Transforming the HSC

Affective implications

LORRAINE SMITH & KENNETH E. SINCLAIR, UNIVERSITY OF SYDNEY

Change is in many ways the hallmark of our times, in education and the wider society. Following a ministerial review, important changes have taken place to the role and the form of the Higher School Certificate (HSC) in New South Wales education. While performance statistics and participation rates for the HSC are readily available, relatively little information is available about equally important matters relating to students' motivation and their experience of such affective states as stress, anxiety and depression associated with the HSC. This study focuses on the nature of such negative affective responses and their relationships with student motivation and goal orientation. The study was conducted using a sample of Year 11 and Year 12 students at one Sydney comprehensive high school. Results show that, on average, more than 40% of Year 12 and 25% of Year 11 students in this study are reporting symptoms of depression, anxiety and/or stress which fall outside the normal range. Significantly more females than males report these symptoms. Performance-avoidance goals were significantly and positively correlated with negative affective responses for male students. Self-efficacy was significantly and positively correlated with mastery for female students. These results are discussed in the light of the New South Wales government's changes to curriculum and assessment that it believes will enhance student achievement and success.

INTRODUCTION

In 1998 over 65,000 students undertook the HSC in New South Wales. The HSC takes the form of regular school-based assessments from term four in Year 11 through to an external final examination period in term four in Year 12. Students have, up until 1999, applied for a TER (Tertiary Entrance Ranking) and from 1999 a UAI (University Admissions Index), both of which provide a scaled ranking of students' HSC marks. The results of the HSC are used by students to gain entry to courses at technical and tertiary level and by employers as selection criteria for employment. Competition for places at tertiary or technical level, rising unemployment and concerted media interest have over the last ten years or so contributed to an increasing awareness amongst, and attention paid by, the public to the HSC (Edwards 1997). Consequently, a great deal of importance is placed

on the outcomes of the HSC, resulting in expectations from all quarters for commitment and performance on behalf of the students.

Changes to the HSC have been planned for 2000-2001. These changes are a result of the McGaw Reports (1996, 1997) on HSC form and structure, and subsequent New South Wales Government Reforms (Aquilina 1997). Briefly, the two areas of curriculum and student assessment and reporting will undergo changes with the intention of raising standards and ensuring rigour and relevance. Some courses have been deleted from the curriculum, the Key Learning Areas structure has been abandoned, and a single performance scale will be adopted. Assessment standards are to be developed so that students' results reflect achievement with respect to a course standard rather than a norm, and reporting of students' results will be confidential and made separate to university admission procedures. The reforms are also intended to discourage the prevailing view of the HSC as some sort of competitive benchmark with winners and losers, and to remove the uncertainty experienced by teachers and students concerning Year 11 and 12 curriculum, assessment and reporting.

The government can make changes to its curriculum and assessment to promote student achievement and success, but this is only one part of the equation. Past research has demonstrated that student motivation is a key factor when considering achievement in schools (Maehr and Fyans 1989). To achieve and succeed a student must be motivated to do so. Personal motivation is needed for effort to be expended in an activity or towards the achievement of a particular goal. A student undertaking the HSC, for example, will engage in activities associated with the HSC to the extent of their personal motivation to do so.

A further related consideration is the pressure to perform that students experience while studying for the HSC, whether it be from personal expectations or from external expectations such as school or family. For some students this can result in negative affective responses such as stress and anxiety. The constant demands and expectations over the twelve-month period, and the importance that is placed on the final mark, make the HSC a stressful undertaking for many students. Associated negative emotions and thoughts, and physical symptoms, can act as demotivators for a student studying for the HSC. Negative affect may therefore impact on the personal goals adopted by students studying for the HSC.

In both the McGaw Reports (1996, 1997) and the Government Reforms (Aquilina 1997) passing mention is made of the potential stressfulness of the HSC, describing it variously as a 'race to the finish' (McGaw 1996, p.66), a 'selection device' (Aquilina 1997, p.27) and as having 'high stakes' (McGaw 1997, p.81). Others have described it as a 'blood sport' (Edsall 1997, p.7) and putting students under 'intolerable stress' (Fitzgerald 1997, p.1). While stress has been acknowledged, neither stress nor student motivation have been explicitly addressed in McGaw's Review (1996) or Recommendations (1997), or in the Government Reforms (Aquilina 1997).

The government is wanting students to attempt and succeed in more demanding courses. To do this it has implemented changes to the curriculum and assessment with-

out putting procedures in place to motivate and foster students' personal investment. A large body of research exists that supports the notion that pressures associated with competitive performance can result in students experiencing negative cognitions and affect which have a debilitative effects on performance (Ames 1992; Ames and Archer 1988; Pintrich and Schunk 1996; Zeidner 1995). Alternatively, approaches to schooling which foster students' love of learning and the development of valued skills will give rise to increased independence and a sustained personal investment in achievement-oriented activities (Ames 1992).

It is a concern, therefore, that recent research found a high proportion of students studying for the HSC were 'at risk' of severe psychological illness (Hodge, McCormick and Elliott 1997), whereby emotional distress was reported by 42 percent of Year 11 and 56 percent of Year 12 students.

Student goal orientations

School students' motivation and the approaches they take to their learning can be understood in terms of their goal orientations. Mastery and performance orientations to the achievement of goals have been developed into a hierarchical model of approach and avoidance (Elliott and Church 1997). With a mastery goal, students are oriented towards learning with the focus primarily on mastering the learning tasks involved and developing competence. With a performance goal orientation, students focus primarily on performance outcomes and the results of these outcomes in relation to other students. This orientation can take the form of performance-approach, whereby the student is motivated to demonstrate ability, or performance-avoidance, whereby the student is motivated to avoid the demonstration of the lack of ability. Performance goal orientations can have positive, approach-related outcomes for students when they are influenced by high competency expectancies and a desire for achievement. Elliott and Church (1997) found that achievement with a performance approach goal was associated with high achievement motivation, low fear of failure, and high expectations of competence. They also found, however, that performance-avoidance goal orientations can have negative, avoidant-related outcomes when associated with fear of failure, low expectancies of competence and poor performance. Mastery goals, as expected, were found to be based on intrinsic motivation and high competence expectancies.

Goal orientation and negative affect

Goal orientation can also have a negative impact that extends beyond the achievement domain and into personal adjustment and wellbeing. Fear of failure and subjective feelings of distress amongst performance-avoidance-oriented students have been found to have a deleterious effect on their satisfaction with their progress, self-esteem and life satisfaction (Elliot and Sheldon 1997).

Just how performance goals can give rise to negative affect was described by Dweck (1985). Dweck argues that a performance goal orientation is more uncontrollable than a mastery orientation. This is because performance goals are externally driven, being

dependent upon the evaluation of others and comparison of peers. A mastery orientation is seen to give more control over the attainment of a goal since it is internally driven. Control judgements are more accurate because they are not dependent on others' evaluations and there is less reliance on defensive coping responses.

In a goal theory model of motivation, Anderman and Maehr (1994) propose that affect is an outcome of contextual goal stresses and mediating beliefs. In this model a school's goals will influence students' personal academic goals, such as mastery, performance-approach or performance-avoidance. Personal goal orientations will also be influenced by perceptions of academic self-efficacy. These factors are seen to influence the types of learning strategies, affects, attitudes, choices and preferences adopted by a student.

Thus, this transactional-style model allows for the interaction of important determinants of student academic learning. It could be postulated that school culture, personal goals and self-efficacy may interact with each other as well as influence outcome variables. Furthermore, outcome variables, affective responses in particular, may also influence the determining factors. Temporal effects should also be considered. Over the lifetime of the HSC, for example, a student's personal goals, academic self-efficacy and affective responses may vary depending on external factors such as school demands and examinations, or internal factors such as emotional responses to success or failure on assessments. In the context of the HSC the orientations that students adopt towards the achievement of their goals may have an effect on, and be affected by, the level of negative affective responses they experience.

Negative affect and self-efficacy

The achievement of feelings of mastery and control in situations is partly determined by a person's confidence or belief in their self-efficacy. Self-efficacy concerns people's perceptions of their ability to perform a behaviour or action. A person who has a well-developed sense of self-efficacy will believe strongly in their capacity to carry out a behaviour. A low level of self-efficacy would mean that a person has little confidence in their capacity to carry out a behaviour. Self-efficacy beliefs are related to the effort invested in a behaviour, perseverance in the face of difficulties, and the degree of optimism or pessimism attached to the outcome (Pajares 1996). Self-efficacy beliefs influence how much affective distress a person will experience in coping with demanding situations (Bandura 1997). Perceptions of low efficacy in exercising control can give rise to anxiety and depression, and, with respect to managing academic demands, students with low selfefficacy are particularly vulnerable to achievement anxiety (Bandura 1993). Low self-efficacy can also result in avoidance of difficult tasks, low aspirations and weak commitment to goals (Bandura 1993). Teachers' self-efficacy and the culture of efficacy created by a school can also have a significant negative or positive impact on the learning environment of students (Bandura 1993).

Self-efficacy may therefore have a positive or negative effect on students' goals. Positive perceptions of efficacy and optimism could contribute to a mastery or performance-

approach orientation to achievement. Similarly, negative perceptions of efficacy and a pessimistic outlook could contribute to a performance-avoidance orientation.

Negative affective responses have been acknowledged as a factor in students' learning and performance in the literature, and they occupy a place in models developed thus far. However, apart from the aforementioned Hodge et al (1997) study into HSC stress, research has largely ignored the role that these types of student responses may be playing in the HSC. The McGaw reports (1996; 1997) and the Government Reforms (Aquilina 1997) also fail to take this factor into account.

The current study

A study was conducted in a Sydney high school in 1998 investigating Year 11 and 12 students' anxiety, depression and stress, goal orientation, and academic self-efficacy. The following research questions were developed in the light of the research literature and in the context of the HSC:

- 1. What is the nature and extent of student stress?
- 2. What sorts of personal goal orientations do students have?
- 3. What are the relationships between affective responses, goal orientations and academic self-efficacy?

The following hypotheses were also postulated with respect to students studying for the HSC:

- Positive relationships would be found between: i) performance-avoidance goals and negative affective responses; ii) performance-approach goals and academic self-efficacy; and iii) mastery goals and academic self-efficacy.
- 2. Negative relationships would be found between: i) performance-avoidance goals and academic self-efficacy; ii) mastery goals and negative affective responses; and iii) academic self-efficacy and negative affective responses.

METHOD

Sample

Students from Years 11 and 12 in a co-educational high school in a middle-class area in metropolitan Sydney participated in the study. This school was selected because of its co-educational, comprehensive and middle-class status. Although one school cannot be seen to be totally representative of schooling in New South Wales, it was felt that the characteristics of this school reflected many of the attributes of government-based schooling. Sixty-seven students from Year 12 (41 males, 26 females) and 63 students from Year 11 (35 males, 28 females) took part.

Instruments

A questionnaire package consisted of the following:

 Affective responses were measured using the Depression Anxiety Stress Scales (DASS) (Lovibond and Lovibond 1995). The DASS is an Australian-normed set of

self-report scales designed to measure the emotional states of depression, anxiety and stress. For the purposes of this study, the short form of the DASS was used (DASS21). The internal consistency and concurrent validity of the DASS and DASS21 has been found to be very good to excellent (Antony, Bieling, Cox, Enns and Swinson 1998). Scores for each of the scales are calculated by simple summation and doubling of raw scores. Examples of the DASS questions are: 'I felt I wasn't worth much as a person' (depression scale); 'I felt I was close to panic' (anxiety scale); 'I found it hard to wind down' (stress scale).

ii) Patterns of Adaptive Learning Scale (PALS) (Midgley, Maehr, Hicks, Roeser, Urdan, Anderman and Kaplan 1996) were used to measure students' goal orientations and academic self-efficacy. Scores for each of these scales are calculated by taking the mean of the sum of raw scores. Examples of the PALS questions are: 'I like school work that I'll learn from even if I make a lot of mistakes' (mastery goal orientation); 'The reason I do my school work is so others won't think I'm dumb' (performanceapproach goal orientation); 'One of my main goals is to avoid looking like I can't do my work' (performance-avoidance goal orientation); 'Even if the work is hard, I can learn it' (self-efficacy).

Procedure

The questionnaire package was completed during class time. Year 12 students' data collection took place after completion of their trial HSC exams and prior to the final HSC exams. Year 11 students participated in the study in term four.

RESULTS

1. Negative affective responses

Norms provided with the DASS (Lovibond and Lovibond 1995) enable the conversion of raw scores to Z scores and their corresponding percentile values. Comparisons can then be made between the three scales, and severity labels to be applied. Tables 1 and 2 below detail the rates of depression, anxiety and stress, by severity, reported by Year 11 and Year 12 students respectively.

Table 1 - Percentage rates of depression, anxiety and stress: Year 11

	Males: N=35			Females: N=28			
	Depression	Anxiety	Stress	Depression	Anxiety	Stress	
Normal	71.4	71.4	71.4	42.9	50.0	46.4	
Mild	11.5	5.7	20.0	21.4	7.1	10.7	
Moderate	5.6	14.3	8.6	10.7	28.6	17.9	
Severe	8.6	2.9	0.0	4.3	10.7	17.9	
Ext. severe	2.9	5.7	0.0	10.7	3.6	7.1	
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	

Table 2 - Percentage rates of depression, anxiety and stress: Year 12

	Males: N=41			Females: N=26		
	Depression	Anxiety	Stress	Depression	Anxiety	Stress
Normal	46.3	73.2	46.3	15.4	38.5	30.8
Mild	22.0	7.3	22.0	15.4	7.7	11.5
Moderate	14.6	7.3	21.9	38.4	26.9	19.2
Severe	7.3	4.9	4.9	15.4	7.7	27.0
Ext. severe	9.8	7.3	4.9	15.4	19.2	11.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

A conservative estimate of the proportion of students who are reporting levels of depression, anxiety and/or stress outside of normal limits according to norms provided (Lovibond and Lovibond 1995) can be made by treating the 'mild' category as 'normal' and studying percentages of the 'moderate', 'severe' and 'extremely severe' categories. The characteristics of high scorers (those falling outside of 'normal' or 'mild') include pessimism about the future, inability to become interested or involved, and a belief that life has no meaning or value (depression scale); apprehensive, panicky, worries about performance, and breathing difficulties (anxiety scale); inability to relax, irritable and intolerant of interruption or delay (stress).

Analysis of Table 1 shows that many Year 11 students in this sample reported high ('moderate', 'severe' or 'extremely severe') levels of affective distress. The states indicating most concern are anxiety in Year 11 males (22.9%), and, in Year 11 females, depression (25.7%), anxiety (42.9%) and stress (42.9%). Year 12 students' rates of affective distress outside 'normal' or 'mild' limits are much higher. In this sample, the proportion of male students reporting high rates of symptoms of depression and stress are 31.7% for both scales. The proportion of the Year 12 sample of females' reported rates of all three negative affective states are disturbingly high, showing 69.2% for depression, 53.8% for anxiety and 57.7% for stress.

To establish any significant differences between groups, independent t-tests were conducted. Table 3 details mean scores of depression, anxiety and stress for Year 11 and 12 students.

Table 3 - Mean and standard deviation scores of depression, anxiety and stress

	Depression	Anxiety	Stress	
Year 11				
Females	12.8 (<i>10.8</i>)	7.8 (<i>6.0</i>)	16.6 (<i>10.4</i>)	
Males	7.5 (<i>7.8</i>)	5.6 (<i>7.0</i>)	8.5 (<i>6.3</i>)	
Year 12				
Females	17.0 (9. <i>0</i>)	10.3 (7. <i>8</i>)	19.5 (<i>11.2</i>)	
Males	11.6 (9. <i>8</i>)	5.3 (6.7)	13.0 (10.1)	

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Gender differences were found on student responses to the DASS. Independent groups' t-tests revealed significant differences (p<0.05) between Year 11 males and females on the stress and depression scales, and Year 12 males and females on the stress scale, depression scale and anxiety scale. Study of Table 3 indicates that females' mean scores were significantly higher than males' scores for these scales.

Significant cohort differences were found within sex between years. Independent groups' t-tests showed that Year 12 males reported significantly higher scores than Year 11 males on the depression and stress scales (p<0.05), but not on the anxiety stress scale (p>0.05). There were no significant differences between Year 11 females and Year 12 females on any of the scales (p>0.05).

2. Affective responses - goals - self-efficacy relationships

Correlations between affective responses, goals (mastery, performance-approach and performance-avoidance) and self-efficacy were carried out for sex and year.

<u>Table 4 – Correlations – Females and Males: Year 11</u> (Females in bold, Males in *italic*)

	Depression	Anxiety	Stress	Self- efficacy	Mastery	Perf- app.	Perf- avoid.
Depression		. 75**	.55**	09	.02	.18	.37*
Anxiety	.30		. 62**	14	.04	.09	. 55**
Stress	.73**	.24		.05	.33	.21	.29
Self-efficacy	27	13	31		.26	.44*	10
Mastery	35	13	20	.44*		.34*	19
Perf-app.	.09	.24	.11	.21	.16		.25
Perf-avoid.	.20	.13	.14	.18	.06	.33	
	*p<.0	5 **p<	.01				

<u>Table 5 – Correlations – Females and Males: Year 12</u>

		(Females in bold, Males in			n <i>italic)</i>		
	Depression	Anxiety	Stress	Self- efficacy	Mastery	Perf- app.	Perf- avoid.
Depression		.68**	. 65**	06	06	07	.25
Anxiety	.54*		.79**	20	.18	.22	.56**
Stress	.67**	.73**		04	.17	.23	. 45 *
Self-efficacy	08	.12	09		.19	.02	36*
Mastery	12	.08	.08	.67**		.19	.09
Perf-app.	.45*	.15	.16	.14	.02		. 35 *
Perf-avoid.	.38	04	.10	38	29	.58*	
	*p<.0)5 **p<	.01				

For students in both Years 11 and 12 it will be observed from Tables 4 and 5 that stress is strongly correlated with depression and anxiety for male and female students. As might be expected in a number of instances, the affective measures related to performance-avoidance goals. Importantly, for male students in Years 11 and 12, quite strong relationships are found between those anxiety and debilitating performance-avoidance goals. For male students in Year 11 feelings of depression are also significantly related to performance-avoidance goals and for male students in Year 12 feelings of stress are significantly related to performance-avoidance goals. In contrast, few significant relationships may be observed between affective factors and the more positive mastery or performance-approach goal orientations.

Orientation towards mastery goals is not related to the affective responses of depression, anxiety or stress. For females in Years 11 and 12, however, there is a significant positive relationship between mastery goal orientations and self-efficacy. Some interesting further relationships are found, as well, for self-efficacy. As expected, self-efficacy is typically negatively related to the affective measures of stress, anxiety and depression, although most co-efficients are not significant. For Year 11 males there was a significant positive correlation between self-efficacy and the performance-approach goal orientation. A significant negative correlation between self-efficacy and performance-avoidance goals was found for Year 12 males. As already noted, both Year 11 and Year 12 females' scores for self-efficacy were significantly and positively related to mastery goals. Clearly self-efficacy is a variable with strong implications for student goal orientation in education.

The significant positive correlation between performance-approach and performance-avoidance goal orientation scores for both females and males in the Year 12 sample appears contradictory. However, recent research has shown these two scales to be positively correlated (Middleton and Midgley 1997), and a need for some clarification of the distinction between these two goal orientations (Midgley, Kaplan, Middleton, Maehr, Urdan, Hicks Anderman, Anderman and Roeser 1998).

DISCUSSION

The above discussion reports the results obtained from Year 11 and 12 students from a single co-educational high school in Sydney. The results confirm interesting and important relationships between HSC student affective responses and achievement goal orientations. Whether those relationships may be generalised more widely to students across Sydney and beyond will need to wait on further research.

These results show that, on average, over 40 percent of the Year 12 students in this study reported levels of negative affective distress following trial HSC exams and prior to final exams that were beyond normal limits. This result supports the findings of Hodge et al (1997). Replication of this study using a larger, more comprehensive sample of HSC students should be a matter of priority given these findings.

The hypotheses proposed in this study, were, on the whole, confirmed by the results. The hypothesis that performance-avoidance goals and negative affect are significantly related was supported by the results obtained from the male students in Years 11 and 12.

The presence of this type of goal orientation and its associated negative affect amongst students in their final (and arguably most important) year at school must present a considerable challenge to schools and teachers, and should be of concern to policy-makers.

The hypothesis that mastery goals and self-efficacy would be positively related was statistically significant for this sample of Years 11 and 12 female students. Additionally, a significant positive relationship between self-efficacy and the performance-approach goal orientation for males in Year 11, and a significant negative correlation between self-efficacy and performance-avoidance goals for year 12 males were confirmed. The strong relationship between self-efficacy and mastery goal orientation points to a way of counteracting the debilitating effects of negative affective responses experienced by many students. Moreover, these findings suggest that by finding ways of maintaining and even enhancing feelings of self-efficacy through the final two years of high school, students are more likely to take positive approaches to their learning and achievement (Pintrich and De Groot 1990). This may help to prevent negative affective responses and associated performance-avoidance orientations, particularly for male students, becoming more salient over the course of the HSC.

No statistically significant results were obtained with respect to the remaining hypotheses, namely that a negative relationship exists between (i) mastery goals and negative affect, and (ii) self-efficacy and negative affect. Although none of the data confirmed significant negative correlations between these sets of variables, the trends were in the directions predicted. A longitudinal study following students through the course of Years 11 and 12 could throw further and more convincing light on these predictions, and also track the changes that may take place with respect to student negative affect, goal orientations and academic self-efficacy. This seems imperative in the light of this study's results showing that a significant proportion of students may be suffering from disturbingly high levels of depression, anxiety and/or stress during their final years at school.

Differences were found between both males and females and year groups in the study on affective responses. While this gender difference warrants separate and further investigation, some preliminary conclusions can be drawn. More females than males report negative affective responses, and females report higher levels than males. Males, particularly those in Year 11, reported lower levels of affective distress than female students, and this result mirrors the findings of Hodge et al (1997).

The very clear differences evident in students' responses on the Depression Anxiety Stress Scales may be due to the gender roles perpetuated in our society. This sex difference may be an artefact of a male propensity to be defensive and under-report symptoms of stress, anxiety and depression, and a female propensity to accept and admit to such emotions. Another interpretation of this finding can be made through the application of Lazarus and Folkman's (1984) model of individuals' personal meanings and appraisals of stressful situations and resultant coping responses. It is possible that males deal with stress through rationalisation of threatening situations and defence mechanisms, such as denial, whereas females appraise such situations in a less defensive manner but have to cope with the full weight of the associated emotional responses. Seeking an understand-

ing of the personal meanings students give to the HSC and whether or not these meanings change over the course of the final school years would help to clarify these issues.

The results of this study reveal a student perspective that has not been satisfactorily addressed by the government in its changes to the HSC. This is a curious thing, given that student motivation is central to the undertaking of demanding courses and the achievement of success in these courses. It has been demonstrated in this study that there are relationships between affective responses, academic self-efficacy and the types of academic goals students adopt for the HSC. Most importantly, there is a strong relationship between negative affective states and performance-avoidance goal orientation, and self-efficacy and mastery goal orientation. The government's changes to the curriculum and reporting procedures may well streamline the HSC and loosen the grip universities have on results, but these changes may be insufficient to create an environment that truly fosters achievement. In fact, the existence of performance-avoidance orientation, and its associated negative affect in the student population, may only be exacerbated by the government's aims for students to undertake and succeed in more demanding courses. Research shows that performance-oriented students very quickly develop negative selfcognitions, negative affect and impaired performance in the face of difficult or demanding tasks (Dweck and Leggett 1988). If the government wishes to improve achievement, consideration should be given to the motivational style of students and its interaction with stress responses.

Attention should also be paid to the study and development of school cultures that foster achievement, strong self-efficacy and success. Mok and Flynn's study (1997) supports the notion of a learning environment that is geared from both a curriculum *and* a student/teacher perspective in order to enhance student wellbeing and achievement in the HSC. Maehr and Meyer (1997) state that individuals construct goals with reference to a particular context and that this must influence educational policy and practice. In other words, a school's culture and the goals it holds for its students will impact on the goals determined by its individual students.

In conclusion, changes can be made to the HSC curriculum and an attempt can be made to reduce the influence of university admission scores on community perceptions, but will these changes improve student motivation, reduce negative affective responses and maximise achievement? One could ask how much the government's changes to the HSC have been influenced by a consideration of students' perspectives on academic goals, or the impact that a school culture may have on an individual's learning and achievement. It is not too difficult to imagine how a young adult who believes that life has no meaning and is unable to become interested or involved in tasks, or who is apprehensive and panicky, would find studying for and performing in the HSC a demand that exceeds their personal resources.

The HSC is a stressful undertaking for many thousands of students. The government acknowledges this, albeit cursorily. Wouldn't the development of classroom practices that advocate learning for learning's sake, academic self-confidence, and teacher-pupil relationships do more to reduce stress and improve achievement? After all, foster-

ing students' intellectual, social and moral development is precisely what the government claims it wants to do.

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