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HOW ABLE SIXTH FORM STUDENTS FELT
ABOUT THEMSELVES,
ABOUT LEARNING,
AND
ABOUT OTHERS

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ABSTRACT

In order to investigate how able sixth form students felt about themselves, about learning, and about other people a pilot study was carried out. From an analysis of the findings of the pilot study, a questionnaire was designed which covered relevant affective (social and emotional) domain aspects such as competitiveness, perfectionism, fear, sensitivity, enjoyment, confidence, happiness, defensiveness, security, worry, and choices in what and how the students learned.

In order to gain more indepth information about how these students felt about themselves, about learning, and about others, a second source of data was collected. Small groups of students from the questionnaire cohort were interviewed. The interview questions were based on the results from the questionnaire; that is the frequency counts of how many students agreed and disagreed with each of the fifty statements. These interviews gave the students the opportunity to respond to the results of the questionnaire, add a contextual base to their responses in the questionnaire, establish any causal relationships between the topics in the questionnaire, and reduce any researcher bias in the interpretation of the results.

The questionnaire sample consisted of 283 students from 20 schools who were nominated by their teachers as able, according to criteria supported in the literature. The interview sample consisted of 46 students from 7 schools.

The research aimed to explore how the students felt about themselves and how they described themselves, how they felt about their own learning, how they felt when they were learning with others, and to point to any problems they had in these areas of the affective domain.

The results showed that the students perceived they had a lack of confidence; had fears and anxieties; were perfectionists at some things; were competitive in order to remain accepted by their group; wanted to change some things about what and how they learned, especially increasing the amount of discussion; were inexperienced in making choices, especially career goals; felt stressed; wanted more life skills; wanted to combine practical skills with theoretical knowledge to make sense of their experiences; but enjoyed being with others despite worrying about what others thought of them in certain circumstances.

The students indicated that these areas adversely affected the quality of their learning.

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Chapter 1

INTRODUCTION

Purpose of this study

The present study explored some aspects of the affective (social and emotional) domain (Clark, 1992) of able sixth form students by asking them about some of their feelings. In particular how they felt:

- * about themselves

- * about learning

- * about others.

Four factors influenced the decision to pursue this study:

- * after studying a Masters level paper at Massey University on the Education of the Talented, it became clear that able students did not always succeed at school, and some of the students, regardless of whether they were successful at school or not, developed behavioural problems and social and emotional needs specific to able students

- * the international literature on giftedness has clearly focused on the cognitive domain (especially identification of the gifted and teaching programs which enhance cognitive performance) and very little attention has been given to the affective domain¹.

- * Clark (1992) maintained that teaching affective skills would enhance cognitive performance for gifted students, because the brain works in an integrative and synergetic way

- * there has been no New Zealand research to date on the affective domain of able students.

The term 'able'

In this study the term 'able', rather than 'gifted', was used for two reasons. Firstly, there has been discontent in educational circles with the term 'gifted' because of the adverse affects this labelling had on students (Delisle, 1984). 'Labelling students results in a change in parent and teacher expectations, as well as in the self-concept of the child' (Clark, 1992, p234).

¹ In more recent literature there has been a strong interest in attitudes of the gifted, and towards the gifted (McAlpine, 1988, 1992).

Secondly, it was an appropriate word to describe the students in this study, who were not tested for abilities but were nominated by their teachers as having high level abilities; higher than expected for their age (Renzulli 1985).

Nevertheless in the absence of any internationally acceptable alternative term, the current literature still used the terms 'gifted' and 'gifted and talented'. Most of the literature cited in this study therefore, used the term 'gifted', and in the absence of any international literature using the term 'able', all references in this study using 'gifted' should be read in connection with 'ableness'.

The cognitive domain

In most schools learning is directed at the cognitive domain. Students are not only given cognitive information but they are also taught how to process it; below is an example.

In chemistry students are taught about the elements - their characteristics and ways of identifying them. Students usually carry out experiments to mix, distil, condense and dissolve chemicals. Conclusions are drawn about combinations of chemicals, and behaviours of chemicals in certain conditions. After a series of experiments it is possible to draw conclusions about

one or more families of chemicals, and predict behaviours in given circumstances.

Students are similarly taught how to process mathematical information or information from other disciplines. This means that when students receive information they know how to process it, and can reach conclusions. These skills enable students to make decisions about what to proceed with, and what to discontinue, for any desired effect.

It has been generally accepted that both theory and practice are integral parts of the learning process, and students are usually provided with both textbooks and equipment to assist their cognitive learning.

The affective domain, on the other hand has been treated very differently.

The affective domain

Students are not usually given information, or taught how to process information, in the affective domain. Yet students receive social and emotional information because they have social and emotional experiences. Cognitive learning situations produce social and emotional information because students either like or dislike learning situations, and because they learn in classes with other people.

Without being given affective information, or processes to deal with that information, affective learning may not take place at a pace equal to that of the cognitive domain. Students may receive affective information and have no means of developing that information, and have no processes to draw conclusions or engineer constructive situations for themselves.

In most schools there is no formal teaching of affective processes, no textbooks, and no equipment.

Little research is being done to identify what processes are most needed.

This suggested that there may be an imbalance between the rate of cognitive learning and the rate of affective learning, and a difference between the competence of the cognitive self and the competence of the affective self.

Clark (1992) maintained that students could learn more in the cognitive domain when the whole of their brain was being stimulated, because the brain works best in an integrated way. Clark suggested that the stimulation of the affective domain increases capacity in both the affective and cognitive domains in a synergetic way. That is, the capacity of the integrated brain is greater than the sum of the

capacity of two individual (affective and cognitive) domains.

Able students

Able students are those who have high level abilities, beyond what is expected for their age, in one or more field(s) or sub field(s) which could be inside the curriculum, or outside the curriculum.

Clark (1992) stated that the perceived gap between the learning in the affective and cognitive domains for gifted students was of particular concern for several reasons. Gifted students received more affective information from their surroundings than an average student and may have learned few processes to deal with that information. This does not mean that gifted students were formally given information but rather that they observed more things in their environment. Secondly, gifted students had a higher capacity to learn than the average student, and so could receive enormous benefit in being taught affective processes. Thirdly, gifted students tended to experience heightened fear and worry from an early age, and needed affective skills to deal with that heightened fear.

There may also be students who have high level abilities in the affective domain (Gardner & Hatch 1989) who are not being identified because the

affective domain has not been given as much attention or resources in either the curriculum or in research.

Since there has been no New Zealand research to date on the affective domain of able students, this study aimed to explore how able sixth form students in New Zealand felt about themselves, about learning, and about other people.

This study then, set out to explore some aspects of the affective domain for able sixth form students, and in particular to investigate how able sixth form students felt about themselves, about learning, and about others.

The research design

The research design involved a questionnaire and then indepth interviews to some of the questionnaire participants.

A literature search showed that no suitable questionnaire was available for the above topics and so the study included the design of a questionnaire.

The questionnaire was administered to a large sample (283) of able sixth form students. The fifty one item questionnaire asked the students to respond to fifty statements on how they felt about themselves, about learning, and about other people, and the last item

asked the students to say what they thought of the questionnaire. The data from the questionnaire were then analysed to find out how many students agreed and disagreed with each statement.

The second stage of the study involved indepth interviews with small groups of students (forty six students in seven groups of between five and ten students in each group) from the original cohort. The purpose of the interviews was to find out more about how the students felt about themselves, about learning, and about other people by asking them to respond to the results of the questionnaire. The interviews also gave the students an opportunity to add any information they saw as relevant and important, and an opportunity to participate in the interpretation of the questionnaire results (Lather, 1986).

The affective domain topics included in the questionnaire and interviews were selected from the current literature and included emotional and social aspects of learning, such as:

- * fear
- * sensitivity
- * enjoyment
- * boredom
- * jealousy

- * worry
- * confidence
- * happiness
- * shyness
- * defensiveness
- * perfectionism
- * security
- * choices in what and how they learn.

These topics were applied to individual and group learning situations, in school and outside of school.

THE AIM OF THE PRESENT STUDY

The aim of the present study was to investigate some aspects of the affective domain of able sixth form students.

The research findings from the questionnaire and indepth interviews were to provide information about how the students felt about themselves and how they described themselves, how they felt about their own learning, and how they felt when they were learning with others.

It was hoped that the findings of this study would contribute to a better understanding of how able students felt about themselves, about learning, and about other people.

It was also hoped that the research findings would:

- * point to any problems the students had in these affective areas
- * point to situations or environments that these able students felt enhanced their learning
- * identify any affective learning or teaching taking place.

Chapter 2

**CHARACTERISTICS OF ABLE STUDENTS:
LITERATURE REVIEW**

In order to find out more about how able students felt about themselves, about learning, and about others for this study, it was important to understand the characteristics of able students.

There are two main categories of characteristics of able students in the literature. Firstly, there are characteristics used for identification purposes to ascertain whether or not a student is able. These characteristics are often based on previous accomplishments and behaviours, and usually include some kind of "intelligence".

Secondly, there are the ongoing characteristics of defined groups of identified able students. These characteristics described students' ongoing preferences, and the ongoing affects of ableness on themselves, on their learning, and on their relationships with others.

Although there is more information about the affective domain in the second category (see Chapter 3), it is also important to acknowledge the characteristics used in the literature to identify students with high level abilities. Of particular interest to this study are the types of "intelligences", or range of ability areas described in the literature.

Identification of gifted students

The process of identification of gifted students has been hotly debated and fraught with difficulties, because, as Garner et al (1990) stated 'there is not a uniform set of criteria to distinguish children who are gifted' (p108).

The characteristics used for identification purposes and the process of identification have broadened considerably in the last few years. There is now:

- * a broader concept of intelligence
- * a wider range of curriculum and non-curriculum areas where students have been identified as having high level abilities
- * less emphasis on traditional testing
- * acceptability of teacher, parent and peer nominations as a method of identification
- * an acknowledgment of culture and gender characteristics in the identification process.

Gardner and Hatch (1989) took a broad view and advocated the existence of multiple "intelligences": logical-mathematical, linguistic, musical, spatial, bodily-kinesthetic, interpersonal, and intrapersonal.

Of particular interest to this study was the possibility of having high level abilities in one or more of these "intelligences", and the identification of intrapersonal and interpersonal 'intelligences'.

According to Gardner and Hatch (1989) intrapersonal "intelligence" meant having 'access to one's own feelings and the ability to discriminate among them and draw upon them to guide behaviour; knowledge of one's own strengths, weaknesses, desires, and intelligences' (p6).

Interpersonal "intelligence" meant having 'capacities to discern and respond appropriately to the moods, temperaments, motivations, and desires of other people' (Gardner and Hatch, 1989, p6).

Sternberg (1986) too, suggested there was more than one kind of intelligence. His triarchic theory divided intelligence into three types: componential, experiential, and contextual. Componential intelligence referred to where a student used mental components for analytical thinking. Experiential intelligence referred to where a student creatively combined

disparate experiences in insightful ways. Contextual intelligence referred to where a student understood the environment s/he was in and was able to manipulate it.

Sternberg (1986) maintained that only students with componential intelligence tended to do well on traditional intelligence and assessment tests, or rather that the traditional means of assessing students only catered for componential intelligence.

Sternberg's view supported the argument for a broader approach to identification of "intelligences".

Renzulli and Reis (1985) developed a model to describe giftedness which included 3 interlocking criteria: above average (though not necessarily superior) ability, commitment to the task, and creativity.

The three criteria in Renzulli and Reis' (1985) model have been used in this study to mean commitment is the level and duration of motivation to complete a task, creativity is the number and type of unusual ideas; ability or "intelligence" is the number and type of solutions.

Renzulli and Reis (1985) found that students could be gifted in many subject areas, or just in one specific area of knowledge or performance, and that giftedness

could be manifested in any one or more of a very broad range of areas inside and outside of traditional curriculum areas.

They argued that traditional tests were insufficient in identifying the multiplicity of high level abilities, and insufficient in catering for disadvantaged and culturally different groups. Although tests were seen as suitable in some areas, nominations by teachers, parents and peers was suggested as a suitable method of identification for abilities in non-traditional areas and for under represented groups in the gifted population.

Students' abilities are intermittently being assessed by others inside and outside of school. Their abilities are determined by their written, verbal or behavioural performance. These assessments occur formally and informally at school, in the home, and in social and sporting situations.

However, in international research most gifted students have been identified as having high level "intelligence" in curriculum areas alone, and have most often been identified by traditional tests.

Characteristics of defined groups of gifted students

Recently in the literature attention has been paid to specific groups not previously acknowledged in the

identification process. Female gifted students and gifted students from ethnic minorities were two of the largest defined groups. Each group had their own characteristics.

Although this study did not focus on gender or cultural differences, it was important to:

- * recognise that these issues were important in the literature
- * see whether the sample of students nominated by their teachers as able had included female and non-pakeha students in proportions which represented the population at large
- * see if there were gender and/or cultural differences in the results of this study.

Gifted females

Recently there has been an increase in the amount of research done on gifted females. To date, the main topic concerning gifted females has been society's pressure to conform to a feminine stereotype which is inconsistent with high achievement.

Luftig and Nichols (1992) stated that gifted females found it more difficult to concurrently develop their abilities, maintain friendships, and maintain a high level of self-esteem.

They suggested that there was a societal pressure to make these criteria mutually exclusive, so that females either fitted in socially to the detriment of their abilities, or vice versa.

Luftig and Nichols (1992) also suggested that society sent mixed messages to gifted females encouraging them to be:

'docile, supporting, passive, and nurturing, and on the other hand they are expected assertively to develop their own talents. This conflict often leads to ambiguous peer relations between gifted girls and their nongifted counterparts' (p114).

With these societal pressures, gifted females have been less willing to be identified as high achievers. It is not surprising then, that it has been difficult to identify gifted females, at least by traditional methods.

Beck (1989) argued that mentorships were vital for assisting gifted female students to overcome society's pressure:

'Teachers and coordinators should try to recruit more female mentors since they have such positive effects on gifted female students' (p22).

Cultural perspectives

Cramer (1991) and Renzulli (1991) found that there were special populations that were under represented in gifted programs. Minority cultural groups were one of these special populations. Partly this was due to the failings of the conventional identification methods used (Smith et al, 1991; Renzulli 1992), and partly because little was understood by the majority groups about the other culture concerned.

Renzulli (1992) suggested that using teacher, parent or peer nominations as a means of identification was seen as a way of overcoming part of this problem.

A change in the majority cultural group's focus on identification methods, could also help to overcome part of the problem, because:

'while it is universally accepted that gifted and talented children may be found in all ethnic groups . . . unless focussed efforts are made to both find and nurture minority group youth, employing special rather than traditional approaches, they remain an untapped source of potential intellectual and creative talent' (Reid, 1992, p49).

Reid (1992) added that teacher identification of gifted minority cultures in New Zealand is hampered by

'middle class, monolingual, monocultural Europeans working in an education system that is predominantly ethnocentric' (p50), and that parents of cultural minority students find identification of their gifted children difficult because of a:

'lack of confidence in alien circumstances, a feeling of self-consciousness about their poor command of English, and a belief that their educational duties as parents cease once their children have entered the formal education system' (p53).

Chapter 3

**THE AFFECTIVE DOMAIN:
LITERATURE REVIEW**

The importance of the affective domain

There are several theoretical perspectives which have acknowledged the importance of the affective domain, and its contribution to the effectiveness of the cognitive domain. These theories have been followed up by research studies investigating the impact and practical implications of these perspectives.

It has been recognised in the literature for some time that the affective and cognitive domains were not independent - 'each person responds as a total organism or whole being' (Krathwohl et al, 1964, p7).

In their work on the affective domain Krathwohl et al (1964) constructed a taxonomy of affective behaviours which described the process of learning as a combination of cognitive and affective behaviours. The taxonomy consisted of a sequential hierarchy of receiving information, responding to that information, valuing it, and putting that new value into an existing organised structure. Each of these processes was

seen as dependent on the willingness of the learner to receive and to respond, on how the learner valued the information, and where the learner placed that value into their existing value structure.

Thus, like the cognitive domain, the student has control over whether or not they valued each piece of information. The structure of each student's affective domain ultimately depends on whether or not they valued each piece of information, and if they valued it, where they placed it in their existing structure.

Krathwohl et al's (1964) taxonomy established a parallel between the processes that occur in the affective and cognitive domains for judging information, and deciding what to do with that information.

The importance of the affective domain has been supported more recently by Hunt (1987). He argued that cognition is not the sole or main activity and that 'in considering intelligent behaviour it is necessary to approach it as a complex human endeavour and not as a compartmentalised one' (p108).

This notion of reciprocal dependence was also supported by Clark (1992). She stated that the affective domain is directly related to a part of the brain called the limbic system. Its function is to

express emotions and feelings. She argued that the limbic system contributes significantly to the learning process because it connects our inner and outer experiences. As a result it determines feelings of identity and helps to construct a sense of reality. It also supports the thinking processes, affects memory and attention span, and is seen as the stimulant of higher cognitive thought; the more the affective function is developed, the more the brain processes become integrated, and the more stimulated the cognitive function becomes.

The affective domain therefore, has direct relevance to educational goals and outcomes for several reasons:

1. Clark (1992) described the brain as an integrated system, where different parts of the brain had the capacity to stimulate other parts of the brain, and to cooperate and form a complex whole which is greater than the sum of the individual parts. The affective function of the brain 'more than supports thinking processes; it does, in fact, provide the gateway to enhance or limit higher cognitive function' (p33-34).

Clark (1992) maintained that able students were more familiar with their cognitive domain than their affective domain, and that if gifted students could learn more about their affective domain they could learn more in their cognitive domain.

2. The way students perceive the world was dependent on information from a combination of sources including information from the affective domain.

According to Sternberg (1986) children receive information from within themselves (affective information) and from the outside world, and experience and intelligence together made a combined 'knowledge' of the world.

Clark (1992) had a similar view; that gifted students need to apply affective information to their cognitive information in order to 'make sense of the world' (p40) and to fit in with that person's existing knowledge (Vygotsky, 1978; Clark, 1992).

3. Feelings are part of the affective domain, and are different from the cognitive (intellectual) domain. However, the affective domain could influence success in the cognitive domain (Clark, 1992) because attitudes determine action (McAlpine, 1992). For example, an able student may feel unhappy about being at school and may not do well in school subjects as a result.

4. Students needed skills to process affective information in the same way that students need skills to process cognitive information.

Gifted students may need assistance in developing affective processing skills, because they may not develop automatically. This was of particular concern to Clark (1992) because 'the same heightened sensitivities that underlie gifted intelligence can contribute to an accumulation of more information relating to emotions than the student can process' (p246).

5. Whereas cognitive skills and processes are formally taught in schools, affective skills and processes are not.

The school curriculum requires teaching of skills which largely stimulated the cognitive domain. Most schools do not formally teach processes which stimulated the affective domain such as how to cope with a fear of failure or a lack of confidence in the classroom. If gifted students have negative feelings they may interfere with their capacity to learn in the cognitive domain.

6. According to Clark (1992) 'high levels of cognitive development do not necessarily imply high levels of affective development' (p40). So if the gifted student has not developed, or been taught to develop the affective domain, then the advantage of using affective information to increase cognitive capability will be lost.

7. As a result there may be an imbalance between the skills gifted students have acquired to process cognitive information and the skills they have acquired to process emotional and social information.

8. There could also be lost learning opportunities in that able students may be just as capable of learning affective skills as they are of learning cognitive skills, and that where an able student may have a high level ability in the affective domain, it may go undetected if these skills are not formally taught and/or identified.

9. It has become much more important in recent years for students to achieve learning outcomes which included the development of both interpersonal skills and technical skills because the success of careers depends more on the combination of both types of skills than in the past.

To date, many of the research studies on the importance of the affective domain have taken place under the umbrella of topics such as emotions, behaviours, commitment, relationships, and adolescence.

Most of this research has involved mainstream students and few studies have been done on the affective domain of gifted students.

The research on the interactional nature, and reciprocal dependence of, the affective and cognitive domains has been summarised in the following sections.

Emotions

Historically, emotions in the learning situation have been valued as less important than cognitive information and skills, particularly at secondary and tertiary levels. As a result the active part emotions play in the ability and the decision to learn, has not been recognised.

However, in the last decade, there has been some research done in this area.

Chamberlain (1992) administered questionnaires to fourth form students and found that:

'approximately one-fifth of students reported that they felt "depressed", "lonely", or "upset" at school while more than a quarter of students felt "restless" . . . at any given time, there may be a considerable proportion of students who view school or school-related learning activities less than favourably' (p66).

Chamberlain also noted that little previous qualitative research had taken place in New Zealand in the area of quality of school life for students.

Kuhlthau's (1989) research into students' information search strategies in libraries supported the idea that the affective domain impacts on the cognitive domain:

'the information search process was a complex series of stages involving thoughts and feelings as well as actions . . . traditional library instruction has been based on teaching sources of information, while virtually ignoring the dynamic learning process involved in information use' (p226).

Kuhlthau argued that recognition of the effects of the confusion and the resulting tiredness, and the relief when a project was completed, would help the students seek better strategies for searching in libraries.

Underwood et al (1992) reported that students said 'they would express anger much more often with peers than with teachers' (p366), and that those who tended to use rules to decide whether or not they would express anger in any given situation, also tended to mask sadness.

It was not surprising that concealment of one emotion was an indication of other emotions being concealed.

If students conceal their emotions, particularly in front of the teacher, then it is likely that students conceal emotions about learning. This concealment may impact on their ability to learn in the cognitive domain.

Behaviour

The research of Randhawa et al (1988) showed that teacher ratings of children's behaviour in the classroom was almost the same as the teacher ratings of children's performance in cognitive tasks. Randhawa suggested that teachers may base their judgement of children's performance in cognitive tasks, on the children's behaviour in the classroom.

An explanation of why this might occur was offered by Gassin (1989) who suggested that during any interaction, the participants involved in that interaction organise both affective and cognitive aspects of that interaction simultaneously.

This means then, that not only is children's behaviour a result of both cognitive and affective processing, but that the teacher's judgement of the children is based on the combination of the child's behaviour and the child's cognitive abilities.

Therefore, where a child has high level abilities in the cognitive domain but less developed abilities in the

affective domain, there would be implications for both the child and the teacher. The child's behaviour may influence the teacher's judgement of that child's cognitive abilities, and the teacher's judgement may in turn influence the child.

Clark (1992) argued that it is possible for gifted students to have high levels of cognitive development without necessarily having high levels of affective development. It follows then that it is important for students to develop affective behaviours alongside cognitive behaviours.

Commitment

Commitment is seen as an affective behaviour, because it involves decisions connected with the interests and values of a person. Commitment is a motive for learning.

Hendrix et al's research (1990) suggested that achievement contributed to commitment, and that commitment contributed to the amount of effort a student put into school, which in turn could contribute to higher achievement. 'Commitment to school was ultimately tied to young people's experience or perception of empowerment, success (grade point average), relevance and effort in the student role' (p134).

Hendrix et al (1990) considered that commitment could be enhanced from three different sources: external rewards or those given from another person; intrinsic meaningfulness or a sense that one was contributing; and a feeling of being accepted in the community.

Achievement in cognitive activities could be rewarded externally, but the pleasure of receiving an award and the feeling of being accepted, became affective responses, which in turn could increase commitment.

Both this intrinsic meaningfulness and the sense of communality involved affective mechanisms, which could have cognitive implications if a student wanted to continue, or improve, the level of commitment and achievement in those areas.

Renzulli (1992) argued for a different set of criteria for commitment. Each of Renzulli's three criteria involved the affective and cognitive domains:

- * personality and physical makeup
- * level of interest in the task
- * and when there was an overlap of these first two criteria, a third criteria produced an energy which became the need to complete, or commitment to, a task.

Irrespective of the debate over which criteria constitutes commitment, it seems clear that commitment plays a major part in a person's decision to concentrate, to learn, or to pursue cognitive achievement.

Relationships with others

Spence (1987) found that the development of social-cognitive skills led to social competence which in turn determined the success of peer relationships. The success of relationships with others could affect students' confidence in the learning environment.

In the past classrooms were required to be quiet places because it was considered necessary to enhance learning. However, research now suggests that classrooms provide an opportunity to interact socially, develop social competence, and as a result enhance and encourage learning. Nastasi et al, (1990), Jones (1991), Vygotsky (1976) argued that social interaction in a learning situation enhances learning, and that there should be cognisance of the contribution social interaction makes to the learning process.

Adolescence

Adolescence has traditionally been known as a difficult period in life, and much research has been done on the emotional and social effects of adolescence. Some of this research has focussed on assessing how

affective responses and behaviours could be improved by learning more skills.

Tyszkowa (1990) suggested that affective development is enhanced by cognitive processing. She argued that coping with stress and difficult situations for adolescents was 'effective when adequate cognitive elaboration of the situation occurs, despite the negative emotions that the subject was experiencing' (p188).

Tyszkowa (1990) stated that difficult situations arose in adolescence when there was an imbalance of aspirations and values on the one hand, and competencies on the other hand. When that imbalance continued it became necessary for adolescents to redress the imbalance. Tyszkowa recommended that this imbalance be redressed by reconstructing their objectives using both cognitive and affective responses, and choosing to adapt one or more of the causes of the imbalance.

She added that this process could produce defensiveness, regardless of the success of the adaptation.

Tyszkowa (1990) emphasised that:

'a relatively large number of subjects mentioned looking for reasons for one's own failures (both in learning and in interpersonal relations) through analysis of the whole situation, including one's own behaviour. With difficult interpersonal situations, this occurs by frequently going over the intellectual and emotional components of the situation, at an individual level and in talks with peers and/or adults. Such discussions help adolescents to understand better the situation which has occurred and the part they played in it. This can contribute to the lowering of the emotional tension and to the achievement of some psychological distance from the situation and from oneself' (p197).

It seems that the social and emotional stresses of adolescence could be improved by developing coping skills in adolescence.

Jackson and Bosma (1990) in discussing coping strategies in adolescence raised the question 'was the establishment of a positive identity in adolescence a sort of warrant for effectively coping with stresses arising in adulthood?' (p219).

If this was so, then the affective skills learned in adolescence to develop a positive identity would have far reaching effects, well beyond schooling.

More specific research on the affective domain of school aged gifted students is summarised in the following sections.

How students feel about themselves

Research on aspects of the affective domain relevant to how students feel about themselves is summarised in this section. The research falls into several categories: fears, independence, self concept, creativity, perfectionism, and life choices.

Fears

Deverensky and Coleman (1989) investigated the fears of gifted children 8 - 13 years of age, and found 'their fears to be similar to those of older "normal" (original author's emphasis) children and to reflect advanced cognitive and social awareness' (p65).

Clark (1992) and Piechowski (1979) stated that it was common for gifted students to have fears which were more representative of older students.

The cause of the gifted students' fear was, according to Clark (1992) an heightened ability to collect and

process that cognitive information, and conclude that there was rational cause for concern or possible danger. She argued that these fears may have been based on personal or world wide environmental, social or ethical issues.

However, gifted students have not always got the affective maturity or skill to cope with, or process, those fears. This can result in an astuteness in detecting causes for concern, but a lack of astuteness in placing that fear in an appropriate context, or learning how to see that fear in proportion to other personal or world events, or finding any satisfying solution.

Independence

A study by Griggs (1984) found gifted learners were highly independent. The students were self-reliant and preferred to learn by themselves. She suggested that these students preferred self-management and self-monitoring to group activities.

Self concept

Chapman and McAlpine (1988) found that even though gifted students had a higher perception of their academic ability, than average students, there was no significant difference between the two groups in perceptions of their ability in non-academic areas.

This meant that there had been no transfer in self concept between academic and non-academic areas.

These findings lend support to the notion that high level academic ability is no predictor of high level ability in the affective domain, and that high level cognitive abilities will not provide gifted students with similar abilities in the affective domain.

Creative thinking

Creativity can be seen as an "intelligence". Many able students have high level abilities in creativity (Clark, 1992), that is, a high ability to combine previously unrelated ideas either to solve a problem, invent something new, or for humorous reasons.

Clark (1992) has suggested that there is an affective component which enhances creativity; the feeling component of her creativity model means that a student needs a high level of mental well-being and self-actualising qualities to develop the necessary creative attitude.

Perfectionism

Many gifted students are perfectionists because they are highly motivated and have high standards for themselves. However, Clark (1992) found that gifted students' perfectionism 'interferes with their relationships with others' (p128) because they expect

the same high standards of other people. This leads to disappointment and dissatisfaction, and difficult relationships.

Life choices

Society expects gifted students will easily find a career they like, and they will be successful in that chosen career.

However, Clark (1992) maintained that gifted students (especially females) have difficulty in setting and attaining career and life/family goals that were appropriate for their abilities.

Hollinger and Fleming (1991) researched the realisation of potential of gifted 27 - 29 year old females who had earlier taken part in Project CHOICE². The authors pointed out that the questionnaire asked the women to list their three greatest achievements, and many women included personal and interpersonal growth, as well as educational and career accomplishments, as achievements.

Hollinger and Fleming (1991) supported the need for:

² A project in the United States for gifted and talented adolescent females.

'an expanded definition of achievement that includes not only educational, career, and financial accomplishments but other accomplishments that fall within other personal and interpersonal lifespheres' (p211).

How students feel about learning

Research on aspects of the affective domain relevant to how students feel about learning is summarised in this section. The research falls into several categories: constructive feedback, advanced level projects, questions in class, classroom based learning, learning styles, and a sense of control.

Constructive feedback

Gifted students in a Clark and Zimmerman study (1988) described some of their teachers as 'challenging but not offering instruction about how to succeed' (p344). The students expressed a need for teachers to provide more rigorous and supportive instruction; teachers who will demand high achievement and commitment to their ability area.

Advanced level projects

Able students can become bored if the work is not stimulating enough, and if the teaching methods are restrictive. If students are capable of learning at a rate, or performing at a level, more representative of older students then their learning should include appropriate tasks.

Starko (1988) investigated students who completed projects using Renzulli's Revolving Door Identification Model Type III enrichment. These projects were based on individual or group investigations of real problems, using the methodologies of appropriate practising professionals. This type of project gave the students the opportunity to become independent contributors rather than consumers of information.

The students reported that the project effected their career goals, improved research skills, led to a more positive attitude toward school, and increased insight into personal strengths and weaknesses, than students not in this program.

Questions in class

When able students asked questions in class, they should be asked appropriate questions according to their abilities, and be given sufficient time to form an answer which represents their ability.

In Leder's study (1988) teachers spent less time interacting with high achieving students, and when the students were asked challenging questions, they were not given sufficient time to do justice to the questions. Leder recommends that teachers give able students more time to reflect and formulate their own responses.

Classroom based learning

Chapman and McAlpine (1988) found that even though gifted students had a higher perception of their academic ability, or higher academic self-concept, than average students, gifted students were less satisfied with classroom-based experiences, than their counterparts.

Learning styles

After reviewing the literature on learning styles Renzulli (1992) stated that there was consensus on three main aspects of learning styles, all of which involved both cognitive and affective responses.

Firstly, learning styles were 'natural' preferences and were connected with personality and the socialisation of a person. Secondly, styles interacted with a person's abilities and interests. And thirdly, the environment in which a person was learning may favour certain styles of learning over other styles.

Renzulli (1992) argued that students need exposure to several different kinds of learning styles 'from the early years of schooling . . . in much the same ways that we provide systematic coverage and documentation of content' (p175). And that exposing students to several different kinds of learning styles will enable them to know which styles are most applicable to them personally in each subject, and will assist learners in blending styles that will best suit future learning and career activities.

Adaptation of the classroom and other learning environments, and adaptation of teaching methods to accommodate different learning styles may well assist the learner to feel more comfortable in learning situations, and enhance learning.

A sense of control

When students have some sense of control over what and how they learn, students feel more committed to the task and more motivated to learn. It is also seen as validation that the student is interested in the task.

Middleton et al (1992) found that gifted students enjoyed learning when they had some control over the learning process. This control produced a sense of academic "fun". Middleton stated that "fun" is important in the learning process because it

'relates to the level of arousal and control perceived to be afforded by the task . . . teachers can influence motivation toward academics (subjects) by giving their students the opportunity to personalise their own education' (p38).

Ryba and Chapman (1983) supported this notion:

'whether a student is, in reality, able to exert control over instruction may not be so important as the internal sense or feeling s/he has of being in control. It is this inward state of control which appears to be vital for improving academic achievement' (p49).

The home environment too, can offer opportunities for the child or adolescent to gain a sense of control and a feeling that their contribution is worth while.

Karnes and D'Illio (1992) stated that children would perceive more cohesiveness in the home environment if they were

'encouraged to actively participate in the planning, organisation and implementation of family activities. Direct expressiveness of feelings, even when they are not heeded by all

family members, will increase the emotional expressiveness of the child. . . . The home environment can be enhanced not necessarily by increasing actions, such as family outings, but by encouraging supportive attitudes that contribute to mutual interaction of all members' (p279).

Those who have this opportunity at home may feel as though something is lacking at school if they are not given the same opportunity they have at home. On the other hand, if a child has no experience at either school or home to enhance their sense of control over what tasks they do, and what they learn, they may be disadvantaged and inexperienced later when they must make life and career choices.

How students feel about others

Research on aspects of the affective domain relevant to how students feel about others is summarised in this section. The research falls into several categories: . social skills, social interaction, group work, and discussion as a learning tool.

Social skills

Bellanca and Fogarty (1991) supported the need for the formal teaching of affective skills: 'social skills do not develop for the class as a whole without deliberate, specific and repeated attention to them' (p38).

They found that directly teaching social skills to students resulted in more effective learning of content, and more on-task, on-focus, concentrated student effort in other curriculum areas..

Social interaction

Socialisation is often problematic for able students, because with high level abilities they often have problems identifying with peers. This may cause feelings of isolation, a lack of belonging, and feelings of being different, which can cause low self-esteem.

Able students often have thoughts and speech that are far more advanced than their peers, and as a result may identify with people several years their senior to secure conversation involving a high level of knowledge. This situation may cause a compartmentalisation where friendships become based on knowledge. In a social sense, these students may not be as mature as their older friends.

If able students have not spent much time discussing knowledge with their peers, then there may be little to

build friendships on with children of their own age. Their preference for cognitive stimulation over affective stimulation may effect their development of social skills, and development of long term relationships.

Luftig and Nichols (1992) suggested that gifted children 'must strike a balance between being true to their abilities and interests and maintaining good social relations with their less gifted peers' (p111).

Able students may seek the company of those with a similar level of ability and may need assistance in developing affective skills that are helpful in relationships with others.

Group work

Working in groups toward a specific goal offers a good opportunity to develop the affective domain. Students need to keep the group goal in mind, while discussing how the group will proceed towards that goal, seeking consensus, and resolving any conflicts.

Treffinger (1991) espouses the benefits of team work 'since effectiveness arises from the expertise and contributions of many people . . . Teams also offer built-in support, recognition, and increased communication' (p7).

The advantage of cooperative learning, or working in teams, is supported by Gallagher, (1991): 'the group members are thus motivated to help each other . . . so as to make the team more productive' (p15) in achieving their group goal.

Gallagher (1991) also pointed out that it is a misfit that students spend 12 years at school being told to do their own work and not let anyone see their exam paper, and then expect students to cooperate with others in a socially acceptable manner.

Discussion as a learning tool

In the literature discussion is seen as a means to connect what is being taught, to what the students already know. Vygotsky's (1978) zone of proximity states that the closer the new knowledge being received is to knowledge that already exists in that student's mind, the greater is the chance that the student will comprehend the new knowledge and assimilate and accommodate that new knowledge into their existing structure of knowledge.

Vygotsky (1978) argues that peers are more likely to be able to assist in that assimilation and accommodation of new knowledge because peers are closer to that zone of proximity than are teachers or parents. Hence discussion, or social interaction, with peers tends to enhance cognition.

Jones (1991) found that discussion in class was advantageous to learning: 'In order to understand school knowledge, rather than simply memorise it, students need to "make sense" of new knowledge and to take it on board as their own, modifying their existing knowledge. Talk is central to this process.' (p110).

Jones argued that for able students, discussion outside the classroom integrated:

'the syllabus into their daily lives, expressing a close and confident relationship with the school curriculum. This sort of casual work and talk . . . provided excellent practice and skills such as interpreting, abstracting and using one's own words which are necessary for acquiring school knowledge . . . (this) reinforces the legitimacy of the girls' prior knowledge about how to do schoolwork . . . (because) the students engaged with their teachers in the process of getting school knowledge' (p136-137).

Clark and Zimmerman (1988) found that gifted students preferred smaller classes because it 'encouraged better communication and instruction' (p345) and discussion could take place more readily.

Integrated affective and cognitive learning

Blending social and emotional skills with cognitive skills in the learning environment would be particularly beneficial for students with high level abilities, because they have often developed high level processing abilities in the cognitive domain, without developing matching high level processing skills in the affective domain (Clark, 1992).

Of course, like everyone, able people receive emotional and social information through emotional and social experience, but it can not be presumed that able students necessarily have the same competence in processing affective information as they have in processing cognitive information (Clark, 1992). The competence able students have in processing cognitive information has been assisted by the formal process of schooling.

Garner et al (1990) stated that 'program planning and implementation must encompass all areas of children's development: cognitive, social, emotional and physical . . . the mind develops from interpersonal activity' (p110).

This view was supported by Clark (1992): 'meaningful academic programs integrate emotional growth' (p34). She felt that if the students are unable to process information gained from their emotional experiences then students may well misinterpret the information 'affecting the individual negatively' (p40).

Clark (1992) also found that if able students' cognitive needs are not met, the students' behaviours will include affective reactions.

Among the most common reactions are impatience, difficulty in conforming, poor interpersonal relationships, resentment, frustration, disruptive behaviour, and their behaviour is often perceived by others as being compulsive, conceited, elitist, critical, inhibited, demanding and intolerant (p38-39).

It would seem then, that the affective and cognitive domains are dependent on each other for growth and satisfaction.

Chapter 4

METHODOLOGY**THE RESEARCH QUESTIONS**

The aim of this study was to find out more about how able sixth form students felt about:

- * themselves

- * learning

- * and other people.

RESEARCH METHODOLOGY

It is important in research methodology to include more than one source of data. There are two reasons for this:

1. The use of more than one research instrument provides an opportunity to assess the validity of each of the test instruments used. If the findings of each test instrument corroborates the findings of other test instruments used in the research then the validity of each will be strengthened.
2. When the people being researched have an opportunity to comment on the results of the research, clarifications can be made about the context of responses. This enables those being researched to assist in the interpretation of the results, and to reduce the bias of the researcher (Smith, 1988; Lather, 1986).

This survey included a questionnaire, and later indepth group interviews. The questionnaire was used as a large scale investigation into what able students felt about themselves, about learning and about others.

The questionnaire data were then analysed to find out how frequently students agreed with each statement. Selected frequency results then formed the basis of the interview questions. The interviews were designed to investigate on a smaller scale, but in a more indepth basis, what able students felt about themselves, about learning, and about others.

The purpose of the interviews was to obtain the students' responses to, and interpretation of, some of the questionnaire results, and to gather any other information which they saw as relevant and important. This allowed the students being researched to:

- * discuss the results
- * describe the context in which the questionnaire responses were made
- * add any information they thought was relevant and important
- * suggest causal relationships
- * participate in the research findings and the construction of the research
- * reduce any researcher bias in the interpretation of the results.

THE DEVELOPMENT OF QUESTIONNAIRES

The literature databases were searched for the key affective issues for able students and these formed the basis for the pilot study questionnaire. Many of these issues concerned how gifted students were affected by school, family and friends. However, most research focussed on selecting gifted students to complete questionnaires without asking them directly how they felt giftedness affected them, or asked parents or teachers to complete questionnaires about gifted students.

In the pilot study the research design included asking able students directly how they felt ableness affected them.

In the pilot study the research questions were based on investigating how ableness had affected able sixth formers' feelings about themselves and about learning, and their relationships with other people.

The pilot study was developed to gauge the appropriateness of the questions, and to see if there were other topics which the students thought were relevant and important and should be included in the questionnaire for the main study.

A secondary school known to have enrichment classes for able students was approached to take part in the pilot study. The school was told of the aim of the study and agreed to take part.

An open-ended questionnaire was developed for the pilot study so that students had the opportunity to introduce as many topics as they felt were relevant to each topic. The pilot study focussed on:

- * how and when they found out they were able

- * the good and bad aspects of being able:
 - within themselves
 - within their family
 - amongst friends
 - at school and
 - the media portrayal of able people

- * their career plans.

The initial draft of the questionnaire was administered in the pilot study (Table 1). The information gained from the pilot study was incorporated to develop the revised questionnaire (Table 2) which was used to gather data for the main study.

THE PILOT STUDY

The pilot study questionnaire was administered to six sixth form students (three females and three males) nominated by their teacher as able, and was followed by a discussion with the students on the questionnaire topics.

Table 1
Pilot study Questionnaire

You are in this group today because you are considered by your teacher to be able students. I would like to know more about how ableness affects students. Please answer the questions below.

A. Realisation

1. How old were you when you realised?
2. Did anyone tell you or did you come to the realisation yourself?
3. Was it good news or bad news?
4. Was it a shock or was it comforting?
5. Would you have preferred to have found out another way, or from someone else?
6. Did things change after you realised?

B. What is it like knowing that you are able?

The good aspects

7. Within yourself?
8. Within your family?
9. Amongst your friends?
10. At school?
11. The media messages?

The bad aspects

12. Within yourself?
13. Within your family?
14. Amongst your friends?
15. At school?
16. The media messages?

How do others communicate their attitude about ableness to you?

17. Your family?
18. Your friends?
19. Your school?
20. The media?

C. The future

21. Do you want to go to university or study anywhere else?
22. What career(s) do you want to pursue?
23. Do you think being able will help you or hinder you in a career?
24. Has anyone been helpful in discussing career possibilities with you?
25. Will your family or friends support you in developing your abilities?

D. Other things

26. Do you feel you have enough companionship with other able people?
27. Would you prefer not to be able?
28. Would you like other people to know more about how ableness makes you feel?
29. Is it different for a female to be able, than it is for a male to be able?
30. Is there anything else you would like to say?

The findings from the pilot study pointed to some relevant and important topics not previously included. These topics were then included in the revised questionnaire for the main study. Below are the additional topics:

- * Most of the students said one of the disadvantages of being able was a resulting competitiveness at school about marks which singled students out. So statements on competitiveness, enjoying high marks, working in groups, and having a say in how they learn were then included in the revised questionnaire.
- * All students said that their abilities gave them some kind of confidence at certain times, but that their abilities could also make them feel sensitive at other times. So statements on confidence and sensitivity were included in the revised questionnaire.
- * Some of the students said that parents and teachers didn't acknowledge how much hard work contributed to their high marks. So a question on hard work contributing to high marks was included in the revised questionnaire.
- * Only half of the students felt they had clear goals for the future, while the other half said they had been given inadequate advice and insufficient

support for any career or life choices. So two statements were added to the revised questionnaire on having goals and wanting a role model.

THE MAIN STUDY

The main study took place in 20 secondary schools in Wellington. After contacting 6 schools asking them to participate in the survey, it became clear that several schools had a policy of not telling students that they were considered by their teachers to be able.

Reasons given for this included:

- * that parents of the students would become demanding
- * that it was not good for pupils to be labelled
- * that it was elitist to identify students as able
- * that the students themselves would already know that they were able.

In many of these schools staff informed each other at departmental staff meetings, of those students who were considered to be able.

At the commencement of this study it had been assumed that able students knew they were able, either by coming to that conclusion themselves and/or by someone telling them. It was anticipated that able students could be surveyed about the affects of their

ableness on themselves, on their learning, and on their relationships with other people.

The discovery of the policy in some schools that able students could not be asked about their ableness necessitated a change in direction for this study.

All schools were happy to have their able students surveyed, providing ableness was not mentioned in the survey. As a result, the questionnaire was revised, with no reference to ableness. A further literature search took place to identify additional topics to replace previous questions about ableness.

The Revised questionnaire

The revised questionnaire for the main study was administered to a large number of students (283) and so open-ended questions were replaced by Likert scale options.

The format consisted of fifty statements with a five point Likert scale for responses to each statement, and one open-ended question at the end where students wrote what they thought of the questionnaire.

The students were asked to use the Likert scale options to indicate how frequently they felt each statement was true for themselves for that current year.

The five categories in the Likert scale were: 'not sure' and four categories to describe how frequently they agreed with each statement; 'hardly ever', 'not often', 'quite often', and 'nearly always'. The 'not sure' category was to be used when the student was unable to choose one of the other categories, or did not understand the statement.

The revised questionnaire (see Table 2) consisted of fifty statements on:

- * school
- * learning
- * interpersonal skills
- * knowledge of their own feelings
- * knowledge of other peoples' feelings
- * satisfaction with group activities
- * descriptions of their personal selves
inside and outside the classroom.

The revised questionnaire included an open-ended question asking the students what they thought of the questionnaire.

This was to gauge whether or not the students felt it was helpful to describe their feelings, and therefore whether or not it might be a good tool for further research.

The revised questionnaire also asked the students to name their best subject. Ability is considered to occur in a wide range of areas, and not just within the traditional curriculum areas (Renzulli and Reis, 1985). Teachers were asked to nominate students who showed signs of having high level abilities both within the traditional curriculum areas and outside the traditional curriculum areas.

The 'best subject' information was required to establish whether or not the cohort contained a narrow or broad range of ability areas.

TABLE 2
QUESTIONNAIRE

The purpose of the survey is to ask sixth form students how they feel about themselves, about learning, and about other people. It will take about 20 minutes to complete. This information is CONFIDENTIAL and will be used for research purposes only.

INSTRUCTIONS: For each question choose one of the 5 options. Tick the answer that best represents how you feel about things this year. Please answer as many questions as you can.

SUBJECT YOU ARE BEST AT

FEMALE [] MALE [] AGE

ETHNICITY

	1	2	3	4	5
	not sure	hardly ever	not often	quite often	nearly always
1. I enjoy school.	[]	[]	[]	[]	[]
2. I would like more of a say in what I learn.	[]	[]	[]	[]	[]
3. I worry about things.	[]	[]	[]	[]	[]
4. I enjoy working in a group.	[]	[]	[]	[]	[]
5. I get bored at school.	[]	[]	[]	[]	[]
6. I know more about schoolwork than about people.	[]	[]	[]	[]	[]
7. Success makes me feel shy.	[]	[]	[]	[]	[]
8. I want to contribute more during lessons.	[]	[]	[]	[]	[]
9. I understand how I learn best.	[]	[]	[]	[]	[]
10. I worry about what other people think of me.	[]	[]	[]	[]	[]
11. I would like a good role model.	[]	[]	[]	[]	[]
12. I am impulsive.	[]	[]	[]	[]	[]
13. Learning is fun.	[]	[]	[]	[]	[]
14. I pretend not to understand what is going on.	[]	[]	[]	[]	[]
15. I am confident at school.	[]	[]	[]	[]	[]
16. I get on well with other people.	[]	[]	[]	[]	[]
17. I have unusual ideas.	[]	[]	[]	[]	[]
18. I have emotions that I don't understand.	[]	[]	[]	[]	[]
19. I feel alert.	[]	[]	[]	[]	[]
20. I know how to get better marks.	[]	[]	[]	[]	[]
21. Other people are jealous of me.	[]	[]	[]	[]	[]
22. I want to know more about leadership.	[]	[]	[]	[]	[]
23. I can predict my own feelings.	[]	[]	[]	[]	[]

TABLE 2 contd

	1 not sure	2 hardly ever	3 not often	4 quite often	5 nearly always
24. If I am not doing well I find it hard to admit.	[]	[]	[]	[]	[]
25. I want to learn more about people skills.	[]	[]	[]	[]	[]
26. I am sensitive in class.	[]	[]	[]	[]	[]
27. I feel secure.	[]	[]	[]	[]	[]
28. Working hard will get me good marks.	[]	[]	[]	[]	[]
29. I can have good and bad feelings at the same time.	[]	[]	[]	[]	[]
30. I am independent.	[]	[]	[]	[]	[]
31. I am happy when I am learning.	[]	[]	[]	[]	[]
32. I don't know how other people feel.	[]	[]	[]	[]	[]
33. I worry about events in the world.	[]	[]	[]	[]	[]
34. I am a perfectionist.	[]	[]	[]	[]	[]
35. I feel defensive.	[]	[]	[]	[]	[]
36. I am afraid to try new things.	[]	[]	[]	[]	[]
37. I am motivated in the same way other people are.	[]	[]	[]	[]	[]
38. I enjoy getting high marks at school.	[]	[]	[]	[]	[]
39. I would like more of a say in how I learn.	[]	[]	[]	[]	[]
40. My communication skills are improving.	[]	[]	[]	[]	[]
41. I don't care about the subjects I'm not good at.	[]	[]	[]	[]	[]
42. I am happy when I am by myself.	[]	[]	[]	[]	[]
43. I am similar to a lot of other people.	[]	[]	[]	[]	[]
44. I don't understand myself.	[]	[]	[]	[]	[]
45. I have clear goals.	[]	[]	[]	[]	[]
46. I understand more about others than about myself.	[]	[]	[]	[]	[]
47. I like to concentrate.	[]	[]	[]	[]	[]
48. I get constructive feedback.	[]	[]	[]	[]	[]
49. I am competitive.	[]	[]	[]	[]	[]
50. I feel content when I am with other people.	[]	[]	[]	[]	[]
51. What did you think of this questionnaire?	[]	[]	[]	[]	[]

SELECTING THE SAMPLE

For the purpose of this study each school was given criteria for selecting able students. In general terms students needed to repeatedly show a high level of ability beyond what was expected of their age group. Ableness could be manifested in curriculum areas or outside of curriculum areas (Renzulli & Reis, 1985). That is:

- * in at least one curriculum subject, or part of one subject; for example, in furniture design but not in other areas of design, in organic chemistry but not inorganic chemistry, in gymnastics but not in other areas of physical education

- * or in a non-curriculum field such as leadership, social skills, debating, etc.

Below are some specific examples (adapted from: Bloom's Taxonomy, Krathwohl et al, 1956 and 1964; Steinaker & Bell, 1979; Renzulli & Reis, 1985; Sternberg, 1986; Gardner & Hatch, 1989) of what could be considered to be indications of high level abilities, if the students' performance in these functions is beyond what would be expected for their age, and if they occurred on a regular basis:

- Application: where a teacher is introducing a new concept to a class, and most students are just grappling with the new concept, but an able student has understood it so quickly that s/he is already applying it to a situation
- Synthesis: where a student is inventive and designs new constructs in thought, language, or materials by further developing existing knowledge
- Prediction: in a game where the student has understood the rules well, has mapped out the opponent's patterns, is able to predict what will happen next, and intercept the opponent's moves
- Creativity: combining previously unrelated ideas in a creative sense, or for problem-solving purposes,
- Clarity: a clarity of thought or language as a result of prioritising

Curiosity: a student's questions can often indicate that they have understood the concepts before they were expected to, and that they want even more knowledge to satisfy their curiosity.

To further assist schools in the selection of able students it was explained that able students need not necessarily be high achievers, they may get bored easily in class and as a result may have behavioural problems.

Schools were asked to put forward all of their students who fitted the above criteria.

COLLECTION OF QUESTIONNAIRE DATA

The researcher planned to administer the questionnaire to the nominated group in each of the schools, so that queries could be answered in a consistent way in each school. However in some schools this was not possible. Each student had his or her own timetable constraints, and coordinating the students from a variety of classes to meet at the same time during school hours was not always possible.

In eight schools teachers administered the questionnaire. Strict guidelines were provided. In twelve schools the researcher administered the questionnaire.

The fifty one item questionnaire took twenty to thirty minutes to administer. In all schools the students were given the same introduction:

- * the questionnaire was confidential

- * the statements in the questionnaire related to how the students felt about the topics that year

- * some statements related specifically to school and used the words school, classes, marks or lessons, whereas other statements related to the whole of their lives including school, family and social life
- * the statements on learning need not necessarily represent only learning that took place at school
- * students should ask for an explanation if they found any of the statements unclear.

The sample and results from the questionnaire were analysed in SAS statistical software by the researcher for frequency counts and percentages:

- * by age
- * by gender
- * by ethnic group
- * by gender and subject
- * by ethnic group and subject
- * by gender and by statement
- * by ethnic group and by statement

Results from some of the questionnaire statements were then used as the basis for questions in the interviews.

THE QUESTIONNAIRE SAMPLE

Secondary schools

Of the 20 schools participating:

- * 11 were coeducational schools
- * 6 were girls' schools
- * 3 were boys' schools.

Coeducational and single sex schools

Of the 283 students taking part in the survey:

- * 177 (63%) of students were from
coeducational schools
- * 66 (23%) of students were from girls' schools
- * 40 (14%) of students were from boys' schools.

Gender

In the overall sample:

- * 151 (53%) were female students
- * 131 (46%) were male students
- * 1 student chose not to answer the question.

However, from the coeducational schools:

- * 85 (48%) were female students
- * 91 (52%) were male students.

Age

Of the 283 students:

- * 5 (2%) were aged 15
- * 162 (57%) were aged 16
- * 110 (39%) were aged 17
- * 4 (1%) were aged 18
- * 2 (1%) chose not to answer the question.

Ethnicity

The largest group was Pakeha/New Zealander with 202 (71%) students. The other groups were:

- * Maori 26 (9%)
- * Polynesian 19 (7%)
- * Asian 16 (6%)
- * from EEC countries 6 (2%)
- * African 2 (1%)
- * other 4 (1%)
- * 8 (3%) chose not to answer the question.

THE INTERVIEWS

Purpose of the interviews

Small groups of students from the original cohort were interviewed and asked to discuss some of the results from the questionnaire, and to add any information they saw as relevant and important.

The interview questions

The questionnaire statements and the interview questions were grouped under the three themes: what the students felt about school, about learning, and about other people.

The data from the questionnaire were analysed and the results formed the basis of the interview questions. Some questions were based on results from only one statement, and other questions were based on results from two or more statements. Some interview questions with results from two or more statements appeared to show patterns, such as:

- * the results of one statement appearing to support the results of other statements within a theme

- * the results of one statement appearing to conflict with the results of other statements within a theme.

The interview questions were designed to encourage discussion.

Interview sample

It was considered that fifty students, or approximately one fifth, of the original cohort would be a representative sample for interview purposes.

Seven of the schools in the survey were selected at random to participate in indepth interviews. These schools were asked to arrange a small group (minimum of five students, maximum of ten students) from the questionnaire participants to take part in a group interview at each school. Of the seven schools participating in the interviews there were:

- * 5 coeducational schools
- * 1 girls' school
- * 1 boys' school.

There were 46 students who took part in the discussions. This was 16% of the original cohort of 283 students. There were 24 females and 22 males. The ratio of pakeha to non-pakeha was approximately the same as in the total cohort: 5 to 1.

The students at one school had been informed by their teachers (after they had completed the questionnaire,

and before being interviewed), that they had been selected for the survey because they were considered by their teachers to be able.

Interview Methodology

The aim of the group interviews was to collect student responses without restricting or influencing them with either my own ideas or ideas from school groups I had already interviewed.

Students were told that they could respond to each question from their own personal perspective, or by referring to what they thought was a commonly held opinion amongst their peers. The students were reminded that the discussion was confidential.

Originally there were nine questions for the interview. Responses were recorded. The interviews were planned to take an average of thirty to forty minutes.

After interviewing groups in two of the schools there appeared to be common themes in the students' responses which were not catered for in the nine planned questions. Two more questions relating to these topics were then added to the interview schedule.

VALIDITY OF TEST INSTRUMENTS

Construct validity had been obtained in two ways.

Firstly, by designing questionnaires according to the relevant issues in the literature. The literature databases were searched prior to the designing of the draft questionnaire for the pilot study, and later they were searched a second time because:

- * of the information gained from the pilot study
- * and the need to replace some items because most schools did not want their students informed that they were considered by their teachers to be able.

The second literature search was incorporated into the revised questionnaire for the main study.

And secondly, by the design of this study which provided the students with an opportunity to validate or challenge the results of the questionnaire and assist in the construction of this research.

Criterion validity had been obtained through:

- * the use of a pilot study
- * followed up by the use of two sources of data for the main study (questionnaire and indepth interviews); both sources were based on the same criteria.

Chapter 5

RESULTS OF THE QUESTIONNAIRE

The aim of the present study was to investigate how able sixth form students felt about themselves, about learning, and about other people. It was these three themes which were the focus of the questionnaire, and which were the basis for the development of the fifty statements in the questionnaire.

The questionnaire was administered to 283 sixth form students who were nominated by their teachers as able.

THE STATEMENTS

There were fifty statements in the questionnaire:

- * how students felt about themselves - 23 statements
- * how students felt about learning - 15 statements
- * how students felt about others - 12 statements.

Some of the statements in the first category, how the students felt about themselves, included ideas about how the students felt about themselves in learning situations or in situations with other people. Hence there are more statements in the first category than in each of the other two categories.

The statements in the second and third categories focussed more on learning and on interactions with other people.

The questionnaire was designed to contain a mixture of positive and negative statements.

Where students disagreed with negative statements, and created a double negative such as disagreeing with 'I don't understand myself', the results have often been written to include the positive meaning, such as 'I do understand myself'.

Students responded to each statement according to how frequently, or infrequently, each statement was true for them during the current year.

A five-point Likert Scale was used for responses. The five categories were 'not sure', 'hardly ever', 'not often', 'quite often', and 'nearly always'. The 'not sure' category was used when the students did not understand the statement or when they felt the other four categories in the Likert scale were not appropriate.

There was no 'sometimes' category. The purpose of this was to encourage the students to think more about each statement, and to decide whether the statement was true more frequently than sometimes, or less frequently than sometimes.

The students were asked to respond to all statements.

ANALYSIS OF DATA

The data from the fifty statements in the questionnaire were analysed in SAS statistical software for frequency counts and percentages:

- * by statement
- * by gender and by statement
- * by ethnic group and by statement.

Chi square tests of significance were carried out in Epistat statistical analysis software. The chi square tests determined whether the difference between groups of data (eg. female and male responses) were substantial enough to be considered statistically significant. When results were significantly different then the groups were considered to be discrete and independent of each other, and the differences were worth noting.

The level of significant difference most commonly reported is $p < .05$, which represents a 95% confidence level that the groups are indeed discrete. There are other levels of confidence which are more difficult to satisfy:

- * $p < .01$ (99% confidence)
- * $p < .001$ (99.9% confidence)
- * $p < .0001$ (99.99% confidence).

THEME 1

How students felt about themselves

The first theme of the questionnaire was how the students felt about themselves. To find out more about how they felt about themselves students were asked to respond to twenty three statements by indicating how frequently they thought the statements were true for themselves. Below are some of the topics in theme one:

- * competitiveness
- * confidence
- * independence
- * security
- * alertness
- * worry
- * shyness
- * impulsiveness
- * being happy by themselves
- * prediction of their own feelings
- * having good and bad feelings at the same time
- * having clear goals
- * having unusual ideas.

The results are in Table 3 below:

Table 3
Theme 1
How Students Feel about Themselves

Statement		N = 283		not sure N (%)	hardly ever N (%)	not often N (%)	quite often N (%)	nearly always N (%)
03.	I worry about things.	2 (1)	27 (9)	89 (31)	109 (39)	56 (20)		
07.	Success makes me feel shy.	10 (4)	84 (30)	71 (25)	85 (30)	31 (11)		
11.	I would like a good role model.	32 (11)	75 (27)	69 (24)	61 (22)	42 (15)		
12.	I am impulsive.	14 (5)	39 (14)	110 (39)	85 (30)	33 (12)		
14.	I pretend not to understand what is going on.	5 (2)	188 (66)	65 (23)	19 (7)	4 (1)		
15.	I am confident at school.	4 (1)	14 (5)	44 (16)	152 (54)	68 (24)		
17.	I have unusual ideas.	14 (5)	21 (7)	88 (31)	109 (39)	51 (18)		
18.	I have emotions that I don't understand.	25 (9)	89 (31)	85 (30)	58 (20)	22 (8)		
19.	I feel alert.	9 (3)	11 (4)	58 (20)	156 (55)	49 (17)		
23.	I can predict my own feelings.	25 (9)	21 (7)	68 (24)	120 (42)	47 (17)		
24.	If I am not doing well I find it hard to admit.	2 (1)	87 (31)	114 (40)	54 (19)	25 (9)		
26.	I am sensitive in class.	15 (5)	57 (20)	94 (33)	77 (27)	38 (13)		
27.	I feel secure.	7 (2)	23 (8)	51 (18)	118 (42)	81 (29)		
29.	I can have good and bad feelings at the same time.	23 (8)	22 (8)	74 (26)	120 (42)	42 (15)		
30.	I am independent.	6 (2)	3 (1)	24 (8)	126 (45)	122 (43)		
33.	I worry about events in the world.	4 (1)	43 (15)	108 (38)	93 (33)	33 (12)		
34.	I am a perfectionist.	14 (5)	44 (16)	72 (25)	79 (28)	73 (26)		
35.	I feel defensive.	17 (6)	54 (19)	98 (35)	91 (32)	22 (8)		
36.	I am afraid to try new things.	4 (1)	138 (49)	102 (36)	29 (10)	10 (4)		
42.	I am happy when I am by myself.	5 (2)	34 (12)	73 (26)	122 (43)	46 (16)		
44.	I don't understand myself.	18 (6)	143 (51)	78 (28)	29 (10)	11 (4)		
45.	I have clear goals.	7 (2)	35 (12)	48 (17)	102 (36)	90 (32)		
49.	I am competitive.	4 (1)	21 (7)	53 (19)	102 (36)	100 (35)		

One hundred and eighty eight (66%) students said they hardly ever agreed with the statement 'I pretend not to understand what is going on', and another 65 (23%) students said they did not often agree with this statement. This meant that when 89% of students understood what was going on, they did not pretend otherwise.

One hundred and twenty two (43%) students said they were nearly always independent, and slightly more, 126 (45%) students said they were quite often independent.

One hundred and thirty eight (49%) students said they were hardly ever afraid of trying new things, and slightly more 102 (36%) said they were not often afraid of trying new things.

Sixty eight (24%) students said they were nearly always confident at school, and another 152 (54%) said they were quite often confident at school.

One hundred and forty three (51%) students said they hardly ever agreed with the statement 'I don't understand myself', and another 78 (28%) said they did not often agree with this statement. This meant that 79% of students said they did understand themselves.

Forty nine (17%) students said they were nearly always alert, and another 156 (55%) said they were quite often alert.

One hundred (35%) students said they were nearly always competitive, and slightly more 102 (36%) said they were quite often competitive.

Eighty one (29%) students said they nearly always felt secure, and another 118 (42%) said they quite often felt secure.

Ninety (32%) students said they nearly always had clear goals, and another 102 (36%) said they quite often had clear goals.

In summary: With the 'nearly always' and 'quite' often categories combined more than two thirds of the students described themselves as:

- * acknowledging what was going on (89%)
- * independent (88%)
- * not afraid to try new things (85%)
- * understanding themselves (79%)
- * confident at school (78%)
- * alert (72%)
- * competitive (71%)
- * secure (71%)
- * having clear goals (68%)

THEME 2

How students felt about learning

The second theme of the questionnaire was how the students felt about learning. To find out more about how they felt about learning students were asked to respond to fifteen statements by indicating how frequently they thought the statements were true for themselves. Some of the topics in theme two are listed below:

- * enjoyment of learning and school
- * receiving constructive feedback to support their learning
- * wanting more of a say in how and what they learned
- * understanding how they learned best
- * knowing how to get better marks.
- * wanting to know more about leadership
- * wanting to contribute more during lessons.

The results are in Table 4 below:

Table 4
Theme 2
How Students Feel about Learning

Statement		N = 283		not sure N (%)	hardly ever N (%)	not often N (%)	quite often N (%)	nearly always N (%)
01.	I enjoy school.	3 (1)	15 (5)	55 (19)	154 (54)	56 (20)		
02.	I would like more of a say in what I learn.	16 (6)	18 (6)	72 (25)	129 (46)	47 (17)		
05.	I get bored at school.	2 (1)	44 (16)	105 (37)	105 (37)	26 (9)		
08.	I want to contribute more during lessons.	12 (4)	49 (17)	96 (34)	103 (36)	23 (8)		
09.	I understand how I learn best.	29 (10)	18 (6)	43 (15)	108 (38)	82 (29)		
13.	Learning is fun.	6 (2)	34 (12)	81 (29)	134 (47)	27 (10)		
20.	I know how to get better marks.	14 (5)	9 (3)	32 (11)	130 (46)	97 (34)		
22.	I want to know more about leadership.	17 (6)	44 (16)	81 (29)	86 (30)	54 (19)		
28.	Working hard will get me good marks.	4 (1)	3 (1)	8 (3)	75 (27)	191 (67)		
31.	I am happy when I am learning.	10 (4)	8 (3)	63 (22)	144 (51)	55 (19)		
38.	I enjoy getting high marks at school.	1 (0)	1 (0)	4 (1)	38 (13)	237 (84)		
39.	I would like more of a say in how I learn.	19 (7)	21 (7)	60 (21)	109 (39)	73 (26)		
41.	I don't care about the subjects I'm not good at.	7 (2)	140 (49)	78 (28)	30 (11)	27 (10)		
47.	I like to concentrate.	10 (4)	19 (7)	47 (17)	133 (47)	71 (25)		
48.	I get constructive feedback.	16 (6)	26 (9)	71 (25)	126 (45)	41 (14)		

Two hundred and thirty seven (84%) students said they nearly always enjoyed getting high marks at school, and another 38 (13%) said they quite often enjoyed getting high marks at school.

One hundred and ninety one students (67%) said they nearly always felt that working hard would get them good marks, and another 75 (27%) students said they quite often felt that working hard would get them good marks.

Ninety seven (34%) students said they nearly always knew how to get better marks, and another 130 (46%) students said they quite often knew how to get better marks.

One hundred and forty (49%) students said they nearly always cared about the subjects they were not good at, and another 78 (28%) students said they quite often cared about the subjects they were not good at.

Fifty six (20%) students said they nearly always enjoyed school, although another 154 (54%) said they quite often enjoyed school.

Seventy one (25%) students said they nearly always liked to concentrate, and another 133 (47%) students said they quite often liked to concentrate.

Fifty five (19%) students said they were nearly always happy when they were learning, and another 144 (51%) said they were quite often happy when they were learning.

Eighty two (29%) students said they nearly always understood how they learned best, and another 108 (38%) said they quite often understood how they learned best.

Seventy three (26%) students said they nearly always wanted more of a say in how they learned, and 109 (39%) students said they quite often wanted more of a say in how they learned.

In summary: With the 'nearly always' and 'quite often' categories combined approximately two thirds or more of the students said they:

- * enjoyed getting high marks at school (97%)
- * felt working hard would get them good marks (94%)
- * knew how to get better marks (80%)
- * cared about the subjects they were not good at (77%)
- * enjoyed school (74%)
- * liked concentrating (72%)
- * were happy when they were learning (70%)

- * understood how they learned best (67%)
- * wanted more of a say in how they learned (65%).

In the nearly always category 84% of students said they enjoyed getting high marks, but only 20% of students said they enjoyed school.

Two thirds of students (67%) said they nearly always felt that hard work would get them good marks, but only a third (34%) of students said they nearly always knew how to get better marks, and less than a third (29%) said they nearly always knew how they learned best.

A similar number of students in both the 'nearly always' and 'quite often' categories said they understood how they learned best (29% and 38% respectively) and said they wanted a say in how they learned (26% and 39% respectively).

THEME 3

How students felt about others

The third theme of the questionnaire was how the students felt about other people. To find out more about how they felt about others students were asked to respond to twelve statements by indicating how frequently they thought the statements were true for themselves. Below are some of the topics in theme three:

- * getting on well with other people
- * enjoyment from working in a group
- * knowing how others felt
- * knowing more about others than about themselves
- * worrying about what others thought of them
- * improvement of their communication skills
- * wanting to learn more about people skills.
- * knowing how other people felt
- * jealousy
- * motivation.

The results are in Table 5 below:

Table 5
Theme 3
How Students Feel about Others

Statement		N = 283				
		not sure N (%)	hardly ever N (%)	not often N (%)	quite often N (%)	nearly always N (%)
04.	I enjoy working in a group.	4 (1)	28 (10)	61 (22)	130 (46)	59 (21)
06.	I know more about schoolwork than about people.	54 (19)	83 (29)	83 (29)	48 (17)	10 (4)
10.	I worry about what other people think of me.	3 (1)	58 (20)	82 (29)	75 (27)	65 (23)
16.	I get on well with other people.	7 (2)	3 (1)	6 (2)	113 (40)	152 (54)
21.	Other people are jealous of me.	110 (39)	44 (16)	64 (23)	44 (16)	17 (6)
25.	I want to learn more about people skills.	14 (5)	27 (10)	54 (19)	132 (47)	54 (19)
32.	I don't know how other people feel.	23 (8)	74 (26)	105 (37)	69 (24)	11 (4)
37.	I am motivated in the same way other people are.	72 (25)	48 (17)	60 (21)	83 (29)	20 (7)
40.	My communication skills are improving.	19 (7)	11 (4)	27 (9)	150 (53)	76 (27)
43.	I am similar to a lot of other people.	46 (16)	80 (28)	82 (29)	66 (23)	5 (2)
46.	I understand more about others than about myself.	29 (10)	85 (30)	121 (43)	38 (13)	8 (3)
50.	I feel content when I am with other people.	15 (5)	6 (2)	25 (9)	132 (47)	99 (35)

One hundred and fifty two (54%) students said they nearly always got on well with other people, and another 113 (40%) said they quite often got on well with other people.

Ninety nine (35%) students said they nearly always felt content when they were with other people, and another 132 (47%) students said they quite often felt content when they were with other people.

Seventy six (27%) students said they nearly always felt their communication skills were improving, and another 150 (53%) students said they quite often felt their communication skills were improving.

However 85 (30%) students said they nearly always knew as much or more about themselves than about other people, and another 121 (43%) students said they quite often knew as much or more about themselves than about other people.

Fifty nine (21%) students said they nearly always enjoyed working in a group, and another 130 (46%) said they quite often enjoyed working in a group.

Fifty four (19%) students said they nearly always wanted to learn more about people skills, and another 132 (47%) students said they quite often wanted to learn more about people skills.

In summary: With the 'nearly always' and 'quite often' categories combined approximately two thirds or more of the students said they:

- * got on well with other people (94%)
- * felt content when they were with other people (82%)
- * felt their communication skills were improving (80%)
- * understood as much, or more, about themselves as they understood about other people (73%)
- * enjoyed working in a group (67%)
- * wanted to learn more about people skills (66%).

Although 80% of the students said their communication skills were improving, 66% said they wanted to learn more about people skills. Perhaps this is because almost half of the students (49%) said they worried about what other people thought of them, and nearly three quarters of students (73%) said they knew as much or more about themselves as they did about other people.

Gender differences

Themes 1, 2, and 3

The frequency results of the 'nearly always' and 'quite often' categories were combined into an 'agreement' category, and the results of the 'hardly ever' and 'not often' categories were combined into a 'disagreement' category.

Using the Chi square test there were some significant differences at the .0001, .01, and .05 levels between female and male student responses to the fifty statements. The differences were:

* significantly more female students agreed with the statements:

- I want to contribute more during lessons
($p < .0001$)
- I am sensitive in class
($p < .01$)
- I can have good and bad feelings at the same time ($p < .01$)
- I am happy when I am by myself
($p < .01$)
- I want to know more about leadership
($p < .05$)

* significantly more male students agreed with the statements:

- I pretend not to understand what is going on ($p < .01$)
- I don't know how other people feel ($p < .01$)

* significantly more female students disagreed with the statement:

- I don't know how other people feel ($p < .01$)

* significantly more male students disagreed with the statements:

- I enjoy school ($p < .01$)
- I am sensitive in class ($p < .01$)
- I am happy when I am by myself ($p < .01$)
- I have clear goals ($p < .01$).

BEST SUBJECT

In approaching the schools to nominate able 6th formers it was emphasised that high level abilities could be manifested in any curriculum subject area, or outside of the curriculum. Teachers in the schools nominated students who were considered to have high level abilities within the curriculum, and outside the curriculum in sports, leadership, debating, and performing and non-performing arts.

The questionnaire asked the students to name their best subject. The purpose of this was to record the range of ability areas in the cohort.

The responses to which 'subject you are best at?' are ranked in Table 6 below.

Table 6
Subjects the students say they are best at

Rank	Subject	N n = 283	%
1st	Maths	62	22
2nd	English	42	15
3rd	Accounting	16	6
4th	Biology	15	5
5th	Computing	14	5
6th	History	12	4
7th	Economics	11	4
8th =	Chemistry	10	4
8th =	Art	10	4
10th =	Music	9	3
10th =	Physics	9	3
10th =	Typing	9	3
13th =	French	8	3
13th =	Geography	8	3
15th	Science	7	2
16th	Physical Education	6	2
17th	Design	5	2
18th	Debating	4	1
19th	Latin	3	1
20th	Legal Studies	3	1
21st	Classics	2	1
22nd	Technical Drawing	2	1
23rd	Religion	2	1
24th	Media Studies	2	1
25th	Clothing, Drama, German, Japanese, Journalism, Leadership, Maori (each subject named by 1 student)	7	2
	No response	5	2
TOTALS		283	100

Nearly a quarter of the students (22%) named Maths as their best subject. Maths, together with English, Accounting, Biology, and Computing, accounted for more than half (53%) of their best subjects.

Languages and the arts were not well represented in the top ranking subjects.

Science was named separately by seven students but science was taught as separate disciplines in the 6th form, eg. Physics, Chemistry, and Biology. However these students may have intended to say that they were good at all science subjects.

A broad range of thirty one subjects was named. However, most of these were curriculum subjects.

Only two distinctly non-curriculum subjects were named: Debating (4 students) and Leadership (1 student). However there were curriculum subjects named which were not traditionally associated with students who have high level abilities: Typing (9 students), Religion (2 students), Technical Drawing (2 students), Clothing (1 student).

This involved 19 students (7%) out of 283 whose best subject was different from the subjects which students with high level abilities were traditionally expected to be good at.

Gender differences for best subject

There were differences between the subject rankings of female and male students, and both were different from the combined rankings.

Table 7 below shows the comparisons of the first 18 rankings for female and male students.

Female			Male		
Rank	Best subject	N.	Rank	Best Subject	N.
1st	English	31	1st	Maths	34
2nd	Maths	28	2nd	English	11
3rd	Accounting	13	3rd =	Economics	8
4th	Biology	10	3rd =	Physics	8
5th =	French	7	3rd =	Computing	8
5th =	Typing	7	6th	History	7
7th =	Chemistry	6	7th	Art	6
7th =	Computing	6	8th =	Biology	5
9th =	History	5	8th =	Design	5
9th =	Music	5	10th =	Chemistry	4
11th =	Art	4	10th =	Music	4
11th =	Geography	4	10th =	Geography	4
11th =	Science	4	13th =	Accounting	3
14th =	Debating	3	13th =	Sport	3
14th =	Economics	3	13th =	Science	3
14th =	Sport	3	16th =	Latin	2
17th =	Classics	2	16th =	Technical drawing	2
17th =	Legal Studies	2	16th =	Typing	2

There were differences between the rankings for best subject for female and male students.

In one subject there was a significant difference between the number of female and male students who named it as their best subject

The differences were:

- * There was a significant difference between the number of female (31) and male (11) students who named English as their best subject ($p < .01$).
- * The 1st and 2nd ranks for female students were English and Maths respectively. The 1st and 2nd rankings for male students were the reverse order; Maths and English respectively.
- * More than twice as many female students (28) named English as their best subject, than did male students (11).
- * More than three times the number of female students (13) named Accounting, than did male students (3).
- * Twice as many female students (10) named Biology, than did male students (5).

- * Whereas French ranked 5th for female students, French was not ranked in the top 18 subjects for male students.

- * Whereas Physics was ranked 3rd for male students, Physics was not ranked in the top 18 subjects for female students.

- * Whereas Chemistry ranked 7th for female students, Chemistry ranked 10th for male students.

- * No female students named Design, Drama, Graphics, Japanese, Journalism or Technical Drawing as their best subject.

- * No male students named Classics, Clothing, German, Graphics, Journalism, Leadership or Maori as their best subject.

Best subjects for non-Pakeha

Most non-pakeha groups by subject were so small that no pattern was discernible. The largest groupings were 8 (31%) Maori students, and 5 (26%) Polynesian students who named English as their best subject, and 8 (50%) Asian students who named Maths as their best subject.

QUESTIONNAIRE ITEM 51**What the students thought of the questionnaire**

The students were asked an open ended question to gauge whether or not the students felt it was helpful to describe their feelings, and therefore whether or not it might be a good tool for further research.

Forty nine percent of the responses supported the use of the questionnaire:

- * It was good to express my feelings (22%)
- * It was interesting; it was enjoyable; it was worthwhile (15%)
- * It was well constructed to match the purpose of the survey (9%)
- * It was good to be able to say how 6th formers feel (3%).

Gender differences for item 51

More females said it was interesting, enjoyable, or worthwhile (45) than did males (21). The chi squared test shows that this difference is just less than significant at the 0.05 level of confidence ($p > .05$).

DISCUSSION

The literature suggested that gifted students may have affective (social and emotional) needs that are not being met, and that learning situations which do not adequately cater for gifted students' cognitive needs may exacerbate their affective needs.

The literature also suggested that gifted students may not have learned as many skills in the affective domain as they have learned in the cognitive domain.

The present study sought to find out more about how able sixth form students felt about themselves, about learning, and about other people.

The questionnaire results gave an indication of what able sixth form students felt about themselves, about learning and about others.

However, the diversity of topics in the questionnaire, especially in theme 1, meant that the results raised many questions about possible links between topics, but few inferences should be made from the questionnaire results alone.

Almost half of the questionnaire topics were raised again in the interviews where more indepth information was gained about the context in which the

questionnaire responses were made. The results of the interviews are discussed in the next chapter.

Theme 1: how students felt about themselves

The results of the questionnaire showed that more than two thirds of the cohort said they were independent, not afraid to try new things, confident at school, and secure. What did this mean?

These results could suggest they had some kind of strong self identity in the affective domain, and could mean they were courageous as well.

More than two thirds of the cohort also said they were competitive, had clear goals, understood themselves, and when they understood what was going on, they did not pretend otherwise. What did these results mean?

Clear goals could mean that they had already prioritised what they wanted in life. This seemed reasonable, because they said they understood themselves. They also said they were competitive, so perhaps their goals included doing well, or aiming to be the best, in whatever they chose to do.

Most of the students (89%) disagreed with the statement 'I pretend not to understand what is going

on'. Perhaps they felt confident enough to accept, and even deal with whatever they perceived was going on, regardless of whether this produced a difficult situation or not. If this was the case, it would suggest that these students were confident about themselves. It could also mean that they had developed good intrapersonal, and perhaps interpersonal, skills in the affective domain (Sternberg, 1986).

Although 89% of students disagreed with the statement 'I pretend not to understand what is going on', fewer students (71%) disagreed with the statement 'If I am not doing well I find it hard to admit.' So, more than a quarter of students (28%) found it hard to admit when they were not doing well. Perhaps this indicated that more students found it hard to accept situations connected with their success, than a situation that was more general.

Although 78% of students said they understood themselves, fewer students said they understood their emotions (61%), and fewer still said they could predict their own feelings (59%), and 57% said they had good and bad feelings at the same time.

If students felt they understood themselves and had a strong sense of self identity, perhaps they were not concerned when they did not understand their

emotions or had unpredictable feelings, or had good and bad feelings at the same time.

Approximately half of the students said they worried; 58% worried about things, and 45% worried about events in the world (and 49% worried about what other people thought of them in theme 3). It is important to note that approximately half of the cohort worried quite often or nearly always, and that these results supported Clark's (1992) description of gifted students. That is, that they typically had a heightened sense of fear.

More than half of the students (57%) said they had unusual ideas. This may suggest that they have a strong sense of creativity (Clark, 1992).

Theme 2: how students felt about learning

There were more students who said they enjoyed getting high marks at school (97%) than there were students who said they enjoyed school (74%). These results suggested that students enjoyed success at school more than they enjoyed school.

With a strong interest in success then, it was not surprising that 77% of students showed concern over subjects they were not good at. There could be several reasons for this. Perhaps after succeeding in

some areas, students had difficulty in coping with a lack of success in other areas.

There were more students who said that working hard would get them good marks (94%), than there were students who said they knew how to get better marks (80%). These results suggested that nearly all students knew how to get good marks but fewer knew how to improve those marks, and get even higher marks.

Considering that 97% of students enjoyed getting high marks it would seem worthwhile to find out more about why 20% of the students did not know how to increase their marks.

Seventy percent of students said they were happy when they were learning, but fewer students (57%) said learning was fun. This may suggest that some students considered learning to be serious but enjoyable. In comparison though, there were many more students who enjoyed getting high marks than there were students who enjoyed learning.

The results indicated that students wanted changes in their learning environment. Almost two thirds of students said they wanted more of a say in what (63%) and how (65%) they learned, and 40% said they wanted to contribute more during lessons.

It is interesting to note that similar numbers of students said they understood how they learned best (67%) and said they wanted more of a say in how they learned (65%). If these students knew how they learned best, then what changes did they want in how they learned?

Almost half of the students said they wanted to know more about leadership. This is interesting because society expects able students to be leaders because of their high level abilities (Clark, 1992), but only half of the students in the cohort expressed an interest in knowing more about leadership. It is possible that the other half of the cohort identify more with a more private academic stereotype (described as the media image in the pilot study).

Theme 3: how the students felt about others

A large number of students said they got on well with other people (94%) and felt content when they were with other people (82%), and yet only 67% said they enjoyed working in a group. This indicated that most students liked to socialise with others but fewer liked to work with others. One third of the students then, preferred to work alone (Griggs, 1984).

Even though so many students felt their communication skills were improving (80%), almost two thirds of

students still wanted to learn more about people skills (66%). It is not evident from the questionnaire results whether students interpreted people skills as being mainly communication skills or whether they interpreted it as being broader and included such things as included group dynamics and assertiveness.

Seventy three percent of students said they understood as much, or more, about themselves as they understood about other people, and 58% said they understood more about people than about schoolwork. This implies that many students understood more about themselves, than about schoolwork.

Fifty seven percent of students said they were different from a lot of other people, and only 36% of students said they were motivated in the same way as other people. These results indicated that there were many students who saw themselves as being different from other people, especially in motivation (Griggs, 1984).

Best subject

The criteria for ableness given to schools, on which to base selection of the sample, included subject areas inside and outside of the curriculum. However, it was expected that most students identified by their

teachers as able, would have shown high level abilities in traditional curriculum areas.

There was a wide range of 31 'best subjects', but most were traditional curriculum subjects. Maths (22%) and English (15%) were the largest groups of 'best subject', as would be expected.

Non-curriculum subjects, Leadership and Debating, were named as best subjects by only five students. However, another fourteen students named curriculum subjects which were not traditional 'best subject' areas for able students such as typing and technical drawing. These students may well have had high level abilities in non-curriculum areas but interpreted the question to mean their 'best subject' at school.

What the students thought of the questionnaire

This item was included in the questionnaire to gauge how students responded to a questionnaire on personal matters, and to see if it was supported well enough to suggest using it for further research.

There was a wide variety of responses to this item on the questionnaire. Forty nine percent of students strongly supported the use of it especially as an opportunity to express their feelings.

Another 16% of students wanted an opportunity to write a fuller response to the statements or were interested in the research results.

Twenty seven percent of students were indifferent or had difficulty in responding to one or more statements. Only 5% thought it was a waste of time or too personal.

The questionnaire was designed with a mix of positive and negative statements for balance. However, the students may have had some difficulty in responding to some of the negative statements, and in hindsight it may have been better to have used only positive statements. Reducing the Likert scale to two or three categories may have helped students as well.

Gender differences

The results showed that there were some significant differences between the responses of female and male students, suggesting that any recommendations taken from this study should accommodate the needs of both genders.

Female students were significantly more likely to want to contribute more during lessons than their male counterparts, and more likely to see themselves as being sensitive in class.

Significantly more female students said they were happy when they were by themselves, and wanted to know more about leadership.

Significantly more females felt they did know how other people felt. Whereas significantly more male students said they did not know how other people felt.

Males were significantly more likely to pretend not to understand what was going on, than were females.

Males were significantly less likely to enjoy school and have clear goals.

As would be traditionally expected, English ranked first for female students for 'best subject', whereas Maths ranked first for male students.

Whereas Physics ranked third for males, physics was not in the first eighteen rankings for females.

More than twice as many females (45) thought completing the questionnaire was interesting, enjoyable or worthwhile, than did males (21).

Chapter 6

RESULTS OF THE INTERVIEWS

The purpose of the group interviews was to find out more about how the students felt about themselves, about learning, and about other people.

Key results from each of the three themes in the questionnaire became the basis for the interview questions. The students were asked to discuss the results and to add any relevant and important information.

This gave the students the opportunity to describe the context in which the questionnaire responses were made, to suggest any causal relationships in the results, and to reduce any researcher bias in the interpretation of results.

The interview questions were designed to cover a broad range of topics from each of the three themes, and included questionnaire results with high, low and medium degrees of agreement.

Some of the interview questions involved the results of only one statement from the questionnaire, and the other interview questions involved the results of at least two similar (or dissimilar) statements from the questionnaire.

Students were sometimes asked to comment on these results, and sometimes asked to explain apparent differences between these results.

When asked to explain differences students sometimes addressed these differences, but at other times they preferred to simply give a contextual basis to each of the statements in the interview question.

The students' sometimes responded to a question by reintroducing topics which had already been discussed. And sometimes they pre-empted my questions by speaking about topics which I had planned to introduce later in the interview. As a result there are recurrent themes.

One reason for this may have been that they remembered statements from the questionnaire which they had previously completed, or perhaps the students felt that several topics were interrelated.

The students in most schools responded to each question. However there were some interview

questions which received little or no response from some schools.

When completing the questionnaire students had interpreted two of the statements differently from the intended meaning when the questionnaire was designed. These differences are discussed as they arise in the text below.

Students were told that they could respond to each question from their own personal perspective, or by referring to what they thought was a commonly held opinion amongst their peers.

The students were interested in talking about the results of the questionnaires, and every discussion was lively.

The students were reminded that the discussions were confidential.

There were 15 interview questions:

- * how students felt about themselves - 6
- * how students felt about learning - 5
- * how students felt about others - 4.

THEME 1

HOW STUDENTS FELT ABOUT THEMSELVES

List of interview questions

Below is a list of the six questions in theme 1: how students felt about themselves. Each question is repeated at the beginning of the results of each interview question.

1. Why was it that more than two thirds of students (79%) said they were confident at school and yet 40% said they were sensitive in class?
2. Why was it that almost half of the students felt shy about success? (41% agreed and 55% disagreed).
3. More than two thirds of the class agreed with these two statements:
 - * I feel alert (72%)
 - * I have clear goals (68%).

Would you like to comment on these results?

4. Just over half of the class agreed with the following two statements:

- * I am happy when I am by myself (59%)
- * I am a perfectionist (54%).

Would you like to comment on these results?

5. Less than half of the students agreed with these statements:

- * I feel defensive (40%)
- * I am afraid to try new things (14%)

Would you like to comment on these results?

6. These are the results of the responses to three statements on students' feelings.

- * I can have good and bad feelings at the same time (59%)
- * I have emotions I don't understand (28%).
- * I don't understand myself (14%)

Would you like to comment on these results?

INTERVIEW QUESTION 1

Why was it that more than two thirds of students (79%) said they were confident at school and yet 40% said they were sensitive in class?

I am confident at school

Some of the students said they thought it was possible to feel confident at school because of external circumstances such as when they got good marks, and because others thought of them as being confident, but at the same time it was also possible to feel a lack of internal self confidence. Other students felt that they had not thought about the issues very much to date. Below are comments from three schools:

- * 'You can feel confident at school, especially if you get good marks.'
- * 'When others think of you as confident, you look confident and you believe it.'
- * 'It is possible, in fact it is easy, to feel confident at school and sensitive in class.'
- * 'Some students are confident at school, but not confident about themselves.'

- * 'Its possible to be confident on the surface, confident in groups, but not confident in yourself.'
- * 'Maybe we haven't thought about ourselves much, about sensitivity or confidence.'
- * 'Maybe confidence and sensitivity are a bit like people skills - you can experience things but you are not really processing it.'

I am sensitive in class

When the questionnaire was designed this statement was intended to mean "I am self-conscious in class and prefer to avoid situations, like asking questions, which may place the focus solely on me". Half of the students in four of the schools thought the statement meant "I am sensitive to other people's feelings in class".

In reference to the intended meaning the students answered with the following comments concerning sensitivity in class and in groups, reasons for sensitivity about asking questions and speaking out in class, the effects of sensitivity in class, and helping those who are sensitive.

Sensitivity in the classroom

There were differing opinions between the schools as to whether or not sixth formers were sensitive in class, and what sensitivity depended on. The students in four schools chose to talk about sensitivity in class.

- * 'I feel confident in some subjects and sensitive in others.'
- * 'Some people are shy about saying things in class.'
- * 'Very few are confident enough in class to stand up and give unusual ideas.'
- * 'Shyness is common. Its hard to read out loud in class.'
- * 'People need more confidence to ask questions in class. Some teachers are trying to encourage it, and it is working.'
- * 'Most third formers are too shy to ask questions in class, but not many sixth formers are.'

Sensitivity in a group

The students in two schools specifically talked about sensitivity in groups.

- * 'You can be confident in doing your own work but lots of people are sensitive about doing solo things in a group.'
- * 'More people are confident if they are in a small group.'

Reasons for sensitivity in class

The students in four schools talked about why they thought sixth formers were sensitive about asking questions, or speaking out, in class. Most of the comments were about fear of what others would think of them.

- * 'It would be easier if school wasn't so serious.
There is a fear that people think you are dumb if you ask questions. It is probably not true.'
- * 'In class you don't want them to say she's smart but she can get it wrong.'
- * 'If everybody in class says they understand, then you don't want to say that you don't understand.'
- * 'If you are known for always getting it right, there will be trouble if you get it wrong.'
- * 'If you are intelligent you are too proud to ask for help. You get locked into a stereotype.'
- * 'In maths no-one asks for help. It's too embarrassing.'
- * 'Some ask questions in class. Then other people call out that the question has already been asked. You feel stupid that you weren't listening.'
- * 'Students won't ask questions. They're too shy and it's uncool to show interest in the subject.'
- * 'You don't want to admit that you don't know. Smaller classes are not so embarrassing.'
- * 'Sometimes I would rather try and find out later, or even just forget about it, than go through the

embarrassment of asking something stupid in class.'

- * 'Those who want to achieve, fear failure.'
- * 'Sensitivity affects everybody from time to time.'

Effects of being sensitive in class

- * 'Shyness holds people back.'
- * 'The more confident I feel the more I learn.'
- * 'Confidence to ask questions in class depends on personal confidence, confidence in the subject, the teacher and classmates. Confidence affects your ability to learn.'

Other concerns about sensitivity

The students in one school felt that classmates could offer help to those who were sensitive.

- * 'You can help others if they are sensitive.'

Summary of responses to interview question 1

The students said that it was possible to feel confident at school but sensitive in class. The students also said that it was possible to have extrinsic confidence but feel a lack of intrinsic confidence, so that

students felt confident at school or in groups but lacked confidence in themselves.

They said that good marks helped their confidence.

The students said that confidence to ask questions in class depended on several factors: personal confidence, confidence in the subject, the teacher, and classmates. And so it was not surprising that students felt confident in some subjects but sensitive in others, and confident in small groups but sensitive in large groups.

The students gave several reasons for being sensitive in class, most of which were connected to what other people might think of them if they spoke up or asked questions:

- * shyness was common
- * few students were confident enough to stand up in class and give unusual ideas
- * when students were considered to be intelligent they would be embarrassed if they spoke up and got it wrong
- * they feared that people might think they were dumb if they asked questions
- * they were too proud to ask for help, especially if they were intelligent and identified with the stereotype of an intelligent person

- * those who wanted to achieve, feared failure
- * it was uncool to show interest.

The students said that the more confident they were in class the more they could learn.

INTERVIEW QUESTION 2

Why was it that almost half of the students felt shy about success? (41% agreed and 55% disagreed).

Success makes me feel shy

Comments fell into two categories. The first category was about how success, and the feelings that are associated with it, are largely dependent on external aspects such as anticipating how other students will react. The second category concerned learning more about how to handle success.

Dependent on how others see it

Below are the comments from students in two schools:

- * 'There is a hierarchy of what subjects it is acceptable to be good in.'
- * 'Success is not cool in certain subjects. Success in physics means you are clever, in art it means you are talented, in religious education it means you are holy. It depends how you feel about that success. There are diligence prizes for hard work in each subject too. Diligence in some subjects is OK.'
- * 'You don't want others to think you are boasting. Depends on how others react. You're not shy by yourself; you're proud of yourself.'
- * 'The sixth form is better. People are more grown up. Others feel good for you when you are successful.'

Learning more about how to handle success

The comments below were from students in one school:

- * 'You're not taught how to take compliments, in or out of school. You need help with compliments. You need to say thanks.'
- * 'Pride is confused with overconfidence or arrogance. We don't know enough about it.'
- * 'I'm just learning in this discussion that we are all thinking the same. Whereas before I thought that others think differently. I just thought the others would think I was boasting.'

Summary of responses from interview question 2

The students said they felt proud of themselves when they were successful but felt shy about success in front of others when they expected other people to view it badly, for example:

- * some students would be pleased for you and others would think you were boasting
- * success was considered to be cool in some subjects, but not in others.

Students wanted more help in dealing with success. They felt that pride was confused with arrogance.

During the interview in one school the discussion process allowed students to understand that they were all thinking the same thing; they all feared that others would think they were boasting.

INTERVIEW QUESTION 3

More than two thirds of the class agreed with these two statements:

- * I feel alert (72%)
- * I have clear goals (68%).

Would you like to comment on these results?

I feel alert

Most students agreed that they felt alert quite often, but that there were circumstances that effected their alertness. Below are the comments from six schools:

- * 'I am more alert in my own time, not at school.'
- * 'It takes till Wednesday to become alert, then I have two days of it.'
- * 'It changes daily. It depends on sleep, interest, family, and social distractions.'
- * 'You need to prioritise. I am alert out of school, but I am never alert in a lesson.'
- * 'It depends on the time of the year. Early in the year it is good, but late in the year it is not.'
- * 'There is a cycle. If I am not alert at the beginning of a concept, then the next day I can't be bothered catching up.'
- * 'At school we are told to do things, but at home I can choose. I can study better at home.'
- * 'Some days I am alert and some days I'm not. It depends on the teacher and if the student is interested in the subject.'
- * 'I am alert but not focussed.'
- * 'I am surprised so many are alert. It depends if you are being forced to study three hours a night.'

I have clear goals

The students' comments fell into four categories:

- * assistance that the students said is currently available to help them develop goals
- * areas where the students said they needed more assistance to develop goals in general
- * areas where the students said they would like more assistance to develop career goals in particular
- * and concerns the students said they had about attainment of goals they had set.

Available assistance for students to develop goals

Four schools chose to talk about assistance available to students to clarify their goals:

- * 'If you want help it is there.'
- * 'Some work has been done at school on goals.'
- * 'Help is not advertised enough.'
- * 'The family can encourage you.'

Wanting more assistance in developing goals

Four schools talked about wanting more assistance in developing general goals.

- * 'Sometimes a teacher will ask you about your goals. The student responds on the spot without really thinking about it.'

- * 'Goals are not covered well. We need more.'
- * 'Would like more assistance with goals.'
- * 'We need to be given heaps of options and goals.'
- * 'The short term goal is to pass exams. Long term goals are not discussed fully.'
- * 'People have come to the school and given group talks but you need one-to-one advice. Its not individual enough.'
- * 'The sixth form is too late. We need advice when we are much, much younger. Perhaps in primary school.'

Wanting more assistance in developing career goals

The students in four schools talked about wanting more assistance in planning career goals.

- * 'Some know what they want to be, and some of them are dreaming.'
- * 'When you choose a subject you need to know what career you want. Sixth formers need more career help from school or family.'
- * 'Very few have career goals.'
- * 'We need a career adviser before the sixth form, because we do the same subjects in the seventh form.'
- * 'Most of us have life goals or family goals, or at least we have thought about it. But not many of us have professional goals.'

- * 'We've been told about careers from when you are young, but there has been no discussion yet. The school has been good in working against sexism and cultural problems though.'
- * 'We need to know which subjects lead to which qualifications and we need to know which qualifications lead to which careers.'
- * 'Not really shown why you should want a particular career.'
- * 'There should be more career advice. We don't really know what's out there.'

Wanting more assistance in attaining goals

The students in two schools talked about wanting more assistance in attaining goals they had already set for themselves.

- * 'I guess about half of the students know what they want, but they don't know how to get there.'
- * 'We dream of careers, but some have no hope of achieving them. With goals you need a dream and the pathway, or you have to change the dream.'

Summary of responses to interview question 3

Most students agreed that they felt alert quite often, but certain factors could influence their level of alertness. Most of these factors suggested personal cycles such as more alert early in the year, or early in the week, or at home, or in their own time. Some students said:

- * they were more alert and could study better at home when they could choose what to do next
- * they were alert but not focussed
- * it was difficult to be alert with three hours study every night.

The students said that they received some assistance in setting goals from family and school, but that help was not advertised enough.

The students said they wanted more assistance in setting goals, particularly career goals, and that they needed assistance in attaining those goals. They said that some students who had set goals often had no idea how they could attain those goals.

The students said they wanted one-to-one advice on setting long term goals, and they wanted it earlier than in the sixth form year because students had to take the same subjects in the sixth and seventh forms.

Students said they wanted to know which courses led to which qualifications and which qualifications led to which careers.

INTERVIEW QUESTION 4

Just over half of the class agreed with the following two statements:

- * I am happy when I am by myself (59%)
- * I am a perfectionist (54%).

Would you like to comment on these results?

I am happy when I am by myself

Few comments were made about the results of the responses to this statement. The students in two schools said they felt happy when they were by themselves, but also enjoyed working with others or being in the company of others.

- * 'At school you are in groups, and in your own time you are by yourself. I enjoy both.'
- * 'It is possible to be happy by yourself and enjoy other people.'

I am a perfectionist

The students' comments included descriptions of perfectionists, reasons for becoming a perfectionist, reasons for not becoming a perfectionist, and the number of perfectionists.

Descriptions of perfectionists

The students in three schools described what they saw as aspects of perfectionism.

- * 'Very, very few students would work only and have no social life.'
- * 'There are different types of perfectionism.'
- * 'Perfectionists are more critical because they are obsessed. They forget about people.'

Reasons for becoming a perfectionist

The students in four schools gave reasons why they thought people became perfectionists.

- * 'You can become one because you are always striving to achieve. You are used to going the extra step to achieve.'
- * 'Depends on how high your motivation is.'
- * 'There is a difference between being happy in yourself and your own confidence, and whether you need to be a perfectionist.'

Reasons for not becoming a perfectionist

The students in four schools gave reasons why they thought people did not become perfectionists.

- * 'There's not enough time or incentive to be one.'
- * 'It is better to complete work and have it assessed, than to make it perfect.'
- * 'It is not cool. You get hassled for perfectionism.'
- * 'You don't lose marks for untidiness, but teachers are proud of fussiness and tidiness. Our peers are against fussiness.'
- * 'You can be handicapped because you are obsessed.'

The number of perfectionists

Students in two of the schools chose to comment on what they perceived as the number of perfectionists.

- * 'Not many people are.'
- * 'There are a few who are perfectionists at everything and they don't want to try anything new, because they are good at what they already do. But there will be more who are perfectionists at one thing or another.'

Summary of responses to interview question 4

Students said that they were happy when they were by themselves, but also enjoyed being with others and working in groups.

Students had a variety of descriptions of perfectionists:

- * they were more critical because they were obsessed
- * they worked hard and had no social life
- * they forgot about people.

The students also gave reasons why they thought people became perfectionists and why they did not become perfectionists.

Reasons why people became perfectionists:

- * high motivation
- * used to going the extra step to achieve
- * low self confidence and felt the need to fill the gap with perfectionism.

Reasons why people did not become perfectionists:

- * it was not cool
- * not enough time or incentive

- * it was better to complete work and have it assessed than to make it perfect
- * peers were against fussiness but teachers were proud of it, even though they did not lose marks for untidiness
- * being obsessed was a handicap.

The students did not think there were many perfectionist at everything, but that there were perfectionists at one thing or another. The few who insisted on perfectionism in everything, were not likely to try anything new because they were good at everything they already did.

INTERVIEW QUESTION 5

Less than half of the students agreed with these statements:

- * I feel defensive (40%)
- * I am afraid to try new things (14%)

Would you like to comment on these results?

I feel defensive

The students at only one school commented on defensiveness. It was in connection with defensiveness of their schoolwork.

Defensive about schoolwork

- * 'Lots of students are defensive about the quality of their own work.'

I am afraid to try new things

The students' comments included reasons for not trying new things, being afraid but trying new things anyway, and not being afraid of trying new things.

Reasons for not trying new things

The students in five schools chose to give reasons for being afraid to try new things.

- * 'We were advised at school not to try new subjects this year.'
- * 'I prefer not to fail.'
- * 'Depends how major it is.'
- * 'I'm uneasy about new things.'

- * 'New things would be a risk for seventh formers. You could pick up a new subject and be really good at it. It depends on your confidence but it is a risk.'

Being afraid, but trying new things anyway

The students in four schools talked about being afraid to try new things, but doing so anyway.

- * 'Yes I have a fear of new things, but it doesn't mean I won't try it anyway.'
- * 'I feel reticent but I still try new things.'
- * 'Its easier if you do a new thing with a friend.'
- * 'I fear failure. I want to try new things, but I'm afraid. I am pleased when I do try something new, but it is awful if it goes wrong.'

Not being afraid of trying new things

The students in two schools commented on not being afraid to try new things.

- * 'Very few are afraid to try new things.'
- * 'I like new things. I like challenges.'

Summary of responses to interview question 5

Students in only one school chose to comment on defensiveness. They said a lot of students were defensive about the quality of their own work.

The students gave reasons for being afraid, and reasons for not being afraid, to try new things. They also talked about being afraid but trying new things anyway.

Reasons for being afraid to try new things:

- * preferring not to fail
- * being uneasy about new things
- * it depended on how major it was
- * it was a risk especially picking up a new subject for seventh form.

Reasons for not being afraid to try new things:

- * liking new things
- * new things were seen as a challenge.

The students said that even though they were afraid, they tried new things anyway. They said that it was easier to try new things with a friend, and that they were pleased when they did try something new.

INTERVIEW QUESTION 6

These are the results of the responses of three statements on students' feelings.

- * I can have good and bad feelings at the same time (59%)
- * I have emotions I don't understand (28%).
- * I don't understand myself (14%)

Would you like to comment on these results?

I can have good and bad feelings at the same time

The students' comments included acceptance of mixed feelings as being normal, problems associated with having mixed feelings, causes of mixed feelings, learning about mixed feelings, people to talk to about mixed feelings, and problems with new feelings.

Acceptance of mixed feelings

Students in three of the schools said they accepted having good and bad feelings at the same time.

- * 'It is normal. Don't worry about it.'
- * 'Teenagers are mostly like this.'
- * 'It is OK to have mixed feelings but I'm scared of them.'

Problems associated with having mixed feelings

The students at three schools said they had problems with having good and bad feelings at the same time.

- * 'Some people might panic if they have good and bad feelings at the same time.'
- * 'It is hard to get over mixed feelings.'

Causes of mixed feelings

The students at two schools chose to talk about what they saw as the cause of having good and bad feelings at the same time.

- * 'You can do things that are good but for the wrong reasons.'
- * 'If you are happy but you feel sorry for someone else, then you have to decide on the best reaction.'

Learning more about mixed feelings

Students at two schools talked about learning issues.

- * 'We need to learn more about it.'
- * 'You can't learn about yourself or learn from others any faster so you are bound to have mixed feelings.'

People to talk to about mixed feelings

Students at three schools mentioned people they could talk to about having good and bad feelings at the same time.

- * 'There is peer counselling from trained seventh formers and from sixth form deans and the guidance counsellor. It has just started.'
- * 'Some say it is good to go to the counsellor, and some say it is bad. If I have new feelings, it is better to talk to mates about it. Better still, talk to acquaintances about it.'
- * 'I communicate mixed feelings to friends, but some people have high standards for themselves and they find it more difficult to talk to others about it.'

New feelings

- * 'The first time I have a new feeling I'm not sure about myself and I worry.'

I have emotions that I don't understand

The students' comments included acceptance of having feelings they did not understand, how they reacted to having emotions they did not understand, and

understanding the phenomena of having emotions they did not understand.

Acceptance of having emotions they did not understand

The students in one school talked about accepting that they had emotions they did not understand.

- * 'Everyone has emotions that they don't understand. It is natural. Its adolescence. And it is the same all your life.'
- * 'I am not alone. I am not the only person who sometimes doesn't understand myself.'
- * 'It is not a problem yet.'

Reactions to having emotions they did not understand

The students at two schools talked about their reactions to having emotions they did not understand.

- * 'It might make me feel frustrated. I concentrate on good feelings.'
- * 'I tell others if I have a problem.'
- * 'I ask friends if I don't understand myself.'

Other comments

Students at two schools made other comments.

- * 'I only just understand my feelings now.'
- * 'Some people punish themselves if they fail.'

I don't understand myself

Although 79% of students disagreed with this statement, and therefore felt they did understand themselves, none of the groups of students commented on this result.

Summary of responses to interview question 6

Students said they understood that having good and bad feelings mixed together, and having emotions they did not understand, was part of adolescence. These emotions however, did create problems for them.

Some students said that they panicked when they had good and bad feelings at the same time, and that it was hard to get over those mixed feelings. Some students said they thought it was normal to have good and bad feelings mixed together but that they were scared of them.

The causes of having good and bad feelings together that students mentioned were:

- * doing good things but for the wrong reason
- * feeling happy for themselves but sorry for someone else at the same time.

Some students felt that they needed to learn more about mixed feelings, and other students felt that they could not speed up the process of learning about themselves and hence should expect to have mixed feelings.

Some students did not want to talk to others about mixed feelings because they had high standards for themselves. Other students said there were people they could talk to about mixed feelings:

- * trained seventh formers
- * sixth form deans
- * friends
- * acquaintances
- * school counsellor.

The students had mixed feelings about talking to the school counsellor. Some students thought this was a good idea and other students thought this was a bad idea.

New feelings could make students lose self confidence and worry.

Students said that having emotions they did not understand sometimes made them feel frustrated.

Their solution was to concentrate on good feelings or speak to others about the problem.

The students in one school mentioned that some students punish themselves when they failed.

None of the students commented on the results of the statement 'I don't understand myself'.

THEME 2

HOW STUDENTS FELT ABOUT LEARNING

List of interview questions

Below is a list of the five questions in theme 2: how students felt about learning. Each question is repeated at the beginning of the results of each interview question.

7. Nearly three quarters of the students (74%) said they enjoyed school, and yet nearly half of the students (46%) said they got bored at school. Can you explain how this could happen?
8. Almost two thirds of the students said they wanted more of a say in HOW (63%) and WHAT (63%) they learned. Would you like to comment on these results?
9. Almost all students said they enjoyed getting high marks (97%), but fewer (80%) said they knew how to get better marks. Can you explain this?

10. I have the results of two statements about learning and concentration:

- * almost three quarters of students said they liked to concentrate(72%),
- * but only 57% of students said they thought learning was fun.

Would you like to comment on these results?

11. More than half of the students (59%) said they got constructive feedback. Would you like to comment on this result?

INTERVIEW QUESTION 7

Nearly three quarters of the students (74%) said they enjoyed school, and yet nearly half of the students (46%) said they got bored at school. Can you explain how this could happen?

I enjoy school

Students from all of the schools said that some subjects were boring, while the social life at school was enjoyable.

The students in all of the schools said their enjoyment of school was partly due to their social life. Some students said they also enjoyed the schoolwork and the security of school.

Enjoying the social life at school

- * 'I enjoy talking to friends at school.'
- * 'The social life at school explains most of the enjoyment.'
- * 'I enjoy school because of lunch breaks and friends.'
- * 'I enjoy the extra-curricular activities like sport and music.'

- * 'The social life before school, and at breaks is great.'
- * 'The seventh form buddies that you get in the third form were good because they organised activities for you.'
- * 'The social life at school was good in the third, fourth and fifth forms, but the sixth form is not so great.'

Enjoying schoolwork

Students in three schools said they sometimes enjoyed the schoolwork, but for different reasons:

- * 'The work is sometimes intense, and that is sometimes enjoyable.'
- * 'Some subjects are good. It depends on the teacher.'
- * 'The easier the subject, the more interesting it is.'

Enjoying the security of school

The students in one school said school gave them a sense of security.

- * 'I enjoy the security of school.'

Other comments

The student's at one school suggested that their enjoyment of school depended on how happy they were at home.

- * 'I enjoy school. It depends on the family. Some enjoy home more and some enjoy school more.'

I get bored at school

Students in all of the schools said that the boredom which they sometimes experienced at school was due to a variety of reasons: the subjects, the level of work, the teaching methods, the routine of school, and personal reasons.

Bored with the subjects

Students in five of the seven schools said that the boredom they experienced in some subjects was due to the subject itself.

- * 'Schoolwork can be boring. It depends on the subject.'
- * 'Some subjects are boring. Some are not.'

Bored with the level of work

The students in one school said the level of work was sometimes a source of boredom.

- * 'Sometimes the work is not stimulating enough.'

Bored with the teaching methods

The students in three schools said they thought that teaching methods were responsible for some of the boredom that students felt at school.

- * 'When the teacher goes back over work it is boring.'
- * 'It is boring to listen to the teacher all the time.'
- * 'If the teacher has problems controlling the class it is boring.'
- * 'Even if you get a bad mark the teacher should encourage you, otherwise you get a bad attitude. Those students who get encouraged, do well. The students who get fourth in class get no prizes and get no encouragement. Students need more knowledge about how the teacher reacts to you.'

Bored with the school routine

The students in two schools said they felt that the routine at school was boring.

- * 'Classes are routine and monotonous.'
- * 'There is a sameness since the age of five. We want something new. We want individuality and freedom. Uniforms don't help individuality.'
- * 'We always have to work. We always have to sit inside and sit at a desk.'

Personal boredom

The students from two schools said that they felt bored on some days without being able to attribute any specific reason for this. And the students at a third school agreed that it was easy to get bored when they got behind in their work.

- * 'I have days of boredom, but it can still be enjoyable overall.'
- * 'Some days I just feel bored, and some days I feel OK. It doesn't depend on anything.'
- * 'If I am not doing well I find it hard to work towards anything and get bored.'

Summary of the responses to interview question 7

The students said that their enjoyment of school was often centred around:

- * socialising in the breaks
- * extra-curricular activities

and sometimes schoolwork. There was a variety of reasons why students felt schoolwork was enjoyable, and these reasons represented different perspectives:

- * the intensity of work
- * the easier the subject, the more interesting it was
- * the enjoyment depended on the teacher.

Other reasons for enjoying school were:

- * the security of school
- * enjoying school more than they enjoyed being at home.

The students said that schoolwork could also be a source of boredom:

- * when it was not stimulating enough
- * when they got behind in their work
- * when they were not doing well and found it hard to motivate themselves
- * when teachers had problems controlling the class
- * when work was repeated
- * when students had to listen to the teacher a lot.

The routine and monotony of going to school everyday and always sitting inside at a desk were also mentioned as sources of boredom.

INTERVIEW QUESTION 8

Almost two thirds of the students said they wanted more of a say in HOW (65%) and WHAT (63%) they learned. Would you like to comment on these results?

I want more of a say in how I learn

The students in five of the seven schools chose to talk about different ways in which they preferred to learn. The other two schools did not respond to this part of the question.

There were several types of responses. There were statements about ways in which they preferred to learn. This included styles of learning which they had experienced infrequently, but felt they would prefer more frequently in learning situations. The students also commented on modes of learning currently offered to them.

Although the students were aware that this question on learning included learning experiences inside and outside school, most of their answers were centred around school and classroom learning.

Wanting more student input in classes

Students in two of the seven schools chose to talk about student input in class time. Of the comments below, three of them are about wanting more discussion, and one of them is about wanting more choice within a given boundary.

- * 'Need more discussion with teachers, not one way talking.'
- * 'We need discussions to get different opinions, to get the wider picture, to clarify our own ideas, to become more involved.'
- * 'Discussions are more enjoyable, and I remember things better after a discussion.'
- * 'We have done a project on our own, found results and conclusions, and presented them. It was great because we need a boundary but we could choose the topic.'

Wanting less passive learning

The students in two of the seven schools said they felt that learning could be increased if they were involved in more active learning styles.

- * 'I'm bored copying down notes and learning for exams. I want an explanation and I want to be involved in activities.'
- * 'There is too much spoon feeding. If you cannot make notes from texts at school, then you will not

know what to write down in lectures at university.'

Wanting different teaching methods

The students in two of the seven schools chose to talk about teaching methods as possible ways to improve how students learned.

- * 'We have to copy down notes while the teacher talks. We can't listen while we are copying notes, so we take the notes home and teach ourselves.'
- * 'Some teachers ask you to ask questions and then more people do it.'

Wanting different learning processes

Students in two of the schools talked about group work and involvement in activities as preferred ways to learn.

- * 'I want to do more group work. We do group experiments in physics and chemistry, but its from a book and we are told exactly what to do.'
- * 'Need more activity, more involvement, then I remember better.'

Wanting application of theoretical knowledge

Students in two of the schools said they preferred to learn by being given a practical application of the theoretical perspectives they were learning.

- * 'Need to put theory into practice.'
- * 'Need more practical work to put things you know into practice, otherwise there is no motivation to continue.'
- * 'Classes should be more practical. One physics class was great because all of the students were moving around: students had to pretend they were electrolytes and had to move around, then the teacher told us to pretend there was more voltage and we had to move faster, then we had to jump over things because she told us to pretend there was resistance. I remembered it well in the exam.'

Wanting assistance in meeting learning expectations

The students in one of the schools chose to talk about a disparity in learning outcomes. The students thought teachers had expectations that some kinds of learning had occurred, when actually the students felt that they needed assistance to achieve that learning.

- * 'It is expected in the fifth form that you do not think very much for yourself, then in the sixth form it is expected that you begin to think a little for yourself, then think a lot more for yourself in the seventh form, and even more so at university. But no-one helps you make those changes. It is just expected.'

Other comments

There were other comments about how much they learned, and what factors effected why or how they learned.

Competition

The students who had been told by their school that they were able said they felt that the competitiveness amongst able students, to a certain extent, could determine how much they learned.

- * 'Able students are always trying to keep up with competitors in the sixth form.'

Pace

The students from one school mentioned that their own personal pace varied from day to day, and could effect how they learned.

- * 'I might not want to work that day but I want to work twice as hard the next day.'

I want more of a say in what I learn

Students in all seven schools chose to talk about this part of the question. There was a wide variety of responses.

Wanting to learn more life skills

The students in four of the seven schools said they wanted to learn more about life skills.

- * 'We need more social skills, parenting skills, work experience, and life skills.'
- * 'We want to learn how to budget, and get a driver's licence like they do in the transition classes.'
- * 'We have six periods a day, but every once in a while we need something different, for example social skills.'
- * 'I really want to do transition classes but it is not recognised at our level.'
- * 'I want to see what people do in their job, for example in a factory.'

Wanting more curriculum choices

The students in six of the seven schools chose to talk about curriculum matters. Some of the comments were about choice in the curriculum, or choice within a school subject, and others were about what the students saw as the function of the curriculum.

- * 'The curriculum is too restricted, and there are not enough modular options for individual choice within a subject, like history.'
- * 'There is no choice in the sixth form. We don't have enough experience in choosing. We should

have a choice in books, say in English text.'

- * 'We could avoid texts and see more people, life and jobs. This would give us more interest in school, and more insight into what to pursue, and more willingness to accept other ideas.'
- * 'I don't really need maths, but I do it to be accomplished and to show I am able to learn.'
- * 'We haven't used computers and you don't get experience unless you do computer studies classes.' (girl's school)
- * 'Some subjects are not available at school, such as horticulture.'

Wanting schoolwork to relate to life outside of school

The students in three schools chose to talk about changes they would like to see in what they learned, so that it had more relevance to their life outside of school.

- * 'Subjects need more relevance to everyday life.'
- * 'I want to know how the subject relates to life.'
- * 'I want to know when to use maths principles in life.'
- * 'I want to be able to use what I learn outside of school.'

Wanting schoolwork to have a use in the future

Only two schools chose to talk about the future use of what they learned.

- * 'Not very useful content. No use in it for the future.'
- * 'Students need to have more input into the curriculum instead of being taught things that we can't use later.'

Wanting to know WHY they are learning specific topics

The students in two schools felt that it was important to be told the reason why they were learning what they were learning.

- * 'We learn things but we don't know the reason.'
- * 'I want clear goals at the beginning, for example what we are about to learn and for what reason.'
- * 'Sometimes we do work on a topic but we are ignorant of what it is for.'

Summary of the responses to interview question 8

The students said they wanted to have more of a say in how they learned because they were not content with the learning modes available to them. In particular they wanted to :

- * have more discussions
- * be allowed to select what they wrote down
- * be encouraged to ask more questions in class

- * be involved in more active learning styles rather than listening and copying down notes
- * be given the opportunity to put theory into practice
- * be assisted in developing learning techniques.

The students clearly wanted to be less passive in their learning situations and felt that they would like to be more involved in activities and decision making.

The students felt that discussions gave them the opportunity to hear different opinions, allowed them to clarify their own ideas, and helped them remember things better.

The students said they wanted more of a say in what they learned because they were not content with what they were learning. In particular they wanted:

- * to learn more life skills, such as parenting skills, social skills, budgeting, work experience
- * to have more choice within the curriculum
- * to have more experience in making choices
- * to learn more about people and life but not by using textbooks
- * to learn the kinds of things that could be used outside of the classroom, now and in the future
- * to be told why they were learning what they were learning.

INTERVIEW QUESTION 9

Almost all students said they enjoyed getting high marks (97%), but fewer (80%) said they knew how to get better marks. Can you explain these results?

I enjoy getting high marks

The students in all seven schools agreed that they enjoyed getting high marks, and that most people they knew also enjoyed getting high marks. However the students said there were comfortable and uncomfortable consequences of getting high marks.

The advantages of getting high marks

There was a variety of responses, including personal, career, and family reasons why getting good marks was enjoyable.

- * 'I like getting high marks because it is good to pass, good for my career, and it makes my parents proud.'
- * 'When I get high marks I know I am doing my best.'
- * 'I have a fear of failing and high marks help.'
- * 'You can feel pleased for yourself.'

The disadvantages of getting high marks

The disadvantages appeared to be focussed on what other people, including friends, thought of those students who got high marks. The competitiveness mentioned by the students, was seen as an uncomfortable phenomena for two reasons: unless they competed they felt they were not accepted in the same way as when they did compete, and they felt competition was strenuous.

- * 'The sixth form is competitive. It makes you work but it is hard keep up with others all the time.'
- * 'Competition is ugly and it interferes with friendship.'
- * 'You can be seen as a nerd when you get high marks. It depends on whether you boast or not.'
- * 'Others can be jealous.'

I know how to get better marks

There was a variety of responses to this part of the question. The students in two of the schools mentioned that hard work, or working consistently, was necessary to get better marks. The students in two other schools mentioned working hard or working consistently, and strategies that they used to get

better marks. The students in three schools mentioned only strategies. Some of the comments are based on exams.

Working hard

- * 'About 20% of the class work hard but don't know how to get better marks.'

Working hard and consistently to get better marks

- * 'Work consistently. Organise notes and time well.'
- * 'Pay attention during class.'
- * 'Yes hard work gives you better marks, but you need some luck as well.'
- * 'Work consistently, because if you work too hard on one assignment then you will not have enough time left for your next assignment.'
- * 'There is a big jump from the easy fifth form to a difficult sixth form year. I prefer internal assessment so I can work steadily.'
- * 'Do your homework.'

Strategies for getting better marks

- * 'Pick a subject with a teacher who marks easy, or who doesn't bother about spelling details. Lots of students pick up on this.'
- * 'Need criteria to do well. Some teachers give it to you, but the criteria has to be flexible - skill based rather than petty exactness.'
- * 'Select what you study so you do the easiest bits

last. Then you will have adequate time on each part.'

- * 'You need to know what the teacher wants. You need to be given criteria and topics.'
- * 'You need to identify strategies - work smart rather than work hard.'
- * 'After you have learnt it in class, do review exercises at home to remember it.'
- * 'Build up your concentration span gradually from half an hour to three hours.'
- * 'In class I take notes, but I have no idea what it means so I go home and learn it.'
- * 'I concentrate on what I know well. Others concentrate on what they don't know.'
- * 'I study better if I read aloud and talk to myself. Others write it out again in a different way.'
- * 'Some people cram, and some people use model answers which they learn and adapt.'

Other recommendations for getting better marks

Students in two schools talked about other important issues in getting better marks.

- * 'Have an interest in the subject.'
- * 'Be confident in what you know when you are sitting the exam.'
- * 'Have commitment.'
- * 'Teachers in the fifth form told us you need to prioritise study above extra-curricular activities.'

Knowing more about study skills

The students in one school expressed interest in learning more about study skills.

- * 'I need to know more about study skills. Am I doing it the best way?'

Summary of responses to interview question 9

The students in all seven schools agreed that they enjoyed getting high marks, however there were advantages and disadvantages in getting high marks.

The advantages were that it was good for them to succeed - personally, for their parents, and for their future careers.

The main disadvantage was that with a focus on high marks students were always competitive. This meant that:

- * in order to feel part of the group students had to remain competitive, which was strenuous
- * students had to handle success discretely to prevent becoming unpopular with friends.

The students suggested a variety of methods as to how to get better marks: hard work, working consistently, and several strategies. The strategies included:

- * doing review exercises at home
- * learning model answers and adapt them where necessary
- * doing the easiest bits last so that you have adequate time on each part
- * building up your concentration span gradually from half an hour to three hours
- * concentrating either on what you know well, or what you know least well
- * writing out your notes again in a different way
- * reading aloud to yourself
- * asking the teacher to give you skills based criteria to work towards.

The students in most schools felt that they needed to know more about study skills to improve their chances of getting better marks.

INTERVIEW QUESTION 10

I have the results of two statements about learning and concentration:

- * almost three quarters of students said they liked to concentrate (72%),
- * but only 57% of students said they thought learning was fun.

Would you like to comment on these results?

I like to concentrate

Although the students in all of the schools agreed that they liked to concentrate, the student's comments mainly concerned difficulties which interfered with concentration. Below are comments from the four schools which chose to talk about concentration:

Aspects which made concentration difficult

- * 'So hard to concentrate after so much work.'
- * 'There is no major incentive. I can pick up things next year.'
- * 'It is not easy to concentrate all the time.'
- * 'I can't concentrate all the time.'
- * 'It depends on the subject.'

Learning is fun

The students' comments fell into two categories: when and why learning was fun, and situations that effected whether or not learning was fun.

When and why learning was fun

Below are comments from the six schools that chose to talk about when and why learning was fun.

- * 'When I am learning skills it is more interesting, and class is fun.'
- * 'Learning is satisfying.'
- * 'When you feel as though you've learned something and succeed at it, it is good.'
- * 'It is fun at the moment of understanding.'
- * 'It is interesting to have knowledge, to feel the mind is growing. I like to know things.'
- * 'In my own time I seek a learning situation or seek relaxation. It depends. Sports are good for both.'
- * 'It is fun when you don't have to struggle to understand.'
- * 'Yes learning is fun, but it is hard to admit. It is not cool to admit that you like learning.'

Fun of learning dependent on other things

Students in three schools talked about learning being dependent on other things, such as the teacher, and the concept of being taught.

- * 'Some teachers are good, others are boring.'
- * 'Most sixth formers are curious but not interested in being taught.'
- * 'There is a difference between being taught and taking in information.'
- * 'Some teachers just write on the board. You need discussion and activities. The teacher needs to know that students want to learn to understand and not learn to recite information.'
- * 'The teacher tells you so you know it, but you don't know why. 'Why' would help us to remember. We have asked teachers and they say it is to pass exams.'

Summary of responses to interview question 10

Students in all of the schools agreed that they liked to concentrate, but there were things which could interfere with their concentration:

- * there was no major incentive to concentrate in the sixth form, such as external exams
- * it was difficult to concentrate after so much schoolwork.

The students felt learning was fun:

- * at the moment of understanding
- * when they gained knowledge
- * when they learned skills
- * when they did not have to struggle to learn.

The students felt that some teaching methods detracted from the fun of learning, such as students being asked to recite rather than understand concepts, and not being told why they were learning what they were learning.

The students considered that it was not cool to admit that learning was fun.

INTERVIEW QUESTION 11

More than half of the students (59%) said they got constructive feedback. Would you like to comment on this result?

I get constructive feedback

The students' comments fell into five categories:

- * where they said they were receiving constructive feedback from, and what type of constructive feedback it was
- * giving constructive feedback
- * areas where students felt there was a lack of constructive feedback
- * who students wanted more constructive feedback from and why
- * concepts of feedback that were not helpful.

Receiving constructive feedback

The students in three schools chose to talk about receiving constructive feedback:

- * 'Everybody gets it from sports groups.'
- * 'Some of the class get it from home. Sometimes they ask for it at home.'
- * 'The art teacher sees a student's work and gives constructive feedback to the whole class. Then each student can choose to listen or not. It is not focussed on one student and it is not embarrassing, and they are not forced to do what he says. It works well.'

- * 'If the teacher gives criteria to students then students get information from the marks on each criteria.'

Giving constructive feedback

The students in three schools talked about giving constructive feedback:

- * 'I say to friends "It might help if . . .".'
- * 'Giving someone constructive feedback is a fine art.'
- * 'In art and music, students are taught to give constructive criticism to others.'

Lack of constructive feedback

The students in two schools chose to talk about a perceived lack of constructive feedback:

- * 'Don't get much from students.'
- * 'Sometimes I get constructive feedback from my parents, but not often from teachers.'
- * 'Students don't give it because others think it is being critical.'

Wanting more constructive feedback

The students in four schools talked about wanting more constructive feedback than what they were presently receiving:

- * 'Yes we get some from teachers, but we want more.'
- * 'Parents try to, but they don't really succeed. They tell you to do what you know you should do, but you don't really want to hear it. I would like parents to have more skills.'
- * 'It depends on the teacher. In practical classes like Tech drawing, English, Film Studies, Chemistry, Science and Woodwork the teachers do it, but students want more. We want it to be normal.'
- * 'Right now it doesn't bother me, but I would like more before it really mattered.'

When feedback was not helpful

The students in three schools talked about situations where they had not found constructive feedback helpful:

- * 'Constructive feedback helps. Sometimes students and teachers try to do it, but when it fails it is a nuisance.'
- * 'Usually the feedback is do this and don't do that.'
- * 'I wouldn't want it from a new person.'

Summary of responses to interview question 11

Students said they liked getting constructive feedback but they did not get nearly enough. They wanted to receive a lot more constructive feedback from all sources until it became normal to give it and receive it.

The students named several sources of constructive feedback:

- * sports groups
- * home
- * teachers giving feedback in the class
- * teachers giving marks for each of several criteria.

However, students felt that only some teachers gave constructive feedback, and students felt they would like more constructive feedback from more teachers.

Some of the feedback that students received amounted to 'do this and don't do that' and was not seen as constructive.

The students said they wanted parents and teachers to have more skills in giving constructive feedback.

THEME 3

HOW STUDENTS FELT ABOUT OTHERS

List of interview questions

Below is a list of the four questions in theme 3: how students felt about others. Each question is repeated at the beginning of the results of each interview question.

12. Eighty percent of students said their communication skills were improving and yet 66% of students said they wanted to learn more about people skills. Can you explain this?

13. Two thirds of students said they enjoyed working in a group (67%) and slightly less said they knew how other people felt (63%). Do you have to know how other people feel to enjoy working in a group?

14. Although 82% of students said they felt content when they were with other people, 50% of students said they worried about what other people thought of them. Would you like to comment on these results?

15. One in five students (21%) said they knew more about schoolwork than about people. However, almost the same number of students (19%) answered 'not sure' in response to this statement. Would you like to comment on the findings?

INTERVIEW QUESTION 12

Eighty percent of students said their communication skills were improving and yet 66% of students said they wanted to learn more about people skills. Can you explain this?

My communication skills are improving

The students' comments included why and how much they thought their communication skills were improving, what helped to improve their communication skills, the actual learning of communication skills, and what practical steps they said they needed in order to improve their communication skills.

Communication skills are improving

The students in three schools said they thought their communication skills were improving.

- * 'Yes, my communication skills are improving because I socialise more now that I am older.'
- * 'My communication skills are slowly improving.'
- * 'My communication skills improve every year. They improve as you get older.'

What helped to improve communication skills

The students in three schools chose to talk about what they thought improved their communication skills.

- * 'Part-time jobs with the public are helpful.'
- * 'School is helpful. Not directly, but you see the same people every day.'
- * 'I need to see more people.'
- * 'I'm beginning to realise the impact of my communication skills on others.'

Practice to improve communication skills

The students' in four schools said they thought practice would improve their communication skills.

- * 'I need practice in public speaking.'
- * 'I need practice at job interviews.'
- * 'We need classes to emphasise group work and presenting.'
- * 'You get them in the third form but we need more discussion where everyone speaks.'
- * 'You can't teach communication skills. You need experience.'

The learning of communication skills

The students in four schools chose to talk about the learning of communication skills.

- * 'If your family does not communicate well then school is the only place to learn.'
- * 'I'm learning more tact.'
- * 'I need communication skills in general.'
- * 'I need to learn how to talk to people.'
- * 'I want communication skills - listening, speaking, how to approach people and groups and other nationalities, and to overcome shyness.'
- * 'We have had helpful videos in religious studies about communication, family life and social justice. They should be used in the fourth form. We had a visit to a prison too. Prisoners told us it is not worth it. It makes me feel that they weren't told that it is not worth it.'

I want to learn more about people skills

The students talked about wanting to learn more about people skills, where they said they learned about people skills, and the need for people skills.

Wanting to learn more people skills

The students in two schools said they wanted to learn more about people skills and both schools suggested learning them at school.

- * 'Social skills should be introduced into the curriculum.'
- * 'You need more people skills. Perhaps they should be taught in religious studies.'

Where they say they learned about people skills

There was a variety of opinions from three schools about where they said they learned about people skills.

- * 'You get people skills from friends, family, TV and conversation.'
- * 'You learn about people through experience. You don't study people.'
- * 'Team sports help but it is difficult to know others at school.'

Having a need for people skills

One school mentioned the need for people skills.

- * 'When you get a job you need people skills. You need a balance.'

Other comments

There were additional comments from three other schools.

- * 'If you fight at home you experience it, but you don't understand the structure.'

- * 'I want to know more about others.'
- * 'Social skills would be helpful to everybody.'

Summary of the responses to interview question 12

The students felt that their communication skills were improving, but they clearly wanted to, and felt the need to, improve their skills even further.

They identified situations which they said gave them the opportunity to improve their communication skills: part-time jobs, socialising at school, and meeting new people. They felt that practice was imperative.

Although they spoke about 'learning' and 'practicing' communication skills some students did not indicate that these skills could or should be formally 'taught'.

However most students felt that people skills should not only be formally taught, but taught in the curriculum at school.

They identified situations where they gained experience in, and learned, people skills (interactions with family and friends, from educational videos, and from TV).

The students felt that they needed to learn more about people skills to make sense of their experiences.

They also predicted that they would require them in employment situations.

INTERVIEW QUESTION 13

Two thirds of students said they enjoyed working in a group (67%) and slightly less said they knew how other people felt (63%). Do you have to know how other people feel to enjoy working in a group?

I enjoy working in a group

Below are the comments from students in two schools. The students' comments in all seven schools suggested that although they often enjoyed working in a group, they also preferred to do some things on their own, and that working together in a large group was not always successful.

- * 'I would prefer to discuss the topics with others, and then write the assignment alone.'
- * 'Most sixth form classes are in big groups. It

depends on the dynamics of the group and the confidence you have.'

- * 'In large groups two or three people do everything and others do nothing.'
- * 'People should be given the opportunity to work on their own sometimes.'

I don't know how other people feel

Most of the students' comments were about getting to know other people and distinguishing between friends and other people: how they got to know others, how much they got to know others, and experiences that had helped them to get to know others.

How they knew how other people felt

The students in two schools talked about how they knew about other people's feelings.

- * 'You can pick up on things about others without being close friends. Some people you can get to know better, regardless of whether they are friends or not.'
- * 'How could you know how others feel? They have to tell you, unless they have failed an exam, and then you know.'

How much they knew about other people

The students in one school mentioned how much they knew about others.

- * 'You always think you can know someone more.
How well do you ever know someone?'

Experiences that helped to get to know other people

The students in two schools talked about experiences they had which helped them get to know other people better.

- * 'We had a leadership week and I enjoyed it. We had a week to get to know others, learn to trust others, communication skills, problem-solving and negotiating.'
- * 'We had a camp for a few days to get to know other the sixth formers. This familiarity will give you confidence. But no skills were taught.'

Other comments

The students in three schools mentioned other issues which they saw as important.

- * 'Some people have topics to talk to people about but they cannot get on with others.'
- * 'Everyone's different. People are unpredictable.'
- * 'There is a difference between knowing how others feel and caring whether others feel OK.'

Summary of the responses to interview question 13

The students saw the idea of knowing how others felt as a more complex issue than the idea of knowing whether or not they enjoyed working in a group.

The students in all seven schools agreed that working in a group was often enjoyable. However, there were times when they preferred to work alone, especially if they wanted to complete an assignment, or if the dynamics of the group were not conducive to producing a genuine group effort.

The students felt that people were complex, and expressed uncertainty about how much they ever really knew about other people.

The students determined whether or not people were friends by the feelings they had for them, rather than how much dialogue they had with them, or how much they knew about them.

The students differentiated between:

- * becoming more familiar with other people by engaging in conversation with them on the one hand, and actually being friends on the other hand

- * knowing how other people felt on the one hand, and caring about how other people felt on the other hand.

Only two schools chose to talk about situations which they said helped to get to know other people better. These were a three day camp and a leadership week. Both were organised by teachers at the respective schools.

The students said that both situations offered opportunities to get to know others by practical experience in group work, and simply by being together. They said that skills to understand other people better were not formally taught.

INTERVIEW QUESTION 14

Although 82% of students said they felt content when they were with other people, 50% of students said they worried about what other people thought of them. Would you like to comment on these results?

I feel content when I am with other people

There was agreement from the students in each of the schools that they were usually content in the company of others.

However, they chose to spend more time talking about the other part of the question.

I worry about what other people think of me

The students chose to talk about reasons why they did and did not worry about what other people thought of them, and conditions that determined whether or not students worried about what other people thought of them.

Worrying about what others thought of them

The students in four schools talked about why they worried about what other people thought of them.

- * 'Being self conscious is common. Its because the sense of belonging is strong - group pressure.'
- * 'I think that sixth formers are more sensitive with people they know at school, than they are outside

of school. I think it is because they like people at school and don't want to offend them.'

- * 'People worry more in a new group because you want to impress them.'
- * 'You worry because you don't want to look like a fool.'
- * 'You fear rejection no matter how confident you feel.'
- * 'At school I'm not worried, but outside school I worry about new people I meet if I like them.'

Not worrying about what others thought of them

The students in three schools talked about not worrying what other people thought of them.

- * 'I take what others say as constructive criticism.'
- * 'I used to worry more, but not now.'
- * 'If you are confident then you don't worry about what others think.'
- * 'Yes probably half of the students would worry about what others think.'

Conditions that determine whether students worry about what others thought of them

The students in two schools talked about reasons why they did or did not worry about what others thought of them.

- * 'There's not much emphasis placed on the individual. More emphasis is placed on accepting others.'
- * 'People worry too much about what others think of them.'
- * 'It varies from person to person.'
- * 'The sixth form is close. There's more unity, not just clusters like there was in the fifth form.'

Summary of responses to interview question 14

Students in all of the schools said they usually felt content when they were with other people but they did not choose to discuss this further.

The students said they worried about what other people thought of them in certain situations.

Students said they worried about what others thought of them when:

- * they liked that other person(s) or wanted to impress them
- * did not want to feel foolish
- * were self conscious because they wanted to feel as though they belonged to that group.

Students did not worry when:

- * they felt confident
- * they accepted comments from others as constructive criticism.

Whether or not students worried about what others thought of them also depended on other, more global, conditions. These conditions were not dependent on individual situations:

- * individual differences
- * the closeness and unity of students in the sixth form as opposed to the clusters of students in the fifth form
- * more emphasis in the school on accepting others rather than on the individual.

INTERVIEW QUESTION 15

One in five students (21%) said they knew more about schoolwork than about people. However, almost the same number of students (19%) answered 'not sure' in response to this statement. Would you like to comment on the findings?

I know more about schoolwork than about people

One in five students answered this statement in the questionnaire by saying they were not sure.

The intended meaning of this statement, when the questionnaire was designed, was explained to the students: "this year I have increased my knowledge about matters in the curriculum, more than I have increased my knowledge about acquaintances, family members or friends, or increased my knowledge about relationships with people". Students in four of the seven schools said they had read the statement in the same way as was intended.

Almost half of the students in the other three schools said they had interpreted the statement as "I like reading books and studying, and prefer reading books and studying to socialising with others". If they felt they enjoyed socialising, then they had disagreed with this statement.

Other students saw the ambiguity and were not sure which meaning was intended at the time of answering the questionnaire.

Some other students were not sure whether they knew more about schoolwork or more about people.

For the purpose of the interview the original meaning was used.

There were quite marked differences in the opinions between schools. The students in some schools felt that students knew more about schoolwork, and in other schools the opinion was that students knew more about people.

The students also raised the issues of not knowing how much they knew about people, learning about other people at school, and a variety of related issues comparing knowledge of schoolwork to knowledge of other people.

Knowing more about schoolwork

- * 'It is possible to know more about schoolwork than about friends. People are complicated. School is easier to understand.'
- * 'Depends, some get people skills outside school, in the family, and others don't.'
- * 'Heaps of people know more about schoolwork than people - more about facts than about feelings. Heaps of people are not good at relating to each other.'

Knowing more about people

The students in two schools felt that they knew more about people than schoolwork.

- * 'You're bound to know more about people.'
- * 'More people know about others than schoolwork. By the sixth form you know more about people after four years of school together. You know how they feel.'

Not knowing how much they knew about people

The students in one school chose to talk about the idea of not knowing how much they knew about people.

- * 'From birth you know about schoolwork. You have only known about chemistry for the last two years. But there is nothing to show how much you know about people.'
- * 'If you haven't started learning about people how do you know what there is to learn or if you can learn?'

Learning about other people at school

The students in two schools talked about the idea of wanting to learn more social skills at school, and one of these schools mentioned a successful program at their school.

- * 'It would be helpful to use a book or a Buddy System.'

- * 'If we were taught social skills we could improve in schoolwork.'
- * 'We want a balance. We need more social skills work at school. Then we could be more confident and ask the teacher for help.'

Other comments

The students in two schools compared learning schoolwork to learning about people.

- * 'In the third form you learned how to accept yourself. In the sixth form you learned how to make soaps (which is practical), and to test theories (which is useful) and there are science fairs if you want to go to them.'
- * 'If you have no social life, then you can study and get success that way.'
- * 'With people you learn by instinct, but you force yourself to know about physics.'

Summary of responses to interview question 15

Some students found this statement ambiguous and so the questionnaire results for this statement were not reliable.

The intended meaning of this statement was:

"this year I have increased my knowledge about matters in the curriculum, more than I have increased my knowledge about acquaintances, family members or friends, or increased my knowledge about relationships with people".

The discussion in relation to this meaning showed that the students were divided: some thought that students knew more about schoolwork, and others felt that students knew more about people.

Some students said they knew more about schoolwork:

- * because schoolwork was easier to understand than people
- * because they knew more about facts than feelings
- * because they did not get much opportunity to learn people skills in the family or outside school.

Other students said they knew more about fellow students at school than schoolwork because they had spent four years together.

Students in one school felt there was nothing to show how much they knew about people, whereas the school system gave indications of how much they knew about schoolwork (ie. results of assignments and exams).

Students in two schools felt that people or social skills would enhance their learning of schoolwork, particularly in improving their confidence in asking questions.

The students in two schools made additional comments:

- * if a student has no social life then studying can bring another kind of success
- * learning about people is instinctive, but learning about schoolwork requires diligence
- * students were taught how to accept themselves in the third form, and taught about schoolwork from then on.

ADDITIONAL INFORMATION

Although I did not ask the students what they thought of the interview students in four out of seven schools made comments anyway. All the comments were positive and supported the use of the survey.

- * 'I liked doing that and I think all sixth formers should do it.'
- * 'It was a good questionnaire because it was anonymous, and if you are too shy to say it you

could say it in a questionnaire.'

- * 'The discussion afterwards was good.'
- * 'Its made me think.'
- * 'Teachers should do this for us.'

DISCUSSION

Able students by definition have high level abilities in the cognitive domain, but what about the affective domain? Do able students feel as competent in the affective domain as they do in the cognitive domain? Do they have problems in the affective domain and do they want any assistance to develop further competence in the affective domain? Do able students feel that their competence in the affective domain effects their competence in the cognitive domain?

The present study sought to answer some of these questions by asking 283 able students to complete a questionnaire on how they felt about themselves, about learning, and about others. Small groups of students from the questionnaire cohort were then interviewed to gather more indepth information about these three themes. Below is a discussion on the findings of the interviews.

How students felt about themselves

'One of the most prevalent myths about gifted students is the belief that no special considerations are needed in their personal and social development' (Zaffrann & Collangelo, 1979, p142).

The results of the interviews supported the idea that the able students in this survey did want assistance in their personal and social development, and that how they felt about themselves and about others did impact on their opportunities to learn.

The results showed that although they felt confident in groups at school they did not feel confident in themselves. The students said that they did not feel confident when they were singled out in a group: that is, when they were seen as more successful than others, when they asked questions in class, or when they were given compliments about their ability or their performance.

The reason why the students did not feel confident was that they had fears about what their peers would think of them. It became clear to one group that the interview process allowed them to see that the other students in the group had the same fears, and that discussion could assist them in reaching a common understanding amongst their peers.

The students particularly wanted assistance in being able to show pride in their success, without appearing to be arrogant, which would make them unpopular with their peers. These situations produced conflict. On the one hand they said they were privately pleased about succeeding, and felt pleased for their parents, but on the other hand were unable to express how they felt to their peers without fear of rejection. These fears must impact on the quality of communication, and relationships, with their peers.

The students had other fears. Many students said that although they did try new things sometimes, and wanted to feel more comfortable about trying new things, they feared failing at something new.

Trying something new was a risk for these able students for several reasons: they were known for their successes, they probably had expectations that they would succeed, and others probably had similar expectations of them.

In this way, they seemed to have identified with the stereotype of the gifted student; that is, someone who is accustomed to success, inexperienced at failure, and trapped into seeking those activities where they will succeed.

It was interesting that the students said they were teased when they did well, and teased when they failed.

Although all of the groups accepted that mixed feelings were part of adolescence, some of the students said they were scared of them, and some of the students said they were particularly afraid of new feelings.

This seemed similar to their fear of trying new things. The difference was that the students could control when they tried new things, but new feelings may not be so controllable.

There were varying opinions about perfectionism. Some of the students said that although there were not many who were perfectionists in everything, about half of the students were perfectionists in some areas. One group of students said that it was easy for students with high motivation, and those who were used to going the extra step to achieve, to become perfectionists, but that perfectionism was an obsession and could be handicapping. Other students said there was not the time or incentive to be a perfectionist.

With a fear of failure, a history of succeeding, and high motivation, students might find it difficult not to

be perfectionists and go the extra step to ensure success.

The students also said they were competitive and had to remain competitive, to continue being accepted in their group. The momentum of competition and perfectionism, and fear of failure, may cause able students considerable stress.

What is all the success and stress for?

The achievements of able students suggests that they would find a suitable career easily (Clark, 1992). However, the students said they would like more assistance in setting and attaining goals; in particular, they wanted more information about setting and attaining career goals. One group wanted specific information about which courses led to which qualifications and which qualifications led to which careers, and one group wanted one-to-one career counselling.

The results showed that these able students did not find choosing career goals easy, and they needed substantial assistance in planning how to attain those goals.

How students felt about learning

There were many aspects of learning which students said they would like changed. Essentially these were:

- * how they learned
- * what they learned
- * why they learned.

The students said they were not satisfied with how they learned. They wanted to be more actively involved in their own learning; that is, they wanted:

- * more discussion to hear different opinions
- * more discussion to clarify their own ideas
- * more discussion to remember ideas better.

The students felt that they could learn a lot from discussions and that there was a lack of discussion as a learning tool in their experiences. It was particularly relevant that they felt that discussions helped them remember better. It would appear then, that discussions should be used more often in class, and that informal learning based on discussions in a social situation with parents, peers (Jones, 1991), or mentors (McAlpine, 1988) could be an effective way for these able students to learn.

The students said they were bored with the passive learning styles available to them. The key changes the students said they wanted were:

- * less repetition
- * less listening to the teacher in class
- * less copying down of notes in class
- * less routine of sitting inside at a desk
- * less unstimulating work
- * less teacher time spent controlling the class.

It is clear that students wanted to feel more actively involved in their own learning. The discussions did not extend to explaining why they wanted to be more actively involved. Perhaps the students perceived that being more actively involved in their own learning might increase their motivation, or increase their range of interests, or increase the pace at which they learn, or increase their satisfaction in learning?

Whatever their reasons, the students felt sure that they experienced boredom at school because of the passivity in learning styles available to them (Renzulli, 1992).

The students wanted more constructive feedback where they were told what they could do to improve. It is interesting that even though these students were considered to have high level abilities and most were

probably succeeding in their schoolwork, they still wanted to know how to improve (Clark and Zimmerman, 1988).

They said they were currently getting a lot of 'do this and don't do that' type of feedback, but would appreciate feedback that was more constructive. The students felt that constructive feedback was an effective way to learn, and were interested in having more constructive feedback from both parents and teachers.

The students were dissatisfied with what they learned for two reasons.

Firstly, they felt they should be given more choice to better suit their interests. Having more decision making power, and more control, over what they learned may well increase their motivation to learn (Ryba and Chapman, 1983).

Students said if they could choose they would like to:

- * broaden the type of information they had
(Sternberg, 1986)
- * know more about other people
- * broaden the type of skills they had (Clark, 1992;
Sternberg, 1986)

- * learn more social skills to enhance learning
(Nastasi et al, 1990)
- * learn more life skills such as budgeting,
parenting, and job skills
- * know the marking criteria for assignments
- * learn more study skills and revision strategies.

Secondly, they did not feel they had sufficient experience in exercising choice (Ryba and Chapman, 1983). This was particularly relevant because they realised that they were going to have to make more and more choices on their own, as they got older.

Students also wanted to ask more questions in class than they were currently asking. When they wanted to clarify or increase what they were learning they feared being ridiculed for asking "stupid" questions in class or expressing more interest than was "cool". The students in some groups wanted to receive more encouragement to ask questions.

Why do students learn?

There were three reasons which arose from the interviews. Firstly, students felt that the emphasis on marks at school caused competitiveness, and they felt that in order to remain part of the group they had to continue competing for marks. The students said that this was strenuous.

However, they also said there were advantages in getting good marks personally, for their parents, and for their careers.

This meant that there was some ambiguity and tension arising from succeeding at school. Unfortunately none of the interview groups talked about what they thought might happen to their marks if there was less competition, and what they thought might happen to their group if there was no competition.

Secondly, students wanted to know why they learned what they learned. They said they preferred to be told why it was important, and how they could use that information outside the classroom (Sternberg, 1986). The students said they wanted to learn to understand and apply information rather than learn to recite for exams.

Sternberg (1986) supported the notion of connecting the theoretical world with the practical world in learning situations: 'experience mediates between what is inside - the internal, mental world - and what's outside - the external world . . . (We should) be looking at how experience affects a person's intelligence and how intelligence affects a person's experiences' (p59).

Perhaps if students saw a stronger connection between the practical uses of their information and classroom learning they might have more reasons for learning (Downs, 1986).

Thirdly, although most students felt happy when they were learning, it was considered unacceptable to show their enjoyment, particularly in certain subjects. The students might openly enjoy learning more if there was a culture that accepted learning as fun (Middleton et al, 1992).

How students felt about others

There were four key findings from the interviews about how students felt about others: they were fear of what others thought of them, the need to become more confident, the need to learn more people skills, and making sense of their experiences with other people.

The students expressed fear of what others thought of them in the following situations:

- * asking questions in class
- * expressing interest in a subject
- * talking about their successes
- * not competing for marks.

Their sense of belonging to a group was strong enough to inhibit their behaviours in all of the above situations. Yet during the interview one group said that they thought these fears were peculiar to them individually and were previously not aware that other students had the same fears.

It is important to validate students' fears by listening to them and discussing them, but as a result of a discussion students may then feel that there is no reason why the fear should continue (Tyszkowa, 1990).

Students felt they needed to become more confident with other people so that they would worry less about what other people thought of them.

Students clearly enjoyed success privately but wanted to be able to manage success in public better.

Students felt that if they were more confident they would be able to accept criticism better and learn from it, and they would be able to ask more questions in class, and learn from the answers.

It seems then, that if students experienced a reduction in fear of what others thought of them, then students would experience an increase in confidence.

Increased confidence may allow learning situations to become more sociable and thereby improve their learning (Nastasi et al, 1990).

The students articulated quite clearly what people skills they thought they needed and why. They felt they needed more people skills both for their learning and for future employment.

The students pointed out that there were no exams to prove how much they knew about other people.

They said that they would like to learn more people skills within the curriculum, and that they needed to learn more people skills because people were complex.

The students felt they particularly needed to improve their communication skills so that they could say what they wanted to say, and have the effect they wanted to have such as expressing pride in their success, without appearing to boast.

They said that they knew that practice was imperative to improve communication skills.

Students felt clear that friendships were not decided by how much dialogue they had with each person, but rather the feeling they had about those people. It was interesting to note that students did not think

that the quantity of communication was important in friendships, but at the same time students did not mention the quality of communication in connection with any relationships.

Students felt that discussions were good learning tools and used in conjunction with other modes of learning such as writing on their own, could create a variety of learning styles. This interest in discussions could be used as an opportunity to address other concerns that the students had, such as the need to practice communication skills, and the need to hear other people's opinions.

Some students said they needed more people skills to make sense of their experiences with other people. This meant that students wanted to know how to process information about people, and about their reactions to people, so they could learn from it (Clark, 1992).

CONCLUSION

The present study set out to explore what able sixth form students felt about themselves, about learning, and about others.

The interview responses added more indepth information to that collected in the questionnaire. The results of the interviews showed quite clearly that the students wanted to learn more about themselves, about learning, and about others, and that they had areas of concern.

Students responded to the interview questions in ways that integrated issues which were previously in three separate themes. This suggested that the problems they had were interrelated. The students offered solutions including discussing problems, and learning more information and skills.

Self Confidence

In the questionnaire 78% of students said they were confident at school. However, in three out of seven interviews students enlarged on this and said they

could feel confident in a group (extrinsic confidence) but not confident about themselves (intrinsic confidence). Many students said they were not as confident as they would like to be when they wanted to speak up in class.

The students said they wanted to learn how to be more confident so that they could ask more questions in class. They wanted to be encouraged to ask more questions. The students also said that if they had more confidence they could ask the questions they wanted to for clarification, and then they could learn better.

The students also wanted to learn how to deal with success more confidently: how to accept compliments, and how to show a pride in their success without appearing arrogant. The responses in the interviews showed that the students feared that taking pride in their success would be read by other students as boasting, and cause the students to become unpopular.

So where does this fear come from? Parents, peers and the community are all significant transmitters of attitudes, who probably all give mixed messages to the gifted (McAlpine, 1992 Renzulli, 1992). Perhaps the stereotype that has been perpetuated means that both students and teachers disdain the brilliant, hardworking, non athletic student (McAlpine 1992).

It is clear that more research should be done in this area to investigate how the students' confidence could be raised so that they can ask the questions they want to ask in class, and therefore get the information they want or need, and to take pride in their successes without it being misread by other students.

Although in the questionnaire only 14% (39 out of 283) of students said they were afraid to try new things, many students in the interviews said they did not have as much confidence as they would like to try new things. Students said they lacked confidence to try new things, because they feared failure, even though they felt that new things were often interesting and challenging.

The students said that those with low self confidence may become perfectionists, because then they could feel successful at some things. Fifty four percent (152 out of 283) students said that perfectionists felt a fear of failure when trying something new. They felt that trying something new with a friend was a good solution.

Having new feelings sometimes caused students to lose confidence in themselves, even though new feelings could be good feelings. The students said that although they accepted having good and bad feelings

together as normal for adolescents, they also found them hard to deal with.

Since new activities and new feelings were difficult for the able students in this survey, the researcher suggests that further research be done on these topics to investigate what circumstances would reduce that difficulty. According to this research students can be quite informative in describing circumstances which they perceive to reduce the difficulty.

Goals

Clark, 1992 stated that people who were considered to be gifted at school did not always attain the employment positions, careers, and life satisfaction that was expected.

The students said they wanted assistance with goal setting, especially career goals. They wanted to know which courses led to which qualifications and which qualifications led to which careers. They also wanted to find out how to attain goals they had set.

If they received assistance in setting and attaining goals then the students would have the opportunity to discover any unrealistic goals which they may have set for themselves. This could prevent students from working towards inappropriate or unattainable goals.

It would appear important for able sixth form students to be given the opportunity to experience more goal setting. It is appropriate to suggest that further research be carried out to investigate whether the successful ACHIEVE program (Poskitt et al, 1993)³ could be used for able sixth formers.

People skills

The students said they wanted to be taught people skills formally in the curriculum, so that they could make sense of their experiences (Clark, 1992). This could be particularly helpful when dealing with the above intrinsic confidence problems.

They also felt they would need a balance of both people skills and their own specialist expertise in employment situations. This could be particularly important when students considered their career goals.

The students were particularly interested in learning more people skills, life skills, social skills, parenting skills, and communication skills without relying excessively on textbooks. The students clearly wanted to include experience from outside the

³ The ACHIEVE program involves students setting and negotiating their own learning goals each day with parents and teachers.

classroom into their learning, and they wanted to learn things inside the classroom which were also relevant outside the classroom (Clark, 1992; Iozzi, 1989; Sternberg, 1986).

Active learning

Students felt that some teaching methods restricted them to passive learning styles which created boredom. The students felt that more active learning styles such as discussions, and having the opportunities to make more choices (especially making more of their own decisions), would enhance their learning (Renzulli, 1992; Griggs, 1984).

Discussions in class

Students showed a very strong interest in having discussions. In relation to their past experiences they felt that discussions gave them the opportunity to hear other people's ideas, which in turn helped them to clarify their own ideas, and in turn helped them to remember the lesson better.

The students emphasised that practice, particularly in communication skills, was imperative. It would seem appropriate then to incorporate communication skills and other people skills, as preparation for discussions in the classroom (Jones, 1991).

Choices or options

Students felt they did not have enough experience in making choices; they wanted to choose topics within the curriculum, choose projects within topics, and make choices such as what to write down within each lesson. They felt that they were expected to make more and more decisions for themselves each year, both academically and personally, and therefore needed more skills in making decisions. This is particularly relevant to career choices mentioned earlier.

There is a second advantage in offering choices. When students are given choices, or a sense of control over what is learned or experienced, it enhances their interest in the topic and the outcome, and enhances learning to the extent that even a perceived sense of control will enhance learning (Ryba & Chapman, 1983).

These findings on preferred learning styles for able students in this survey has implications for teaching, and for career counsellors. More research is needed in this area, particularly in New Zealand.

Stress

It was clear from the interview responses that the able students in the survey were under considerable stress.

They felt they must compete for marks. If they did not compete for marks then they would no longer be considered part of the group they were in. The students said that it was stressful to continually keep up with this competition (Hitchfield, 1973).

In the pilot study the students had said they were disappointed that parents and teachers were unaware how much work went into getting good marks. It appeared to the students in the pilot study that parents and teachers assumed students got high marks because they were able and did not need to put much effort into it.

When the students in the main study did get good marks they could not talk about it without fear of being accused of boasting and as a result, become unpopular.

The students got high marks even after not having the confidence to ask the questions they wanted to ask in class.

Students concealed their enjoyment of learning because it was not "cool" to admit that they did enjoy it, even though 57% (161 out of 283) of students agreed in the questionnaire that 'learning was fun' and 70% (199 out of 283) of students said they were 'happy when they were learning' (Middleton et al, 1992).

The students indicated that they did not know enough about the world outside of school to make decisions such as career goals (Herr & Watanabe, 1979). Yet, the curriculum subjects they had already chosen has in some ways limited their career options. The students said they needed one-to-one counselling to assist in developing realistic goals.

Sixth form students will be forced into making career decisions within one or two years. The students in the survey said they have insufficient experience in making such choices and decisions.

Students are not only learning formally from the curriculum, but they are also learning informally about what is acceptable practice amongst peers at school. This includes the notion that it is "uncool" to admit they like learning, that competition is a way to gain a sense of belonging in a group, and that asking questions in class is not worth the risk of possible humiliation. It is these notions that are causing stressful situations for able students.

Without acknowledgment of the problems that the students have talked about in the interviews, this informal learning will probably remain a strong determinant of their behaviour, and the stress may continue to affect the quality of their learning.

Recommendations

The able students in this survey wanted to develop more affective skills, so they could:

- * feel more confident
- * have less fears
- * set goals more accurately
- * become more skilful in choosing
- * make sense of their experiences
- * learn better
- * have less stress.

The literature points to several ways that these problems could be addressed.

Several models aimed at developing affective skills have been described in the literature, and two of the most pertinent are summarised in the following section.

Betts' 1985 Autonomous Learner model (Davis & Rimm, 1989, pp175-179) combines the affective and cognitive domains in indepth and enrichment activities, for both the individual and groups. The model was designed to help gifted students:

- * develop more positive self-concepts
- * comprehend their own giftedness
- * develop social skills
- * increase their knowledge in a variety of subject areas
- * develop their thinking, decision-making and problem-solving skills
- * demonstrate responsibility for their own learning in and out of school
- * and ultimately become responsible, creative, independent learners.

Williams' 1986 Model for Developing Thinking and Feeling Processes (Davis & Rimm, 1989, pp177-179) also combines activities and develops skills in the cognitive and affective domains simultaneously. The model has three dimensions: content or curriculum, strategy or teacher behaviour, and process or pupil behaviour. The pupil behaviour dimension is designed to develop:

- * curiosity (willingness)
- * risk taking (courage)
- * complexity (challenge)
- * imagination (intuition).

Several theoretical frameworks and practical programs aimed at developing affective skills have been

described in the literature, and are summarised in the following section.

Downs (1986) advocated that because people are complex, teaching should include the development of both the affective and the cognitive domains in learners, to reflect that complexity.

Wragg (1991) and Cutbrush (1987) both concluded that education programs that were developed solely for information, or cognitive purposes, and did not contain affective development were not successful: 'clearly the informational approach has been discredited' (Cutbrush, 1987, p48). Iozzi (1989), and Sternberg (1986) emphasised the importance of fusing learning in the affective domain into the existing curriculum at all ages from kindergarten to high school.

Church (1990) observed that teachers predominantly use the lecture method to teach vocabulary, principles and concepts, but that 'adolescents need activities with opportunities to do and feel as well as inculcate facts' (p9).

Robinson (1986) used confluent education in a research program; that is, 'an approach in which cognitive and affective elements are integrated in both individual and group learning' (p193). Significant academic gains

were recorded in reading, maths and problem-solving. Behavioural changes were reported by teachers including an improvement in communication, increased co-operation, and a reduction in hurtful remarks and actions.

Downs (1986) argued that classes should encompass the affective domain by being action-orientated, trying to develop all the senses, having a multicultural emphasis, and involving students in the planning of activities and events.

Iozzi (1989) advocated that where there was teaching and learning about attitudes and values, there should be frequent simulations and role plays involving a large amount of interaction between students, and not just from students to the teacher.

Church (1990) stated that the use of role play and simulations would assist the learner in comprehending the need for social skills, and in comprehending the social consequences of actions.

Downs (1986) used an interesting concept of 'needing to know'. She suggested that 'the dynamic importance of need in learning must be fully exploited. People learn best when they have a need to know' (p42). To follow on from this concept, it would appear constructive to discuss with the students which uses

and applications of that knowledge they are interested in, before teaching any given topic.

Menis (1989) believes that it is important to enhance the learner's attitude to, as well as instruct in, the subject matter. He stated that one of the important roles of teaching is to develop positive attitudes towards the subject matter, and its application to everyday life.

However, he cautioned that improving the attitudes of students towards the subject matter is partly dependent on good teaching methods, strategies and conditions of learning.

Blum-Anderson (1989) stated that attitudes and beliefs that students hold, about the subject and about themselves as learners of that subject, are just as important in the learning process as are the cognitive elements.

She espoused several teaching strategies to foster healthy student attitudes towards the subject matter:

- * helping students to understand frustration,
- * acknowledging anxiety
- * realising that when a student is upset at not being able to understand a new concept 'nearly all of that student's mental energy will focus on the

emotion itself and the cognitive processes will be arrested' (p164)

- * being aware that student confidence is not stable and that confidence depends on how easy it is for that student to absorb novel concepts
- * relating the topics to occupations and personal use.

Downs (1986) suggested that student attitudes to the subject depended on how easy it is for the students to express anxiety, fear, confusion, and other emotions implicit in the learning of new concepts and ideas.

If students perceive that problems have developed either in the cognitive domain or in the affective domain there are usually few well known, accepted and reliable sources of assistance available to them.

Society, and the education system, to date have not made it easy for students to blend their social and emotional responses into a learning context.

Zaffrann and Colangelo (1979) stated that counselling programs should be established for gifted students. They advocated developmental guidance to help gifted students understand the stages of human development, differentiated guidance to respond to individual needs particularly pertaining to giftedness, and counselling involving 'the facilitation of mental health and creativity' (p151).

McAlpine (1988) reviewed the literature on creativity and noted that students could be encouraged to think more creatively by being formally taught to do so, and with the influence of role models in an informal learning situation. The formal learning situations should allow students:

- * to be given the time to think of alternatives
- * to be given rewards for original thinking
- * to have the opportunity to play with ambiguities and uncertainties
- * to be encouraged to reclassify and restructure ideas
- * to be encouraged to be intuitive by operating on minimal clues for maximum conclusiveness.

The informal learning situations such as role modelling should offer students:

- * enthusiasm and confidence in a playful context of ideas
- * a one-to-one relationship
- * confidence
- * an increasingly critical voice
- * a sense of judgement of one's own performance
- * a holistic style of learning and thinking.

Deverensky and Coleman's (1989) results suggested there was a need for teachers, parents and

administrators to provide appropriate forums for gifted children to discuss their fears, and to realise that these fears were legitimate and similar to those of other gifted children their own age. They argued that effective intervention programs can decrease the anxieties of gifted children, promote a sharing of ideas, and lead to effective solutions.

Headey and Waring (1990) argued that it would be useful if 'effective coping strategies could be identified, and perhaps taught, so that individuals suffering adversity could be helped to help themselves' (p328).

When children do take the opportunity to express emotions in learning situations, it is important that the situations are dealt with skilfully, so that children are not discouraged from this kind of expression in the future.

Guilbault (1988) stated that when a student gives a teacher information about their current emotional and social disposition, it would be advantageous if the teacher understood how it effected the learning capacity of the student. She acknowledged the value of this kind of information from students about themselves, and argued that with this additional information 'Then can a teacher understand. Then can a child learn' (p464).

Downs (1986) maintained that learning can be enhanced by the provision of an emotionally safe environment, where the learner can safely explore any fears and can afford to risk change. She suggested that teacher training courses should include the development of the affective domain in the student teacher. This would give the student teacher adequate skills to teach children affective skills later in his or her own classroom.

She argued that 'since methods of teaching are personal ways of using self, they cannot be given; they must be discovered' (p43), and that the processing of the meaning of any new discoveries was vital: 'since people learn most effectively from their own experience' (p43) learning should be based on discovering meaning through student involvement. This could be gained through discussion and group work which allows for feelings to be part of the curriculum.

She argued that student teachers should learn in the same way that she advocates for any learner - through experience, discovery, and involvement.

Lewis (1987) investigated the effect of teacher's classroom management techniques, by asking the students for their view.

The findings showed that 'teachers were seen to use embarrassment of students as a technique for controlling classes' (p182). Students felt sympathetic for the misbehaving student if the teacher's intervention was deemed inappropriate (unclear rules, demanding apologies from students, moving students without warning, mistargetting the cause of the problem, unjustified response to the problem such as yelling at the student).

Whereas, when the teacher was seen as praising appropriate student behaviour as a classroom management technique, the students were less likely to sympathise with the misbehaving student.

The students reported that a ripple effect operated in the classroom in that those who never misbehaved still suffered the adverse affective consequences of being present when punitive measures were being sanctioned.

Heyman et al (1992) found that affective learning was not restricted to school environments but was instead part of a much larger environment. Affective learning, according to Heyman, involved the family and the community because children start school with experiences, values and behaviours which they have learned from the home or the community. Therefore, Downs (1986) argued, the school, the family, and the

community should all be involved in the formal education process.

Renzulli (1991) believes that the

'effective programming for gifted and talented children is not a function of schools alone . . . we view the gifted child as part of a much larger system incorporating family, cultural milieu, classroom, school, and community. Furthermore, we view the issues surrounding the . . . education of gifted and talented students as including personal and social issues as well as cognitive ones' (p73).

This study concludes that able students are not as skilful in the affective domain as they would like to be, and that this lack of skill affects the quality of their learning.

This study recommends that the existing models and research findings be incorporated to address the existing problems that able students have in the affective domain.

Teachers, counsellors, and parents can make a difference to the quality of able students' learning, and to the stress levels involved in that learning, when they become aware of the able students' needs

and the educational issues involved in addressing those needs.

APPENDIX

Below are the results of the chi square tests of significance carried out on gender differences in the questionnaire responses:

- I want to contribute more during lessons
(0.000015)
- I am sensitive in class (0.0023)
- I can have good and bad feelings at the same time
(0.0046)
- I am happy when I am by myself (0.0028)
- I want to know more about leadership (0.014)
- I pretend not to understand what is going on
(0.0099)
- I don't know how other people feel (0.0029)
- I don't know how other people feel (0.0012)
- I enjoy school (0.0086)
- I am sensitive in class (0.0085)
- I am happy when I am by myself (0.0094)
- I have clear goals (0.0080)
- named English as their best subject (0.0072)
- the questionnaire was interesting, enjoyable, or
worthwhile (0.056)

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