agency across personal, social, academic, spiritual and moral domains.

Introduction

An emerging interest of educational research, in recent times, has been the identification of those factors and conditions that impact upon students' personal,

prosocial and academic maturation and progress. Emerging from this research is a body of evidence which indicates that effective education must provide for the affective and social formation of students as well as their cognitive and academic development. In this context, student wellbeing has been shown to be a significant aspect of the personal, pro-social and academic progress of students. As noted by Hill (Chapter 9), however, the notion of 'wellbeing' is capable of multiple interpretations. This borne out by a perusal of literature on wellbeing, wherein there is general agreement that wellbeing research for the young is of value; nevertheless, it also reveals the diversity in the ways that the concept of wellbeing is made operative in research (Awartani *et al.*, 2008; Ben-Arieh, 2008; Hascher, 2008). Furthermore, Hascher (2008) suggests that, rather than being viewed solely as 'an achievement enhancer', student wellbeing has its own 'educational value', and, hence, there is a need to advance research into student wellbeing at school at the theoretical and methodological levels.

Given the growing recognition of the significance of student wellbeing at school, this chapter provides a survey of recent literature that identifies various characteristics pertaining to the phenomenon. Although the literature which explicitly and specifically examines student wellbeing at school may be relatively small, there are a considerable number of other studies that investigate factors which either directly or indirectly impact upon student wellbeing at school. Examination of this diverse range of literature germane to student wellbeing at school shows the phenomenon to be multifaceted and influenced by: school and classroom climate, teacher support and caring, student connectedness to school, and values education. Moreover, the neurosciences provide insights which indicate that wellbeing is a product of the synergy of the cognitive, affective and social dimensions. Student wellbeing, therefore, emerges as being holistic and demands to be conceptualized as such.

The essence of wellbeing

Rather than being devoid of values and signifying a neutral state of homeostasis, Hill (Chapter 9) submits that wellbeing does indeed encompass a framework of values and goals. Such an approach to wellbeing implies it to be pervasive, a perspective

reminiscent of Aristotle's notion of *eudaimonia*. Urmson (1988), proposes that *eudaimonia* (or happiness), according to Aristotle, is to be understood as living the best possible life, that is, a life worth living that was to be chosen for its own sake. The quintessence of *eudaimonia* was to be found in intellectual contemplation (e.g. Urmson, 1988; Van Cleemput, 2006); however, as Kristjánsson (2007) elucidates, this notion of ultimate good impels purposeful activity and serves as an end for the exercise of the various human capacities:

In the *Nicomachean Ethics*, Aristotle proposes a theory of 'happiness' (*eudaimonia*) – perhaps better translated as 'well-being' or 'flourishing' – as the ultimate good and unconditional end (*telos*) for which they do all other things. ... According to Aristotle, it is empirically true that the well-being of humans consists in the realization of intellectual and moral virtues and in the fulfilment of their other specifically human physical and mental capabilities.
(p. 15)

Aristotle's notion of wellbeing is holistic and issues in the actualization of human potentialities and capacities, and any diminution of those capacities is a state other than that of human flourishing or wellbeing. Indeed, the wise person values the flourishing of these biological proclivities because they are essential to a person's self-realization of rational agency (Irwin, 1988, p. 386). Such agency includes both the cognitive and affective propensities of an individual (Carr, 2008). Thus, attention to Aristotle's notion of *eudaimonia* means that any consideration of student wellbeing at school cannot be constricted to a narrow set of indicators, but must be multi-faceted and holistic and include personal, cognitive, affective, social, physical, psychological, moral and spiritual dimensions.

Recent findings of the neurosciences enhance the understanding of the ways in which wellbeing is actualized, particularly by exposing the inseparable, dynamic interaction between cognition, affect and social context, and the implication this has for human thought, reasoning, judgement and action. According to Antonio Damasio (2003) the biological capacities inherently possessed by humankind, which serve to

regulate and promote life, do not function solely to maintain a neutral state of homeostasis, but, rather, have the propensity to promote human flourishing or wellbeing. In other words, human beings are biologically predisposed to act for their own wellbeing. Beyond that, the processes of human learning and judgement actually depend upon the interaction of the inherent cognitive and emotional neural networks that support and empower the intellectual and conative capabilities of persons:

Those of us in the field of education often fail to consider that the high-level cognitive skills taught in schools, including reasoning, decision making and processes related to language, reading, and mathematics do not function as rational, disembodied systems, somehow influenced by but detached from emotion and the body. (Immordino-Yang & Damasio, 2007: 3)

This means that cognition, and hence reason, are dependent upon and even energized by enabling and supportive affective states, that is, the motivation toward and the content of intellectual engagement is associated with particular affective states (e.g. Immordino-Yang & Damasio, 2007; Kusché & Greenberg, 2006; Storbeck & Clore, 2007). Affect is not displaced by cognition nor is cognition by affect, since both accompany the phenomenon of human consciousness. Said another way, the neural networks pertaining to emotion and cognition are active whenever an individual is conscious (Damasio, 1999; cf. Ashton & Gregoire-Gill, 2003). Indeed, effectual learning is a result of the synergy of cognitive engagement and the affective states that facilitate and sustain such engagement (Kusché & Greenberg, 2006).

In addition to this essential synergy between cognition and affect, Immordino-Yang and Damasio (2007) emphasize the significance of the social context of learning. The development of high level cognitive skills is impacted by the emotional and physical wellness of the body, which, in turn, is influenced by the socio-cultural context. Hence, the neural structures which underlie thought and affect develop within a social context and this environment contributes to the growth, development and

maintenance of those neural pathways formed in the process of learning (Hinton *et al.*, 2008). The import of such research reinforces the understanding that the ambience of the learning environment, along with the pedagogical activities and processes employed are themselves instrumental in affecting student formation and maturation across personal, affective, cognitive, spiritual, social, moral and academic domains. Given the powerful and pervasive dynamic of the learning context, effective education must contribute to student wellbeing. Therefore, a necessity exists for educators to be mindful of the ways in which the cognitive, affective and social interact in human learning, judgement and action. This means that provision for student wellbeing involves orchestrating such conditions and influences as are needed for actualization of all student potentialities.

The impact of schools on student wellbeing

International research has shown that school and classroom environments impact upon on student achievement and wellbeing (see Rowe, 2004). Using data from grades six and eight in Canada, Willms (2000) established that the greatest variance in academic achievement and wellbeing factors (self esteem, general wellbeing, sense of belonging, and general health) was greater at the classroom level than the school or district level. Further understanding of the impact of schools and classes on student wellbeing and academic achievement is provided by concerted research into the student wellbeing in school undertaken in Flanders, Belgium, by Opdenakker and Van Damme (2000), Engels *et al.* (2004; 2008), and Van Petegem (2008),

A study of first year secondary school students by Opdenakker and Van Damme (2000) has demonstrated that schools and classes do have an independent effect on student wellbeing and academic achievement, with the impact on academic achievement being the greater. In general, school-level characteristics relating to 'instruction and knowledge acquisition' affected academic achievement and wellbeing indicators, whereas school characteristics relating to non-cognitive factors were effective only for some wellbeing factors. This indicates that for well motivated students a school wide academic emphasis impacts positively on student wellbeing and attainment. One of these emphases, 'teaching staff cooperation in relation to

teaching methods and student counselling', impacted positively on student wellbeing and achievement; however, these results were not repeated in a subsequent but not completely identical study of second year secondary students (see Van Landeghem *et al.*, 2002, pp. 448-449).

Interestingly, Opdenakker and Van Damme found the interaction of school and student characteristics in some instances produced differential effects with these differences being mediated by student characteristics. For example, in general, an 'orderly learning environment' had a positive effect on student academic achievement and the wellbeing indicators of 'social integration in the class', 'attentiveness in the classroom' and 'attitude towards homework'. Nonetheless, for students who registered low 'prior achievement motivation', an orderly learning environment had a negative effect on their motivation and interest toward learning. Thus, student motivation proved to be a critical indicator of student engagement and interest in learning. On the whole, interest and motivation of all students was found to be enhanced by the non-cognitive school level characteristic, 'focus on (moral and social) education and personality development'. Conversely, this same characteristic displayed a negative effect on mathematics achievement. This observed variability in the interface between school-level characteristics, student characteristics and academic achievement supports the notion of an ecology of learning, that is, a complex and interdependent interaction between the various elements that comprise the learning environment (see Deakin Crick *et al.*, 2007). Student motivation emerges as being pivotal in student attainment and wellbeing. It is pertinent to note that Opdenakker and Van Damme used this student characteristic as an indicator of wellbeing factors, whereas measures of subject specific student intelligence were the chosen indicators of academic achievement. Other studies cited later in this review demonstrate a clear link between student motivation and academic achievement.

Engels *et al.* (2004) arrived at a definition of student wellbeing for secondary students that encompasses the affective life, environmental factors of the school and the personal needs and expectations of students. Data for the study was

sourced from questionnaires and panel discussions with students. Satisfaction (the cognitive component), feeling (the affective component), and behaviour were each found to be reliable indicators of student wellbeing, with satisfaction ($\beta = .517$) being the strongest. Active participation in class increased student wellbeing and heightened feelings of student responsibility for their own learning. Teacher 'respect and encouragement' and 'good didactic support' also enhanced student sense of wellbeing. Students preferred teachers who gave them clear instructions and space, whereas inconsistency on the part of teachers had a negative effect on students. Student satisfaction with the 'infrastructure and facilities' of the school ($\beta = 0.11$) emerged as one of the better indicators of student wellbeing; however, 'the atmosphere at school' ($\beta = 0.33$) proved to be the subscale best indicating student wellbeing. Clear regulations arrived at through negotiation with students that are consistently applied promote student wellbeing, which is also enhanced by positive learning-oriented goals, and a sense that the curriculum is relevant. Conversely, 'study pressure' becomes negative where pupils perceive unclear teacher expectations or too little teacher support.

Furthermore, Engels *et al.* (2004) found that positive behaviour ($\beta = 0.175$) is a predictor of student sense of wellbeing: students who are satisfied with school exhibit fewer behaviour problems and the fewer the behaviour problems the better the atmosphere of the school. Student wellbeing was enhanced by intrinsic motivation and positive contact with friends, and girls reported a higher sense of wellbeing than boys. Additionally, student sense of wellbeing varied between schools and according to school type. It is evident from the analysis provided by Engels *et al.* that positive values lie at the basis of student wellbeing as evidenced by the importance of friendships, positive student-teacher relationships, school ambience, clarity of communication of expectations regarding behaviour, and excellence in pedagogy. In a different study, De Fraine *et al.* (2005) found that student sense of wellbeing declined during their time at secondary school for most students, but with large differences between students (cf. Hawkins *et al.*, 2001). School influence on student wellbeing, in line with other studies in Flanders, was considered to be minor.

Van Petegem (2008; Van Petegem, Aelterman *et al.*, 2007), using the definition of Engels *et al.* (2004), found that eleven percent of variance in the measure of student wellbeing was at classroom level (cf. Opdenakker & Van Damme, 2000).

Furthermore, students who declared they were at school because they wanted to learn scored higher on the wellbeing scale (Van Petegem *et al.*, 2008; Van Petegem, 2008). Higher levels of student motivation (desire to learn) correlated with higher levels of sense of wellbeing, irrespective of level of ability, and also, a liking for course content positively influenced student wellbeing. Owing to the established link between interest and motivation, and achievement (see Ainley, 2006), Van Petegem (2008) posits an indirect link between student wellbeing and academic achievement. Compulsory attendance, however, resulted in low sense of wellbeing with such dissatisfaction finding expression in dysfunctional behaviour, which indicates that student wellbeing is related to liking for school (Van Petegem, 2008; Van Petegem *et al.*, 2008). Positive interpersonal relationships with teachers increased student sense of wellbeing, whereas strict and admonishing teachers had a negative impact on student wellbeing (Van Petegem, Aelterman *et al.*, 2007, p. 459; cf. Assor *et al.*, 2005; Yildirim *et al.*, 2008). In general, cooperative behaviour on the part of the teacher relates positively to student wellbeing and increases student motivation and interest and proved to be a stimulus to student motivation and interest in school work, and these, in turn, were positively related to wellbeing (Van Petegem, 2008; cf. den Brok *et al.*, 2004; den Brok *et al.*, 2005). Likewise, Hasher (2003; 2008) found that teacher behaviour characterized by fairness, care and a high quality of teaching was an important contributor to the wellbeing of students in Switzerland.

In Finland, Konu and Lintonen (2006) tested a subjective wellbeing profile on Grades 4 to 12. This instrument was comprised of the four categories: “‘school conditions’, ‘social relationships’, ‘means for self-fulfilment’ and ‘health status’” (p. 633).

Moderate correlations occurred between means for self-fulfilment and social relationships, and means for self-fulfilment and school conditions, while a low correlation was recorded between school conditions and health status. In a comparison of the results between primary, lower secondary, and upper secondary

level students, primary school students rated school conditions more highly than secondary students, and social relationships and means for self-fulfilment as being better than upper secondary school students. A more positive sense of wellbeing was reported by girls and younger students in each of the primary, lower secondary, and upper secondary levels, whereas boys reported fewer health symptoms.

Several points of interest emerge from the various international studies of student wellbeing at school cited above. They confirm that schools do, in fact, impact on student wellbeing and academic achievement. Opdenakker and Van Damme (2000) demonstrated that the level of student motivation impacted on measures of student wellbeing and engagement in school work. Furthermore, student motivation was enhanced by social and moral education and personality development. The work of Engels *et al.* (2004) points to the importance for student wellbeing of student agency, teacher support and caring, academic emphasis and support, school facilities and infrastructure, school ambience, and relevance of the curriculum. Additionally, there were several student characteristics indicative of their wellbeing: positive behaviour, intrinsic motivation, and positive relations with friends. Van Petegem's (2008) research indicates that motivation and interest in schoolwork are vital to student wellbeing, and the quality of student-teacher relationship proved to be a significant dynamic in such motivation and interest (cf. Osterman, Chapter 43). These findings concur with observations of recent Australian studies where it was shown that teacher care and concern was paramount for student engagement in learning (e.g. Brady, 2005; Rowe, 2004; Scanlon, 2004; see Lovat & Clement, 2008a; 2008b). Additionally, Van Petegem noted the longitudinal effect of academic achievement on student wellbeing as well as suggesting a link between student wellbeing and academic achievement.

Teacher support and caring

The findings of Van Petegem (2008) serve to emphasize the importance of the quality of the teacher-student relationship for student engagement and student wellbeing. Beginning in the early years of schooling, the potent dynamic of the teacher-student relationship is associated with peer acceptance, engagement in

learning and academic outcomes (Hughes & Kwok, 2006; Hughes *et al.*, 2008). Teacher support increases emotional security, which, in turn, is related to task involvement (Thijs & Koomen, 2008). Sense of insecurity directly affects cognitive performance, so therefore, for kindergarten students, wellbeing has precedence over cognitive tasks (Koomen *et al.*, 2004). Additionally, the quality of teacher-student relationship was found to be predictive of academic achievement via classroom engagement during the early years of schooling (O'Connor & McCartney, 2007).

Furthermore, Hamre and Pianta, (2001) observed that the impact of teacher-student bonding in the early years of schooling continued through to eighth grade. A strong and persistent relationship existed between the quality of the student-teacher relationship and academic performance and behavioural outcomes, with observed effects persisting through to the middle years of schooling. Students having negative relationships with their kindergarten teachers displayed 'fewer positive work-habits' than their peers with positive relationships (p. 632). Negative relationships with kindergarten teachers mediated behavioural and academic outcomes up to year eight, with the greater impact being on behavioural outcomes. The quality of the teacher-student relationship is seen to have a direct bearing on the degree of student engagement in learning (cf. Entwisle & Hayduk, 1988). The vitality of the quality of student-teacher trust is further illustrated by Lee's (2007) research among seventh grade students in Korea. Measures, which included cognitive and affective elements, demonstrated that levels of trust impacted on student school adjustment and academic motivation which, then, mediated the effect of that trust on academic achievement as measured by grade point average (GPA). Similarly, Marchant, *et al.* (2001) concluded that the effect of teacher interest and support on student achievement is mediated by student perceptions of their motivation and academic competence.

These findings fit well with the research amongst middle school students by Wentzel (1997, 2002), who observed teacher caring to be a predictor of student motivation (academic effort), pursuit of social responsibility goals and pro-social goals. Students

were observed as being more likely to engage in learning activities if they felt supported and valued by their teachers (cf. Entwisle & Hayduk, 1988; Hamre & Pianta, 2001 above). Students identified caring teachers as ones who: interact democratically and encourage reciprocity in communication, deal with students equitably and respect them as persons, account for individual differences when formulating expectations, offer constructive feedback, give appropriate support and feedback, have high expectations of students, and model motivation in regard to their own work (cf. Davidson *et al.*, 2008; Van Petegem, 2008).

Teacher support and caring have a positive influence on self-concept (Demaray *et al.*, 2009). As a component of social support, along with parents and friends, teacher support and caring is necessary but not sufficient for student satisfaction with school, student self-efficacy and engagement, gaining higher grades, attendance, less problem behaviour, and more time spent in study (Rosenfeld *et al.*, 2000). Particularly for those students who are judged as being at high risk of school attrition, teacher caring acts as a compensatory form of social capital, and is associated with a higher than anticipated performance in mathematics (Muller, 2001). Also, teacher support is related to the reduction in the likelihood of participating in the health-risk behaviours associated with smoking, marijuana use, drinking to intoxication, suicide attempt or ideation, weapon related violence and first sexual intercourse (McNeely & Falci, 2004). Research among detained youth documents that low teacher connectedness is related to higher risk behaviours regarding sex and drugs. The implication is that student sense of connectedness with teachers is protective in regard to participation in at-risk behaviours (Voisin *et al.*, 2005). Further supporting evidence of the protective nature of the teacher-student relationship against negative social pressure is provided by Garcia-Reid (2007) who found that the support of teachers, parents and friends (with teacher support being the greatest influence) was directly related to school engagement for 133 female students of the minority Hispanic group in the USA aged 13-14 years. Contrary to expectations, and possibly because of an artefact of the research design, these trends were not repeated in a similar study by Daly *et al.* (2009) involving 123 urban 'adolescents of color'.

These observations regarding the impact of the student-teacher relationship coincide with Osterman's (2000) summation of research literature in regard to student connectedness or bonding to school: "teacher support has the most direct impact on student engagement" (p. 344). In a similar vein, Klem and Connell's (2004) synthesis of related literature concludes that student engagement has been found to be a robust predictor of student academic achievement, retention, absenteeism and behaviour problems. This conclusion is further confirmed by their analysis of longitudinal data from 1846 elementary and 2430 secondary students in the USA. Results indicate that student engagement is affected by teacher support, and is higher in an environment that is well structured, has clear and high expectations, and is caring. In turn, higher levels of student engagement correlate with higher academic performance. Academic engagement has been found to promote 'academic resilience' and is protective of students who are considered to be at high-risk of school failure (Finn & Rock, 1997). In their research among Latin American immigrant youth, Green *et al.* (2008) observed that student motivation can vary according to the perceived support of their current teacher. Furthermore, a study of 11, 13 and 15 year old students in Finland, Latvia, Norway and Slovakia by Samdal *et al.* (1998) found that experience of teacher practical and emotional support emerged as one of four important school climate indicators of student satisfaction with school. The other three were just treatment, feeling safe at school and fellow-student support. Conversely, student perception of unreasonably high teacher expectations was associated with poorer perceived academic performance. Across all countries, student satisfaction with school was the 'most influential predictor' of student perceived academic achievement (Samdal *et al.*, 1999, p. 312). Furthermore, Murray and Malmgren (2005) concluded that improvements in the supportive character of teacher-student relationships at secondary school have the potential to impact on subsequent student academic achievement.

Teacher pedagogical competencies form a vital part of teacher support and caring because of their effect on perceived wellbeing. Research among secondary students in Germany by Gläser-Zikuda and Fuß (2008) indicated a high correlation between

student rating of competencies of physics teachers and student wellbeing. Particularly high correlations were found between perceived student wellbeing and measures of *teacher's motivational competence* ($r = .94$) and *teacher's care of students* ($r = .93$). In this dimension, teacher caring aligns with the characteristics of quality teaching as identified by Darling-Hammond (1998). Additionally, López (2002) found that teacher support is correlated with academic achievement for students from a minority culture.

In summary, the literature cited on teacher support and caring indicates the vital impact of this relationship on student wellbeing, across all school grades, and that it is important for the personal and pro-social development of students as well as their academic progress and achievement. Also, the literature reports that quality of teacher-student relationships impacts directly on the motivation and engagement in learning of students, which subsequently impact on their academic outcomes and personal and pro-social development. This coincides with the conclusions of Van Petegem (2008) who observed a direct link between student wellbeing and positive student-teacher relationships and who posited an indirect link between student wellbeing and achievement. Evidence for the link between a positive teacher-student relationship and student achievement has been tendered in the work of Klem and Connell (2004), Lee (2007), López (2002), Murray (2005), Muller (2001), O'Connor and McCartney (2007), and Samdal and colleagues (1998; 1999). These studies make it clear that the impact of teacher caring on student academic achievement is mediated through student characteristics such as motivation and self-concept. Teacher support and caring provides a form of social capital that is protective of at-risk behaviours, and appears to be particularly important for marginalized students, such as those from minority cultures. It implies that an ethic of care, involving the dual aspects of teacher pedagogical competencies and the social-emotional support of students, impacts on student personal and pro-social development, and engagement in school work. As Klem and Connell (2004) concluded, student engagement mediates the impact of teacher caring on student academic performance. Thus, teacher support and caring embody those qualities essential to effective education, wherein best practice pedagogy is energized by an

ethic of care and concern for student wellbeing and academic progress (cf. Lovat & Clement, 2008a; 2008b; Osterman, Chapter 43).

School climate and student wellbeing

International literature attests to the fact that school and classroom climates exercise a significant influence on the quality of education (e.g. Creemers & Reezigt, 1999; Muijs & Reynolds, 2001). Teacher support of students is part of a social fabric embodying trust that facilitates positive student progress through school and is an aspect of what Bryk and Schneider (2002) typify as 'relational trust'. This is a 'connective tissue' that binds people together via supportiveness and reciprocity among the various stakeholders in the school community, with a view to the advancement of student achievement and wellbeing. Thus, the tenor of this organizational property is an instrumentally efficacious resource for school improvement that advances student achievement. Bryk and Schneider observed that schools with high relational trust had a one in two chance of school improvement, whereas those with low relational trust had only a one in seven chance.

Furthermore, research studies provide corroboration of the positive interaction between a supportive school community and 'academic emphasis' (otherwise known as 'academic press'). Such a nexus provides conditions conducive to student achievement and has the power to counteract debilitating effects of socio-economic status on indicators of student wellbeing and attainment (e.g. Battistich *et al.*, 1997; Lee *et al.*, 1993; Lee & Smith, 1995, 1999; Shouse, 1996). According to Gaziel (1997), effective schools serving disadvantaged students place a high value on academic achievement and continuous school improvement. On a cautionary note, the work of Phillips (1997) demonstrates that communal spirit isolated from to academic emphasis can have deleterious effects on student achievement. Even so, Opdenakker and Van Damme (2000), as well as confirming the importance of academic emphasis, found that a communitarian school climate has potentially beneficial effects on student interest in and motivation towards learning. Likewise, Lee and Smith (1999) affirm that both social and academic supports are essential resources for student learning (cf. Shouse, 1996). Also, the renowned work of

Newmann and Associates (1996) established that a communitarian ethos is an essential element in supporting student intellectual quality and achievement, and that shared academic experiences encourage a sense of school membership (see Marks *et al.*, 1996). Further evidence for the correlation between the quality of school experience and academic achievement is provided by Mok and Flynn (1997) in their study of Year 12 students in New South Wales, Australia. Higher levels of student satisfaction with the quality of the school culture were reflected in higher end of school examination results. In like manner, Marchant *et al.* (2001), in the USA, found that school climate factors impacted on student academic achievement and were mediated by student perceptions of their own motivation and/or academic self-competence.

Parents, friends and teachers form a network supportive of student wellbeing and achievement (Rosenfeld *et al.*, 2000). Malecki and Demaray (2006) observed that such a supportive network mitigates the negative impact of SES on academic achievement as measured by GPA (cf. Muller, 2001). In a similar vein, Furrer and Skinner (2003) found that the relatedness of students in grades three to six to parents, teachers and peers impacted on their academic engagement and performance. Again, Van Ryzin *et al.* (2009) concluded that engagement of secondary school students with learning mediates the impact of both student academic autonomy and teacher support on student wellbeing or hope ('positive psychological adjustment'). Peer support also impacts upon hope in two ways: it has a direct impact as well as being mediated by student engagement. Furthermore, student engagement subsequently impacts upon student perceptions of academic autonomy and teacher support, thus indicating an ongoing interactive dynamic. Whereas hope is a trait-like characteristic that remains relatively stable over time, engagement is a 'state' and so subject to situational variation. Change in the level of hope is predicted by changes in engagement and peer support.

Aspects of a supportive school community identified in the literature as having instrumental effects on student achievement are: social capital (Goddard, 2003b), school climate (Bulach *et al.*, 1995), relational trust (Bryk & Schneider, 2002) and

collective teacher efficacy (Hoy *et al.*, 2002; Goddard, 2001; Goddard *et al.*, 2000; Goddard, 2003a; Woolfolk Hoy & Davis, 2006). Hoy *et al.* (2006) have demonstrated that the three social capital items of academic emphasis, faculty trust and collective teacher efficacy combine in a construct of academic optimism predictive of student achievement after controlling for prior achievement, socio-economic status and urbanicity. As with the student-teacher relationship, social networks (of which teachers are an indispensable part) give psychological, social and academic support foundational to student wellbeing and academic achievement. In short, the literature establishes that indicators like relational trust, supportive relationships and networks, social capital, school climate, collective teacher efficacy, and academic emphasis impact on student wellbeing and even their academic achievement. An inspection of the listed items leads to the conclusion that, far from being discrete and unrelated, they together indicate an underlying need for a socially and academically positive and supportive climate in order to facilitate student growth and maturation across all domains.

School connectedness

Having a sense of belonging at school contributes to student social and personal development, physical and mental health, school achievement and is protective against school conduct problems and at-risk behaviours. From an extensive review of relevant literature, Osterman (2000) concluded that students' experience of belonging and acceptance at school disposes them more readily to intrinsic motivation and acceptance of others' authority and establishes a stronger sense of identity, wherein they experience a sense of autonomy and accept responsibility for self-regulation according to classroom norms. Students who sense greater acceptance by teachers and fellow students are more likely to enjoy and be interested in school, be more committed to class work and have higher expectations to succeed and lower anxiety and, thus, embody positive academic attitudes and motivation (p. 331). The development of intrinsic motivation flourishes in the context of secure relationships. When these basic needs of students are satisfied, there is an increased likelihood of their internalizing the values that teachers and parents endorse. Connectedness along with encouragement to initiate and

experiment will enable students to become autonomously motivated (Deci & Ryan, 2002, pp. 74-75; Ryan & Deci, 2000). Additionally, Anderson *et al.* (2004) found that the tenor of the classroom climate impacted on student motivation. In particular, higher levels of student affiliation, (friendliness) were associated with higher levels of motivation. Furthermore, Loukas *et al.* (2006) found that sense of connectedness accounted for student cohesion, the level of friction between students, satisfaction with classes and ensuing problems with conduct.

A sense of belonging at school impacts on a range of issues related to student wellbeing. Rowe's (2007) review of cross-disciplinary literature reports that student sense of connectedness to school has repercussions for student health and wellbeing. Student sense of belonging is facilitated by a whole school approach that encompasses the classroom and school climate. It is also influenced by organizational and administrative processes and policies, the community context, and the partnerships between school and community, as well as the physical ambience of the classroom and school. Additionally, school connectedness has been observed to correlate positively with coping, social confidence and behaviour control (Rice *et al.*, 2008) and the quality of student health (Mansour *et al.*, 2003). Moreover, student bonding to school has been found to be protective of emotional ill-being and substance abuse (Bond *et al.*, 2007; McGraw *et al.*, 2008; Rice *et al.*, 2008; Shochet *et al.*, 2006). It is also protective of students adopting behaviours that would threaten their wellbeing, particularly when combined with connectedness to family and other adults (Resnick *et al.*, 1997). Additionally, Catalano *et al.* (2004) report a link between lower levels of school bonding and substance use, delinquency and crime, gang membership and academic problems. An association was also found between bonding in elementary school and initiation into smoking, drinking and alcohol abuse and levels of dependence up to 21 years of age (cf. Battistich, 2008; Battistich *et al.*, 2004; Battistich & Hom, 1997; Hawkins *et al.*, 1999; Hawkins *et al.*, 2001; Hawkins *et al.*, 2005; Lonczak *et al.*, 2002). Moreover, higher levels of school connectedness have also been associated with reduced levels of victimization and aggression, albeit a relatively small effect (Wilson, 2004). Conversely, the effects of connectedness can be negative if support is drawn from peers with deviant

behaviour (Cho *et al.*, 2005; Maddox & Prinz, 2003; McNeely & Falci, 2004; Osterman, 2000; Prelow *et al.*, 2007; Solomon *et al.*, 1996).

Students with a sense of school connectedness have a more positive view of themselves and others, and are more likely to support, help and be considerate of others (Osterman, 2000, p. 334; cf. Battistich *et al.*, 1995). Prelow, (2007) in a study of 316 students from a high school in north-eastern USA, found that school connectedness promoted higher levels of competence in social relationships at school; however, there was a negative interaction between ecological risk (school factors and ethnic identity) and problem behaviours for European American students, possibly due to support from peers with deviant behaviour.

Motivational and school competence factors mediate the impact of student sense of connectedness to school on academic achievement (e.g. Osterman, 2000; Marchant *et al.*, 2001; Maddox & Prinz, 2003). Anderman (2002) found that higher levels of school connectedness were associated with higher GPAs and a positive sense of school community was associated with positive academic attitudes and motives among students in high-poverty schools. Moreover, Battistich *et al.* (1995) was observed to effect 'academic attitudes and motives' (including academic motivation and liking for school) and 'social and personal attitudes, motives and behaviours' (including conflict resolution skills, intrinsic prosocial motivation and altruistic behaviour). Further evidence of the contextual nature of the benefits of school connectedness is provided by Maroulis and Gomez (2008) in their pioneering work examining the relation between network density (the degree of connectedness to peers) and academic achievement. An interaction between network density and the academic achievement of individual students was found to be dependant on the level of peer achievement of the social network to which a student was attached. The effect on grades of networks of high performing peers was positive, whereas the effect on grades of lower performing peers was negative. This means that encouraging closer ties between students alone may not in itself necessarily encourage higher academic achievement. This study delivered findings counter to expectations foreshadowed in the literature; however, it was conducted in a single

school involving a relatively small sample, and focussed solely on peer relationships. Other literature included in this review attests to the salience of student relationships with teachers and parents, and the mediating influence of student motivation and engagement on student academic achievement.

The review of literature pertaining to student connectedness to school has shown that it has consequences for student attitudes to school and learning, their behaviour, their sense of agency in learning, the development of intrinsic motivation, their mode of behaviour, the maturation of prosocial attitudes and skills and even academic achievement (cf. Osterman, Chapter 43). It contributes to their sense of wellbeing, as indicated by their mental and physical health, and is protective of their adoption of at-risk behaviours. Conversely, connectedness can have deleterious effects where the support is drawn from deviant peers.

Synthesis of factors impacting on student wellbeing

Motivation and engagement in learning emerge as key contributors to student wellbeing and academic progress. As noted earlier, the studies of student wellbeing from Flanders draw attention to the impact of student motivation on wellbeing and academic achievement (Opdenakker & Van Damme, 2000; Engels *et al.*, 2004; Van Petegem, 2008). Student motivation is predicted by teacher caring (Green *et al.*, 2008; Wentzel, 1997, 2002; Van Petegem, 2008), and the classroom climate, especially the quality of peer relationships (Anderson *et al.*, 2004; Wentzel, 1997), and is influenced by student sense of connectedness to school (e.g. Osterman, 2000, p. 341, Chapter 43; Marchant *et al.*, 2001; Maddox & Prinz, 2003). Moral and social education and personality development result in an increase in student motivation and interest (Opdenakker & Van Damme, 2000). Furthermore, motivation mediates the impact of student academic autonomy and connectedness to school on student wellbeing (Van Ryzin *et al.*, 2009), the impact of student-teacher trust on academic achievement (Lee, 2007), and the effect of school connectedness on academic achievement (e.g. Osterman, 2000, p. 341; Marchant *et al.*, 2001; Maddox & Prinz, 2003).

Motivation lies at the core of student learning because it relates to achievement behaviours of students through their beliefs, values and learning goals (Eccles & Wigfield, 2002; cf. Roeser *et al.*, 2002). Additionally, motivation is considered to be at least as important as intelligence in predicting student achievement and, in fact, after controlling for prior achievement, motivation and not intelligence contributed to the prediction of mathematics achievement for secondary school students (Steinmayr & Spinath, 2009). Moreover, student engagement, an allied notion to that of motivation, is also predictive of student achievement (Klem & Connell, 2004), and serves as a protective factor for students at high risk of school failure (Finn & Rock, 1997). In fact, Roeser *et al.* (2002) found that the intrinsic value of a subject was the best predictor of cognitive engagement ($\beta = .46$), with social desirability being the other predictor ($\beta = .28$). Notably, Ainley (2006, 2007) draws attention to the synergy of affect, motivation and cognition in student learning and achievement, because interest focuses energy toward a task and therefore is a 'key variable' in motivation: it is a state in which affect, motivation and cognition are coordinated. Thus, theories of motivation mirror the dynamics between the affective, cognitive and social domains identified by the neurosciences as outlined earlier in this chapter. The import of this alignment of the affective, cognitive and social has been recognized by leading educational psychologists. Monica Boekaerts (1993) emphasizes that student wellbeing impacts upon their learning through their perceptions of personal resources like self-efficacy, ability to interpret and control emotions and perceived social support. Similarly, Richard Ryan (2007) points to the re-emergence of the acknowledgement that motivation includes both affective and cognitive components, a state of affairs that has arisen because of the ineffectiveness in the long-term of cognitive interventions which ignored affective and motivational aspects. Furthermore, Elizabeth Linnenbrick (2006) has also observed this trend to combine affect, cognition and motivation into the one construct.

A range of factors that impact on student wellbeing and academic achievement have been identified from the literature reviewed. This, in turn, raises the question as to whether there is an interaction between student wellbeing and academic

achievement. This question cannot be answered definitively from the literature cited thus far in this review, because of the differing ways in which student wellbeing is operationalized in the various instruments used; nevertheless, the following observation can be made. Opdenakker and Van Damme's (2000) cross-sectional analysis found no impact of student wellbeing on academic achievement; however, the longitudinal study of Van Petegem (2008; cf. Van Petegem, Creemers *et al.*, 2007) demonstrates that academic achievement has an ongoing impact on student wellbeing and posits an indirect link between wellbeing and achievement via motivation. Other studies cited in this review have shown correlations between indicators of wellbeing and student academic achievement both as perceived by students themselves and as measured by test results (e.g. Anderman, 2002; Lee, 2007; Malecki & Demaray, 2006; Marchant *et al.*, 2001; Samdal *et al.*, 1999). These findings concur with those of Marsh and Omara (2008) who observed that academic self-concept and academic achievement are related reciprocally and mutually reinforce each other over an extended period. Academic self-concept was a measure of student wellbeing used by Opdenakker and Van Damme (2000); however, this was a global measure of academic self-concept, whereas Marsh and Omara advocate domain specific measures. Marsh and Omara's findings demonstrate an ongoing interaction and reinforcement between domain specific academic self-concept, a wellbeing indicator, and academic achievement. Similarly, Roeser *et al.* (2000) observed that the wellbeing indicators of emotional distress and academic competence were predictive of school grades longitudinally, and, in turn, school grades impacted on the wellbeing indicators of emotional distress, academic competence and the ways that students valued school. Hence, there is a strong *prima facie* case for positing an ongoing interactive effect between certain specific indicators of student wellbeing and academic achievement over time.

As evidenced by the literature, factors identified as pertaining to student wellbeing at school bring to bear upon student interest, engagement and motivation and subsequently impact on student achievement. It is also evident that student wellbeing is a product of dynamic interaction between the affective, cognitive and social in a manner that is consistent with the recent findings of the neurosciences as

outlined above. An array of factors has been identified that contribute to student wellbeing and support their academic achievement; however, the question remains as to whether a link exists between values education and the wellbeing of students.

Values education and student wellbeing

Concurrence exists in the research interests of researchers investigating the fields of student wellbeing and values education. This is evidenced by the fact that indicators such as student motivation and engagement, student self-concept/esteem, teacher-student relationships, and student sense of belonging to school are observed by researchers in both spheres. For instance, similarities appear in the lists of indicators of Engels *et al.* (2004) in regard to the investigation of student wellbeing in Flanders, and those of Benninga *et al.* (2003, 2006) in their examination of the effect of character education on student achievement in Californian elementary schools. Similarities in indicators can be observed in relation to: the physical condition of school facilities, interaction with staff, and the atmosphere or climate of the school. Benninga *et al.*'s findings of a small, but significant and sustained correlation over three years between values education and student achievement adds to the evidence that student wellbeing impacts on student achievement as measured by standardized tests, and of the role that values play in nurturing and maintaining student wellbeing. Further attestation of this interrelation of values and wellbeing is provided by Roffey's (2008) qualitative study of emotional literacy and wellbeing. Values and the conversation around them have a central role in creating and sustaining a trusting and supportive school ecology essential to continued student and teacher wellbeing.

Investigation of the impact and effectiveness of values education has demonstrated that when values education is conjoined with best practice pedagogy, or quality teaching, there are positive benefits for student wellbeing and academic progress (Lovat & Clement, 2008b; Lovat, Toomey, Clement *et al.*, 2009; Lovat & Toomey, 2009). Research into the effects of religious schools by Bryk *et al.* (1993) and Hill *et al.* (1990) has pointed to the positive synergy between systemic values and academic emphasis in producing excellent educational outcomes for students. Similar results

have been produced across all educational sectors, whether religious, private or public, when values have been taken to the very core of the educational endeavour (Lovat & Clement, 2008a). For example, the experience of West Kidlington Public School in the UK provides evidence of the transformation in the wellbeing of students and improvements in their level of academic achievement when values were taken to the heart of school and curriculum reform. Confirmation of the soundness of the approach is indicated in above average academic performance and the school being sought out for placement of special needs students (Farrer, 2000; Hawkes, 2005, 2009; 2008; Chapter 24). In like manner, Sherblom *et al.* (2006) have observed that elementary student academic performance in mathematics and reading moderately correlated ($r = .58$ and $r = .56$ respectively) with fidelity of implementation of values education. Also, measures of student wellbeing ($r = .56$ and $r = .70$) and teacher feelings of belonging ($r = .69$ and $r = .75$) were also moderately to highly correlated with student attainment.

Teacher practice informed by values and good practice pedagogy has proven pivotal in promoting positive changes in student achievement and wellbeing (Abbott *et al.*, 1998). Improved teacher practice has been found also to result in increased engagement in class and to encourage a supportive sense of classroom community that mediates positive changes in a range of student related dispositions including: pro-social and academic motivation, self-efficacy, liking for school, conflict resolution skills, and trust in teachers (Battistich, 2008; Solomon *et al.*, 2000; Watson *et al.*, 1998). Furthermore, evidence indicates that high quality values education programs implemented with consistency and fidelity provide protection for students against drug use (alcohol and marijuana) and achieve effect sizes similar to those programs that are specifically targeted at drug abuse prevention (Battistich *et al.*, 2000; cf. Catalano *et al.*, 2004). Moreover, the positive effect of values education programs for students throughout their elementary or primary school years have been shown to exert positive and enduring influences on the wellbeing of students into their years of secondary schooling and even into young adulthood (Battistich, 2008; Battistich *et al.*, 2004; Hawkins *et al.*, 1999; Hawkins *et al.*, 2001; Hawkins *et al.*, 2005; Lonczak *et al.*, 2002). The capacity of values education to influence student

character-related behaviour at school positively has also been observed by Skaggs and Bodenhorn (2006) in their study of five school districts in the USA.

Beneficial effects of values education on student wellbeing are also reported as a result of the Australian Government's *Values Education Good Practice Schools Project* (VEGPSP) (DEST, 2006; DEEWR, 2008; Lovat & Toomey, 2009; Lovat, Toomey, Clement *et al.*, 2009; Lovat, Toomey, Dally *et al.*, 2009; see also Toomey, Chapter 2; Dally, Chapter 33). It is noted in the VEGPSP - Stage 1 Final Report (DEST, 2006) that changes in teacher classroom management had a 'ripple effect' on student behaviours and the whole discourse of schools. Subsequently, changed student behaviours impacted positively on school climate, with the effect that classrooms and schools became calmer with happier students and teachers. Likewise, VEGPSP – Stage 2 Final Report (DEEWR, 2008) indicates that values education, as implemented among the various school clusters, promoted wellbeing attributes such as student connectedness, motivation, engagement, interest and ownership in learning, as well as leading to changes in student prosocial behaviour. An investigation of the effects of VEGPSP using a complement of qualitative and quantitative methodologies confirms the general picture that student wellbeing is advanced by values education. Quantitative measures indicate teacher-reported improvement in student wellbeing in terms of student engagement, inclusive behaviour and responsible behaviour after a year of values education. In like manner, qualitative data provided corroborating evidence that student wellbeing had, in fact, been enhanced by the implementation of values education in terms of improvements in school climate and student self-appraisal, self-regulation and self-esteem (Dally, Chapter 33; Lovat, Toomey, Dally *et al.*, 2009).

Examination of the role of values in education leads to the conclusion that effective education cannot proceed unless it embodies those values which underlie a positive concern and regard for student welfare in the provision of that environment which contributes to the development of their full capacities. Collaboration between cognitive, affective and social dimensions of learning indicates that values are central, rather than peripheral to education and learning. Such a view is reinforced

by Hawkes (2009) who draws attention to Sankey's (2006) assertion that our actions are not arbitrary, even if subconsciously initiated; rather, they are influenced, and even determined, by values acquired through experience over time and which permeate the conscious and subconscious. Sankey continues:

School is one very influential area of experience where meaning and value are assimilated into neuronal connections that make students what they are. ... Values and meanings encountered in the process of education not only influence the *conscious* choices and actions of students, **they also contribute to the making of individual brain and influence what each self will do when actions and choices are initiated *subconsciously***. ...the school itself has to become a values-based learning environment. (pp. 173-174, bold added)

Furthermore, Sankey contends that a values-based learning environment is enhanced by the understanding afforded by the neurosciences that alerts educators as to what is happening within the student, thus providing insight into the developmental needs and opportunities of students. Therefore, schools and teachers play a significant role in the values formation of students both through explicit curriculum (either as specific values education programs or the intentional integration of the teaching of values into curriculum subjects) and via the implicit or hidden curriculum in its many facets and manifestations (e.g. Halstead and Jiamei, Chapter 49; Hawkes, Chapter 24; Narvaez, Chapter 35).

Conclusion

A concept of student wellbeing at school informed by Aristotle's notion of *eudaimonia* will of necessity be holistic, multifaceted, and values oriented. In the research literature surveyed, the notion of wellbeing is measured by or observed against a number of different descriptors, including: student liking for school; self-concept; self-efficacy; relational trust; mental health and psychological adjustment; physical health; protective behaviours; social support of parents, peers and teachers; quality of school life; communitarian school ethos; school academic emphasis; school connectedness; and classroom and school climates. From this list of

descriptors it can be readily identified that many facets of student wellbeing are affected either directly or indirectly by the nature and quality of relationships with significant others. Concern for student wellbeing is ultimately driven by the values of the school principal, staff, parents, students themselves and the wider community. The affinity between providing conditions conducive to student wellbeing and effective values education is evident in the findings of this review, and, in particular, in relation to the positive effects of teacher care and concern on student wellbeing and academic progress (e.g. Hawkes, 2009). Other aspects of student wellbeing regarding school and classroom climate, student connectedness to school, student behaviour, and student motivation, interest and engagement in learning have been also associated with and positively affected by educationally sound values education programs that are implemented with consistency and fidelity (e.g. Battistich, 2008; Battistich *et al.*, 2004; Solomon *et al.*, 2000; Watson *et al.*, 1998). Finally, an overlap of research interests between the two fields of student wellbeing and values education is apparent.

Consideration of the interrelation of values education and student wellbeing at school leads to the conclusion that student wellbeing is a positive observable outcome of the implementation of values as they are embedded in educational policy, leadership administration, and the explicit and hidden curriculum, and also as given tangible expression in pedagogical practices and the web of relationships amongst the various stakeholders of a school. Recent findings of the neurosciences have underscored the fact that in order to be effective, education must engage students across affective, cognitive and social domains. Moreover, the very experiences undergone by students during their schooling are formative of academic and moral values. Research into values education affirms the centrality of values in shaping the ambience of the learning environment and the significance for student wellbeing and achievement of what Neil Hawkes (2009; Chapter 24) calls 'values-based education'. In other words, values lie at the very basis of all effective education. Promotion of student wellbeing means the provision of those conditions wherein student potentialities can flourish be they physical, affective, cognitive, social, spiritual, or moral. Student wellbeing cannot be attained or maintained apart

from attention to values and their actualization in the educational setting, beginning with the valuing of students.

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