Minority Students and Gifted and Talented Programs: Perceptions, Attitudes and Awareness

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abstract

This study, part of a Federally funded project, sought to investigate the extent to which specific targeted groups were under-represented in NSW provisions for gifted and talented students. In order to determine reasons for any under-representation perceptions, attitudes and awareness of students, families, community members and school personnel were examined. It was anticipated that the under-representation of the three target groups: Aboriginal and Torres Strait Islanders, Pacific Islanders and Arabic Speaking background students was not due to the perceived inappropriateness of these provisions by students or their communities but due to differences in perceptions of giftedness and talent between schools and their community and/or lack of awareness of provisions.

It was found from a review of State documents that Aboriginal and Torres Strait Islander and Arabic Speaking background students were significantly under-represented in State provisions for gifted and talented students. Pacific Islander students were also under-represented but not to the same extent.

Qualitative data were obtained in the form of interviews and surveys of students in Years Three, Four and Five, their teachers and their families in 15 government schools across New South Wales.

It was found that the majority of parents and students were unaware of State provisions. Parents believed giftedness and talent should emphasise cultural attributes of students. They also requested more information about provisions and support for gifted and talented students. Many parents were happy to be involved in school/community partnerships to support these students.

Teachers were found to be more aware of provisions but in many instances were opposed to the provision of special programs for gifted and talented students of any group. Teachers had little awareness of the target groups’ perceptions of giftedness and talent and had little knowledge of identification strategies. Teachers also requested more information about available
provisions and thought that parents also needed greater support and information in the area of giftedness and talent. Although teachers also desired more school/community partnerships in this area they did not feel that the community had a significant role to play in the identification process.
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chapter one

introduction
...talent is not the prerogative of any racial or ethnic group, any social class, or any residential area. It may lie untapped in some situations under some conditions, but no population has either a monopoly on nor an absence of giftedness.

(Passow, 1986a, p. 170)

Increasingly the international literature acknowledges that in many cases the gifted and talented child may also be disadvantaged. Over the last three decades the under-representation of minority groups in gifted and talented programs has been highlighted. This imbalance occurs despite the broadening of the traditional concepts of giftedness and talent to embrace a range of abilities and aptitudes. Issues investigated in the international literature include cultural conceptions of giftedness and talent, identification procedures and the appropriateness of available provisions.

Australia has followed the international trend in its attitudes to appropriate provisions for gifted and talented students. Since the seventies there has been a move towards the concept of equality of outcomes, over riding the earlier stance that equality of education presupposed identical treatment for all. There has been an increased interest in the under-identification and inclusion of gifted and talented students from specific populations, leading to equity concerns. In the New South Wales (NSW) State education system (now called
the Department of Education and Training) the Director-General argued that:

In my view equity is about equal outcomes amongst groups.

If we are genuine in seeking real equity then our goal must be for the educational performance of any one group of students to approach that of the student cohort of which they are a part. The mean and range of performance for the particular group should, over time, draw closer and closer to the mean and range of performance for the total population of students (Boston, School Education News, 20 July, 1994, p. 3).

In Australia in the early 1990s, Commonwealth funded, specifically targeted equity programs were developed under the banner of the National Equity Program for Schools. My work as a project officer from April 1994 to April 1995 for a National Equity Program for Schools Gifted and Talented Students (GATS) project in the NSW Department of School Education (DSE) forms the basis of this study. The project was supported by a Commonwealth Department of Employment, Education and Training (DEET) grant. Permission was granted by the DSE (Appendix A) and DEET (Appendix B) for the data collected in the course of the project to be used for my Doctorate of Education degree.

This study sought to determine the extent to which specific targeted groups were under-represented in State provisions for gifted and talented students within the Government school system. In addition it sought to determine what constitutes gifted and talented behaviour as perceived by students, families and community members and school personnel, and to investigate the attitudes and awareness of these groups to available State models of support. This study also examined the extent to which those perceptions may have hindered the identification and/or inclusion of these students in State
programs for gifted and talented students.

This study involved 15 Government primary schools from across three of the State's ten regions. Five of these schools were in a suburban area close to the central business district, five were in the outer metropolitan areas and five were in the South Coast area. Three of these were suburban schools and two were schools in small towns. All the schools had a high ethnic population and a significant representation of one or more of the target groups. Fourteen of the fifteen schools had been classified as disadvantaged schools. Primary schools were particularly targeted as their students are in the age group which may apply for entry to all the State gifted and talented provisions.

**Overview**

The under-inclusion of students from disadvantaged or minority groups in gifted programs is well documented in the international literature (e.g. Frasier, 1992; Masten, 1985; Richert, 1987; Sisk, 1994). Most of the research has been conducted in the United States.

A key question is "To what extent are these groups under-represented in gifted and talented programs?" Richert (1987, p.149) noted that:

> Figures published by the US Department of Educations' Office of Civil Rights reveal that minority groups such as Blacks, Hispanics, and native Americans are under-represented by 30-70% in gifted programs throughout the nation.

Trends in minority enrolment in both specialist and gifted classes were further examined in four Office of Civil Rights surveys (Chinn & Hughes, 1987). The research examined the data for blacks, Hispanics, Asian and Pacific Islanders,
American Indians and whites. These nationwide US data confirmed that the representation of blacks, Hispanics and American Indians continued to be disproportionately low over this period. In contrast, Asians and Pacific Islanders were represented twice as much as would be expected from their numbers in the total school population. It is significant to note that the white population, which made up 57.86% of the total sample, had a 72.8% representation in gifted and talented classes. The representation of minority groups in the total sample was 42.14%, but only 27.22% in gifted and talented classes.

More recent research continues to emphasise that the inequities in minority group participation in gifted programs are a major concern. Frasier states that:

The ratio of non ethnic/minority students to ethnic/minority students in gifted programs is approximately 5:1, a ratio that has persisted since the early 1970s (Frasier, 1990, p. 43).

There appear to be no such data available for the representation of Australian minority groups. This study sought to provide baseline data for selected minority groups in Government schools within NSW, Australia.

The literature attributes this under-representation to a range of factors, including inappropriate identification techniques (Baldwin, 1992; Chinn & Hughes, 1987; Richert, 1982; Sisk, 1994), differing cultural perceptions and values of giftedness and talent held by these groups from that of the dominant society (Gauci, 1988; Masten, 1985; Passow & Frasier, 1994) and the inappropriateness of available provisions and or programming (Deschamp, Robson & Nash, 1981; Goertz, Phemister & Bernal, 1995).
Much of the recent research consequently focuses on questioning the appropriateness of available programs for these students or on investigating new approaches to identification so that educators will be better able to identify and provide for gifted and talented students from all populations. However, since research in this field from the 1970s has not resulted in a significant increase in the representation of these groups in gifted and talented programs it would appear that a solution is not imminent. One must question whether new directions in the research are needed.

Although there is an emerging interest in the variety of cultural perceptions of giftedness and talent, research investigating educators' knowledge and perceptions of the cultural values of minority groups is limited. Further, there appears to be no research into the awareness of or attitudes towards available provisions for gifted and talented students held by minority communities, their students and educators. This indicates a substantial gap in the research as it highlights another possible cause for the under-inclusion of students from these groups in gifted and talented programs. In addition, Australian research investigating cultural perceptions of giftedness and talent is extremely limited (Braggett, 1985; Gauci, 1988; Gibson, 1997).

Australia is a country rich in its abundance of cultures. In such a multicultural society a variety of conceptions of giftedness and talent is to be expected. Here, however there is a dearth of research examining the causes for under-representation of Aboriginal and Torres Strait Islander students (ATSI) and other minority groups in gifted and talented programs. The reasons for their under-representation may or may not be attributed to the same factors as the current, mainly American, literature would indicate.

The work of Harslett (1993) in Western Australia and Gibson (1997) in
Queensland investigating Aboriginal gifted and talented students, and of Gauci (1988) examining the Lebanese community's conceptions of giftedness and talent in Victoria has provided an invaluable foundation for further research in this area. Australian research is needed to investigate the under-representation of minority students in gifted and talented programs, and the range of possible reasons.

Definition of terms

For the purpose of this study it is necessary to understand the specific use of certain terms within the NSW Government school system context.

Gifted and talented

For the purpose of this study the definition of giftedness and talent of the NSW DSE is used.

Gifted students are "those with the potential to exhibit superior performance across a range of areas of endeavour."

Talented students are "those with the potential to exhibit superior performance in one area of endeavour." (NSW DSE, 1991, p. 2).

Alternative definitions are considered in the literature review.

Primary schools

These schools cover the years from kindergarten to year six. Students would normally be between five and twelve when attending these schools. It is
possible, however, for students to begin school at age four as part of the 'early entry' program for gifted and talented students.

Disadvantaged schools

The "disadvantaged" classification results from an application for funding assistance by a school where the student population comes from backgrounds of low socio-economic status.

Policy

For the purpose of this study, policy refers to the NSW DSE "Policy for the Education of Gifted and Talented Students" (1991; see Appendix C) and its accompanying support document, "Implementation Strategies for the Education of Gifted and Talented Students" (NSW DSE, 1991).

Educational personnel

Although teachers played an important role in the identification and teaching of gifted and talented students in the schools involved, there were also other key personnel. In this study educational personnel refers to classroom teachers, executive staff, English as a Second Language (ESL) teachers, Community Language teachers, Aboriginal Education Assistants (AEAs) and Community Liaison Officers.

Community

In this study community refers to students and their parents/guardians. The exception to this is with reference to the Aboriginal community which is
broader in context, also including Aboriginal elders in interview situations.

**State Provisions for Gifted and Talented Students in the NSW DSE**

In NSW there is a range of provisions for gifted and talented students in Government schools. These provisions include flexible progression which may be in the form of early entry, whole grade or subject acceleration, specialist classes and camps. In addition to these provisions there are three State provisions, Opportunity 'C' (OC) classes, Selective High Schools and the Mentor Links program. An outline of the State provisions follows.

**Opportunity 'C' (OC) classes**

At the time of this investigation OC classes were available in selected primary schools in each of the ten regions (this structure has since been replaced by 40 districts). Regions had autonomy in the selection procedure of students for these classes. In some cases the classes were referred to by other names such as "Academic Extension Classes" or "GATS" classes. The majority of OC classes were for academically gifted students in Years Five and Six; however, a small number also catered for students in Years Three and Four.

In most regions admission was via a series of elimination, group administered psychological tests to year four students, with the final test being administered to the remaining candidates by the school counsellor. In some regions one test was administered to each candidate by a school or regional counsellor.
State policy and support documents of the time did not outline the purpose of OC classes. Information simply stated that the classes were available. For example:

Centres of Excellence, opportunity classes, selective and specialist secondary schools cater for gifted and talented students (NSWDSE, 1991a, p. 8).

The definition and procedures outlined above remained unchanged until 1997 when a new State selection procedure for OC Classes was introduced. The current State definition for these classes is as follows:

Opportunity 'C' (OC) classes provide intellectual stimulation and an educationally enriched environment for academically gifted and talented children in Years Five and Six (NSW DSE, 1996, p. 2).

Selective High Schools

There are currently nineteen Selective High Schools and four Agricultural High Schools within the Department of Education and Training (DET) in NSW. There are identical statewide entry procedures for both types of school. Selective and Agricultural High Schools cater for academically gifted and talented students. The State administered selection process includes a statewide test, grades from schools and additional supporting information from schools and parents. Students from both the State and the private system are able to sit the test in Year Six. State policy and support documents at the time of this research did not include a definition of Selective High Schools. They were referred to generally as one of a variety of provisions for gifted and talented students.

For some gifted and talented students placement in a specialist class

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or school may be appropriate.

ii. Specialist Schools: selective high schools, and to some extent specialist high schools and schools designated as Centres of Excellence, fall into this category (NSW DSE, 1991b, p. 6).

The following, current definition for Selective and Agricultural High Schools is much more specific.

Selective and Agricultural High Schools cater for highly achieving, academically talented students by providing an educationally enriched environment. These schools can provide intellectual stimulation by grouping talented students together, concentrating school resources and using specialist teaching methods (NSW DET, 1998, p. 4).

**Mentor Links**

There is a distinction between Mentor programs referred to in the DSE Gifted and Talented policy and support documents and the State Mentor Links program. Whereas:

Mentor programs match individual students with mentors who have expertise in a specific area of interest. This may involve regular in-school and after school meetings or mentoring by distance mode (NSW DSE, 1991(b), p. 7).

**The Mentor Links Program:**

... is designed to enhance the education of gifted and talented students aged ten years and over by allowing each student to work with a mentor on a one to one basis ... The mentor and student meet outside school hours at a negotiated time. The Mentor Links Coordinator will liaise between the mentor and students and will also provide the links which are necessary to start the program (DSE, 1996, p. 2).
The Mentor Links program is a State program with strict guidelines, including criminal record checks of prospective mentors. It is administered by Mentor Links co-ordinators who have undergone a one day training course. Mentor programs in comparison are relatively informal in structure. They are usually organised within individual schools.

**Purpose of the Study**

This research investigated the extent and causes of the under-representation of students from three specific minority groups in gifted and talented programs within the Government school system in NSW.

**Research Questions**

The research questions that guided this study were:

1. To what extent are students from Aboriginal and Torres Strait Islander, Arabic and Pacific Islander communities under-represented in NSW DSE gifted and talented programs?

2. What are the reasons for this under-representation?

   Are the community cultural perceptions of giftedness and talent different from those expressed in the official policy?

   Are educational personnel aware of any differences in perceptions of giftedness and talent in their school community?

   What current procedures are used within the three communities and/or by educational personnel to identify students who are gifted and talented?
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Do community and educational personnel consider the State provisions for gifted and talented students appropriate?

3. What level of awareness do the various groups have of aspects of the current policy?

4. What are the communities' perceptions of their role in the identification process, support for gifted and talented students and involvement in school perceptions?

   To what extent, if any, are the communities' perceptions at variance with the perceptions of educational personnel?

5. If these groups value the current provisions what can be done to increase their representation in the various programs?

The first question was raised to establish the extent to which the under-representation of these groups in NSW Government Schools is comparable with that of minority groups reported in the international literature. The subsequent questions sought to investigate the causes for the under-representation of these groups in NSW Government schools by posing a number of significant questions. Although these questions related to the cultural conceptions of giftedness and talent held by the communities and the identification procedures they use, an issue often discussed in the literature, the emphasis was more on the level of awareness that schools and the target groups had of each other's perceptions. Further, the questions investigated these groups' awareness of aspects of the official DSE gifted and talented policy including State gifted and talented provisions. These questions had not been previously addressed in Australian research. They may broaden the scope of reasons considered for the under-representation of the target groups in NSW as well as minority groups in the international literature. The
questions consequently raise healthy debate about international literature recommendations and the relevance of current research trends in this area for an Australian context.

Background to the Study

This research was conducted whilst I was a project officer in the NSW DSE from April 1994 to April 1995. Prior to this I was a classroom teacher and extensively involved in the initiation and support of gifted and talented training and development for teachers and extension and enrichment activities for students both in the schools I worked in and across the region. I was an active member of the regional gifted and talented committee and also an elected member of the NSW Gifted and Talented Children Association. In addition I had completed postgraduate studies in gifted education.

The project, “Models of support for disadvantaged gifted and talented students, in particular Aboriginal and Torres Strait Islander students, students from non-English speaking backgrounds and low socio-economic status English speaking students” investigated cultural variance in the identification and nurturing of giftedness and talents within four disadvantaged populations in NSW. The investigation focused on perceptions of giftedness and talent in the home, school and community setting, with a view to determining how these different perceptions may hinder the inclusion of students in programs for the gifted and talented. The aim of the project was to find the best approaches to the identification of giftedness and talents in disadvantaged students and to develop models of programs and investigate provisions which were or could be organised to deliver appropriate learning outcomes for these students.
Four broad student groupings within the disadvantaged population were targeted for the project: Aboriginal and Torres Strait Islander, two groups with a language background other than English (Pacific Islander and Lebanese) and low socio-economic status English speaking students. The present research focused on the data obtained from the first three populations.

Students from these target groups were perceived to be generally under-represented in the range of provisions for gifted and talented students available in NSW Government schools. The general perception within the DSE at that time was that students from the targeted groups might be under-represented because the available provisions were not culturally acceptable to the students' communities.

The broad objectives of the project and the student groupings selected were structured before I began my position. Although I was encouraged to move freely within the project description guidelines in adapting the methodology and consulting with relevant community representatives and selecting the schools, there were some mandatory guidelines. These are discussed further in the methodology chapter.

For the DSE a major focus of this study was the data to be obtained from the target group low socio-economic status English speaking students. As I was particularly interested in the target groups from different cultural backgrounds I ensured that more data were collected than required by the DSE from these groups. The data obtained have been further analysed since the completion of the original project.
Methodology

The original research was conducted using (a) an initial literature review, (b) an analysis of the available quantitative data on the representation of these groups in NSW DSE provisions for gifted and talented students, and (c) interviews and surveys of students in Years Three, Four or Five, parents who had a child in Years Three, Four or Five, teachers of students in Years Three, Four or Five from one or more of the target groups at the time the research was conducted, Aboriginal Education Assistants, community language teachers and community liaison officers who worked with or made up the target groups. This sample was chosen so that after being involved in the research and having their awareness of provisions raised, students from the target groups could have the option of being nominated for these programs before the relevant cut-off dates. In total 127 interviews were conducted and 312 surveys were completed.

In addition to the target group of ATSI students the Pacific Islander and Arabic speaking background students were selected as sample cultural groups within the category of language background other than English. These two groups presented as concentrations of students with access to a range of cultural and community activities. The Arabic speaking community was selected, as it was a well-established community in NSW. In contrast, the Pacific Islander group was selected as it was a more recently settled community.
Limitations of the Study

The methodology employed in this research was characterised by several limitations. These limitations included:

Size of the sample

Because of the reluctance of some parents to participate in the study, the number of parents participating from the priority groups is disproportionate. Although surveys were translated into community languages, many of the parents, whether of non-English speaking background or ATSI, may not have been literate in their own language.

Type of school

Constraints on time and the fact that it was a DSE project precluded an investigation of students who were from other cultural or socio-economic groups or attending different school systems. Thus valuable comparison or control group data were not available. All students, teachers and parents involved were in the NSW State school system.

Reliability of the sample

Fourteen of the schools chosen were classified as disadvantaged schools. This classification does not imply that all the students or communities connected with the school were socio-economically disadvantaged. Although some principals selected parents or students to be surveyed or interviewed on the basis of their socio-economic background, many selected students at
random or issued surveys to all parents and students.

Identification of the Tongan population caused some problems. The DSE could not provide a breakdown of enrolments for this group in State provisions for gifted and talented students. The empirical data could be collected only under the grouping “Pacific Islander”. While interviews were conducted with Tongan students and community members, the surveys were distributed under the category “Tongan/Pacific Islander”.

Mentor Links data

The available Mentor Links data illustrated the number of students accepted into the program from four regions, Metropolitan North, Metropolitan West, Metropolitan South West and Metropolitan East. Data were not available for the South Coast region which was one of the three regions participating in the research. An individual breakdown by region was not supplied. It is possible that many of the nominations were from Metropolitan North and that the data are therefore not representative of the three regions selected for the research. As the target groups were not well represented in Metropolitan North it is likely that the Mentor Links figures are over-represented for the population.

The division of the figures into years is possibly misleading, as students who were accepted into the program in 1993 may still have been waiting for a link or a relink or have been participating in a link during 1994 at the time that the figures were collated. It is possible then that these figures over-estimate the links made on a year to year basis.
Structure of the Thesis

The Literature Review provides an historical overview of the changing conceptions of giftedness and talent. Emphasis is placed particularly on research addressing under-representation of gifted minority groups from culturally diverse backgrounds, and cultural conceptions of giftedness and talent. The available Australian research is examined and compared to the international research. The subsequent chapter outlines the research procedures and the methodology used for this study. Chapter Four examines the representation of the target groups in State gifted and talented programs in NSW. Chapters Five, Six and Seven present the results for each of the target groups, ATSI, Arabic speaking background students and Pacific Islanders respectively. Chapter Eight provides a discussion and a summary of the overall findings of the study. The concluding chapter includes an overview and recommendations for further research.
chapter two

literature review
chapter two

literature review

It is widely accepted that gifted and talented students can be found in all socio-economic and cultural groups. However, research clearly indicates that minority and disadvantaged students are not proportionately represented in programs for gifted and talented students.

This literature review, focusing on gifted and talented students from culturally diverse backgrounds, seeks to examine both the reasons for this imbalance and possible strategies to redress it. In particular, the review focuses on cultural perceptions of giftedness and talent, and the awareness that minority communities and their educators have of gifted and talented policy, of available gifted and talented provisions, and their respective perceptions of giftedness and talent.

The purposes of this literature review are to:

(1) explore the reasons gifted students from specific populations are under-represented in provisions for gifted and talented students, and

(2) comment on identification tools or processes which may assist in addressing this imbalance.

The review is organised into seven sections.

☐ The first section provides a brief statement on how the review was conducted.
The second section defines the significant terms used in the review.

The third section outlines the findings of the literature examining the inclusion of minority students in gifted and talented programs.

The fourth section examines cultural perceptions of giftedness and identification techniques for gifted and talented students from culturally diverse minority groups.

The fifth section delineates the available research on educators' and their communities' awareness of gifted and talented policy and available provisions for gifted and talented students.

The sixth section deals with the literature concerning the inappropriateness of programs for gifted students from minority groups as a cause of their under-inclusion.

The final section outlines strategies to redress the under-inclusion of students from culturally diverse minority groups in gifted and talented programs, based on a summary of the major findings and issues raised in the literature.

Given the scope of the topic, manual and computer based searches were confined mainly to a search of the years 1988-1996.

The key word used in the Thesaurus of ERIC Descriptors (1990) is "gifted" which in turn links with the following keywords:

- exceptional children
- geniuses
- intellectually gifted
- creativity
- test scores
- mental age
talented
tests
intelligence
ability
academic aptitude
intelligence quotient
achievement potential
culture faire intelligence
intelligence measures
tests

The sources below have been consulted manually with reference to the years 1988-1996.

Resources in Education (1994)
The Thesaurus of ERIC Descriptors (1990)
The Education Index (1996-1998)
On CD ROM the following resources were accessed:
Educational Resources Information Centre (ERIC) (1990)
Australian Education Index (1995)

The Concept of Giftedness and Talent

The literature review focuses on the gifted and talented among culturally diverse minority groups in Australia and the rest of the world. Related
research on students who have physical or learning disabilities, are affected by poverty, isolation, gender or non-English speaking background is not included in this review. However, it must be noted that many culturally diverse minority students may of course be multi-labelled, falling under one or more of the above headings.

In the field of gifted and talented education there is significant diversity in definitions of its essential terminology. Consequently, the major points of contention and a list of definitions used for the purpose of this review are outlined and considered below.

"Gifted" and "Talented"

There is little agreement on the precise meaning of the terms "gifted" and "talented". The words are not only confused colloquially, but also used interchangeably within the literature. Heller notes that:

"giftedness belongs to the class of so-called hypothetical 'construct' terms whose definition is dependent on the chosen theoretical frame of reference (1989, pp. 140-141)."

Not only does the concept of a gift or talent change according to the cultural group concerned, but also the time in history and the specific context. For example, one cultural group may value philosophy, another military prowess, as in ancient Athens and Sparta respectively. When nations were intent on expanding their empires the talent to make maps or navigate was highly valued; today we live in a technological world where computer skills are highly praised. The specific cultural context is, however, the most important. Wallace and Adams (1993, p. 445) argue that there are culturally disadvantaged learners in all countries. These are the learners whose talents or values do
not coincide with those of an education system where their home language and experiences do not have any formal recognition. This view is further supported by Arroyo and Sternberg (in Wallace & Adams, 1993) who illustrate the difficulty of a child developing a talent fully, particularly if the school context values academic superiority and the community stresses the social aspects of giftedness and talent. Differences between the values of the school and the community can clearly limit the development of a student to full potential. The development of the student's cognitive skills is determined to an extent by affective and social development.

Moreover the context in which the learner develops effective thinking skills must be relevant and meaningful, being derived from a cultural context through which the learner can identify positive values and principles (Wallace & Adams, 1993, p. 44).

Similarly, in a program for talented mathematicians, the child who has a talent in leadership, public speaking or artistic design may be overlooked. Students have a better chance of being identified and catered for if they match the course requirements.

The importance of context is a re-emerging issue in the research, particularly with the range of cut-off points often used for entry into gifted programs. For example, in one administrative area giftedness might be classified as having an IQ of over 130 whereas in another it might be classified as over 140. Is the child with an IQ of 131 who moves into a new area no longer gifted? Gourley (1984, p. 157) sums up the problem by asking the question:

Do we define the gifted child as a unique individual with special abilities or as an individual who can meet the selection criteria of a special education program?
The fact that many programs for gifted and talented students cater specifically for specifically academic gifts and talents indicates that we may often make the child fit the program rather than the program fit the child.

In the past some educators (e.g. Deighton, 1971) have proposed an expanded definition of the gifted and talented child as a student whose potential or performance in a valuable line of human activity is remarkable. This definition acknowledges that giftedness is not a static concept; however, it begs the question of who decides what is valuable. The mainstream culture in any given society may have a clear concept of what it values as gifted or talented. For example in the NSW DSE’s definition, giftedness and talent are defined as follows:

**Gifted students** are those with the potential to exhibit superior performance across a range of areas of endeavour.

**Talented students** are those with the potential to exhibit superior performance in one area. (NSW DSE, 1991c, p. 2).

The breadth of scope of gifts and talents is reinforced within the policy document which acknowledges that

  giftedness and talent may occur in many different areas including the creative arts, academic subjects, social and leadership skills and sporting interests. (NSW DSE, 1991c, p. 2).

The above definitions provide a differentiation between the terms, but do not explain what potential is or how teachers may identify it. The definitions may also be interpreted as implying a hierarchy, with gifted students being superior to talented students. It is interesting to note that in the NSW State education system, provisions for gifted and talented students such as Selective High
Schools and OC classes cater predominantly for academically gifted students. Although there are also provisions for students with specific talents (e.g. in music, sport or the performing arts in schools such as the Conservatorium, Westfields Sports High School and the Performing Arts High School), these provisions are significantly smaller in number and as part of their selection procedure generally require superior academic ability. The DSE in these provisions is acknowledging and responding to the importance society places on academic ability. Nonetheless the mainstream school curriculum and the Mentor Links Program cater for a wide range of gifts and talents.

Early definitions such as that of Terman (1925) essentially equated giftedness with intelligence, sometimes known as general intelligence or the “g” factor. Gifted individuals were defined as the top one percent in general intellectual ability as measured by the Stanford-Binet intelligence scale or a comparable instrument. Considerable weight was given to test results. Consequently, the terms “giftedness” and “high IQ” became virtually synonymous.

Definitions in the research today describe a broad concept of giftedness and talent, indicating a shift from a notion of fixed intelligence measured by IQ scores to a broader view which includes a range of abilities both potential and demonstrated. The early research has, however, had considerable impact both on current definitions and on the way in which gifted students are identified. The full extent of debate over the appropriate definition of gifted and/or talented is too large to be reported here, but a selection of definitions currently used in the research is provided to illustrate the important link between definition and subsequent identification of students, and then necessarily the appropriate choice of provision.
Renzulli (1986) offered a definition of giftedness in which gifted behaviours reflect an interaction among three basic clusters of human traits. These are greater than average ability, creativity and task commitment. This is often referred to as the Triad or Three-ring model. Renzulli stressed that all three traits are important. His definition shows that gifted and talented children are those possessing or capable of developing this composite set of traits and applying them to any potentially valuable area of human performance.

This definition indicates a distinction between being gifted and having the potential to be gifted, which is now evident in many definitions of giftedness and talent. Renzulli (1991) claimed there is a need to provide supplementary services appropriate to the gifted/talented to approximately 15% of the population. This estimate reflects the current view of giftedness broadening in its concept rather than having a narrow cut-off point as in the Terman definition.

The Triad definition has provoked heated debate as many researchers claim the requirement of motivation does not take into account the underachieving child. Renzulli (in Kirschenbaum, 1995) acknowledged that task commitment or motivation is often confused with the sort of “general motivation” which is often found in students who work equally hard in all subjects. He specified that task commitment refers to the desire to do a specific task.

Furthermore, Renzulli considered that it is not a requirement for students to possess all three characteristics in order to be eligible for special services. In his model the initial target audience consists of students who display or have the potential to display above average ability in special aptitudes such as
music, drama, art, interpersonal skills or leadership, or one or more academic areas. It is important to note that Renzulli maintained

... the other two rings are considered developmental objectives that we attempt to promote in the target population and bring together in an interactive fashion with one another (Renzulli & Reis, 1991, p. 114).

Under this definition children with a special aptitude or above average ability in an academic area would not be considered gifted unless they also exhibited creativity and task commitment. Creativity, like task commitment, is seen as being developmental, rather than a static quality with which people are born. Renzulli (1978) described his definition as an “operational definition” as it is derived from research studies and also provides guidance for the selection and/or development of procedures or instruments that can be used to guide both identification and programming practices.

Gagné (1985) expressed doubts about the applicability of Renzulli’s model, particularly in regard to underachieving gifted children. His main criticism focused on what he perceived as the presence of motivation as an essential component of giftedness. He asked

... can we say a child with an IQ score of 130 or more is not gifted because he is not sufficiently motivated to succeed in class? (Gagné, 1985, p. 104).

Renzulli, however, would consider such a child potentially gifted and needing special provision within the school. Gagné (1995, p. 78) has since acknowledged Renzulli’s inclusion of students with potential, “capable of possessing this composite set of traits” but still argues that Renzulli’s
meaning is ambiguous because of his lack of differentiation between
giftedness and talent.

The issue raised here of potential is an important one. For Renzulli, potential
is reflected by above average performance. Gagné (1995) referred to
giftedness as a “natural ability” which may be shown by performance in an IQ
test or by an obvious ability in an area for which the child has had no training.
Potential, like the terms gifted and talented, is a hypothetical construct which
will have a variety of interpretations according to its audience. This raises the
issue of determining if there is a real difference between potential and
performance or whether the field is merely playing with semantics. Forster
(1995, p. 12) used a spiral model to illustrate “...the continuity, the ongoing
nature of talent defined by its own production.” She argued that when
educators consider performance they must take into account conditions,
situations, settings, circumstances and challenges. Therefore, Forster
maintained that a definition of giftedness is not confined to cognition, but is an
“interplay” on a continuum of affective and cognitive variables. Potential may
not be illustrated as consistently or as easily, but it is still performance. A
student may consistently perform badly in subject exams. A teacher or
counsellor may recognise or establish that the student has potential. How is
this verified? It may be through a psychological test, a comment showing real
insight or higher order thinking skills, a chance noticing of leadership in the
playground or sporting field. They are all examples of actual potential. If this is
the real distinction, it does not negate the importance of potential, rather it
highlights the importance of identification procedures and provisions
necessary to give students who are gifted the opportunity to show their
capacity.
In addition, Gagné (1985) argued that Renzulli's definition did not differentiate above average ability into separate ability domains, thus suggesting that above average ability correlates with intellectual ability. However, Renzulli (Renzulli & Reis, 1991) clearly stated that potentially gifted students include those with above average ability in aptitudes such as music, drama, art and leadership. Gagné (1985) also maintained that creativity should not be seen as an essential component of giftedness, but as one of many ability domains in which giftedness can express itself.

The Gagné model (1995) proposed five aptitude domains of human ability: intellectual, creative, socio-affective, sensori-motor and "others". This last domain is important as it acknowledges that the definition of giftedness and talent is continually expanding as society's values change. It therefore allows for the differentiation of additional general domains of ability. Gagné provided the examples of personal abilities or paranormal abilities, showing that a definition of giftedness may not only expand but also take into account domains of ability valued by local or minority groups. Talents develop from the transformation of these aptitudes or gifts into developed skills which are characteristic of a particular field of human activity or performance. Gagné noted that these talent fields may be diverse, and states that the model does not presume to represent the whole range of talents. He further asserted that the term "talented" applies to a person only while he or she continues to show above average performance in a field of talent. Gagné used the terms "domain" and "field" to decrease ambiguity between the concepts of gifts and talents.

Gagné (1995, p.107) maintained that the process of talent development manifests itself when the student is engaged in "systematic learning, training
and practice" which is in turn hindered or facilitated by intrapersonal and environmental catalysts. Among the intrapersonal catalysts, motivation (as in the Renzulli model) plays an important role. These catalysts may act as positive or negative moderators of the transformation of aptitudes into talents. Unlike many other theorists, Gagné made a clear distinction between the terms gifted and talented, stating that

The term giftedness is formally defined by Gagné as the possession and use of untrained and spontaneously expressed natural abilities (called aptitudes or gifts) in at least one ability domain, to a degree that places the child or adult at least among the top 15% of his or her age peers. By contrast the term talent is formally defined as the superior mastery or systematically developed abilities (or skills) and knowledge in at least one field of human activity, to a degree that places a child’s or adult’s achievements within at least the upper 15% of age-peers who are active in that field or fields (Gagné, 1995, p. 106).

Gagné proposed a broad definition of giftedness and talent. Indeed in one study (1995, p. 77) he found that 40% of the pupils in any given group were talented. This claim would have major implications for school facilitation of identification procedures and provisions. The Gagné definition, like Renzulli’s, is really a model. It is particularly useful for educationists as they can see the school’s role in acting as a positive catalyst and also perceive more easily the role of other influences in possibly masking giftedness. Gagné hoped that the model would sensitise the designers of future screening instruments to take into account the calculation of specific scores for particular talents or to design an instrument that is specifically oriented toward one category or another.

Feldhusen (1995) used a model, “the Purdue Pyramid” to illustrate how talent is developed. At the base of the pyramid is the prerequisite that
Gifted and talented youth need, as do all youth, to ... view themselves as accepted and respected by all human beings with whom they associate regularly (Feldhusen, 1995, p. 63).

This statement implies that talented individuals cannot reach their potential unless they are accepted while being different. There is also a distinct emphasis on the importance of identifying and nurturing talent.

From both parents’ and schools’ points of view the most important things to know are children’s talent strengths or foci and how to nurture those talents to help children achieve to the highest level possible (Feldhusen, 1994, p. 14).

Feldhusen’s model illustrates that a wide range of learning experiences is needed to develop talent and that in addition talented youth must be aware of their talents and abilities and commit themselves to developing these talents. The latter aspect echoes Renzulli’s emphasis on the importance of commitment. The importance of appropriate learning experiences to enable students to reach potential also reflects Gagné’s model, but the significance of environmental factors is neglected. Feldhusen’s model emphasizes the importance of the school and the individual in achieving talent, but does not acknowledge the role of family or circumstance.

In contrast, Tannenbaum (1983) developed a multi-faceted model of five factors: superior general intellect, distinctive special aptitude, a supportive array of non-intellectual traits, a challenging and facilitative environment and the smile of good fortune at a critical period in life. The environmental element includes the influence of the home, family and school. Tannenbaum maintained that talent exists in adults only and that children who have the potential to succeed as gifted adults must have some special encounters with the environment to foster the emergence of talent. He argued that giftedness
is determined by the culture in which a child is born. If all the appropriate factors interact, then the child who is gifted would have the chance to develop his or her potential, while failure in one of these facets will lead to the non-realisation of potential (Tannenbaum & Feuerstein, 1993). In addition, Tannenbaum maintained that some children may have gifts which are not valued by society. In this definition the chance factor is perceived to be important, with much possibly depending on the time and place where the individual is born and educated.

Research drawn from a variety of sources including gifted and non-gifted populations, exceptional populations and cross cultural accounts of cognition, has resulted in a pluralistic view of human cognition and consequently the theory of multiple intelligences (MI theory) (Gardner, 1983). These intelligences include verbal-linguistic, logical-mathematical, bodily kinaesthetic, intra-personal, inter-personal, musical-rhythmic and visual-spatial. Gardner maintained that each of these intelligences is observable in all the cultures he studied but notes that "... cultures varied as to which of the specific intelligences they valued most highly" (Department of Education, 1996, p. 7).

Although Gardner's theory of multiple intelligences is important in its acknowledgment of the wide variety of individual learning styles and in the importance placed on identifying gifted students through measures which take into account a range of learning styles, his definition of these intelligences does not appear to define giftedness and talent. Gardner acknowledged that

... one could (and perhaps should) drop the word intelligence entirely and speak instead of linguistic talent and logical mathematical talent (1991, p. 56).
Gardner argued that he had deliberately chosen to use the term intelligence as a "challenge" to those who might perceive linguistic and logical-mathematical capabilities on a different level to other capacities in MI theory. Thus he attempted to democratise the range of human cognitive abilities. The theory has significant relevance to the field of gifted education, illustrating the broadening concepts of giftedness and talent as reflected in current definitions such as the JAVITS Act (1988) which includes leadership and artistic areas. However, the theory itself does not define giftedness or talent.

The JAVITS Gifted and Talented Education Act (1994 of the improving Americas' Schools Act of 1994, Title X, Part B) provided a definition which refers only to the word "talent". It is, however, significant because of its strong link to equity. The Act's definition states:

Children and youth with outstanding talent perform or show the potential of performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment.

These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools.

Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavour.

The definition is a landmark in its acknowledgment that it is not equitable merely to compare students to their age peers, because this does not take into account previous experience. The definition suggests that every school can contain a gifted child. This situation may present its own set of difficulties. There would not be a succinct cut-off point to indicate giftedness or talent, and
a child labelled as gifted in one school may move to another school and no longer be gifted. However, one could argue that gifted children, like any other children, have the right to reach their potential and that if they were to move schools they would simply continue to be taught in such a way that this could occur. It would be essential to use a variety of selection criteria to identify children with a variety of backgrounds, support and experiences. The definition also emphasises that talent is present in all groups. This stance is strongly maintained in much of the research but seldom stated within a definition.

The above selection of definitions indicates a diversity of opinion in gifted and talented education. Conflict still arises over the terminology, whether it be "gifted", "talented" or "intelligence". The concept of potential arises as a key indicator of future talent development. The focus on the suggestion that potential is manifested in performance indicates the possibility of enhancement. Most models acknowledge the role of many factors, including intrapersonal and environmental factors and the school, in developing talent. These are important issues for schools to consider when planning appropriate educational opportunities. Most importantly, there is agreement that giftedness or talent are broad concepts not restricted to IQ. This perception has significance in the selection of appropriate identification tools which match the type of program being offered.

For the purpose of this review, the terms "gifted" and "talented" will be used interchangeably, defined as superior performance or potential in one or more areas when compared to age peers and others of similar experience.

This thesis is further concerned with the under-inclusion of gifted and talented students from minority groups in available provisions for gifted and talented
students. Hence the term “culturally diverse minority groups” needs clarification.

Culturally diverse minority groups

Baldwin, Gear and Lucito (1978, p. 1) state that

cultural diversity (CD) is a condition of racial, ethnic, language or physical differences from a mainstream culture.

The term “dominant culture” is generally used when the culture of one group is perceived to be “correct” or “standard”, for example the culture of law courts, the government or schools. A society will generally contain various sub-groups which are culturally different or diverse. Members of these groups may not be accepted by the dominant group or indeed may not wish to be included even if they are full citizens (McLead, 1989).

Baldwin’s definition, which includes physical differences, is crucial to a clearer understanding of the word culture. People with a physical disability such as hearing impairment form a minority group and may develop their own culture. In addition, their way of coping with the disability (such as using sign language) may be perceived to be more culturally “different” than the disability itself.

In this review the focus is on gifted and talented students from culturally diverse minority groups, i.e. any groups not belonging to a dominant group in society because of a difference in ethnicity, language, cultural values or beliefs which are not valued by the broader community.
Research investigating the under-representation of culturally diverse students in gifted and talented programs

This part provides an overview of the literature examining the extent of the under-inclusion of gifted and talented students from diverse minority groups in available gifted and talented programs and provisions. The purpose is to provide a clearer backdrop to the question, "Why are these students under-represented and how can we redress this imbalance?"

Research in the United States highlights the continued under-representation of minority and low income children in America's gifted education programs (Frasier, 1997; Maker, 1996; Mitchell, 1988). This under-representation is not, however, a new trend. As early as the 1960s it was noted that research indicated a high incidence of Jewish students and a low incidence of Negroes, Italians and other minority groups in gifted programs.

One possible explanation for these differential proportions was thought to lie in the cultural values of the subgroup (Ebel, 1969). Researchers have long acknowledged the relevance of cultural values and perceptions of giftedness and talent, the importance of using multiple identification tools and the problems of cultural bias associated with IQ testing of minority students (Baldwin, 1992; Sisk, 1994). As Frasier (1997, p. 498) stated,

there is no logical reason to expect that the number of minority students in gifted programs would not be proportional to their representation in the general population.

In the last two decades it would appear that tremendous leaps have been made in providing for minority students. Gallagher and Coleman (1992) found that in 38 states of the USA there was provision for identification strategies appropriate to minority students. Definitions of giftedness and talent are now
broader and do not focus on academic ability, however, the capacity for cognitive ability is still in practice central to the definition and identification of giftedness. In spite of these changes minority students are significantly under-represented.

In Australia, research into the under-representation of gifted and talented minority students is limited. However, the available research indicates that minority groups may also be under-represented. Harslett (1994, p. 2), who has conducted research in Western Australia found that

> Aboriginal children are chronically under-represented in programs for gifted and talented children.

Zappia (1989) maintained that the heart of the problem lies in our schools, our attitudes and our values. Lack of consideration for cultural values and perceptions of giftedness and talent is also still considered one of the causes of under-representation (Ford & Harris, 1990). Maker (1996, p. 42) argued that

> either the recommended procedures are not being used or they are being used, but are not working. In either case, change needs to occur.

Wiggins (1989) took this argument one step further by claiming that

> when an educational problem persists despite the well intentioned efforts of many people to solve it, it's a safe bet that the problem hasn't been properly framed. (p. 703).

The following sections of the literature review addresses the issues of conceptions of giftedness, identification techniques, awareness and attitudes towards gifted and talented provisions in more detail. The final section of the
review will focus particularly on strategies advocated to redress existing under-representation.

Cultural Perceptions of Giftedness and Talent

Definitions, in both the research and policies, have clearly expanded to include a broader spectrum of giftedness and talent. This is in part a response to awareness of the under-representation of minority and disadvantaged students in gifted and talented programs. Interest in the knowledge and perceptions educators hold about minority students in relation to giftedness and talent is beginning to be highlighted, but there is little investigation of minority community perceptions of how educators view and identify giftedness and talent.

There is a dearth of Australian research investigating the under-representation of minority groups in Australia or the conceptions of giftedness and talent held by minority groups. For this reason available Australian research is highlighted, to ascertain whether findings and recommendations from the international literature seem relevant to an Australian context.

Teacher perceptions and knowledge of minority group students

In a study of over 600 primary teachers in NSW, Whitton (1995) found that over 40% of teachers had no knowledge of the ethnic backgrounds of students at their school or of their Region's definition of giftedness and talent.

More alarmingly, the survey analysis indicated that there was little concept of the non-English speaking child being gifted. Such perceptions are clearly contrary to the international research which is consistent in its advocacy that
"gifted abilities are to be found in each and every cultural and racial group" (Gibson, 1997(a), p. 3).

These attitudes are disturbing, impacting on both teacher identification and expectations of minority students. Research indicates that students' perception of teacher expectations is one of the most significant factors affecting school performance. Malin (1989) found that a significant number of teachers have negative attitudes to Aboriginal students, stereotyping them as lacking learning ability. Such views have their origins in the 1960s in Australia where it was maintained that Aboriginal people had a lower cognitive ability than Europeans (Gibson, 1992, Lee, 1993). These perceptions are often based on ignorance rather than racism. Researchers have long acknowledged giftedness can be more than the narrow concept of academic ability, yet educators appear to still be well behind the times.

It is not feasible to discuss all the research conceptions of giftedness in examining specific cultures. Therefore this review will be limited to the research investigating target groups for this study, Aboriginal, Arabic and Pacific Islanders and their conceptions of giftedness and talent.

**Research examining Aboriginal conceptions of giftedness and talent**

Gibson, (1995) collected data in the form of interviews with Aboriginal community members and surveys from Aboriginal teachers in Queensland Department of Education schools to investigate the types of attributes urban Aboriginal people associated with giftedness. Theappropriateness of Frasier's ten attributes, motivation, interests, communication skills, problem solving ability, memory, inquiry method, insight, reasoning,
imagination/creativity and humour in the identification of Aboriginal gifted children was also investigated. The surveys asked teachers for indicators of giftedness that would be relevant in identifying gifted Aboriginal children and for teachers to describe the characteristics of gifted Aboriginal children they knew. The majority of responses indicated that eight of the ten attributes were extremely or frequently successful in identifying gifted Aboriginal children. Forty nine percent of teachers rated the remaining attributes, motivation and problem solving, as frequently or extremely successful. When asked for indicators or characteristics of gifted Aboriginal students, teachers provided descriptions concerning

Leadership abilities and the child's sensitivity or intuitiveness ... self confidence of the child, social maturity and social responsibility (Gibson, 1995a, p. 11).

Consequently she proposed two further attribute categories of leadership and sensitivity, as relevant indicators of giftedness in urban Aboriginal children. These were later collapsed into the category of interpersonal/intrapersonal ability “...which is defined as an unusually heightened understanding of self and others” (Gibson, 1995b, p. 85).

When asked to rank order Frasier's ten attributes from the most to the least successful indicator of exceptional ability in Aboriginal children, the attributes of motivation and communication were most frequently used to describe giftedness and high ability. Motivation, inquiry and reasoning were also ranked in the top five by the majority of teachers. Nevertheless, the results of both the interviews of Aboriginal adults and teachers provided support for the use of Frasier's ten traits in describing attributes characterising gifted Aboriginal children.
In the interviews and questionnaires, Gibson’s respondents also described culturally specific examples of giftedness for gifted Aboriginal children. Gibson divided these into sub-categories that included

- interest in and concern about cultural issues
- effectively deal with racism
- sense of family loyalty
- ability to switch language codes
- ability to live effectively in a bi-cultural situation
- story telling (Gibson, 1997, p. 258).

In a study by Harslett, (1993) Aboriginal adults described behavioural characteristics of intellectually gifted Aboriginal children. Their descriptions included knowledge of Aboriginal culture and tradition, early Aboriginal language acquisition, and ability in Aboriginal English. Aboriginal children in the same study described similar characteristics but also included examples related to bush survival skills. Gibson commented that her findings lacked a "traditional culture" quality which were noticeable in Harslett’s study but attributed this difference to the level of assimilation which had been experienced by the participants.

With the information from this study it is possible to develop appropriate identification strategies for minority students. Gibson highlighted the fact that

- it needs to be kept in mind that when using the eleven attributes in identification procedures, it is not a criterion that a student must display exceptional ability in all attributes to be seen as potentially gifted (Gibson, 1997, p. 252).

Thus, Gibson’s is an inclusive model that can be used to complement other identification strategies. Gibson’s study is one of the few to test the
appropriateness of both definitions and selection techniques for their appropriateness in an Australian context. In addition, her study provides one of the few resources based on research completed about urban Aboriginal conceptions of giftedness and talent. In contrast there is a wealth of material available on the learning difficulties of Aboriginal children (Crawford, 1993).

Harslett in contrast investigated conceptions of giftedness and talent among rural non-traditional Aboriginal people in Western Australia. In his research eighty-seven Aboriginal adults and 107 children were surveyed. Harslett found that Aboriginal children valued the intellectual domain as the most important area in which to be gifted. This was followed by the sensori-motor and socio-emotional domains. Parents in Harslett's study valued artistic and sensori-motor ability over academic ability. They valued more highly tradition oriented intellectual performance that included knowledge of kinship structures, bush skills and knowledge of language. Nevertheless, success in academic fields was judged by both parents and children as a valued area in which to be gifted (Harslett, 1993).

Kearins (1982, p. 62) asked 178 Western Australian Aboriginal adults

What sorts of things would make you think that an Aboriginal child was really clever, out of school?

The following characteristics were highly valued: independence and helpfulness (25%), bush skills (20%), sporting ability (15%), and cognitive ability (13.5%). In the latter, the areas of concentration, memory and imagination, talking and self-expression, and curiosity were emphasised. Imagination, talking and self expression, and curiosity were emphasised. Within the area of cognitive ability, emphasis was placed on attributes such as reliability, responsibility, being sensible or a trier and staying out of trouble.
Adults in Kearins’s study also mentioned specific skills such as drawing, painting, singing, tool use, woodcarving and guitar playing. The concept of doing one’s best is also highlighted by Crawford, who commented that

Regardless of a child’s ability or final examination results, if their child continues on and completes their education they are perceived as being gifted (Crawford, 1993, p. 19).

The concept of giftedness and talent is generally based on a point of comparison, being able to perform at a higher level than one’s age peers or the rest of the group. An Aboriginal student who has completed high school may be one of the first in a community to achieve this. Although academically the student may not be gifted, the Aboriginal community appears to be valuing the attributes of staying on task, motivation, perseverance perhaps in the face of adversity and the concept of doing one’s best. They are perhaps identifying the potential this person has to do well in a number of areas.

In contrast to Crawford’s indication that students who complete their schooling will be considered gifted is the comment from Gibson that

the individual who strives for his personal advancement becomes a threat to the group as a whole and is actively discouraged from becoming too ambitious (Gibson, S. 1993, p. 38).

Gibson explains that students who may have the capacity for academic success at school may find they receive little encouragement from their family and particularly their peer group. It can be argued that there is not really a contradiction between these two stances. As Gibson himself points out,

the considerable differences within Aboriginal Society preclude the assumption that Aboriginal students come from a homogeneous cultural background (Gibson, S. 1993, p. 33).
Societies are often divided over appropriate provisions for gifted and talented students. In Australia, elite athletes are honoured in our community, but academic gifts and talents are not as highly prized, often being associated with elitism and snobbery. It is therefore not surprising that Aboriginal communities may have differing values, or that attributes prized for example, in a remote community are not valued in an urban area.

From the available information about Aboriginal populations it is evident that this group does have a conception of and values giftedness and talent. Although there may be variations in the characteristics valued among Aboriginal groups it seems clear that giftedness and talent are perceived as an exceptional ability which may be demonstrated in the academic arena but also in areas such as sporting prowess, motivation, creativity and inter/intrapersonal skills.

**Research examining Arabic community conceptions of giftedness and talent**

An Australian study by Gauci (1998) of the Arabic Muslim community in Melbourne attempted to build a data base of knowledge about the gifts and talents cultivated and valued within this community. Data for the project were collected through interviews with members of the Lebanese Muslim community, parents, students and teachers. A major finding of the study was that the concept of giftedness had three components:

... giftedness is defined differently for specific categories of persons...Secondly, there are significant moral dimensions to both forms of giftedness. Thirdly, social responsibility defines the nature and direction of giftedness (Gauci, 1988, p. 43).
It was found parents particularly valued academic ability, but that there was also emphasis placed on moral and attitudinal attributes. The latter attributes included being co-operative, helping others and being respectful. Gifts were seen as attributes that came from God and were therefore to be used for the good of society. The Gauci study also perceived “moral/religious” people to be gifted, applying this attribute not specifically to gifted children but to gifted people in general.

In another study, Butler-Por, (1983) investigated the educational values of different cultures and sub-cultures in Israel. A component of this study included interviewing 24 Arabic parents. It was found that 100% of those parents attributed the highest importance to academic achievement. Tidiness and cleanliness (97%), competitiveness (94%), material success (92%), a sense of humour (92%), a positive attitude (83%), independence (78%), artistic creativity (78%), respect for teachers (75%) and leadership (67%) were also highly valued by parents.

Academic achievement and specific attitudinal characteristics such as being respectful are clearly valued by the Arabic community in both the above studies. It is relevant that the Gauci study was conducted in Australia whereas the Butler-Por study was conducted in Israel. This raises an important issue. Although it may be expected that people from within the same cultural group may share similar values, people within sub-groups of that culture are likely to have different or additional values. Therefore gifted students from specific minority groups should not be seen as homogeneous. Although it is important to acknowledge and take into account the child’s culture it is essential to evaluate the provisions needed for the individual child (Gibson, 1997; Passow, 1991).
Research examining Pacific Islander conceptions of giftedness and talent

The limited research on gifted and talented Pacific Islander students indicates that these students are "affiliation orientated". Human relationships are perceived as much more important than individual achievement or personal gain (Woliver & Woliver, 1991). Reid (1989) makes reference to Pacific Islanders in New Zealand. He states that

... it is known that Pacific Islander parents place high value on a good education and demand success in scholarly pursuits ... to educate oneself is seen as some kind of moral duty by many Pacific Islander parents (p. 35).

Nevertheless this group is seen to have particular views about the type of education their children need and will not necessarily co-operate with schools which do not conform to these views. If that is the case,

... they will not give any scheme, such as programs for gifted students, their blessing. And the students themselves through loyalty to the community's adults, will not co-operate with the teachers (Reid, 1989, p. 35).

In addition, it is noted that the concept of giftedness would need to be compatible with the cultural values of this community. Consequently if giftedness as seen as setting one apart from the community it is unlikely to be valued (Reid, 1989). More recently Reid (1992) reported that Pacific Islanders in New Zealand have shown superior talent in areas such as sport and performance in dance and song.
Gauci comments that

within a multicultural society such as Australia, where there is a plurality of cultural mores, it is reasonable to expect different notions of gifts and talents to exist (Gauci, 1988, p. 41).

Research indicates that teachers may often have poor knowledge of their students' cultural background. This review indicates that there is little information on the gifts and talents valued by the minority groups such as ATSI, Arabic speaking background or Pacific Islanders within the Australian population and that there is a need for further research. Each of the three minority groups has been shown to value academic giftedness and talent in addition to a range of attitudinal and behavioural characteristics. This common ground is significant and indicates that it may be possible to identify characteristics of giftedness and talent that are applicable across cultural groups.

Identification issues for gifted and talented students from culturally diverse minority groups

The concept of giftedness and talent is at the heart of any identification strategy. The importance of that concept cannot be underestimated, as it provides the direction for the selection and use of identification techniques and for the design of special provisions and differentiated curricula. Identification techniques in turn will impact on what is perceived as gifted and talented behaviour. This part examines the research suggesting a cultural concept of giftedness and talent. This is followed by a review of the literature investigating identification strategies appropriate for gifted and talented minority students.
Gallagher (1964, p. 1) argued that the definition of giftedness is culture bound. Cultural norms may affect the areas in which gifted students will achieve. These norms may include the degree of acceptance placed on achievement and non-acceptance of solitary work. Rejection of these norms may result in lack of social acceptance by the student's peers and family. Sternberg and Arroyo (1993) claim that the development of intelligence is context dependent and that the school context frequently does not allow the child to manifest particular behaviour particularly if the school emphasises academic aspects and the child comes from a background which emphasises the social aspects of intelligence.

Feldhusen (1994, p. 11) maintains that current identification procedures within the US favour particular groups and disadvantage others. He suggests that schools should abandon their traditional definitions of giftedness, which favour select sub groups, and instead focus on identifying and nurturing the special talents of all of their students. This view is supported by Lally and La Brant (1951) who observe that traditionally schools have been concerned with academic subjects. Subsequently, "the search for gifted children has usually discovered the brilliant student in such areas" (Passow, 1981, p. 6). Many schools still seek and find academic gifts and talents. This focus has direct implications to the social construction of giftedness and talent.

Much of the research (e.g. Mitchell, 1988) is critical of educators and administrators for not making sufficient attempts to ensure that students are included in gifted programs when they do not have the necessary criteria to gain entry through conventional identification procedures such as IQ and standardized test scores. Masten (1985) conducted a literature review on gifted minority assessment techniques and found that narrow definition of
giftedness existed. The assessment of giftedness in minority groups was still frequently limited to academic performance, creativity or intellectual ability. He suggests that instead the cultural strengths of minority groups should be identified and used within gifted and talented assessment procedures. This concept is further developed by Keats who argues that

It would be worthwhile to work out to what degree there is a common core of expectations shared by the minorities and the major group and on what important characteristics of intellectual functioning there are striking differences (Keats, 1998 in Davidson, p. 420).

Such an approach may have a stronger chance of being adopted by educators, since there would be no need to use additional special identification provisions for selected groups. This view is consistent with the assumption throughout the literature that an understanding and an awareness of cultural diversity will assist in the identification of gifted minority students (Masten, p. 84). These characteristics of behaviour indicating giftedness and behaviour across cultures could consequently be used as one of a range of identification strategies. This stance has been adopted by a number of researchers who have developed lists of behaviours that describe how such characteristics may be observed in specific cultural groups. In traditional African society for example such characteristics would include;

- a quick wit, wisdom, humor, an active, dynamic disposition, leadership, linguistic excellence, one who knows everything, and one who is good with his hands round the house (Taylor, 1993, in Passow, Monks & Heller, (eds) p. 839).

A list of the most common descriptors for children affected by cultural diversity, socio-economic deprivation and geographic isolation has been developed by Baldwin (1991). Some of these descriptors include: "loyalty to peer group", "..."
"language rich in imagery and humour, rich with symbolism; persuasive language", logical reasoning: planning ability and pragmatic problem solving ability", "creative ability" and "social intelligence and feeling of responsibility for the community, rebellious regarding inequities" (Baldwin, 1991, in Colangelo & Davis, pp. 420-1). In an Australian context Harslett (1993) suggested the following definition of gifted Aboriginal students:

Gifted Aboriginal students are those who consistently excel, or show the potential to excel, beyond their age and expectation of their cultural community in intellectual ability, social helping and leadership skills, sporting ability, artistic ability and those attributes which the culture may deem important to the well being of its members (Harslett, 1993, p. 322).

Although gifted and talented children may be described from a variety of backgrounds there are clearly many common characteristics.

Frasier (1991) notes that there are also traits which appear common to gifted and talented children regardless of their cultural background. These include the ability to

(a) meaningfully manipulate some symbol system held valuable in the subculture; (b) think logically, given appropriate data; (c) use stored knowledge to solve problems; (d) reason by analogy; and (e) extend or extrapolate knowledge to new situations or unique applications (Frasier, 1991a, p. 237).

Frasier (1991a, p. 238) explains that an identification paradigm needs to be developed that will identify both the children who are currently not being identified and those who are being identified. Research findings concerning characteristics of giftedness relevant to children from a variety of minority groups would provide invaluable information for teachers and parents to better
recognise and provide for these students (Gibson, 1997, in Knight & Bailey, (Eds.), p. 22).

The work of Frasier (1992) aims to document the characteristics of gifted economically disadvantaged and limited English proficiency students in order to develop appropriate identification practices for such students. Case studies were developed using children from African-American, Native American, Native Hawaiian, Native Alaskan, Hispanic and low socio-economic backgrounds. These children were identified as bright by collaborative researchers though not currently in a gifted program. From this research a construct of giftedness was developed consisting of ten attributes appropriate for students across cultural groups. The ten attributes are:

<table>
<thead>
<tr>
<th>Motivation</th>
<th>evidence of desire to learn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interests</td>
<td>intense (sometimes unusual) interests</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>highly expressive (with words, numbers or symbols)</td>
</tr>
<tr>
<td>Problem Solving Ability</td>
<td>effective (often inventive) strategies for recognizing and solving problems</td>
</tr>
<tr>
<td>Memory</td>
<td>large storehouse of information (on school or non-school topics)</td>
</tr>
<tr>
<td>Inquiry</td>
<td>questions, experiments, explores</td>
</tr>
<tr>
<td>Insight</td>
<td>quickly grasps new concepts and makes connections; sense of deeper meanings</td>
</tr>
<tr>
<td>Reasoning</td>
<td>logical approaches to figuring out solutions</td>
</tr>
<tr>
<td>Imagination/Creativity</td>
<td>produces many ideas; highly original</td>
</tr>
<tr>
<td>Humor</td>
<td>conveys and picks up on humor</td>
</tr>
</tbody>
</table>
The ten traits, aptitudes and behaviours contain in essence most of the characteristics of gifted children generally and of specific minority groups. In addition these TABs (talents, aptitudes, behaviours) appear to be based on the largest number of minority groups found in the literature.

Frasier's model, the Frasier Talent Assessment Profile (F-TAP) can be used in the initial phase of an identification program to assist teachers in their observation of students as they look for traits, aptitudes and behaviours, referred to as TABS, exhibited by students which may indicate giftedness.

The TABs form the basis of the Panning for Gold Observation Sheet that can be used by the classroom teacher to record observations. It is to be used in conjunction with documentation of demographic data, professional recommendations, identification information and an educational plan for the student.

Frasier's model is a complete identification package which takes into account best practice in including a broad conception of giftedness embracing cultural values and a variety of identification techniques. The model not only covers identification but also includes an educational plan for the student based on the data obtained in the assessment phase. This phase includes input from teachers, administrators, students and parents. The model involves whole school commitment with whole school staff development.

Gibson (1994) sought to contribute to the improvement of current procedures used to identify gifted minority children, particularly Aboriginal gifted children. She used Frasier's findings as the basic design model for her research. Both
interviews and a state-wide survey of Aboriginal teachers and community members were conducted to gain information on how giftedness was perceived by Aboriginal community members and whether they would support the attributes listed in Frasier's TABs.

Gibson found that all of the TABs to some extent were perceived as appropriate indicators of giftedness by Aboriginal teachers and parents. The attributes of imagination/creativity, humour and inquiry did not appear to play as important a role as the other attributes in the identification of giftedness in Aboriginal children (Gibson, 1997, p. 265). From her findings Gibson proposed an additional category of inter/intra personal skills. This new attribute and the attribute of motivation are indicated as having the most significance as indicators of giftedness in urban Aboriginal children.

The Frasier and Gibson models do not attempt to impose an identification tool on a community. Rather they have adapted a tool to suit the values and talents shared by a range of communities or in the case of Gibson, specific to a particular community.

More research is needed in Australia to investigate the characteristics of gifted minority children and to investigate the appropriateness of models such as Frasier's model to an Australian context.

The review indicates that cultural diversity results in differences in behaviours indicative of giftedness and talent. Therefore it appears imperative that cultural influences on giftedness are taken into account in both defining and identifying giftedness and talent. Such knowledge will have the benefit of encouraging a more culturally sensitive approach to identification and curriculum development for minority children.
It is not within the scope of this part to review all the guidelines or strategies appropriate to the identification of culturally gifted students. The intention has been to highlight the literature supporting a cultural concept of giftedness and talent which, in turn, has direct implications for appropriate identification options. Identification issues are however, addressed in the last section of this review dealing with strategies to redress the under-representation of gifted and talented minority groups.

Teacher and minority group awareness of gifted and talented policy and available provisions for gifted and talented students

The research in this area of gifted education is extremely limited. An Australian study surveying over 600 regular primary classroom teachers of Years Three and Four across NSW found that

there was a high percentage of teachers who had no knowledge of current practices or options available for gifted students within their school or region (Whitton, 1995, p. 2).

In Whitton’s study teachers from State and non-State schools frequently indicated that they were unaware of particular issues relating to their school and Region. It was noted that although a new gifted and talented policy mandated the provision of differentiated services and practices by classroom teachers for identified gifted and talented students in 1991, there had been no follow up research to address the extent to which these services were actually provided for in classrooms across NSW.

Awareness of available provisions is reported in a research project from South Florida, where parents of “culturally different” children were unaware of educational opportunities in the school, and of new programs which were
advertised in their local papers. The majority of the homes did not take a daily newspaper (Howells, 1998). Furthermore, an investigation of the reason for under-representation of "culturally different" students in gifted and talented programs found that

parents of these children were not aware of gifted programs and their children's academic needs (Howells, 1998, p. 33).

From these studies it is indicated that teachers in NSW schools may have little awareness of policy or provisions available for gifted and talented students. In addition, it can be seen that the mode of communicating with parents is important for increasing awareness and redressing the imbalance of minority students in gifted programs.

**Inappropriateness of gifted and talented programs to minority students**

The inappropriateness of gifted and talented programs for minority groups is cited as a reason for the under-representation of minority students (e.g. Maker, 1989; McInerney, 1989). Some authors maintain that many programs are inappropriate because they do not complement the values or attributes of minority communities. Further, there is a concern that the curriculum and teaching strategies may have no relevance to these communities.

The cultural sensitivity of provisions is highlighted in the research. Daniels (1988) in reference to provisions for American Indians maintains that

Paramount to appropriate programming for the gifted American Indian student is for teachers to have indepth knowledge of the Indian
community and culture and be trained in education of the gifted (p. 442).

Kitano (1991) in contrast argues that the research should not be concentrating on differences in cultural variables but within group variability or diversity. A combination of these approaches, looking at the big picture, that is the values and learning styles of minority communities, but still focusing on the individual needs of the child may be the most practical solution. Baldwin (1991 in Colangelo & Davis) supports this view. She claims that it is important for teachers to be knowledgeable of cultural experiences or experiences that might affect the students' cognitive approach however she states that

In America, ethnic or culturally minority students should be helped to master styles of the Euro-American culture as well as those of their respective cultures (Baldwin, in Colangelo & Davis 1991, p. 424).

This is a significant point. An educational provision may become inappropriate for fostering the student's future success after school if teachers only use the students' perceived learning style and/or a curriculum based solely on the student's culture.

It can be dangerous to stereotype groups of people but also inconsiderate not to respect or be sensitive to the valued or expected behaviour of individual cultures. Maker (1989) argues that provisions must be perceived as appropriate by families and students. Accordingly they must take into account cultural, economic and linguistic characteristics of the community, however, she also highlights the need for programs and services suiting the needs of the individual child (Maker, 1989).

Patton, Prillaman and Van Tassel-Baska (1990) found in their study of programs for gifted, disadvantaged students in the US that 79% of the 50
states did not differentiate programs or services for this population. Kitano (1991) claims that this represents an assimilation perspective at the state level. There is an underlying theme in the research that

we must also assess the premise that differentiated programming for these students will be required in order to meet differential needs. (Patton, Prillaman & Van Tassel-Baska, 1990, p. 45).

or the provisions will be inappropriate.

An investigation into the under-representation of gifted minority students in Palm Beach County, Florida found that parents were not nominating their children as they perceived places were only going to white, middle class children (McIntosh, 1995). Such perceptions put a different slant onto the issue of inappropriateness of programs. Here there is a clear case of parents feeling that educational personnel believe such programs are inappropriate for minority students.

There is a limited but emerging Australian research on the appropriateness of available provisions to gifted and talented Aboriginal students. Crawford (1993) notes that in some instances it is perceived as “shame” for Aboriginal students to be singled out for different provisions. As Lee further explains,

Aborigines value group membership. Therefore they are offended by being singled out, either praise or blame. Shame is a most powerful personal emotion involving embarrassment, disgrace and humiliation (Lee, 1993, p. 26).

Gibson further explains that the individual who strives for personal advancement becomes a threat to the group as a whole. Consequently,
some pupils who have the capacity for academic success at school find their parents, their siblings and particularly their peer group give them little or no encouragement (Gibson, 1993, p. 38).

McInerney (1989) conducted a study investigating Aboriginal parents’ views on education. When asked the question, “What’s bad about education for your children?” 18% of Aboriginal parents surveyed felt that it was inappropriate to their children. Inappropriate teaching techniques and curricula were the major concerns for respondents. In another question parents were asked what happened if their child did well at school. Twenty six percent of parents mentioned negative consequences of this. Responses included:

if they do well they are at risk of losing their mates. They are classified as high and mighty, trying to be goodie goodie (McInerney, 1989, p. 50).

It was noted that such students received no praise from the school for good performance. Indeed such performance was generally ignored by all including their family.

In contrast to the research findings above, Aboriginal parents have also been found to be supportive of special provisions. An Australian project investigated the way in which the Balga Primary Extension and Challenge Centre (PEAC) catered for urban Aboriginal children found that parents were most enthusiastic about the program which provided an enriched and extended curriculum for gifted students (Fletcher, Gatti & Michael, 1985). The centre’s program was designed around Aboriginal culture, heritage, art and local history. Significantly

These units were followed by an experimental program in computers and electronics which permitted Aboriginal children to excel in individual areas of competence without violating group norms. The
result was a sudden fall in truancy rates, a rise in interest, an active participation in school life ... (Braggett, 1985, pp. 309-10).

The success of this provision supports Harslett’s view that

provision must be made for the gifts and talents of Aboriginal students to be developed within both Aboriginal and the majority culture domains (Harslett, 1993, p. 349).

These findings are not unique to the Aboriginal community. Olszewski-Kubilius and Scott (1992, p. 142) note that

peer rejection often experienced by gifted students can be even more intense for gifted minority youngsters.

Silverman also notes the difficulty for gifted students “... in cultures that value sameness” (1995, p. 1). It is further noted that such students may fear the impending isolation from their family and peers as a consequence of academic success and choices of college and career options. Woliver and Woliver (1991 in Birdy & Genshaft (eds)) note that Hawaiian students who behave more individually and independently at school are chastised by their families for drawing attention to themselves. Consequently students are forced to make a choice between the support of the home or the school.

A sense of shame at being singled out is also present in Maori communities. Reid (1993, p. 251 in Wallace & Adams) refers to the concept of “whakama” which is equivalent to embarrassment, alienation or shame, and which may prevent students self nominating or participating in gifted programs. He notes that similar concepts are found throughout the South Pacific and are generally referred to as “ma”.

Minority Students and Gifted and Talented Programs:  Page 60
The literature suggests a variety of reasons for the perceived inappropriateness of available provisions for gifted and talented minority students. These include curricula that do not take into account the learning style or cultural background of students, "shame" at being singled out for special provision, and inappropriate teaching techniques.

**Strategies to address the under-inclusion of students from culturally diverse minority groups**

A variety of strategies have been proposed to redress the under-inclusion of minority and disadvantaged students in gifted and talented programs. In particular, the literature highlights the importance of school and community partnerships, teacher training in a range of areas including giftedness and talent and appropriate identification strategies. Each of these is outlined briefly below. The importance of a cultural conception of giftedness and talent is emphasised.

**The role of the family and the community**

The importance of the family and the community in the developing and nurturing of talent so that it can reach the highest level possible is well supported in the literature (Feldhusen, 1994; Harslett, 1993; Vialle, 1995).

The training of parents was seen as an essential component of Project Step Up (McIntosh, 1995) which provided parent seminars in critical and creative thinking, communication skills and the improving of self concept. Several of these seminars were presented as interactive workshops with children and family members working together. Home-based activities for parents and children were also provided. Effective communication was a major focus of
the project, using interpreters and translated newsletters where appropriate. Such training not only helped parents to understanding the nature of the gifted program, it also empowered them to assist their child at home (Smith, 1993). It has been shown (Cropper, 1998) that when parents are involved with the school in this way there is a significant impact on the self-esteem and motivation of students. One of the consequences is that students' academic scores improve.

Flinders and Lewis (1994) point out that promoting parent involvement promotes school success. They explain that lack of representation of parents from socially diverse groups is sometimes based on the deficit model. Parents are more likely to become involved in the school if they see themselves as needed participants who can present a view of their history and culture which is not usually presented at school (Flinders & Lewis, 1994, p. 52). It is suggested that

The minority gifted child therefore must be made to feel that his family, culture, and experiences are worthwhile (Cropper, 1989, p. 21).

With parent involvement a continuity is developed between the home and the school. One way of facilitating this continuity is to provide parent awareness and training in available school provisions or in ways in which they can assist their children at home. Another is to encourage parent partnerships with the school. Parents can play an active role in the identification of gifts and talents in their child by providing information about the child's strengths and learning styles (McIntosh, 1995). Parents see a side of their child not always available to educators. Indeed, Gross (1994) argues that parents are more successful in identifying giftedness in children than are classroom teachers. This information could be relayed in a number of ways including the ranking of
indicators of giftedness or supplying portfolios of their child's work (Strom, Johnson, Strom, 1990). Further to involve parents teachers need to ensure that students have a curriculum they perceive as appropriate. McIntosh (1995, p. 29) suggests activities such as the creation of folktales from the families' native countries or posters promoting the native country. These experiences will have a dual consequence of building on the home lives and experiences of the children and increasing positive family perceptions of provisions at school.

Passow (1995, p. 53) highlights that minority communities often have people with areas of specialised talent "far beyond the expertise that the school can provide." This could occur particularly in groups with a strong cultural focus. Parents and community members may act as teachers to whole classes or as mentors to individuals or small groups. In addition, they can assist in the development and evaluation of materials for use in the classroom. This concept of school/community partnerships is strongly advocated by writers who suggest that greater use be made of available community resources (Baldwin, 1987; Van Tassel-Baska, 1989; Whitton, 1995). Community involvement in shaping the school curriculum is advocated by Harslett, who states that

programs must be planned and validated by the cultural community and the opportunity should exist for the community to interact with these programs (Harslett, 1993, p. 349).

He further argues that the curriculum should contain material that is relevant to the cultural background of the student. Accordingly the curriculum will need to be differentiated to cater for different students' needs. By involving the community with the school to run or assist in programs and their development, real partnerships may be formed with community members feeling that they are valued and needed in the school. This is essential when the role of the
family is examined in the light of its role in developing the child, "... their self concept, values, attitudes, motivations, interests and commitments" (Passow, 1994, p. 6).

The role of the classroom teacher

Classroom teachers' awareness of the norms of their students' cultures is an important key not only in observing potential but also in providing opportunities for potential to be observed. Minority groups value talents that may be different from those valued by the dominant culture. It is therefore important for teachers to become familiar with the cultural attributes of giftedness which will be valued and relevant in different cultural contexts (Gibson, 1997).

Research has shown links between conceptualisations of giftedness and the under-representation of minority students (Harslett, 1993). Studies have shown that educators have "negative stereotypes and inaccurate perceptions of the abilities of children from ethnic, cultural, and linguistic minority groups" (Maker, 1996, p. 43). These views in turn affect teacher expectation and consequently student performance. As Kearins points out in her research with the Aboriginal community,

Children don't need to be told they are considered unintelligent or ill informed if, for eg, the teacher is clearly surprised at their ignorance of their own birth dates — or at anything else she considers "normal" but which is only so within her own culture (Kearins, 1982, p. 60).

Kearins explains that such teachers are unlikely to ask for these childrens' other knowledge or interests which lie outside their own cultural knowledge.
Consequently only the relative ignorance of these children may be revealed. This issue is further discussed by Gibson, who suggests that teachers cannot be blamed for a lack of specific cultural knowledge about all of their culturally different children (Gibson, 1993, p. 47).

However, he argues that teacher education needs to deal with the issues of culture and its effect on students' learning styles, relating, perceiving and valuing.

Teacher expectations and negative attitudes towards some culturally diverse students is another important issue. When Aboriginal parents were asked for suggestions as to why many Aboriginal children were not doing well at school, responses related to

low self esteem due to lack of positive attitudes of white teachers. They are often continually told that they are black therefore will only be suitable for labouring type jobs (McInerney, 1989, p. 55).

In the same study, 26% of parents surveyed indicated negative consequences of their children doing well at school. Among the reasons given were little or no praise or support despite good school performance, and the ridicule of the individual by peers. Fifty one percent of parents suggested that teachers should use encouragement and recognition of good work to increase student performance. There are two issues here. The first is lack of teacher recognition based on the students' background, the second is the difficulty of students excelling and maintaining community acceptance. Teachers need to be made aware of the values of various cultural groups which may not approve of individuals drawing attention to themselves. Student ridicule could be avoided by using both a range of assessment procedures and methods of communicating assessment marks. The importance of teacher attitudes,
stereotypes and expectations on student behaviour and performance is critical. It is, however, difficult for teachers to foster the learning of students whom they do not understand (Guider, 1991). There appears to be a need for teacher training in this area.

Teacher attitudes may need to be changed and accompanied by appropriate classroom practices and selection techniques. In regard to teaching strategies, Maker (1996) also emphasises that students need access to "rich and varied curriculum opportunities" (p. 41). It is important that students are also given enrichment activities which cater for their preferred learning style. Indeed,

it is the quality of the provision that will facilitate the emergence, identification and nurturing of gifted children (Harslett, 1993, p. 347).

The literature also suggests that untrained teachers are not reliable judges of giftedness and talent (Frasier, 1997; Gear, 1976).

They are frequently found to choose conforming children of whom (at the secondary level) many may be boys, and to judge the aspects of performance that reflect their own values (Braggett, 1985, p. 320).

Teacher reliability is seen to decrease further in relation to identifying students from culturally and linguistically diverse backgrounds (Hadaway & Marek-Schroer, 1992). The issue of identification is discussed in more detail in the next section. However, the literature (Baldwin, 1994; Frasier, 1993) would suggest that teachers should use a range of strategies when identifying giftedness and talent.

In Australia it is not a prerequisite to complete a gifted education component as part of pre-service training, and consequently teachers may not have the
skills to identify non academic gifts. The importance of teacher training is highlighted in the research, both for identification and provision within the classroom. There is a need for teachers to be trained in a number of aspects such as conceptions of giftedness, identification strategies, teaching strategies and awareness of policy and provisions (Harslett, 1993; Whitton, 1995). It is recognised (Maker, 1996; Whitton, 1995) that teachers may have little understanding of state policies or access to appropriate resources. These are areas that teachers clearly need training in.

**Identification techniques for gifted and talented students**

**Multiple identification tools**

Current research indicates that it is valuable to use a variety of data and sources, when identifying gifted and talented students (Passow, 1981; Richert, 1987). Once this is done, however, the highest peak of the individual's functioning is a better indicator of potential than the highest abilities sustained over a period of time (Wallace & Adams, 1993). This line of argument clearly links performance with potential and would appear to have a much stronger chance of identifying the underachiever or a child from a culturally diverse background.

The use of IQ tests is often strongly debated in the identification of students not from the dominant culture. The validity or variety of IQ tests will not be examined in detail in this review, since there is agreement in the literature that like any other identification strategy it should not be used as the sole source of identification (Brown, 1997; Frasier, 1991a; Vialle, 1995).
The use of multiple criteria is integral to successful identification, particularly criteria which are not based on IQ testing. There is a growing evidence in the research that students admitted to gifted programs by multiple criteria match the performance of students chosen by traditional means (Baldwin, 1994; Passow & Frasier, 1994). Teacher nominations and tests are not highly supported in the literature as a means of identifying students unless teachers have been appropriately trained. Negative expectations can be a major hindrance in identifying giftedness and talent (Maker, 1996). It has been noted that there is a persistent attitude that giftedness cannot be found in some groups (Frasier, 1989).

Frasier (1997, in Colangelo & Davis) explains that such generalisations often stem from indiscriminately characterising all members of particular groups with the characteristics of its least performing members. This can result in a self-fulfilling prophecy, where teachers expecting low performance will receive it (Malin, 1989). The identification of gifted and talented students is inextricably linked with the definitions and conceptions of giftedness and talent in use. It is therefore essential to broaden the concepts of giftedness in culturally diverse groups (Frasier, 1989; Richert, 1987). Nevertheless it is also important to recognise diversity within cultural groups and to identify children on individual strengths.

Borland and Wright (1994) sought to identify economically disadvantaged potentially gifted kindergarten students in urban schools. Their approach particularly emphasised the development of site appropriate methods, observation, dynamic assessment and the concept of best performance. The use of standardised tests was not emphasised. They developed criteria to identify students who were gifted in comparison to their peer group, rather than
by conventional standards. These students were then provided with enrichment opportunities, resulting in vastly superior performance. This concept of an inclusive rather than an exclusive identification process appears critical.

Porter Jatko (1995) used an action research approach, similar in some ways to Borland and Wright's model, to evaluate the effectiveness for economically disadvantaged students of a non-traditional identification technique known as the "whole classroom tryout technique". This technique, designed by Van Tassel-Baska (1989), recommends that all children be allowed to attempt gifted activities within the regular classroom, thus providing all children with an equal opportunity to participate in "gifted like" activities and be judged on performance and criteria directly relating to the gifted program's curriculum. Additional criteria included demonstration of a set of traits or the potential to exhibit these traits by the students. These traits were: alertness, curiosity, initiative, eagerness to do new things, imagination in thinking, flexibility in approach to problems, originality and creativity in thinking, and ability to solve problems by ingenious methods (Porter Jatko, 1995, p. 85).

The simple technique of matching selection criteria to the program's goals or activities appears to have been the crucial link in achieving student success in this program. Braggett (1985, p. 320) claims that

> it is surprising how frequently the identification of gifted students is divorced from program implementation.

The perceived appropriateness of the curriculum may have a significant impact on the opportunity to identify students. In project HUNCHES (Helping to uncover children with exceptional skills) one of the strategies used to increase identity with family groups was to ask students to complete a project based on
interviews on their family heritage (Mitchell, 1998, p. 163). This activity is particularly appropriate for students whose families have a tradition of oral history and who may not be motivated to read to secure further information (Baldwin, 1985, in Horowitz & O'Brien). All students and their families perceived these curriculum activities as culturally appropriate. The increase in student and family self esteem and pride may result in increased student motivation and performance. For a similar reason the use of journals and portfolios is also suggested as one method of identifying gifted minority students because of the longitudinal nature of this work and the opportunity for multiple sources of input (Hadaway & Marek-Schroer, 1992; McIntosh, 1995).

Both educators and non-educators from inside and outside the school, representing different areas of expertise, and who know the child in question should be involved in the identification process. It is advocated that community members participate in setting criteria for the identification at gifted and talented students. It is suggested that parent nominations or checklists are one useful way of obtaining information about out of school behaviour and achievements of all students (Richert, 1987). Currently community perceptions of giftedness and talent are rarely referred to in identification procedures (Masten, 1985). The use of community members in designing attribute lists or alternative ways to identify gifted and talented students from within their culture would be an invaluable tool in the identification process. An added advantage of this school/community partnership is that

as teachers, parents, administrators become involved in the identification process, a strong sense of community and ownership in the program develops (Sisk, 1994, p. 40).
This program ownership will assist in the long term survival of the program and ultimately contribute towards its success.

The use of checklists (Hadaway & Marek-Schroer, 1992) is seen as a starting point to develop awareness among parents and educators of the characteristics that children from culturally diverse backgrounds may demonstrate. These checklists could then be further developed into nomination forms, case studies, vignettes or profiles for further use in parent and teacher training (Frasier, 1987). Such a technique was used in a pilot project initiated in Florida in 1980. Teachers were provided with detailed information on the characteristics of gifted culturally different students. Between 1980 and 1997 there was a steady increase in the number of culturally different students being accepted into that program. From 1990 to 1997 the number of minority enrollments in the program tripled (Howells, 1998, p. 35). Teacher training clearly assisted in making this significant reversal of minority under-representation in gifted and talented programs.

There is a wealth of information indicating that students from minority groups are under-represented in gifted and talented programs. There is a growing interest in the need for a cultural conception of giftedness. In addition the attributes of giftedness valued by minority groups continue to be investigated internationally. However, there is a dearth of information concerning the representation of these groups in gifted and talented provisions in Australia. Australian research investigating the cultural attributes of giftedness and talent is also extremely limited. This study builds on the existing Australian research, investigating the extent to which international research findings about the under-representation of selected minority groups and the proposed reasons are relevant to an Australian context.
The review indicates there is generally little research concerning educators' and their communities' awareness of gifted and talented policy and available provisions for gifted and talented students. Further, little attention has been paid to the knowledge educators and their communities have of each other's awareness of cultural perceptions of giftedness and talent and identification techniques. The literature suggests that one of the causes of under-representation may be the inappropriateness of available gifted and talented provisions to students from culturally diverse groups. This study examines these issues with a view to determining their impact on the under-representation of culturally diverse students in State gifted and talented provisions in NSW.

Conclusion

There is a need for further research to investigate teacher and minority group awareness of current policy and provisions available for gifted and talented students.

There is a dearth of literature examining the attitudes of parents to gifted programs. Research directly ascertaining the attitudes and perceptions of minority communities to existing programs is needed to broaden the investigation of reasons for the under inclusion of gifted minority students.

Teacher experience and perceptions may be a major cause of minority students being unidentified therefore provisions for staff development or meetings with community representatives are accordingly one way to begin school/community discussions about these issues.
A pluralistic, inclusive approach to identification is recommended with the broadest definition of giftedness being used to include a diversity of abilities, not just academic, evidenced by different populations.
chapter three

methodology
The literature review illustrates research documenting and examining the under-representation of minority groups in gifted and talented programs. The review highlights a number of issues to be considered in redressing this imbalance, including (a) the importance of a broad definition of giftedness and talent which incorporates cultural attributes, (b) the use of culture-fair, multiple sourced identification strategies, and (c) the cultural appropriateness of available gifted and talented provisions to minority groups.

In Australia there has been limited research investigating the extent of or reasons for the under-inclusion of minority groups in gifted and talented programs. In addition, there is a dearth of material examining the conceptions of giftedness and talent held by minority groups in Australia.

The purpose of this study is to investigate both the extent to which minority groups are under-represented in State gifted and talented programs in NSW and possible reasons for this phenomenon. In particular, it is hoped that the study will introduce a new dimension to the current research by investigating the knowledge educators and their minority communities have of each other's perceptions of giftedness and talent, and their knowledge of aspects of the current State gifted and talented policy in NSW.

This chapter provides a description of the selection, development and implementation of the research tools used in this study and the procedures used to analyse the data. The introduction provides a framework of the origins
and the history of this research project. The organisation of the research is outlined to show the impact that one stage had on the next. In the subsequent sections, Part One presents information concerning the quantitative data on representation of the target groups in State gifted and talented provisions. Part Two describes the procedures used for the design, implementation and analysis of the teacher, student and parent surveys. It also includes information regarding the research sample for both the surveys and interviews. Part Three outlines the procedures used for the interviews conducted with the target groups.

Origins and history of the project

This research was conducted as part of the 1993/4 National Equity Program for the Schools Gifted and Talented Component funded by DEET. The researcher was employed as the sole project officer by the NSW DSE from April 1994 to April 1995. Permission was obtained from the DSE (Appendix A) and DEET (Appendix B) to use the data collected as part of doctoral studies.

Three groups within the disadvantaged population were selected for the research: ATSI students, Tongan, and Arabic speaking language background students.

The project used a variety of tools to examine a range of questions for the DSE concerning students from the target groups, their schools and communities.

The tasks given to the researcher were to:

1. conduct a literature review on the representation of minority students in gifted and talented programs and on models of support for these
students.

2. collect numerical data on the representation of the target groups in State provisions for gifted and talented students within NSW.

3. select 15 schools, five in each of three regions, with representation of one or more of the target groups, whose staff were willing to participate in the research project, that is, to assist in the selection of interviewees and the distribution and collection of surveys to representatives of the target groups.

4. design interview questions and conduct interviews with students, teachers, ESL/community language teachers and community members from each of the target groups, making a total of 60 interviews.

5. design surveys for distribution to the target groups in each of the fifteen schools.

6. evaluate the information obtained and provide a report containing advice and recommendations.

The researcher met regularly with a steering committee which provided advice and comments on the tools developed by the researcher. This committee was appointed to the researcher by the NSW DSE and included representatives from each of the target groups. The committee consisted of a High School principal (from a school with a high Tongan enrolment and a good rapport with that community), the Chief Education Officer of the Multicultural Education unit, the NSW Senior Adviser Gifted and Talented Students, a Senior Education Officer from the NSW Aboriginal Education Unit, a Pacific Islander Community Liaison Officer and a representative from the Arabic Department of Health.
Tutoring Assistance Program. The researcher was the chairperson of this committee. The committee members provided invaluable insights and recommendations and were of particular assistance because of their knowledge and contacts within the target populations. Reporting and consultation with members of the NSW Equity Programs Unit, the State Gifted and Talented Students Committee and the NSW Disadvantaged Schools Program Committee also took place on a regular basis. In addition, early consultation took place with the President of the NSW Aboriginal Education Consultative Group (AECG) to seek advice and support for the research. This was essential to ensure that Aboriginal parents, students and AEAs would consider involvement in the study. The literature indicates that Aboriginal people are concerned about the amount and type of research being carried out in Aboriginal communities. More specifically,

Aboriginal parents are also concerned about the research that is currently being undertaken by non-Aboriginal people without collaboration with Aboriginal people (Ludwig, 1988, p. 108 in Davidson).

It was essential for the researcher to observe correct protocol with all of the groups involved. However, only the Aboriginal people had a representative organisation from which to seek guidance and support.

Demographic Information

As the demographic information applies to the quantitative data, the surveys and interviews, it is described here to avoid repetition.

In 1994 there were major concentrations of ATSI, Tongan, and Arabic speaking communities in three of the ten DSE regions. There were approximately
18,000 ATSI, 21,000 Arabic speaking background and 4,500 Tongan students in these populations in schools.

Students belonging to the latter two groups were nominated by the DSE as a significant population to investigate and were selected as sample cultural groups within the category of "language background other than English". These two groups presented as concentrations of students with access to a range of cultural and community activities. Particular reference was made to the Tongan community because it was a relatively new immigrant group to Australia. During the course of the project it was decided to expand this group to the Pacific Islander population, since that was the category under which the DSE collected statistical data. In other words, information was not available specifically for the Tongan population. The Arabic speaking background group, in contrast, was a larger, generally more established group.

Population validity, "the extent to which one can generalise from the experimental sample, to a defined population" was an external threat to the study (Borg & Gall, 1989). It was therefore considered significant to include schools from both urban and more isolated areas. The literature indicates particularly that variability occurs across different Aboriginal populations. It is suggested that research carried out in one community may have no bearing on the context of another community...Although many Aborigines may share many of the same experiences, there is a diversity amongst the different cultures. Each Aboriginal community is unique in itself. Remote Aboriginal communities are very different to urban to rural. Researchers cannot generalise across Aboriginal communities the findings from undertaking research in one community (Cutmore, Mathews, Howard, Ferguson, & Stephens, 1997, p. 19).
People from a variety of Aboriginal communities were interviewed and surveyed in this study, but there were no representatives from traditional communities. It was decided to include a sample of students from rural settings in the research, and consequently two of the schools chosen were Country Area Programs (CAP) schools. This study cannot represent the views of all Aboriginal, Arabic speaking background or Pacific Islander groups. However it does provide a variety of community viewpoints from within these populations within NSW.

Schools were not chosen at random, but were invited to participate because they were known to contain a sizable representation of one or more of the target groups. Additional information about the research subjects is provided in Part Two.

**Part One: Quantitative data**

**Representation of the Target Groups in State Provisions for Gifted and Talented Students**

1992, 1993 and 1994 Year Seven students in NSW Selective, Agricultural High schools as well as the 1994 populations of Year Five OC classes and the Sydney Metropolitan Mentor Links Program were used to provide baseline data about participation levels of the target groups in State gifted and talented programs. These data were gathered to address the research question:

To what extent are students from Aboriginal and Torres Strait Islander, Arabic speaking and Pacific Islander communities under-represented in NSW DSE gifted and talented programs?
Selective High Schools and Agricultural High Schools

This study targeted primary school students, their families and educators. As Year Six students are eligible to apply for entry to Selective and Agricultural High Schools the enrolment figures for entry to these schools in Year Seven is significant. Year Seven enrolment figures were chosen because the information was easily accessible and more reliable than the incomplete figures available regarding Year Six acceptance of places.

Information about Selective and Agricultural High School Year Seven enrolments was obtained from DSE Management Information Services Mid Year Censuses conducted in July each year.

Performing Arts and Sports High Schools

The initial data obtained on Year Seven enrolments in Selective and Agricultural High Schools indicated that the target groups were underrepresented in these provisions. Personnel within the State office of the DSE suggested that the target groups may be better represented in Performing Arts and Sports High Schools, which were perceived to emphasise attributes which were more highly valued by the target groups. Information on Year Seven Performing Arts and Sports High Schools was subsequently obtained to investigate whether or not the target groups would be better represented in these schools.

The expected representation for each target group in these provisions was estimated by first establishing the overall percentage of Year Seven students each year enrolled in these schools. It was considered reasonable to assume that approximately the same percentage of the Year Seven target group population might be enrolled in these schools. This process was also used to
estimate the expected representation of the target group in OC classes and the Mentor Program.

The data on Year Seven enrolments in these schools clearly illustrated the under-representation of the target groups. The available data did not indicate how many students from the target groups had applied for selection but were not successful. Further, it was possible that these groups did not favour such provisions. It was therefore considered essential to ascertain first whether students and their parents were aware of those provisions and secondly whether they approved of them.

**OC Classes**

The researcher was directed to approach each of the regions for information regarding enrolments in OC classes. At the time of this research all regions had OC classes. These classes which were called a variety of names including Gifted and Talented Students (GATS) classes and Academic Extension classes. They were organised by the region and were not the responsibility of State Office. Selection procedures for these classes varied across regions. The provision of OC classes was often a sensitive issue because of the time and cost involved in testing students and the perceived lack of support from the DSE State Office in terms of funding and personnel.

Data on OC enrolments were obtained from the Hunter and Metropolitan North Regions. It was not possible to obtain data from other regions because of sensitivity concerning this data. Information was available under the categories of NESB and ATSI only. No further breakdown by target group was available.

The available data indicated that ATSI students were under-represented in
these provisions. Consequently it was decided to investigate reasons for this phenomenon and to also determine the attitudes of the Pacific Islander and Arabic speaking background target groups towards these provisions.

The Mentor Links Program

The data for students participating in the Mentor Links program were supplied by the co-ordinator of the Mentor Program. Information was obtained from the metropolitan regions Metropolitan North, Metropolitan West, Metropolitan South West and Metropolitan East. At the time of this research the Mentor Links program was not State wide and operated in these regions only.

For the purpose of these data, NESB was used to describe students whose parents spoke another language at home. However, it was noted that in only a very few cases was there a total lack of English in one parent and that generally parents were fluent in English, even though it may not have been their first language. It was acknowledged that the data did not accurately reflect home background and that it was not feasible to use the data to reflect a common position for each of the students participating in the program.

The figures provided a record of students who, having been nominated and interviewed, were accepted into the Mentor Links program. They did not indicate whether the students were actually linked with a mentor. In addition, students who were accepted into the program in 1993 may have still been waiting for a link, a relink, or may have been participating in a link at the time the data were collated. Therefore the division of the figures into years was really an artificial construct.

As the available data indicated, there was a small representation of DSP
students, ATSI and non-English speaking background students in the Mentor Links program. It was therefore felt necessary to complement this information with further questions in both interviews and surveys. The small number of students involved in the program correlated with the data from trial surveys which indicated that many teachers were unaware of the existence of the Mentor Links program. However, in the trial surveys the Mentor program was the program viewed most favourably by teachers. The researcher felt that many parents were unaware of the program, and that students of ATSI and non-English speaking background might be particularly interested in a program which fostered individual skills in a way which was culturally favoured and practised by these groups.

Part Two: Surveys

The data on enrolments in State gifted and talented provisions indicated that the target groups, particularly ATSI students, were under-represented in State gifted and talented provisions. However, information was not always available for each of the target groups. In addition, although useful in indicating the extent of under-representation, figures cannot provide any reasons for this under-representation. It was therefore felt necessary to use complementary methods, in this case surveys and interviews, in order to obtain more powerful analyses than could be achieved from each of these methods individually. It was hoped that the use of triangulation would increase the validity and verification of the research analysis by developing a check on the consistency of findings produced by the different data collection methods (Cohen & Manion, 1992), in this case survey questionnaires and interviews. Outlined below are the sample chosen to complete the survey, the purpose of the survey and the
development of the material, as well as the procedures used.

The Sample

Surveys were conducted in the South Coast, Metropolitan East and Metropolitan South West regions of NSW. These areas were selected because of their populations of the target groups. Five schools in each of these regions agreed to become involved after initial contact with the researcher by phone. Schools were selected if they had significant populations of one or more of the target groups. The schools and their representative target group and region are listed in Appendix E. Schools were supplied with relief days to permit teachers to be released for interview and to compensate for the time involved in organising student and parent interviews and distributing and collecting parent, teacher and student surveys. Survey respondents included class teachers, English as a Second Language (ESL) and Community Language Teachers, AEs, after-school Community Language teachers, parents from the target groups who had a child or children in Years Three, Four or Five, and students in Years Three, Four and Five. Teacher respondents in this sample were teaching students in Years Three, Four or Five from one or more of the target groups at the time the research was conducted. Parents and teachers for these particular years were chosen so that the models of support produced by the project might impact on the future decisions regarding these students to nominate or apply for OC classes or Selective High Schools.

Although every effort was made to ensure equal representation of the target groups, representation was affected by a number of factors, including the voluntary nature of the task, the fact that respondents may not have been literate in English or their native language, and possible unwillingness of
teachers to administer the survey to classes which did not contain many students from the target groups. Students surveyed were identified by language, and through an administrative mishap ATSI students could not be identified. Although the number of surveys obtained from the target groups was disproportionate a wealth of data was obtained. This study examines data from 312 surveys. A summary of the number of surveys obtained by target group is provided in Appendix G.

Treatment of subjects was in accordance with the ethical standards of the American Psychological Association.

Materials

There are many advantages in using surveys as a research tool (Cohen & Manion, 1992). The advantage of using a survey method in this study was that it would provide information on the beliefs and attitudes of parents, teachers and students concerning a number of issues. In addition it was seen as an inexpensive, effective way of quickly collecting information from a large number of subjects across several regions in NSW (Cohen & Manion, 1992; Gay, 1990). The survey was also seen as an awareness raising instrument (Gibson, 1997) which could inform teachers and each of the target groups of State gifted and talented provisions.

In a survey all respondents can be asked the same question in an identical way without the threat of bias from interviewer style which may unintentionally encourage or discourage the expression of facts or opinions and/or the distortion of information to please the interviewer (Crowl, 1993; Sattler, 1988). There can also be problems of bias associated with cross-cultural interviewing, as verbal and non-verbal communication may be misinterpreted.
by both interviewer and interviewee (Sattler, 1988). The clarity of questions increases the reliability of the instrument and increases the likelihood of respondents interpreting questions in the same way (Gibson, 1997; Jaeger, 1988). The inclusion of structured questions also allows for statistical analysis, which was considered a useful technique to compare responses between the target groups and groups of parents, teachers and students.

The purpose of the surveys was to research variance in identifying and nurturing giftedness and talent for and among the target groups. The surveys sought to highlight the perceptions of giftedness and talent in the home, school and community settings. Attitudes to and awareness of current models of support were noted, as were suggestions which focused on better outcomes for gifted and talented students. Development of the survey

The survey was developed by the researcher in close liaison with the Steering Committee which included representatives from each of the target groups. This committee considered that the surveys were in a form suitable to elicit information from each of the target groups concerning the research questions.

It was considered essential to keep the survey as clear and succinct as possible. The researcher was well aware that filling out lengthy questionnaires takes a great deal of time and effort, a favour that few senders have any right to expect of strangers (Best & Khan, 1989, p. 181) and consequently the survey was kept to a four page maximum with plenty of white space. English surveys were also available with a Tongan or Arabic translation on the reverse side.

The surveys were trialled at a primary school to ensure the intent, clarity and terminology were clear and that they could be completed in a reasonable time.
frame. The trial sample consisted of eleven teachers: six classroom teachers, three ESL teachers, one community language teacher and one literacy/numeracy teacher. Respondents in this sample taught Aboriginal, Tongan, or socio-economically disadvantaged students, or a combination of these groups. Results from the survey indicated that its intentions were clear and that it could be completed in between fifteen and thirty minutes. This was considered a reasonable time and therefore no questions were deleted. Minor changes to wording were made and suggestions for a due date at the end of the survey were included. As the information collected in this trial was considered valuable it was included as part of the final data collection.

The survey consisted of two parts and an initial "general information" section to establish the background of the person completing the survey. The "general information" section was placed on the front page as it was perceived that people respond best when the initial questions are factual and familiar (Burns, 1995; Cohen & Manion, 1992; Gibson, 1997). Before this was a short section explaining the purpose of the survey and an assurance of confidentiality and anonymity to respondents. The latter was seen as important in increasing the truthfulness of the responses and the percentage of returns (Gay, 1990).

The first part of the survey dealt with definitions and conceptions of giftedness, in addition to identification strategies. The DSE definition was included at the beginning of this section for teachers and parents. Students were given a broad range of examples of areas in which students could be gifted or talented. This section was kept short to maintain respondents’ interest and motivation to complete the survey.

In this section parents were provided with three open ended questions and
one forced answer item. Teachers were asked three open ended questions and two forced answer items. For students this section consisted of two open ended questions and one forced answer item.

The second part of approximately one and a half pages dealt with knowledge of and attitudes to available State gifted and talented provisions. A brief description of each of these provisions was provided at the start of this part. This part also sought respondent knowledge of additional programs and suggestions for alternative programs and activities.

In the second part, parents were given four forced answer items, one of which included a category scale with the choices "good", "excellent," "satisfactory," "poor", "don't know" and "other (please specify)". Six choices were used since an even number of choices forces the respondent away from a neutral or undecided answer (Gibson, 1997). One open ended question was also included. Teachers were asked the same types of question as parents. In view of their age and possible short attention span, students were given fewer items to complete. This section included two, three part forced answer items, an additional forced response question and an open ended question.

At the conclusion of the survey respondents were informed when the survey would be collected and, in the case of students and parents where to return the survey. Teachers and parents were also invited to take part in an interview, and a section was provided for interested respondents to include their contact details.

Questions for teachers, parents and students were the same wherever possible, although the wording was varied to allow for the background of each of these groups. Teachers in some instances were asked additional
questions. The survey questions are outlined here under the headings: Perceptions of giftedness and talent, identification processes, knowledge of available provisions, appropriateness of provisions, and strategies to increase support for and representation of these students in State gifted and talented provisions. The surveys for parents, teachers and students are available in Appendix F.

Perceptions of giftedness and talent

Questions in this category were asked in order to gain data on conceptions of giftedness and talent. By acquiring examples of behaviour indicating giftedness and talent it was hoped to contribute to the current knowledge off the conceptions of giftedness held by minority groups. This data would provide a further opportunity to compare the data from the international research with data from Australian minority groups.

These questions sought to add a new dimension to the literature by investigating the awareness educators and communities had of each other's perceptions of giftedness and talent. It was perceived that any differences in perception could be a contributing factor to the under-representation of the target groups in State gifted and talented provisions.

The questions also allowed for an examination of the perceived appropriateness of the DSE's definition of “gifted” and “talented” to parents in the target groups. The DSE's definition was provided at the top of the page for all groups both in case respondents were unaware of this definition but also because of the importance in defining the significant terms, in this case, “gifted” and “talented,” used throughout the survey (Best & Khan, 1989).
Parent questions

S1 If you think your child is gifted or talented according to the above definitions please list the area/areas

S2 What other special abilities does your child/children have which are not listed here? (e.g. cultural interest, reading maps, ...)

_Do these definitions include the special abilities of your child/children?_

S3 Does the community you belong to value any abilities in children which are not described here?

YES/NO

If yes, please describe these abilities.

S4 What do you think about the Department of School Education's definitions for gifted and talented students?

Teachers

S1 From the students you specified, what percentage would you describe as gifted and/or talented according to the above definitions?

S2 What gifts/talents led you to identify these students?

S3 Do these definitions adequately describe the special abilities of this student population?

YES No DON'T KNOW (Please circle)

If no, please describe the special abilities.

S4 _Does the family or community group of these students value any gifts or_
talents which are not adequately described by the above definitions?

YES NO DON'T KNOW (Please circle)

If yes, please describe what these gifts or talents are.

S5 Please add further comments about these definitions for gifted and talented students as they relate to the specific student group with which you work.

Students

S1 Do you know someone who is gifted or talented according to these definitions

YES NO (Please circle)

What area/s are they gifted or talented in?

S2 What other abilities might gifted or talented students have?

S3 What would your family think "gifted" or "talented" mean?

Identification Processes

The areas of identification and definitions or conceptions of giftedness and talent are interdependent. In this category, teachers were the only respondents to be asked a question. There were also questions for this category in the interview section. Teachers were asked this survey question specifically to see whether they used a variety of strategies to identify giftedness and talent as outlined in the NSW gifted and talented policy and to see if they used different or additional strategies to identify giftedness and talent in students from minority groups. This information could then be used
as a point of comparison with the literature which indicates that inappropriate identification methods are a contributing factor to the under-representation of minority groups in gifted programs and that teachers may not be the most reliable judges when identifying gifted and talented students.

Teachers

S2 What gifts/talents led you to identify these students?

Knowledge of available provisions

The questions in this category sought to determine the awareness of parents, students and their educators in each of the target groups of available State provisions for gifted and talented students. This was done firstly to estimate their knowledge of the gifted and talented policy which outlines these provisions, and also to investigate the extent to which schools communicated this information to their communities.

It was decided to extend this area to knowledge of provisions in general, whether within or outside of the school, to ascertain if there was a difference in their awareness of State, school, regional or community based provisions. The questions on additional provisions could also provide further information on the variety of gifts and talents specifically valued by the target groups.
1) Knowledge of State provisions

Parents

S5 Before this survey were you aware of these programs?

(i) Selective High School YES/NO (Please circle)

(ii) Opportunity classes YES/NO

(iii) Mentor Program YES/NO

Teachers

S7 Were you aware that each of these programs existed?

(i) Selective High School YES/NO (Please circle)

(ii) Opportunity classes YES/NO

(iii) Mentor Program YES/NO

Students

S5 Before this survey did you know these programs existed? YES/NO

(i) Selective High School YES/NO (Please circle)

(ii) Opportunity classes YES/NO

(iii) Mentor Program YES/NO

Why/Why not?
2) **Awareness of Additional Provisions**

**Parents**

S8 Are you aware of any other programs or provisions that are available for your child’s special abilities at their school or at any other centre?

YES/NO (Please circle)

If yes please give examples.

**Teachers**

S9 Are you aware of any programs or activities that are designed to meet the special abilities of these students?

YES/NO (Please circle)

If yes please give examples.

**Students**

S7 Do you know any other programs or provisions that are available for gifted or talented students?

YES NO (Please circle)

If yes please give examples.

**Appropriateness of provisions**

As the quantitative data had already indicated that the target groups were under-represented in State gifted and talented provisions, the questions in this category were perceived as particularly significant to further investigate possible reasons.
The literature indicates that one of the reasons for the under-inclusion of minority students in gifted programs is the perceived inappropriateness of such provisions by their communities. The questions below for students and particularly parents, who were asked to rate their attitude to each of the provisions, were included to determine whether selected minority groups in NSW perceived the provisions to be inappropriate.

The literature indicates that teachers may hold negative attitudes to students from these groups and may not perceive that such students could be gifted. The teacher questions below aimed to assess attitudes to the provisions in general but also specifically to the target group they were teaching.

Parents

S6 Have you nominated or would you nominate your child for any of these programs?

(i) Selective High School YES/NO (Please circle)
(ii) Opportunity classes YES/NO
(iii) Mentor Program YES/NO

Why/Why not?

S7 What do you think about these programs? (Please circle)
<table>
<thead>
<tr>
<th>Selective High Schools</th>
<th>Opportunity Classes</th>
<th>Mentor Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Poor</td>
<td>Poor</td>
<td>Poor</td>
</tr>
<tr>
<td>Don't know</td>
<td>Don't know</td>
<td>Don't know</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>Other (Please specify)</td>
<td>Other (Please specify)</td>
</tr>
</tbody>
</table>

**Teachers**

S6 Have you nominated or would you nominate students in the specified group for any of these programs?

1. **Selective High School**  YES/NO  *(Please circle)*
2. **Opportunity classes**  YES/NO  *(Please circle)*
3. **Mentor Program**  YES/NO  *(Please circle)*

Why/Why not?

S8 What do you think about these programs?

**Students**

S6 Would you like to be nominated for any of these programs?

(i) **Selective High School**  YES/NO
(ii) **Opportunity classes**  YES/NO
(iii) **Mentor Program**  YES/NO
Why/Why not?

Strategies to increase the support for these students their representation in State gifted and talented programs

The final category of questions was included to investigate whether or not the target groups had a preference for a specific type of provision or area of giftedness and talent. This information would be useful in making possible policy recommendations for additional types of provisions available for gifted and talented students.

It was felt that teachers were in a good position to make recommendations which would take into account student learning styles, talents and the values of their community.

Parents

S9 What additional programs or activities do you suggest would cater for your child/children's special abilities?

Teachers

S10 Can you suggest any programs or activities in addition to the three listed above to meet the special abilities of these students?

Students

S8 What other programs or activities do you suggest would help gifted or talented students?
Procedure

Following the trial, surveys were distributed to principals at the fifteen schools. They were asked to distribute the student surveys in class time to three classes from Years Three, Four or Five which contained one or more of the target groups. It was suggested target group students be given surveys to take home for their parents. Some principals chose to hand out surveys to selected parents from the target groups whom they felt would complete the forms. Principals were asked to have the teacher surveys completed by a minimum of three staff members including AEAs and community language teachers who taught Years Three, Four or Five. Respondents therefore did not receive the surveys from the researcher directly. There was the possibility of principal bias in the selection of teachers to complete the surveys (Whitton, 1995); however, in all but two of the fifteen schools, surveys were provided to all teachers of Years Three, Four or Five who had students from the target populations in their classroom.

Surveys were also distributed to Community Liaison Officers of the target groups in three regions, and to teachers at weekend community language schools. Surveys were also given to AEAs to distribute to members of their community. This informal distribution method allowed parents to discuss the content of the survey with the AEA and also to obtain assistance in completing it if necessary.

Appendix F contains the survey forms which were used. As can be seen in Appendix F there were some differences in the survey questions for students, teachers and parents. Questions varied because of the varying experience, expertise and viewpoint of the groups. There was no variation in the questions
asked of different target groups except in the parent surveys.

The issue of non-response was addressed by the use of information at the top of the survey that explained to the respondent the purpose of the research. The researcher was able to address staff meetings at the majority of schools and outline the research purpose in an informal manner.

Confidentiality was emphasised to the respondents; however, completed surveys were returned to the teacher in the case of students and parents and to the principal or nominee in the case of teachers. The steering committee did not feel it was necessary to provide return envelopes and the response rate did not appear to be affected.

Surveys were collected by two methods. They were either mailed to the researcher or where possible collected personally. Surveys were coded to indicate the school and region from which they derived as they were received.

Survey Analysis

Descriptive statistics were calculated for the items in the "general information" section on page one. Blank copies of the parent, teacher and student survey data were used to trial the categorisation process and to check accuracy for all survey questions.

Three hundred and twelve surveys were analysed. Although the surveys were received in bundles by school group, the data were initially sorted according to the target group represented and then by sub group, that is parents, teachers and students. Surveys completed in Tongan or Arabic were translated for the researcher into English onto the original survey.
Some clerical assistance was made available to assist in tallying the closed question responses which were tallied by hand. These were double checked by the researcher. Written comments for parts one and two of the survey were also organised by hand according to the frequency of the given response and the number of respondents making a particular response. For example, in reference to the second part of question S6 “Why/Why not?” of the teacher survey, the draft response categories included elitism, lack of transport, need to cater for whole child, no gifted students, contrary to cultural values, and miscellaneous. These categories were developed from the analysis of the trial surveys and were further developed from the miscellaneous category as more surveys were analysed.

Part Three: Interviews

Interviews were conducted to complement the information obtained from the surveys and quantitative data and to allow further opportunity to draw out more detailed responses to the research questions.

Sample

Interviewees included students in Years Three, Four or Five who were either ATSI or from a Pacific Islander or Arabic speaking background, classroom, ESL and Community Language Teachers, AEA's, after-school Community Language teachers and parents who had a child or children in Years Three, Four or Five. Appendix H contains the interview questions.

Interviewees were selected in a variety of ways. Schools were asked to provide the researcher with up to five teacher interviewees. A selection was
requested of class teachers (from Years Three, Four or Five), in addition to ESL and community language teachers who taught one or more of the target groups. Some parents and teachers nominated themselves for the interviews in the space provided at the end of the survey. These people were contacted by the researcher and an interview organised.

The validity of interviews is highly dependent on the accuracy of the interviewee's information (Bellack & Hersen, 1980). Parent and student interviewees were selected on the basis of their representation of the target group. Parents needed to fit the additional criterion of having a student in Years Three, Four or Five. Students had to be in one of these grades. It was considered reasonable to expect that these students and parents would have a valid perception of their culture's concept of giftedness and talent and attitudes to culturally appropriate provisions for such students. It was also reasonable to assume that they had received information from the school or had some knowledge of State provisions for gifted and talented students. Teachers were selected on the basis of their assumed knowledge of students from one of the target groups.

In some schools all teachers requested to be interviewed and this was done. As parent permission slips had to be completed for the student interviews, schools were asked to send home notes with a selection of students from Years Three, Four and Five in the target populations. In most schools a minimum of three student interviews took place.

**Materials**

It was considered advantageous to conduct face to face interviews for a number of reasons. The degree of cooperation in interviews is generally
higher than in telephone or mail surveys (Jaeger, 1988). In addition the interview is particularly suitable as an instrument for collecting information about people's feelings and beliefs, such as was sought in this study (Fink & Kosecoff, 1985). A survey may have been perceived too formal or as too much work by some respondents, resulting in incomplete and less detailed responses (Gibson, 1997). Further the interview was seen as an opportunity to establish a rapport and accordingly a higher level of motivation among respondents and to ascertain more detailed reasons for responses (Cohen & Manion, 1992).

The interview approach is particularly useful when obtaining responses from people who may otherwise find a written response impossible (Cohen & Manion, 1992). Some of the respondents in this study may not have been literate in their own language and would therefore not have completed the survey in spite of a translation. The interview also allows for the collection of more complex information than might be elicited in a survey (Fink & Kosecoff, 1985). It is noted by some writers that Aboriginal people prefer interviews to surveys. This preference may be attributed to the fact that

many Aboriginal respondents were not used to filling in surveys, have inadequate writing skills and in general do not associate with non-Aboriginal academics (McNerney, 1989, p. 45).

The interviews were consequently viewed both as an opportunity for more in-depth analysis and as data which could complement the information collected in the surveys. Further, the researcher was not restricted by the time or cost of face to face interviews, because the project included funding for the carrying out of research across schools over a large geographic area.

The interviews were piloted by four classroom teachers in one school to check
the clarity of the questions. Time did not permit further trialling. All the interview questions were further piloted by members of the steering committee and members of the Equity Programs Unit where the researcher was located.

All interviews were conducted by the researcher, sometimes with the assistance of an interpreter. The interviews were structured and the order of questions asked within each subgroup was identical. It was anticipated that this would provide greater validity in comparing the responses of interviewees both by target population and by sub-group. Nevertheless the interviewer did probe for further detail and clarity where necessary.

There are disadvantages in using the interview technique. It generally will involve smaller samples because of the time and cost involved in conducting interviews (Gay, 1990). This was not thought to be a disadvantage in this study as the interviews were not the sole source of information.

Direct interviewer/interviewee contact may result in bias from reactions to questions or responses (Gay, 1990). It was important, therefore, to maintain a neutral stance as an interviewer and not to appear to lead the interviewee in their responses (Brenner, 1987). The researcher was also aware of the importance of providing time at the end of each question for the respondent to reflect, add to or further consider questions. The final question was deliberately open to ensure that participants had sufficient opportunity to add to, reconsider or further reflect on their responses.

It is considered advisable in most cases to record interviews. This allows the interviewer more time to think forward to the next question and listen attentively to the interviewee’s response (Brenner, 1987; Jaeger, 1988). However, in the interest of making the interviewees as comfortable as possible the interviews
were not recorded (Burns, 1990). It was hoped that this arrangement would increase the truthfulness of interviewee responses.

Interview questions for teachers, parents and students were the same wherever possible, although the wording was varied to allow for the background of each of these groups. For example in question 2 parents were asked:

When your child's school or teacher is identifying gifted and talented students, what qualities do you think they are looking for? (Appendix H)

In contrast, interview question 2, for teachers was,

Could you describe some of the different interpretations you think your students’ parents might have of the words ‘gifted’ and ‘talented’? (Appendix H)

Teachers in some instances were asked additional questions. The interview questions are outlined here under the headings of perceptions of giftedness and talent, identification processes, knowledge of available provisions, appropriateness of provisions, and strategies to increase support for and representation of these students in State gifted and talented provisions. The interviews for parents, teachers and students are available in Appendix H.

Perceptions of Giftedness and Talent

Questions in this category were asked in order to gain information about conceptions of giftedness and talent. By acquiring examples of behaviour indicating giftedness and talent and comparing them to the survey responses it was hoped to contribute to current knowledge concerning the conceptions of
giftedness held by minority groups. These data would provide a further opportunity to compare the findings from the international research with these from Australian minority groups.

The uniformity of questions in the interviews for each of the target groups and sub-groups allowed for differences and similarities in conceptions of giftedness and talent to be examined. Both differences and similarities in conceptions were seen as essential information for further teacher development and parent information in this area.

These questions sought to add more detailed responses than possible in a survey about the awareness educators and communities had of each other’s perceptions of giftedness and talents. All the questions in this section were open ended with the exception of question 6 for students which also included a request for the response to be explained.

Parents

1. The Department of School Education is interested in analysing the differences between teachers', parents' and students' perceptions of giftedness and talent.

   (a) What do the words "gifted" and "talented" mean to you?

   (b) If someone said a child was "gifted" or "talented" what sorts of things do you think they would be particularly good at?

3. How is the school's definition of "gifted" and "talented" different to the qualities your family or community value?
Teachers

1. The Department of School Education is interested in analysing the differences between teachers', parents' and students' perceptions of giftedness and talent.

   When we are talking about students, what do the words "gifted" and "talented" mean to you?

2. Could you describe some of the different interpretations you think your students' parents might have of the words "gifted" and "talented"?

Students

3(i) If a person was gifted or talented what might they be really good at?

3(ii) Out of school what might someone be really good at?

4. What would your parents most like you to be very good or clever at?

6(i) Do you know someone who is gifted or talented?

   If Yes

   ii) What are they gifted or talented at?

   If No

   What do the words gifted or talented mean to you?
Identification Processes

The areas of identification and definitions or conceptions of giftedness and talent are to a large extent interdependent. The majority of the interview questions focused on identification. Students were not asked questions on this topic. In the surveys only teachers were asked questions relating to identification.

The purpose of these questions was to investigate the ways in which teachers and parents identified giftedness and talent so that these methods could be compared. Further the questions sought to examine the awareness teachers and parents had of each other's role in the identification process. The information from teachers in particular was sought to ascertain their knowledge of best practice in identifying gifted and talented students, specifically those from minority groups.

All the items in this category were open ended.

Parents

2. When your child's school or teacher is identifying gifted and talented students what qualities do you think they are looking for?

6. What role do you see the parents or the community playing in identifying and supporting gifted and talented students?

Teachers

3. In your own classroom what are some of the strategies you use to determine which students may be gifted and talented?
4. Do you identify students from non-English speaking backgrounds or low socio-economic status in different or additional ways?

Could you describe this/these identification procedures?

7. What role do you see the parents or the community playing in identifying and supporting gifted and talented students?

Knowledge of available provisions

Parents, teachers and students were not asked about their knowledge of State or additional provisions for gifted and talented students in the interviews. These questions were asked in the surveys.

Appropriateness of Provisions

The questions in this category sought to determine the attitudes of parents, students and their educators in each of the target groups to available State provisions for gifted and talented students.

These responses were used as a point of comparison with those in the surveys. It was anticipated that more detailed responses would be provided in the interviews.

All the questions were forced response items. However, a probe was included after each response if no explanation was provided.
Parents

5. Would you encourage your child to apply for programs and provision such as OC classes, selective high schools and the mentor program?

Teachers

5. Would you encourage gifted and talented students in your class to apply for programs and provision such as OC classes, selective high schools and the mentor program?

Students

5(i) Would you like to go to an OC class or a selective high school? Probe

5(ii) Would your parents like you to go? Why/Why not?

Strategies to increase the support for these students and their representation in State gifted and talented provisions

These questions, in addition to those asked in the survey, sought to identify strategies to further support gifted and talented minority students. The survey concentrated more on alternative programs whereas the interview questions focused more on assistance within the classroom and school as well as the types of information needed by parents and teachers. The teacher question further sought to investigate teacher awareness of community needs in this area.

Each of the questions was open ended.
chapter three

Parents

4. If a child in your family was identified as “gifted” or “talented" what would you like the school or the child’s teacher to do to help?

7. What additional information do you think parents and the community need about provisions for gifted and talented students?

Teachers

6. What additional information do you think schools and the community need about provisions for gifted and talented students?

Students

7. How could a teacher or parent help a child who was gifted or talented at something?

Procedure

Questions were developed with a restricted time frame in mind. Although relief was provided to schools for the interviews, teachers were interviewed generally in relief from face to face time or lunchtime. The questionnaires were designed to be completed within twenty minutes. Interviews conducted varied in length from twenty minutes to an hour.

All teacher and student interviews were conducted by the researcher at the school. Parent interviews were organised in most cases by the principal or the allocated school contact person. Some principals chose to invite all parents of students in the allocated grades to attend while others asked parents who they
thought would attend.

The AEAs also organised interviews which took place either in the parents' homes or at the school. These personnel were of invaluable assistance to the researcher. In cross cultural interviews it is possible for the interviewee to be distrustful and suspicious of the interviewer (Sattler, 1988). The presence of one particular AEA allowed the researcher access to a remote Aboriginal community and the opportunity to conduct interviews in parents' homes. Researchers need to be aware that permission to enter a community, to carry out any research, has to be negotiated with that community ... There are networks that have to be established at the community level between the people and the researcher before any research begins and as the research takes place (Cutmore et al., 1997, p. 20).

Although the researcher had obtained permission from the AECG to involve Aboriginal people in the research, it was also necessary to contact the appropriate Aboriginal community person, in this case the AEA connected with each school. Communication with these people prior to arriving allowed time for the AEA to inform the community of the purpose of the research and to invite them to consider involvement for themselves and their children. When the researcher arrived the project already had considerable credibility.

Some teachers and parents nominated themselves to be interviewed in the space provided in the survey and were consequently contacted by the researcher. The majority of parent interviews were one to one, although paired and focus group interviews also occurred. Most interviews took place at school, but some parent interviews took place in the home or were carried out by phone.
Several of the parent interviews required a translator and this was generally carried out by their child or in some cases a teacher.

Because of the number of interviews conducted and in the interest of making the interviewees as comfortable as possible, the interviews were not recorded. Notes were taken during the interview and written up immediately after the interview in draft form and in a more substantive form later on the same day. It was essential to collate the information as quickly as possible whilst the information was still fresh in the researcher's memory.

Gender balance was generally equal in student interviews, but not in the case of parents and teachers. This imbalance could be attributed to two factors. Firstly, female teachers vastly outnumber their male counterparts in primary schools. Secondly, since interviews took place predominantly in school hours, in a single income family the mother was generally the only parent available for interview.

The interview questions for parents, students and teachers are available in Appendix H. Although only 60 interviews were required by the DSE, the researcher decided to undertake as many interviews as possible in the time available, with a view to achieving approximately even representation of the target groups. The main reason for the increase in the size of the sample was to increase the validity of the research. Consequently 171 interviews were analysed in this research. Every effort was made to ensure appropriate representation of each of the target groups, but it was dependent on the voluntary nature of the interviews.
Interview Analysis

Interview responses were developed into draft categories after the pilot interviews were conducted. A mock interview sheet with a range of response categories was used by the interviewer to decrease the amount of writing required during the interview. Responses which did not fit these categories were placed in a miscellaneous category until there were sufficient responses to warrant a new category. These categories were reviewed weekly to ensure that the miscellaneous category did not become too unwieldy (Miles & Huberman, 1984).

The interviewer allowed time between each interview to add to her notes. Interviews were analysed at the end of each day or in some cases at the end of a school visit to ensure that the information was not forgotten. Responses were tallied and categorised by hand. Responses were categorised under the heading of target group and by subgroup, that is parents, teachers and students.

Although the validity of the interviews would have been increased by a follow up interview, time and the distance involved in visiting the schools did not permit this to take place. It was also considered that the three sources of information, enrolment figures for students in State gifted and talented programs, surveys and interviews, provided an adequately robust and varied data base.
results one: the under-representation of minority groups
chapter four

results one: the under-representation of minority groups

The international research outlined highlights the under-representation of minority and disadvantaged groups in gifted and talented programs (e.g. Chinn & Hughes, 1987; Frasier, 1992; Masten, 1985; Richert, 1987). As there has been no formal study of the representation of minority groups in State gifted and talented programs in NSW this chapter examines the extent of the under-representation of the target groups in NSW Government schools.

Baseline data about participation levels of the target population in State gifted and talented programs were obtained by investigating the number of Year Seven students enrolled in 1992, 1993 and 1994 in NSW Selective and Agricultural High Schools, Year Seven students enrolled in Sports and Performing Arts High Schools in 1992 and 1993, and 1994 populations of Year Five OC classes and the Sydney metropolitan Mentor Links program. These years were selected as they were the years immediately preceding the study and would therefore provide an indication of the current situation.

This chapter is divided into three parts. The first part examines the enrolments for Selective, Agricultural and Performing Arts High schools, the second details OC class enrolments and the last section outlines student participation in the Mentor Links program.
Year Seven enrolments in Selective and Agricultural High Schools

This study targets primary students, their families and educators. However, as Year Six students are eligible to apply for entry to a Selective or Agricultural High School, the enrolment figures for Year Seven are significant. These figures are more reliable than the incomplete figures available regarding Year Six acceptance of places. Many students continue to be offered places from the reserve lists or after successful appeals well into January of the year of their enrolment.

Year Seven enrolments were targeted because the data were readily available. The information is collected by the DSE Management Information Services each year in its mid-year census and also by the Selective Schools Unit.

The 1992 data shows that 1,596 males and 1,294 females were enrolled in Year Seven in Selective or Agricultural High Schools. The 1993 data show that 1,654 males and 1,283 females were enrolled in Year Seven in Selective or Agricultural High Schools. The 1994 data shows that 1,781 males and 1,399 females were enrolled in Year Seven in Selective or Agricultural High Schools. A breakdown of this information for each of the target groups is listed below in Tables 4.1, 4.2 and 4.3 and is also available in more detail in Appendix J.

The tables indicate both the actual and the expected representation of the target population each year. The expected representation was estimated by establishing the percentage of Year Seven students each year enrolled in these schools. It was considered reasonable to expect that approximately the same percentage of the Year Seven target group population might be enrolled
in these schools. The percentage in brackets indicates the actual percentage of the target population enrolled in these programs each year.

**Aboriginal and Torres Strait Islander Year Seven enrolments**

In 1992 one Year Seven female ATSI student was enrolled in a Selective High School. In 1993 one female and two male Year Seven ATSI students were enrolled. In 1994 four ATSI males and three females were enrolled in Year Seven in Selective High Schools.

The data indicate that Year Seven ATSI students were significantly under represented in Selective and Agricultural High Schools according to their expected representation.

**Pacific Islander Year Seven Enrolments**

The data on Pacific Islander students indicate that five male and two female students were enrolled in Year Seven Selective High School classes in 1993. In 1994 there were three male students enrolled in Year Seven Selective High School classes.

Year Seven Pacific Islander students were under-represented in 1993 but met the expected representation in 1994.

**Arabic Speaking Year Seven Enrolments**

The data on students from Arabic speaking backgrounds show that there were 28 male and 15 female students enrolled in Year Seven Selective High School
classes in 1993. In 1994 there were 23 male and 15 female students enrolled in Year Seven Selective High School classes.

Year Seven Arabic speaking students were clearly under-represented in Selective and Agricultural High Schools according to the expected representation.

Table 4.1.
1992 Year Seven target group enrolments in Selective and Agricultural High Schools

<table>
<thead>
<tr>
<th>Target Group</th>
<th>1992 Year Seven Enrolment in Selective and Agricultural High Schools</th>
<th>Expected Representation based on proportion of the target population*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>ATSI</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Arabic</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

* Year Seven students for 1992 enrolled in Selective and Agricultural High Schools made up 4.8% of the total Year Seven population. Consequently each of the target groups might be expected to have 4.8% of its Year Seven population in Selective and Agricultural High Schools.

### Table 4.2.

1993 Year Seven target group enrolments in Selective and Agricultural High Schools

<table>
<thead>
<tr>
<th>Target Group</th>
<th>1993 Year Seven Enrolments</th>
<th>Expected Representation based on proportion at the population*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>ATSI</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Arabic</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

* Year Seven students for 1993 enrolled in Selective and Agricultural High Schools made up 5.7% of the Year Seven population. Consequently each of the target groups might be expected to have 5.7% of its year seven population in Selective and Agricultural High Schools.


### Table 4.3.

1994 Year Seven target group enrolments in Selective and Agricultural High Schools

<table>
<thead>
<tr>
<th>Target Group</th>
<th>1994 Year Seven Enrolments</th>
<th>Expected Representation based on proportion of the target population*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>ATSI</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Arabic</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

* Year Seven students for 1994 enrolled in Selective and Agricultural High Schools made up 5.5% of the total Year Seven population. Consequently each of the target groups might be expected to have 5.5% of its Year Seven population in Selective and Agricultural High Schools.

Year Seven enrolments in Sports and Performing Arts High Schools

The information on Year Seven enrolments in Performing Arts and Sports High Schools was obtained after the above data were collated. The purpose was to investigate whether or not the target groups were better represented in those schools. There was a general perception within the DSE that the target groups would perceive the provisions of those schools to be more closely related than Selective and Agricultural High Schools to their cultural values.

The enrolment information is provided by year in Appendix L, and by target group below. Tables 4.4 and 4.5 also indicate the expected Year Seven target population.

Aboriginal and Torres Strait Islander Year Seven enrolments

The data show that in 1992 there were seven male and six female ATSI students in Performing Arts or Sports High Schools. In 1993 there were ten ATSI males and seven females.

Year Seven ATSI students were significantly under-represented in these schools in 1992 and 1993 when compared to the expected representation.

Pacific Islander Year Seven enrolments

In 1993 there were six male and five female Pacific Islanders in these types of schools. No data were available for 1992.

Year Seven Pacific Islander students were over-represented in 1993 in these schools when compared to the expected representation.
Arabic Speaking Year Seven enrolments

In 1993 there were seven male and five female Arabic students in these types of schools. In 1992 there were no data for this group available.

Year Seven Arabic students were clearly under-represented in these schools in 1993.

Table 4.4.

1992 Year Seven enrolments in Performing Arts and Sports High Schools - expected representation of target groups

<table>
<thead>
<tr>
<th>Target Group</th>
<th>1992 Year Seven Enrolments</th>
<th>Expected Representation based on proportion of the target population *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>ATSI</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Arabic</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

* Year Seven students for 1992 enrolled in Performing Arts and Sports High Schools made up 1.7% of the total Year Seven population. Consequently each of the target groups might be expected to have 1.7% of its Year Seven population in Performing Arts and Sports High Schools.

Table 4.5.
1993 Year Seven enrolments in Performing Arts and Sports High Schools - expected representation of target groups

<table>
<thead>
<tr>
<th>Target Group</th>
<th>1993 Year Seven Enrolment in Performing Arts and Sports High Schools</th>
<th>Expected Representation based on proportion at the population*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>ATSI</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Arabic</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

* Year Seven students for 1993 enrolled in Performing Arts and Sports High made up 1.8% of the total Year Seven population. Consequently each of the target groups might be expected to have 1.8% of its Year Seven population in Performing Arts and Sports High Schools.

Data Source: Management Information Services. Mid year Census, 31 July 1993

OC classes

Data on OC class enrolments for Year Five were obtained from the Hunter and Metropolitan North Regions (Appendix M). It was not possible to obtain this information from other regions because of sensitivity concerning these data. Tables 4.6 and 4.7 indicate the expected representation of the target groups.

In 1994 the total population of OC students in the Metropolitan North region was 360. This population consisted of 161 females and 199 males. There were no ATSI students in these OC classes. Data on Pacific Islander and Arabic speaking students were not available.
In 1994 in the Hunter region there was one female ATSI student in these OC classes. Data on Pacific Islander and Arabic speaking background students were not available.

The available data indicate that ATSI students were under-represented in these OC classes.

**Table 4.6**

1994 Year Five Hunter Region OC enrolment data

<table>
<thead>
<tr>
<th>Target Group</th>
<th>1994 Enrolments</th>
<th>Expected representation based on proportion of the target population*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>*ATSI</td>
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<td>1</td>
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<tr>
<td>Arabic</td>
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<td>No data available</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

* Year Five students enrolled in OC classes in Hunter Region made up 1.3% of the total Year Five population in Hunter Region. Consequently each of the target groups could be expected to have 1.3% of their Year Five populations in Year Five O/C classes.

Table 4.7.
1994 Year Five Metropolitan North OC enrolment data

<table>
<thead>
<tr>
<th>Target Group</th>
<th>1994 Enrolment in Met. North Year Five OC Classes</th>
<th>Expected representation (based on proportion of the target population)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>*ATSI</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Arabic</td>
<td></td>
<td>No data available</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

* Year Five students enrolled in OC classes in Metropolitan North Region make up 4.25% of the total Year Five population in Metropolitan North. Consequently each of the target groups might be expected to have 4.25% of its Year Five populations in Year Five O/C classes.

Data Source:
- Management Information Services. Mid year Census 31 July
- Data on Year Five OC classes obtained from Metropolitan North Region

Mentor Links

In 1993 there were 59 males and 23 females in the Mentor Program, and in 1994 there were 13 males and 10 females in this program (Appendix N). No ATSI students were nominated for the program in 1993 or 1994. Data available on the mentor program to date are limited. There was no further breakdown by target group available.

The data would suggest that ATSI students were under-represented in this program.
Conclusion

The data clearly indicate that Year Seven ATSI students were significantly under-represented in Selective and Agricultural High Schools and Performing Arts and Sports High Schools. The available data on OC classes and the Mentor Links program are of a more limited nature. However, there is still a clear indication that this group was under-represented.

Year Seven Arabic speaking students were significantly under-represented in both Selective and Agricultural High Schools and Performing Arts and Sports High Schools. The data available for OC classes and the Mentor Links program are insufficient to draw conclusions.

The data on Pacific Islander students are interesting but inconclusive. This group appeared to be under-represented in Selective and Agricultural High Schools in 1993 but met the expected representation in 1994. The 1993 data on Performing Arts and Sports High Schools indicated an over-representation. One possible reason for the Pacific Islander support of these schools could be the close proximity of these groups to some of these schools. The Pacific Islander results chapter also discusses the high value placed on sport, music, dance and singing by this group, which may also help to explain the apparent anomaly in these figures. The data available for OC classes and the Mentor Links program are insufficient to draw conclusions.

ATSI students were clearly under-represented in State provisions for Gifted and Talented students. The available data on Selective and Agricultural, Sports and Performing Arts High Schools indicate that this was also the case for the Arabic speaking population. The data on Pacific Islander students are inconclusive for Selective and Agricultural High Schools, but the over representation in Performing Arts and Sports High Schools is of interest.
may suggest that these schools are more highly valued by this group or it may indicate that this group is more informed of this provision than of other provisions.

The quantitative data overall illustrate the extent to which the target groups were under-represented within State gifted and talented provisions in NSW. Of course, these data do not provide any explanation for this phenomenon. The qualitative data in the form of interviews and surveys in the following chapters may assist in determining whether these provisions were known and/or valued by the target groups and their communities.
results two: aboriginal and torres strait islander groups
Introduction

The international literature provides a wealth of data indicating that minority groups have a disproportionately low representation in programs for gifted and talented students (Frasier, 1992; Sisk 1994). In particular, figures from consecutive national surveys in the United States illustrate the consistent under-inclusion of native Americans by 30 to 70% in gifted programs across the nation (Richert, 1987). The quantitative data outlined in the previous chapter show that ATSI students are significantly under-represented in State gifted and talented programs in New South Wales.

This chapter outlines the results obtained from interviews and surveys attempting to determine the reasons for the under-representation of Aboriginal and Torres Strait Islander students. The questions focused on perceptions of giftedness and talent, identification procedures, awareness of and attitudes towards available provisions, and suggestions to assist future identification and provisions for these students. The chapter is presented in five parts, to address each of these foci. Each part includes a discussion of the results obtained.

Interviews and surveys of parents, students and their teachers were carried out in seven of the 15 schools participating in this study. Three schools were in Metropolitan East Region which is close to the central business district, one
school was in Metropolitan South West Region which is on the fringe of the metropolitan area and three schools were in the South Coast Region. Two of those were in small country towns. One of these contained an Aboriginal community which was separated from the rest of the town. The last school was in a suburban area. Three of the schools had AEAs and one school had a homework centre for ATSI students.

A total of 45 interviews, with 15 classroom teachers, 5 support teachers (AEAs and Aboriginal Homework Centre Teachers), 13 students and 12 parents were conducted. Interviews with parents were generally conducted in the presence of an AEA. Three of the parents were Aboriginal elders who wished to be included in the study. The AEAs and homework centres are unique resources of support for the ATSI population. AEAs work with teachers in the regular classroom and also withdraw individuals and groups of students. Most significantly, they have a high rapport with their community and often liaise in resolving disputes or initiating school/community projects. In working with the Aboriginal community this protocol of being introduced and accompanied by an Aboriginal member was essential in gaining the respect of and indeed access to the community. Surveys were also distributed by the AEA for the same reason and in case written assistance was needed. Twenty four surveys were obtained. These were from 14 classroom teachers, 3 community teachers, 1 support and 6 parents. Because of an administrative mishap the ATSI students surveyed could not be identified.

Similar questions were asked of students, parents, classroom teachers and AEAs, in order to not only determine their understanding and awareness but also to assess their knowledge of each other’s role in identifying and providing for gifted and talented students. Consequently, the attitudes towards and
knowledge of the role of others in the school community in identifying and providing for these students are highlighted.

Perceptions of Giftedness and Talent

The international literature indicates an enormous diversity in the definition and understanding of the terms “gifted” and “talented”. Awareness of the under-representation of minority students in gifted and talented programs has resulted in an increased interest in cultural perceptions of giftedness and talent (Gauci, 1988; Masten, 1995; Passow & Frasier, 1994). Most of the research to date has been conducted in the USA, and may or may not be relevant to the Australian indigenous population and minority groups. Survey and interview questions were asked in order to determine the perceptions of giftedness and talent of ATSI students, their teachers and their communities.

Parents

The majority of parents surveyed perceived a gifted or talented child to be outstanding in one or more areas. These areas included academic (33%, (2)), sport (33%, (2)), art (16%, (10) and leadership (16%, (1)) according to the DSE definition. Parents also responded that their communities valued abilities such as language, culture, music, dance and performance, which they did not perceive to be included in the DSE definition. This view was supported by 25% (93) of the parents interviewed, who thought that the terms “gifted” and “talented” mainly related to cultural gifts. When asked how their school’s definition of “gifted” and “talented” was different to the qualities valued in their family or community, parents interviewed emphasised culture as the quality most valued by their community, and desired more opportunity to share their
chapter five  results two: aboriginal and torres strait islander groups

culture with the school. Other parents interviewed emphasised "respect for one another, respect for the planet, taught more about life issues..." (interview 1). Another parent equated a gifted student with finishing school and not dropping out (interview 6). Such a student was perceived to be outstanding because few Aboriginal students in this particular community stayed at school to complete the Higher School Certificate in senior high school. All parents interchanged the terms gifted and talented.

Teachers

There was no consistency in definitions of giftedness and talent among the teachers interviewed or surveyed. As a group, the majority of teachers surveyed thought that 10% of students could be gifted or talented. A child who was above average or outstanding in one or more areas was considered to be gifted or talented. Teachers interchanged these terms and there was no consistency as to whether these terms referred to one or more areas.

One teacher commented in the survey that "... the children from these groups (referring to Aboriginal and Lebanese background students) are not gifted and talented" (survey 3). This view was reinforced informally by all levels of educational personnel at the majority of schools participating in the research. Teachers and Principals often commented that there were no gifted or talented children at their school. The reason for this was stated to be the cultural or socio-economic background of the students. This information was generally provided informally in the school staffroom which displayed newspaper clippings of students receiving awards for sporting, drama, dancing or artistic achievement. This would indicate that although teachers appeared to have a broad definition of giftedness and talent, in practice they appeared to identify
on the basis of academic ability. These informal findings are supported by research in Florida, where one of the reasons for low enrolment in gifted and talented programs seemed to be that:

...teachers and administrators in inner-city schools were not expecting to find academically gifted students in their classrooms (Howells, 1998, p. 33).

Teachers surveyed were asked what they thought the different interpretations their students' parents might have of the words "gifted" and "talented". There was no real consistency in teacher responses which ranged from "same for both words" (interview 1), "cultural gifts first, then academic" (interview 6) to "brainy, good at sport, dance, art" (interview 9). When asked in the survey if the target groups' family or community groups valued any gifts or talents not adequately described by the DSE definition, the majority of teachers surveyed said they did not know. Many of these teachers were in schools with high ATSIs populations but appeared to have little knowledge or contact with their students' families or community. Thirty three percent (5) thought that this group would value other gifts or talents such as "religious knowledge /beliefs" (survey 6), "cultural dances ... care of younger people and babies, familial responsibility" (survey 14).

Students

The students interviewed thought that a gifted or talented person would have a gift or talent in one or more of the following areas of sport, maths, art and craft. The majority of these students (85%, (11)) knew someone they perceived to be gifted or talented. Those who did not, understood the words "gifted" and "talented" to mean "top of the class", referring to academic ability. As a group
students agreed only that being good at sport would be valued by their parents.

Discussion

Teachers and parents interchanged the terms "gifted" and "talented". Few teachers or parents were familiar with the DSE definitions of giftedness and talent. This could be a result of the two conflicting definitions currently presented to teachers, that is, the DSE definition and the Gagné definition used by the Board of Studies.

There was general agreement among students, teachers and parents that the definition included academic and non-academic attributes such as sport, music, art and dance. Parents emphasised cultural attributes, and this value was also recognised by some teachers. Teachers as a group appeared to have little knowledge of attributes particularly valued by the community.

It is interesting to note that both students and parents readily discussed their perceptions of giftedness and talent in relation to students from their own community, yet education personnel from the majority of schools participating in the research frequently commented informally that there were no gifted or talented students in this target group. Low teacher expectations of this group could clearly affect student behaviour and performance in class. Such views could well have an impact on whether ATSI students were identified or informed about State provisions for gifted and talented students.

Identification Processes

International research (Baldwin, 1992; Richert, 1982; Sisk, 1994) indicates that appropriate identification procedures may be an essential component in
Redressing the imbalance of minority students currently in gifted and talented programs. This study sought to clarify the identification procedures currently used by schools and their communities. In addition, the interviews and surveys examined parents' and teachers' knowledge and perception of each other's role in the identification of gifted and talented ATSI students. Students were not asked questions about how they, their school or their community would identify gifted and talented students.

Parents

The majority of parents (58% (7)) interviewed believed that identification was essentially the role of the school. Some parents perceived that parents and the community could play a large role in identifying students because "...they see the child all the time" (interview 3) and "... would go to the school to tell of gifts" (interview 2). Twenty five percent of parents (3) interviewed thought they could identify giftedness in sport. Other parents were more hesitant to go to the school, commenting they "... would keep information to self - let school find out themself - don't want to brag" (interview 5). Teachers were assumed to be the experts in identifying gifted and talented students.

Parents interviewed perceived that their child's school or teachers identified students as being gifted and talented on the basis of behaviour and performance in class. Comments included "tidy" (interview 2), "writing - neat" (interview 8), "discipline" (interview 5), "concentrates on what teacher says - listens ..." (interview 4) and "the co-operative, good student - not behaviour problems" (interview 8). In addition, parents also spoke of performance indicators such as "... exceptional abilities in one or more areas in the curriculum" (interview 3), "how quick they pick up on things" (interview 5),
"observation, performance, class discussion" (interview 7) and "inquisitive, patience, determination..." (interview 1). Overall parents gave equal weight to behaviour and performance.

**Teachers**

Generally teachers interviewed identified students through indicators such as observation, experience or a "gut feeling" in addition to the child's learning style. Twenty five percent of teachers (4) interviewed took into account behaviour whilst another 15% (3) would seek an expert opinion from an AEA or a counsellor. Thirty percent (6) of teachers believed they needed more information on how to identify gifted and talented students.

Teachers interviewed saw the main role of parents and the community as encouraging and supporting gifted and talented students in addition to communicating with the school. Thirty percent (6) of teachers believed that parents would be unable to identify giftedness and talent.

The surveys demonstrated inconsistency in the way teachers identified students. Observation was primarily used. As reported in the interviews, few teachers utilised available resources such as AEAs or school counsellors.

**Discussion**

There was general inconsistency among teachers in the ways in which gifted and talented students were identified. Twenty five percent (4) used good behaviour as an indicator. This is contrary to research which indicates that bored or under-challenged gifted and talented students are often characterised by apparent lack of interest, laziness or attention seeking.
behaviour (Gross, 1993). When asked how they thought the teacher identified giftedness and talent, parents were accurate in their perceptions. Although they acknowledged academic performance, they felt that teachers also identified on the basis of attributes such as neatness and good behaviour.

The role of the community in identifying gifted and talented students was not valued by teachers and in many cases not recognised. This is contrary to research which indicates that the school community and parents are valuable components of the identification process (McAlpine, 1996). They are able to provide information to which the school may not have access, to see the child’s behaviour in different situations, and are generally not biased in their judgement. The research supports the notion of joint school/community partnerships in the identification process. This view was supported by a proportion of the Aboriginal community who acknowledged both their own role and that of the school; however, overall there was a reluctance to become involved in what was perceived as “school matters”. The fact that 25% of parents (3) felt confident to identify giftedness in sport indicates that with encouragement parents may be happy to contribute to the identification process.

**Awareness of Available Provisions**

Awareness of provisions for gifted and talented students is not highlighted in the international research. Data reflecting the target groups' knowledge of available provisions in New South Wales was an integral component of this research, as it was hypothesised that under-representation of these students in State programs may be linked to lack of information and consequently of the
option to apply.

This section is divided into two parts. The first part considers the target group's knowledge of available State gifted and talented programs, that is, Selective High Schools, OC classes and the Mentor Program. The second part deals with knowledge of additional provisions both within and outside the school setting.

Knowledge of State Provisions

Parents and teachers were asked about their knowledge of State provisions for gifted and talented students.

Parents

As a group, ATSI parents surveyed had little knowledge of available State gifted and talented provisions. No ATSI parents had heard of OC Classes or the Mentor program. Half of the parents (3) had not heard of Selective High Schools.

Teachers

In contrast to the ATSI parents the majority of class teachers surveyed (88%, (16)) were aware of Selective High Schools and OC classes. Most teachers were unaware of the Mentor Program.
Awareness of Additional Provisions

Parents, teachers and students were asked about their knowledge of additional provisions available within and outside their school for gifted and talented students.

Parents

Parents had little awareness of additional provisions other than private dance classes. One parent (interview 8) was aware of acceleration and of a local gifted and talented parent support group.

Teachers

As a group teachers were aware of a wide range of provisions including sport, drama, music activities and Country Areas Program (CAP) funded camps. However, individually teachers were aware of few provisions within or outside their school.

Discussion

Teachers and parents had little knowledge of the Mentor Program or additional programs for gifted and talented students. Most teachers were aware of OC Classes and Selective High Schools, but parents were generally unaware. The availability of application forms for entrance to Selective High schools and the test date are advertised in a major newspaper and some community language papers. Regional Cluster Directors request Principals to inform their school community of OC Class testing dates. These are generally also advertised in
local papers as an initiative by primary schools which have OC Classes. Regional Gifted and Talented Committees communicated the availability of the Mentor Program to all School Principals in their Region. The researcher informally was told by many teachers that many schools simply did not inform parents about OC Classes as they did not wish to lose students. In some cases schools may lose a teacher if their enrolments are reduced. Although testing for Selective High Schools does not impact on Primary School enrolments the researcher was informed that because many Principals did not agree with the concept of Selective schools for academically gifted students, they either did not inform their communities or would put an obscure reference to it in the school newsletter.

A research project in South Florida found that parents of “culturally different” children were unaware of educational opportunities in the school and of new programs which were advertised in local papers. The majority of these homes did not take a daily newspaper (Howells, 1998). Furthermore, in an investigation of the reason for under-representation of culturally different students in gifted and talented programs it was found that

... parents of these children were not aware of gifted programs and their children's academic needs (Howells, 1998, p. 33).

One of the reasons for parents' lack of awareness appears to be lack of communication with the school. Since in general teachers were aware of at least two of the State provisions, it would appear that parents were uninformed either because school personnel believed the school had no gifted and talented students, or because they were concerned that enrolment figures might fall if students were offered places, or because they were ideologically opposed to such provisions. Any of these reasons raises grave concerns over
the accountability of schools for the under-representation of ATSI students in gifted and talented programs.

**Appropriateness of Provisions**

International research (Deschamp, Robson & Nash, 1981; Goertz, Phemister & Bernal, 1995) highlights the inappropriateness of provisions as one of the factors contributing to the under-representation of minority students in gifted and talented programs. Personnel within the DSE hypothesised that this was a significant factor in the small numbers of ATSI students in State provisions. It was suggested that these provisions would be perceived as culturally inappropriate and elitist. Based upon previous contact with the ATSI community and the knowledge that some ATSI students were applying for Selective High Schools, the researcher hypothesised that inappropriateness of provision was not a major factor. The researcher was concerned about rigidly stereotyping any community of people, and aware of the need to take into account differences of opinions and values within most societies. Consequently, interview and survey questions asking parents, teachers and students for their attitudes towards these provisions were included.

**Parents**

Sixty six percent (4) of ATSI parents surveyed assessed Selective Schools and OC classes as good or excellent and 50% (3) assessed the Mentor Program as good or excellent. The Mentor Program had total parent support, with the lowest response being "satisfactory". Comments regarding these programs included "... if my child can further his abilities through these programs I would be glad" (survey 2). Some parents expressed the feeling that "...students
would learn more" (interview 6).

These data were supported by the parent interviews. The majority of parents interviewed felt that OC Classes and the Mentor Program had potential. Sixty-six percent (8) of parents would encourage their child to apply for a Selective High School, 58% (7) for an OC class and 100% (12) for the Mentor Program. Some parents expressed reservations about Selective High Schools and OC classes, mainly because of the problem of transport in isolated areas. The Mentor Program in particular had overwhelming support from parents in the interviews and surveys.

**Teachers**

The majority of teachers surveyed supported the concept of Selective High Schools and OC Classes. Fifty-six percent (11) would encourage students to apply for Selective High Schools and 50% (9) would encourage students to apply for OC classes. The Mentor Program was the most popular, with 83% (15) of teachers indicating they would encourage students to apply for it. The interview results were not consistent, with 40% (8) of teachers encouraging their student to apply for OC classes, none for a Selective High School and 100% (20) for the Mentor Program. The reason for the discrepancy in results for Selective High Schools may be because more teachers of ATSI students were interviewed in isolated areas where it was not realistic for students to attend a Selective High School unless they boarded. Although OC classes may have been within a reasonable distance, these classes may not have always been accessible by public transport. The main reasons provided by teachers against these provisions included the perceived elitism of these programs. Comments such as "... better to be mainstreamed. Not good to
hieve off ... removes normal balance of society" (interview 1) and "Aboriginal kids like to be with a support network" (interview 6) sum up teacher concerns. Teachers also mentioned the lack of ability of parents to transport their children to available provisions.

The Mentor program was commented upon favourably as it was perceived to be non-elitist.

Students

The majority of ATSI students interviewed felt that Selective High Schools and OC classes offered a "better education" (interview 3) where you could "learn more" (interview 2). One student explained that he "...would like to be with other clever people" (interview 8). Ninety three percent of students (12) interviewed stated they would like to attend a Selective High school and 85% (11) would like to attend an OC class. Most students (85%, (11)) thought that their parents would wish them to attend these provisions.

Discussion

The interview and survey data indicate that parents and teachers viewed the Mentor Program as an appropriate provision for gifted and talented ATSI students. Teachers surveyed perceived Selective High Schools and OC Classes as appropriate provisions, but teachers interviewed were more negative in their responses concerning these programs. This tended to be because of personal views that such provisions encouraged elitism and were unsuitable for all students, or because of concerns about transport problems. In contrast, parents were generally favourably disposed to these provisions.
Students interviewed generally expressed favourable interest in these programs and thought that their parents would wish them to attend. This suggests that parents valued academic giftedness and would not see separate gifted and talented provisions for such students as inappropriate.

**Strategies for Increasing Representation of Gifted Minority Groups**

The opinions of students, teachers and parents were sought about ways to further assist these students. The emphasis was on what the DSE in particular could do to increase the representation of gifted and talented ATSI students in State and school provisions.

**Parents**

The majority of parents stated they would like their child to be encouraged by the child's teacher, and given extra time and help. Twenty five percent (3) of the interviewees hoped that teachers would take into consideration the individual learning style of their child.

In particular, parents wanted to know more about provisions available for gifted and talented students both at State level and within the school. Sixteen percent (2) specifically mentioned the importance of the AEA having this knowledge, so that the information would be shared by them informally with the community.

Parents expressed a desire for improved communication with the school involving the sharing of information. Comments such as "... gifted and talented
community people to come in and show kids... lead to community partnership” (interview 9) and “... what parents can do to help children” (interview 1) showed a willingness to support gifted and talented students at both the school and home level.

Teachers

Teachers stressed the need for training about classroom strategies and identification procedures. Forty percent of teachers (8) wished to know more about available programs and provisions and to have more information on identification procedures. Needs expressed in the interviews included “... identification followed by what to do” (interview 1) and information on the “range of programs available” (interview 6).

Teachers also thought that parents should receive information about definitions of giftedness and talent and identification procedures. Fifteen percent of interviewees (3) commented on the importance of the Regional Aboriginal Community Liaison Officers (RACLOs) and AEAs receiving in-service training so they in turn could support their community (interviews 1 & 5).

Students

Students felt that teachers could help a gifted or talented child by providing extra or harder work, and by giving encouragement.

Discussion

Teachers and parents shared the view that more information was needed
about available provisions. Teachers desired specific information on identification techniques and practical classroom strategies. Teachers also maintained that parents needed informing about the area in general. Parents were anxious to form partnerships with their school to assist in the support of gifted and talented students.

Both parents and teachers mentioned the importance of updating AEs in the details of gifted and talented education so that they in turn could support the community. These people, in addition to RACLOs, appear to be a valuable and under-utilised resource in redressing the under-representation of Aboriginal students in State gifted and talented programs.

The fact that students and parents specifically mentioned the need of gifted and talented students for encouragement by the teacher may indicate perceived low teacher expectations or the need for additional support for these students to stand out from their peers.

Conclusion

There was general agreement among students, teachers and parents that the terms "gifted" and "talented" included above average achievement in academic and non-academic attributes such as sport, music, art and dance. Parents wished to emphasise cultural attributes and this value was also recognised by some teachers.

Teachers generally appeared to have little knowledge of particular attributes valued by the ATSI community. Many teachers informally expressed a belief that there were no gifted and talented students from this target group. Teachers did not generally feel that parents or community members could
identify giftedness or talent.

State provisions for gifted and talented students were generally seen as appropriate by the majority of parents and students. Some teachers perceived Selective High Schools and OC classes as inappropriate, maintaining that these provisions were elitist. The majority of these teachers, therefore believed these provisions were inappropriate not only for gifted and talented ATSI students but for all students. The Mentor Program, which was the least known program by parents and teachers, had overwhelming support from students, teachers and parents. Some teachers and parents mentioned that this provision would be particularly culturally appropriate for the Aboriginal community. This support from teachers was unexpected in view of their attitude to Selective High Schools and OC classes. The Mentor Program singles out students for one-to-one work to meet specific needs. It is an extra-curricular component and occurs out of school hours and out of the school grounds. Perhaps it is not so much the concept of elitism but the threat of losing the better students from their school that motivates teachers' negative attitudes towards such programs.

Parents generally desired to have more information about programs for gifted and talented students. Many parents were happy to assist the school and particularly wished to share knowledge about their culture with the school. Teachers desired information about ways to identify and provide for these students and also wished for the community to be given more information and to become more involved in working with the school. The use of AEAs as a source of communication between the school and the community was perceived to be of significant value by both teachers and the community. These people, given appropriate knowledge about provisions, could make a
valuable contribution to redressing the imbalance of Aboriginal students in gifted and talented programs.

Parents had little knowledge of gifted and talented provisions in general or State provisions. No parents had heard of the Mentor Program, a concept which all parents supported. In contrast, teachers were generally aware of State provisions with the exception of the Mentor Program.

The interview and survey data do not support the perception that the ATSI community as a whole finds State gifted and talented provisions inappropriate or elitist. The data reflect division within the community regarding OC classes and Selective High Schools. This division would in all probability reflect the conflicting views of the wider community in New South Wales. The under-representation of ATSI students in state provisions for gifted and talented students is clearly linked to two factors, lack of awareness of these provisions by the ATSI community and poor communication, whether intentional or not, between schools and their communities.
chapter six

results three: arabic speaking background groups
results three: arabic speaking background groups

The international literature indicates that minority groups have a disproportionately low representation in programs for gifted and talented students (Frasier, 1992; Sisk, 1994. The quantitative data outlined in Chapter Four show that Arabic speaking background students are generally under-represented in State gifted and talented programs in NSW.

This chapter outlines the results obtained from interviews and surveys attempting to determine the reasons for the under-representation of students from an Arabic-speaking background. The questions focused on perceptions of giftedness and talent, identification procedures, awareness of and attitudes towards available provisions, and suggestions to assist future identification and provisions for these students. The chapter is presented in five parts, to address each of these foci. Each part includes a discussion of the results obtained.

Arabic speaking background parents, students and their teachers from 12 of the 15 schools in this study were interviewed and surveyed. Four of these schools were in the Metropolitan East region which is close to the central business district, five of the schools were in the Metropolitan South West region which is on the fringe of the Metropolitan area and three were in the South coast region. Two of those were suburban schools and one was a school in a small country town.

A total of 47 interviews were conducted with 13 classroom teachers, 5 support
teachers (English as a Second Language (ESL) Teachers), 6 community teachers, 12 students and 11 parents. In all, 248 surveys were returned from 15 classroom teachers, 5 support teachers, 5 community teachers, 149 students and 74 parents.

Similar questions were asked of students, parents, classroom teachers, support teachers and community language teachers, in order not only to determine their understanding and awareness but also to assess their knowledge of each other's role in identifying and providing for gifted and talented students. Consequently, the attitudes towards and knowledge of the role of others in the school community in identifying and providing for these students are highlighted.

Perceptions of Giftedness and Talent

Awareness of the diversity of definitions and understandings of the terms 'gifted' and 'talented' in addition to the under-representation of minority students in gifted and talented programs has resulted in an increased interest in cultural perceptions of giftedness and talent (Gauci, 1988; Masten, 1995; Passow & Frasier, 1994). Most of the research to date has been conducted in the USA, and may or may not be relevant to Australian minority groups. The parent, teacher and student survey and interview questions were asked in order to determine the perceptions of giftedness and talent of Arabic speaking background communities, students and their educators.
Parents

Parents surveyed felt that, according to the DSE definition, their children were gifted in a range of areas such as sport (21%, (16)), art (15%, (11)) and academic work (16%, (12)). Twenty six percent of parents (19) surveyed nominated cultural attributes not included in the DSE definition were cultural attributes such as language “reading in both Arabic and English” (survey 20) and dance. In particular the concept of being a “good person” who had “…family values, respect for individuals, caring/loving…” (interview 2) was highlighted in the interviews.

It was maintained that the DSE definition “...was different to the qualities that family and community values” (interview 4). It was further explained that “Arabic men prefer males to be good at sport” (Interview 4) whereas it was more important for females to have “neatness and cleanliness” in presentation (interview 8). Parents interviewed interchanged the words “gifted” and “talented”. As in the surveys, many parents equated the terms with being good at one or more school subjects. In particular, good behaviour, “manners” (interview 5) was seen as an attribute of giftedness and talent.

Teachers

Most teachers interviewed saw a difference between the words “gifted” and “talented” but there was no consistency in their understanding of these definitions. Children who were gifted and talented were considered by community language teachers to have an innate gift or a gift from Allah in either an academic or non-academic area. Teachers primarily identified gifted or talented students on the basis of tests, student performance in class or behaviour. Behaviour was associated with motivation and good
behaviour in class. It was perceived that parents saw gifted and talented children to be primarily "good" people, who were well mannered, polite and co-operative. Teachers thought that parents would also equate giftedness and talent with academic ability but not to the same extent. Several teachers commented that parents would have "... no understanding of terminology" (interview 2).

One teacher commented in the survey that "... The children from these groups (referring to Aboriginal and Lebanese background students) are not gifted and talented" (survey 3). This view was reinforced informally by all levels of educational personnel at the majority of schools participating in the research. Teachers and principals often commented that there were no gifted or talented children at their school. The reason was stated to be the cultural or socio-economic background of the students.

Sixteen percent of teachers (4) took into account speed in completing work and 20% (5) relied on student attitudes to their work (motivation). Teachers surveyed believed that parents would interpret the words gifted and talented as "bright", "clever", "good" or "above average" in an academic area. Eight percent of teachers (2) thought that parents would perceive religion as an area with potential for giftedness. Community language teachers were aware of cultural and religious attributes valued by the community (surveys 1 & 7). When asked in the survey if the target group's family or community groups valued any gifts or talents not adequately described by the DSE definition, the majority of classroom teachers surveyed did not know. Most of these teachers were in schools with a high representation of Arabic speaking background students, but appeared to have little knowledge of or contact with their students' families or community.
Students

The students interviewed thought that a gifted or talented person would be good at one or more of the areas of sport, maths, music, culture or religion. Ninety-two percent of the students (11) reported they knew someone who was gifted or talented. Students interviewed agreed that their parents would most like them to be good at school subjects in addition to behaviour, study, religion and culture.

The majority of students’ survey responses included academic ability, “intelligent people who know a lot of things” (survey 3), but there was a wide range of responses. The following were the most frequently cited: sport (21%, (31)), art (19%, (28)), music (15%, (22)) and interpersonal skills (7%, (10)). Overall, students surveyed reported that their families perceived giftedness and talent as relating to being good in one particular area (15%, (22)), being good or smart (7%, (10)), being good at everything (4%, (6)), a gift from God (4%, (6)), “Something God gave them to have pride in themselves” (survey 16) and moral behaviour (3%, (4)) “… well mannered people who listen and learn, does not cheat, smart and polite...respectful” (survey 26). Students’ definitions of giftedness and talent appeared to encompass the attributes valued by their parents and the school.

Discussion

Teachers and parents interchanged the terms “gifted” and “talented”. Few teachers or parents were familiar with the DSE definitions. This could be a result of the two conflicting definitions currently presented to teachers, that is the DSE definition and the Gagné definition used by the Board of Studies.
There was general agreement among students, teachers and parents that the definitions included academic and non-academic attributes such as behaviour, religion, sport and cultural attributes such as language, dance and being a good person. Parents wished to emphasised cultural attributes. Teachers as a group appeared to have little knowledge of attributes particularly valued by the community.

It is interesting to note that while that both students and parents readily discussed their perceptions of giftedness and talent in relation to students from their own community, education personnel from the majority of schools participating in the research frequently commented informally that there were no gifted or talented students in this target group. Such views could well have an impact on whether Arabic speaking background students were identified or informed about State provisions for gifted and talented students.

**Identification Processes**

The international research (Baldwin, 1992; Richert, 1982; Sisk, 1994) highlights the importance of appropriate identification procedures in redressing the imbalance of minority students currently in gifted and talented programs. This study sought to clarify the identification procedures currently used by schools and their communities. In addition, the interviews and surveys examined parents’ and teachers’ knowledge and perception of each other’s role in the identification of gifted and talented Arabic speaking background students. Students were not asked questions about identification procedures.
Parents

The majority of parents interviewed believed that parents and the school should work together to identify students. Some parents thought they could identify giftedness and talent in the Arabic language (interview 5). However, 45% (5) of parents believed that it was mainly the role of the school to identify such students. Comments included “No idea of how to identify a gifted child” (interview 6). Teachers were perceived as the experts when it came to identification issues.

Parents interviewed perceived that their child’s school or teachers identified students as being gifted and talented on the basis of test performance and behaviour in class e.g. “listens well” (interview 1) and “manners” (interview 3). Parents also perceived that teachers used homework as a criterion to assess giftedness.

Parents saw their role as encouraging and supporting their child. They were happy to assist in checking their child’s homework.

Teachers

Generally, teachers interviewed and surveyed identified students through indicators such as test results, student performance in class, or behaviour and speed of learning. Teachers did not identify students from non-English speaking backgrounds in different ways, although some teachers indicated that they might look at mathematical ability and bilingualism. Teachers did not make reference to community language teachers or ESL teachers as an additional resource in identifying these students.
Teachers interviewed saw the main role of parents and the community as encouraging their child, providing rewards and communicating with the school. It was seen as the parents’ role to broaden the child by involvement in excursions or other activities. Identification was seen to be primarily the role of the school.

Discussion

Parents and teachers generally perceived that it was the role of the school to identify gifted and talented students. Parents were accurate in their perceptions of how teachers identified gifted and talented students. They felt that students were identified on the basis of test performance, behaviour and homework.

Teachers were inconsistent in their approach to identification. The majority of teachers relied on indicators such as test and class performance and good behaviour. Reliance on good student behaviour is contrary to the research which indicates that gifted and talented students may have poor motivation or behaviour because of boredom in the classroom (Gross, 1993). Low teacher expectations may also impact on student performance in class and also decrease the likelihood of students being identified.

The role of the community in identifying gifted and talented students was not valued by teachers and in many cases not recognised. It was perceived that “parents are too subjective... not a good judge... can’t really help” (interview 1). This is contrary to research which indicates that the school community and parents are valuable components of the identification process (McAlpine, 1996). They are able to provide information to which the school may not have access, and they see the child’s behaviour in different situations and are
generally not biased in their judgement. The research supports the notion of joint school/community partnerships in the identification process.

**Awareness of Available Provisions**

Awareness of provisions for gifted and talented students is not highlighted in the international research. Data reflecting the target groups' knowledge of available provisions in NSW formed an integral component of this research, as it was hypothesised that under-representation of these students in State programs may be linked to lack of information and consequently of the option to apply.

This section is divided into two parts. The first part deals with the target group's knowledge of available State gifted and talented programs, that is, Selective High Schools, OC classes and the Mentor Program. The second part deals with knowledge of additional provisions both within and outside the school setting.

**Knowledge of State Provisions**

Parents, teachers and students were asked about their knowledge of State provisions for gifted and talented students.

**Parents**

As a group, Arabic speaking parents surveyed had little knowledge of available State provisions. Fifty five percent (41) of parents had not heard of Selective High Schools, 59% (44) had not heard of OC classes and 73% (54) were
unaware of the Mentor Program. This level of awareness is in stark contrast to that of their children’s teachers outlined below.

Teachers

The majority of teachers surveyed were aware of State provisions for gifted and talented students. Thirty five percent (9) were unaware of Selective High Schools, and 45% (110) were aware of the Mentor Program and OC classes.

Students

The majority of students responded that they had not heard of State gifted and talented provisions. Sixty percent (89) had not heard of Selective High Schools, 68% (101) had not heard of OC classes and 76% (113) had not heard of the Mentor Program. Their level of awareness was similar to that of their parents and quite different from that of their teachers.

Awareness of Additional Provisions

Parents, teachers and students surveyed were asked about their knowledge of additional provisions available within and outside the school for gifted and talented students.

Parents

Parents had little awareness of additional provisions within or outside their child’s school. Ninety percent of parents (67) were unaware of additional provisions. Some parents were aware of sporting and debating activities.
Teachers

There was no consistency in teacher knowledge of additional provisions for gifted and talented students. As a group teachers were aware of a variety of provisions including competitions, camps and specialist classes.

Students

Eighty five percent (127) of students surveyed were unaware of additional provisions for gifted and talented students. Some students were aware of sports provisions and competitions such as Tournament of Minds.

Discussion

The majority of teachers were aware of existing State gifted and talented provisions. Nevertheless, the fact that 35% (9) of teachers were unaware of OC classes and 45% (11) of teachers were unaware of the Mentor Program is reason for concern. The majority of parents and students, however, were unaware of State or additional available provisions within or outside the school.

One of the reasons for parent’s lack of awareness appears to be lack of communication with the school. Since teachers were generally aware of at least two of the State provisions, it would appear that parents and students were uninformed either because school personnel believed the school had no gifted and talented students, or because they were concerned enrolment figures might fall if students were offered places, or because they were “ideologically” opposed to such provisions. Any of these reasons raises grave concerns over the accountability of schools for the under-representation of Arabic speaking background students in gifted and talented programs.
Appropriateness of Provisions

International research (Deschamp, Robson & Nash, 1981; Goertz, Phemister, & Bernal, 1995) highlights the inappropriateness of provisions as one of the factors contributing to the under-representation of minority students in gifted and talented programs. Personnel within the DSE hypothesised that this also was a significant factor in the small numbers of some minority students in State provisions. It was suggested that these provisions would be perceived as culturally inappropriate and elitist by minority communities. Based upon previous contact with the Arabic speaking background community and the knowledge that some Arabic speaking background students were in favour of Selective High Schools, the researcher hypothesised that inappropriateness of provision was not a major factor. The researcher was concerned about rigidly stereotyping any community of people, and aware of the need to take into account differences of opinions and values within most societies. Consequently, interview and survey questions investigating parent, teacher and student attitudes towards these programs were included.

Parents

The majority of Arabic speaking background parents assessed Selective High Schools as good or excellent. Sixty six percent (49) assessed OC classes as good or excellent and 71% (53) assessed the Mentor Program as good or excellent.

Parents who stated they had not or would not nominate their child for these provisions did so for a variety of reasons. Comments included:
Because his teacher has never said anything to make me think he could (survey 6). I would nominate now that I know ... (survey 8). I see no specific academic skills or otherwise in my nine year old son (survey 3).

These sorts of reasons did not necessarily reflect parent perceptions that State programs were inappropriate for gifted and talented students from their community, but appear to reflect a need for increased communication with the school, or knowledge that the provisions were inappropriate as they did not perceive their child to be gifted.

The majority of parents interviewed would encourage their child to apply for these provisions. Ninety percent (10) would encourage their child to apply for a Selective High School, 81% (9) for an OC class and 100% (11) for the Mentor Program. These figures are a strong indicator that the State provisions are not perceived as elitist or culturally inappropriate by Arabic speaking background parents.

Teachers

The majority of teachers stated that they had nominated or would nominate students from Arabic speaking backgrounds for these programs. Sixty percent (15) would nominate for a Selective High School, 65% (16) for an OC class and 68% (17) for the Mentor Program.

Teachers were generally positive in their responses concerning these programs. Eighty five percent (21) stated that they had nominated or would nominate students from Arabic speaking backgrounds for these programs. Sixty percent (15) would nominate for a Selective High School, 65% (16) for an
OC class and 65% (16) for the Mentor Program. Eighty five percent (21) rated Selective High Schools as good or excellent, 80% (20) rated OC Classes as good or excellent and 65% (16) rated the Mentor Program as good or excellent. Comments included:

".. they don't have to be held back by other people who are not as smart" (survey 2).

Although these programs cater for a minority group of students, they are the right expression of democratic education. They satisfy the needs and aspirations of these students through the promotion, encouragement and motivation which they offer to enable them to pursue their academic interests (survey 3).

Those who were not in favour of these programs provided reasons such as:

Academic work is only part of what makes up a whole child. I would like to see students be given a range of opportunities (survey 1).

My only problem with Selective High Schools is that children become ‘academic snobs’ (survey 11).

Selective schools will be far from home (survey 4).

**Students**

Eighty three percent (10) of students interviewed stated they would like to attend a Selective High School and 66% (8) would like to attend an OC class. Seventy five percent (9) of students felt that their parents would like them to attend these programs. Most responses indicated a belief that these models produced a superior education which would lead to a better future, "... get into university" (interview 6).
Student survey responses showed that 40% (60) of students would like to attend a Selective High School, 68% (101) would like to attend an OC class and 76% (113) would like to attend the Mentor Program. The Selective Schools program was less popular in the survey than in the student interviews. The reasons for this are not clear. Reasons for not wanting to attend these programs included:

"... because I haven't heard of it" (survey 6)

"I wouldn't want to miss my friends" (survey 9).

"I am not that gifted" (survey 15).

Such comments did not indicate the inappropriateness of the program but rather a fear of the unknown or the possibility that such a program might be too hard.

Discussion

The majority of parents, teachers and students thought highly of these programs, particularly the Mentor Program. The number of teachers stating that they had nominated or would nominate students for these programs was surprising in view of both the under-representation of the target group in these programs and student and parent lack of awareness of these programs.

Some teachers and students expressed reservations about the programs; however, these concerns were related more to concerns about gifted and talented programs in general rather than the inappropriateness of the programs for this specific target group.
Strategies for Increasing Representation of Gifted Minority Groups

The opinions of students, teachers and parents were sought about ways to further assist these students. The emphasis was on what the DSE in particular could do to increase the representation of gifted and talented Arabic speaking background students in State and school provisions.

Parents

The majority of parents suggested they would like the school to assist with Arabic language related programs, additional homework, and provisions for specific cultural talents such as "... special dancing classes, singing classes" (survey 11) if their child was identified as gifted. Some parents also requested religious programs and activities.

Teachers

Community language teachers stressed the need for parent and teacher training. Teachers expressed the need for professional development on available programs and resources. Thirty three percent (8) of teachers interviewed requested information on classroom strategies. This figure indicates the need for further teacher inservice training in this area.

Students

Students interviewed thought that harder or additional work to complete either in or outside the school would assist a gifted or talented child. The students
surveyed suggested a wide range of provisions to help gifted and talented students. These included sport (7%, (10)), more academic work (3%, (4)) and Arabic school (2%, (3)). None of these responses was higher than 7% (10).

Discussion

The variety of suggestions from parents and teachers on ways to further assist gifted and talented children was limited, and there was no consistency in the responses from the three groups. Parents desired additional culturally related activities, teachers desired parent and teacher inserviceing, and students desired more or different work. The suggestion of more or harder work from students implies that some students quickly complete the assigned work which may not be sufficiently challenging.

Conclusion

There was general agreement among students, teachers and parents that the terms “gifted” and “talented” included above average achievement in academic and non-academic attributes such as behaviour, culture, sport and religion. Parents wished to emphasise cultural attributes such as language (both Arabic and English language), dance and personal attributes.

Classroom teachers generally appeared to have little knowledge of particular attributes valued by the Arabic speaking background community. Community language and ESL teachers had the greatest awareness of cultural and religious attributes valued by the community. Many teachers informally maintained that there were no gifted and talented students from this target group. Teachers did not generally feel that parents or community members
could identify giftedness or talent.

State provisions for gifted and talented students were generally seen as appropriate by the majority of parents, teachers and students. The teachers who did not support these programs did so for a variety of reasons, primarily maintaining that such provisions were elitist. They did not, however, feel they were inappropriate for gifted and talented Arabic speaking background students only, but for all students. The Mentor Program, which was the least known program by parents and teachers, had the support of the majority of students, teachers and parents.

Parents generally desired additional programs catering for cultural attributes such as dance, music and language. Parents also requested additional homework for their children. Teachers desired professional development in how to identify and provide for these students and community language teachers also wished for the community to be given more information in the form of training.

Parents and students had little knowledge of gifted and talented provisions in general or of State provisions. The majority of teachers were aware of State provisions for gifted and talented students, but individually teachers had little awareness of additional programs.

The interview and survey data do not support the perception that the Arabic speaking background community as a whole finds State gifted and talented provisions inappropriate or elitist. The data reflect division within the community regarding OC classes and Selective High Schools; however, this would in all probability reflect the conflicting views of the wider community in NSW. In view of the lack of the awareness within this group, withholding of
information by the schools or poor communication between schools and their communities appear to be significant factors in the under-representation of this group in State gifted and talented provisions.
chapter seven

results four: pacific islander groups
Introduction

The quantitative data outlined in Chapter Four indicates that Pacific Islander students are generally under-represented in State gifted and talented programs in NSW.

This chapter presents the results obtained from interviews and surveys attempting to determine the reasons for the under-representation of Pacific Islander students. The questions focused on perceptions of giftedness and talent, identification procedures, awareness of and attitudes towards available provisions, and suggestions to assist future identification and provisions for these students. The chapter is presented in five parts, to address each of these foci. Each part includes a discussion of the results obtained.

Interviews and surveys of parents, teachers and students were carried out in five of the 15 schools involved in this study. Three of these schools were in Metropolitan East Region which is close to the central business district and two schools were in Metropolitan South West Region which is on the fringe of the metropolitan area.

A total of 35 interviews were conducted with 10 classroom teachers, 5 support teachers, 7 students and 13 parents. Forty surveys were returned, from 10 classroom teachers, 4 support teachers, 8 parents and 18 students.
Similar questions were asked of students, parents and classroom teachers, in order not only to determine their understanding and awareness but also to assess their knowledge of each other’s role in identifying and providing for gifted and talented students. Consequently, the attitudes towards and knowledge of the role of others in the school community in identifying and providing for these students are highlighted.

Perceptions of Giftedness and Talent

The international literature highlights the under-representation of minority students in gifted and talented programs. This awareness has resulted in an increased interest in cultural perceptions of giftedness and talent (Gauci, 1988; Masten, 1995; Passow & Frasier, 1994). Most of the research to date, however, has been conducted in the USA and may or may not be relevant to the Australian minority groups.

Parents, teachers and students were asked survey and interview questions in order to determine the perceptions of giftedness and talent held by these groups.

Parents

Pacific Islander parents did not see a difference between the words “gifted” and “talented”. Parents interviewed thought the words could apply to any field of endeavour and were generally happy with their school’s definition of giftedness and talent. Although most parents felt that the family was responsible for teaching the child its own culture, 38% (5) emphasised the importance of culture as a major difference between the school’s definition
and the qualities their family and community valued. When expanding on their
definition of "culture" parents referred to "the Tongan language" (interview 2),
"Tongan Scripture - religion" (interview 1), "respect for parents and elders of
the community" (interview 9) and "singing" (interview 12). In the surveys
parents reported that their children could be gifted or talented in music (25%.
(2) or dance (25%, (2)) according to the DSE definition. Sixty three percent (8)
of parents felt that a major attribute not included in the DSE definition was
performance, referring to singing and the playing of musical instruments
specifically. A major emphasis from both the interviews and surveys was the
emphasis on cultural attributes.

Teachers

There was no consistency among the teachers interviewed and surveyed
about definitions of giftedness and talent. Teachers did perceive a difference
between the meaning of the words "gifted" and "talented" but there was no
consistency in what the difference was. Most teachers perceived students who
were "above average" academically to be gifted or talented. There was no
agreement on the percentage of students who might be gifted or talented.
Many of the education personnel in these schools commented informally that
there were no gifted and talented students from this population or from within
their whole school population.

Forty percent (4) of teachers surveyed believed that parents would interpret the
words "gifted" and "talented" as equivalent to "bright", "clever" and "good". Thirty percent (3) of teachers surveyed thought parents would equate the terms
with academic excellence, "very good in academic subjects" (survey 4), "top of
class" (survey 5).
Teachers did not know if the family or community group of these students valued any gifts or talents not covered by the DSE definition.

**Students**

Survey responses indicated that students particularly valued sport (50%, (9)), academic work (44%, (8)) and music (33%, (6)). The interview data identified being "clever" or "good" (interview 3) at school work or study as attributes of a gifted or talented person. In addition they included personal attributes such as being "kind", "a good person", "co-operative" (interview 5) or "make you laugh" (interview 3). Students interviewed also perceived the areas of dance, sport and music (playing an instrument or singing) as aspects of giftedness or talent.

Students interviewed felt that personal attributes, good marks and academic subjects were most valued by their parents. In contrast, students surveyed highlighted "performance", responding that their families valued performance in areas such as music (43%, (3)) and dance (29%, (2)).

**Discussion**

Teachers perceived a difference between the words "gifted" and "talented", but there was no consistency in what this difference was. Parents interchanged the words "gifted" and "talented". Few teachers or parents were familiar with the DSE definitions of giftedness and talent. This could be a result of the two conflicting definitions currently being presented to teachers, that is, the DSE definition and the Gagné definition used by the Board of Studies.

There was general agreement among students, teachers and parents that the
definitions included academic and non-academic attributes such as sport and music. Students emphasised personal attributes while parents emphasised cultural attributes and this value was also recognised by some teachers. Teachers as a group appeared to have little knowledge of attributes particularly valued by the community.

It is interesting to note that while both students and parents readily discussed their perceptions of giftedness and talent in relation to students from their own community, education personnel from the majority of schools participating in the research frequently commented informally that there were no gifted or talented students in this target group. Such views could well have an impact on whether Pacific Islander students were identified or informed about State provisions for gifted and talented students.

Identification Processes

The international research (Baldwin, 1992; Richert, 1982; Sisk, 1994) indicates that appropriate identification procedures may be an essential component in redressing the imbalance of minority students currently in gifted and talented programs. This study sought to clarify the identification procedures currently used by schools and their communities. In addition, the interviews and surveys examined parents' and teachers' knowledge and perception of each other's role in the identification of gifted and talented Pacific Islander students. Students were not asked questions about identification procedures.
Parents

The majority of parents believed that class teachers identified on the basis of test and class work in addition to the speed with which students completed their work. Eighty four percent (11) of parents interviewed thought that teachers identified giftedness and talent on the basis of test performance.

Sixty one percent (8) of parents interviewed felt that the school and community should work together to identify and support gifted and talented students. Comments such as "... parents and teachers work together" (interview 12) were common, but the comment that parents would be "... perhaps too shy to come up to school" (interview 1) indicated that parents may need some encouragement from the school to do this.

Teachers

Generally, teachers interviewed identified students through indicators such as behaviour in class or observation of their work. There was little consistency in how teachers identified students from non-English speaking backgrounds. The most common methods included a wider range of activities and an organised translation of the student's work. Few utilised resources such as Community Language teachers, ESL teachers or other students to translate work. Comments such as "does not have the skills to assess non-English speaking background" (survey 6) illustrated the concern of many teachers that they did not have the skills to identify these students.

Teachers interviewed saw the main role of parents and the community as communicating with the school or encouraging the student. Although it was acknowledged that there was a "... need to work together" (interview 6) with the
community to identify giftedness and talent, there was a strong belief that it was "... mainly up to teachers to identify" (interview 4). One teacher commented that this community had a “high profile in the school and community” (interview 3) through its organisation of dance and music performances.

Discussion

There was inconsistency among teachers in the ways in which gifted and talented students were identified. Teachers used general observation and attributes such as good behaviour as the major identification strategies. The latter technique is contrary to research which indicates that bored or under-challenged gifted and talented students are often characterised by apparent lack of interest, laziness or attention seeking behaviour (Gross, 1993). Few utilised resources such as Community Language teachers, ESL teachers or other students to translate work. In contrast 84% (11) of parents thought that teachers identified mainly through test performance and the speed with which work was completed.

While parents and teachers acknowledged the value of school/community partnerships, teachers perceived that parents had little significance in the identification process. This is contrary to research which indicates that the school community and parents are valuable components of the identification process (McAlpine, 1996). They are able to provide information to which the school may not have access, and they see the child's behaviour in different situations and are generally not biased in their judgement. The research supports the notion of joint school/community partnerships in the identification process. This view was supported by a proportion of the Pacific Islander
community which acknowledged both their own role and that of the school; however, overall there was a reluctance to become involved in what were perceived as "school matters".

**Awareness of Available Provisions**

Awareness of provisions for gifted and talented students is not highlighted in the international research. Data reflecting the target groups' knowledge of available provisions in NSW formed an integral component of this research, as it was hypothesised that under-representation of these students in State programs may be linked to lack of information and consequently of the option to apply.

This section is divided into two parts. The first part considers the target group's knowledge of available State gifted and talented programs, that is, Selective High Schools, OC classes and the Mentor Program. The second part deals with knowledge of additional provisions both within and outside the school setting. Students were not asked any questions in this part.

**Knowledge of State Provisions**

Parents, teachers and students were asked about their knowledge of State provisions for gifted and talented students.

**Parents**

As a group, Pacific Islander parents surveyed had little knowledge of available State provisions. Thirty eight percent (3) of parents surveyed had not heard of
Selective Schools, 74% (6) had not heard of OC classes and 88% (7) had not heard of the Mentor Program.

**Teachers**

The majority of teachers were aware of available State provisions. Sixteen percent (2) of teachers were not aware of Selective High Schools, 20% (3) had not heard of OC classes and 56% (8) were not aware of the Mentor Program.

**Students**

Students had little awareness of State provisions. Seventy eight percent (14) of students had not heard of Selective High Schools, 74% (13) had not heard of OC classes and 88% (16) had not heard of the Mentor Program.

**Awareness of Additional Provisions**

Parents and teachers were asked about their knowledge of additional provisions available within and outside the school for gifted and talented students.

**Parents**

Parents were unaware of additional provisions for gifted and talented students run by the school. They were well aware of provisions within their own community such as after school church activities and dance groups.
Teachers

As a group teachers interviewed and surveyed were aware of a variety of provisions such as camps, competitions and sporting events, but individually teachers were aware of few provisions. Teachers did not make suggestions for additional programs or provisions.

Discussion

Teachers and parents had little knowledge of the Mentor Program or additional programs for gifted and talented students. Most teachers were aware of OC classes and Selective High Schools but parents were generally unaware of OC classes. Thirty eight percent of parents had not heard of Selective High Schools which is still reason for concern. The availability of application forms for Selective High schools and the test date is advertised in a major newspaper and some community language papers. Regional Cluster Directors requested Principals inform their school community of OC testing dates. These are generally also advertised in local papers as an initiative by primary schools which have OC classes. Regional Gifted and Talented Committees communicate the availability of the Mentor Program to all school Principals in their Region. The researcher informally was told by many teachers that many schools simply did not inform parents about OC classes as they did not wish to lose students. In some cases schools may lose a teacher if their enrolments are reduced. Testing for Selective High Schools does not impact on primary school enrolments, but the researcher was informed that because many Principals did not agree ideologically with the concept they either did not inform their communities or would put an obscure reference to it in the school newsletter.
A research project in South Florida found that parents of "culturally different" children were unaware of educational opportunities in the school and of new programs which were advertised in their local papers. The majority of the homes did not take a daily newspaper (Howells, 1998). Furthermore, in an investigation of the reason for under-representation of "culturally different" students in gifted and talented programs it was found that

... parents of these children were not aware of gifted programs and their children's academic needs. (Howells, 1998, p. 33).

One of the reasons for parents' lack of awareness appears to be lack of communication with the school. Since in general teachers were aware of at least two of the State provisions, it would appear that parents were uninformed either because school personnel believed the school had no gifted and talented students, or because they were concerned that enrolment figures might fall if students were offered places, or because they were ideologically opposed to such provisions. Any of these reasons raises grave concerns over the accountability of schools for the under-representation of Pacific Islander students in gifted and talented programs.

**Appropriateness of Provisions**

International research (Deschamp, Robson & Nash, 1981; Goertz, Phemister & Bernal, 1995) highlights the inappropriateness of provisions as one of the factors contributing to the under-representation of minority students in gifted and talented programs. Personnel within the DSE hypothesised that this was also significant factor in the small numbers of some minority students in State provisions. The researcher was concerned about rigidly stereotyping any community of people, and aware of the need to take into account differences of
opinions and values within most societies. Consequently, interview and survey questions asking for parent, teacher and student attitudes to these provisions were included.

Parents

The majority of parents felt that these programs would be of benefit to students. All parents interviewed would encourage their child to apply for the Mentor Program. Eighty five percent (11) would encourage their child to apply for an OC class or a Selective High School.

All parents surveyed assessed Selective High Schools and the Mentor Program as good or excellent. Ninety two percent (7) assessed OC classes as good or excellent. Comments included that it would be "... for advancement and for own good" (survey 4) and "they can improve their academic studies" (survey 5). Parents did not indicate that the State provisions were in any way culturally inappropriate.

Teachers

The majority of teachers surveyed indicated that they would encourage students to apply for State gifted and talented programs. Ninety three percent (13) expressed support for the Mentor Program, 86% (12) for OC classes and 67% (9) for Selective High Schools.

There was concern that the needs of the individual child and related social programs were not being taken into account for the latter two provisions. Teachers also raised concerns about transport problems for students "lack of understanding of what is happening" (survey 2) in these provisions, and the
fact the provisions focused "... too much on the academic rather than the whole child" (survey 5).

Other teachers acknowledged that gifted and talented students would benefit from "competition" (survey 3), and pointed out that such students may not necessarily relate to their peers in the regular classroom.

Students

Seventy two percent (5) of the students interviewed wished to attend a Selective High School, 61% (4) wished to go to an OC class and 43% (3) wished to take part in the Mentor Program. Many of the students surveyed circled "no" because "I never heard of it" (survey 11). Other students expressed reservations because "I want to stay with my friends" (survey 17). Students who wished to attend these provisions commented on the opportunity to "learn more" (interview 7), and the fact that they would receive "recognition" (interview 3) from their family and within the community for their achievement.

All students thought that their parents would like them to attend a Selective High School or an OC class. This suggests that parents valued academic giftedness and talent and would not perceive special provisions for such students as inappropriate.

Discussion

The interview and survey data indicate that the majority of parents, teachers and students viewed the Mentor Program as an appropriate provision for gifted and talented Pacific Islander students. Teachers perceived Selective High
Schools and OC classes as appropriate provisions. There were some reservations held by teachers and students. In the case of students it was generally because they were unfamiliar with the programs or were concerned about missing their friends. All students thought that their parents would like them to attend a Selective High School or an OC class. Teachers expressed reservations about transport problems and the perceived over-emphasis on the academic needs of the student.

Strategies for Increasing Representation of Gifted Minority Groups

The opinions of students, teachers and parents were sought about ways to further assist these students. The emphasis was on what the DSE in particular could do to increase the representation of Pacific Islander students in gifted and talented programs.

Parents

In the surveys parents suggested a variety of strategies including specialist classes, smaller classes, specialist teachers and more communication with the school. Parents desired "... names/contacts of people and places I could contact ..." (survey 1) to obtain further information. The interviews highlighted requests for more information on both current models of support and how to assist their children at home.
Teachers

Overall, teachers stressed the need for training in identification and available provisions for both teachers and parents. Teachers also expressed a need for information about available programs and contracts (survey 5) and specific information about providing for ESL and different cultural groups (survey 6). Teachers felt that parents should be encouraged to be involved in running activities for gifted and talented students.

Students

Students felt that teachers could help a gifted or talented child by offering a wide range of provisions such as more academic work and sport. One student (survey 1) requested "special trainers and a proper coach", indicating that students could also appreciate the need for specialist teachers.

Discussion

Teachers and parents shared the view that more information was needed about available provisions. Teachers desired information about available programs and specifically requested information about students' cultural backgrounds and how they could provide for ESL students. Parents were anxious to obtain more information about available provisions and how they could support their child. Students suggested additional academic work and sport for students talented in these areas.
Conclusion

There was general agreement among students, teachers and parents that the terms "gifted" and "talented" included above average achievement in academic and non-academic areas. Parents wished to emphasise cultural attributes such as music, dance and singing. Students recognised music but also valued sport. Students also thought that their parents would equate giftedness or talent with being a "good person". Teachers generally appeared to have little knowledge of particular attributes valued by the Pacific Islander community. Many teachers informally expressed a belief that there were no gifted and talented students from this target group.

There was inconsistency among teachers in the way gifted and talented students were identified. Most teachers relied on observation and behaviour as the key identification tools. Few utilised available resources such as ESL or Community Language teachers.

Teachers were generally aware of State provisions for gifted and talented students. Parents and students in contrast had little awareness of these provisions. Individually teachers had limited knowledge of additional available provisions. Parents had a good awareness of provisions available within their community but not within the school.

State provisions for gifted and talented students were generally seen as appropriate by the majority of parents, teachers and students. The Mentor Program, which was the least known program by teachers and parents, had overwhelming support from these groups. Students expressed more reluctance to participate in this provision but generally they had not previously
heard of the program.

Teachers and parents both expressed the desire for further information about available provisions and how these students could be assisted. Parents showed an interest in school community partnerships but seemed to desire encouragement from the school.

The interview and survey data do not support the perception that the Pacific Islander community find State provisions for gifted and talented students inappropriate or elitist. The under-representation of Pacific Islander students in State provisions for gifted and talented students is clearly linked to two factors. The first is the lack of awareness of State provisions by Pacific Islander students and parents, and the second is poor communication, whether intentional or not, between schools and their communities.
chapter eight

perceptions of parents, students and school personnel
chapter eight

perceptions of parents, students and school personnel

Introduction

This chapter deals with the possible reasons for the under-representation of minority students in gifted and talented programs, with reference both to international research and to the collective interview and survey data of ATSI, Pacific Islander and Arabic speaking populations, the targeted minority groups in this project.

This study sought to determine what constitutes giftedness and talent as perceived by students, families, community members and school personnel. The attitudes and awareness of these groups to available State provisions were investigated. This study also examined the extent to which those perceptions may have hindered the identification and inclusion of these students in State gifted and talented provisions. The perceptions, attitudes and awareness of students, families, community members and school personnel from the targeted groups were detailed separately in the previous three chapters.

This chapter is presented in five parts. The format is the same as in the literature review. The five parts focus on (a) perceptions of giftedness and talent, (b) identification procedures, (c) awareness of and (d) attitudes towards available provisions, and (e) suggestions to assist future identification and provisions for these students. In each of these five parts the first section
summarises the information from parents, teachers and students across the three target groups, highlighting differences and similarities in attitudes and perceptions. Similarities and differences are also considered in the knowledge of each other’s perceptions between educational personnel and parents. This is considered an integral component of the research, as it is possible to highlight misconceptions the groups may have of each other and to point towards future directions in redressing the under-representation of minority students. The second section relates these findings to international research.

Perceptions of Giftedness and Talent

Conflicting perceptions of giftedness and talent between educational personnel and their school community were thought to be a possible factor in the under-representation of the target groups in State gifted and talented programs. Therefore, interview and survey questions were included which related to the cultural perceptions of giftedness and talent held by these communities, students and their teachers.

This section emphasizes the level of awareness that schools and the target groups had of each other’s perceptions. In addition it provides an overview of the perceptions of parents, teachers and students across the target groups.

Parents

As a group, the surveyed parents perceived giftedness and talent to be outstanding ability in one or more areas. These areas included academic achievement, sport, art and leadership. Parents perceived these areas were
within the DSE definition which was provided to them in the survey. Parents interchanged the words “gifted” and “talented,” making no distinction between them. The three target groups all reported that their communities valued cultural attributes such as use of language (both English and the home language), which they did not perceive to be included in the DSE definition. This opinion highlighted a major difference between the schools’ definition and the qualities that the family and community valued. Pacific Islander parents were the only group who, although acknowledging the importance of culture, felt that it was mainly the responsibility of the family and the community rather than the school to teach their culture.

Although the three target groups all valued cultural attributes there was some distinction between the types of cultural attribute most highly valued. Music, dance and performance were particularly valued by ATSI and Pacific Islander parents. The latter particularly highlighted singing and the playing of musical instruments. Religion and respect for elders and community/family values (classified by the researcher under “being a good person”) were valued by the Pacific Islander and Arabic speaking background community. The latter particularly valued good behaviour.

These values are quite different from those reported by teachers (see next section) who thought that parents mainly valued academic ability.

**Teachers**

There was a lack of uniformity in teacher perceptions of giftedness and talent. Teachers often perceived a difference between the meaning of “gifted” and “talented”, but there was no consistency in their understanding. Giftedness and talent were defined by the majority of teachers as being above average
academically or outstanding in one or more areas. Children who were gifted or talented were seen by Arabic Community language teachers to have an innate gift or a gift from Allah. Informally, the researcher was informed by all levels of educational personnel at the majority of schools participating in the research that there were no gifted or talented among the target population or within the whole school population. The reason was considered to be the cultural or socio-economic background of the students. The majority of teachers emphasised academic ability, in their identification of giftedness and talent, usually assessed by test, student behaviour and in some cases speed in completing tasks. This interpretation does not align with the current DSE definition of giftedness and talent, which emphasises outstanding ability or performance in a wide range of areas. (DSE, 1991, p. 3). In addition, the DSE policy (1991, p. 5) stresses that a variety of assessment procedures should be used and that identification should not be made on the basis of single activities. The DSE definition does not take behaviour into consideration as a prerequisite for giftedness or talent.

Teachers as a group perceived that parents would consider giftedness and talent as "bright", "clever", "good behaviour", and "academic excellence". The majority of teachers did not know whether the family or community group of these students valued any gifts or talents not covered by the DSE definition. Many teachers appeared to have little knowledge of or contact with their students' family or community. Twenty five percent (4) of teachers of ATSI students felt that this group would value other gifts or talents such as religious knowledge, beliefs, cultural dances and familial responsibility. Teachers thought that parents would not see a difference between the words giftedness and talent. Some teachers felt that parents would think of cultural gifts first,
then academic attributes.

It was believed by teachers that parents saw gifted and talented students to be primarily "good" people. They thought parents would also equate giftedness and talent with academic ability, but not to the same extent. Several teachers commented that parents would have no understanding of the terminology. Community language teachers appeared to be more aware of cultural and religious attributes valued by the community.

**Students**

The majority of students defined giftedness and talent with the words "clever", "good" and "smart". The terms were equated with being good in one or more areas, academic ability and moral behaviour. Students from each of the target groups perceived sport and academic work as areas students could be gifted and talented in. Students valued a variety of areas but there was not necessarily strong consistency across the attributes valued by these groups. Many of the areas mentioned could well be grouped under the heading of cultural attributes.

Gifts and talents particularly valued by Pacific Islander students included dance and personal attributes such as being kind, co-operative, or making you laugh. Musical ability was valued by Pacific Islander students and Arabic speaking background students. Students from an Arabic speaking background perceived a gift or talent as a gift from God or Allah. ATSI students valued the areas of art and craft.

All students agreed that sport was an area which would be valued by their parents. Pacific Islander and Arabic speaking background students felt that
their parents valued academic ability and personal attributes. The latter felt that their parents would also value religious and cultural attributes.

Discussion

Parents’ perceptions of giftedness were quite broad, encompassing both academic and cultural gifts in addition to attributes of being a good and respectful family and community member. Students also stated that academic work, sport and cultural attributes were areas in which students could be gifted and talented. Teachers, in contrast, perceived giftedness and talent as relating mainly to academic gifts, behaviour and speed in completing work. Teachers thought that parents would equate giftedness primarily with being a “good,” well behaved person. They perceived that parents would also value academic gifts but not to the same extent. Few teachers considered that these communities would value cultural attributes. It would appear that parents’ conceptions of giftedness were actually more representative of current definitions of giftedness than those of teachers.

Findings in Light of International Research

There is a wealth of research about the under-representation of minority students in gifted and talented programs. Much of it focuses on identification strategies and the need for a broader definition of giftedness and talent which encompasses cultural attributes and values. The focus on definitions has expanded in more recent research to include minority group perceptions of giftedness and talent. This in turn has led to interest in the knowledge and perceptions educators hold about minority students in relation to giftedness and talent.
In a study of over 600 primary teachers in NSW, Whitton found that

a high percentage of teachers (46%) showed no knowledge of the ethnic composition of their school, their Regional definition of Giftedness (35%) ... (Whitton, 1995, p. 177).

Furthermore, the survey analysis indicated that there was little concept of a non-English speaking child being gifted. Such perceptions may be based on ignorance, a narrow definition of giftedness and talent, or racism. The international research is consistent in its advocacy that

... talent is not the prerogative of any racial or ethnic group, any social class, or any residential area. It may lie untapped in some situations and some conditions, but no population has either a monopoly on nor an absence of giftedness (Passow, 1986a, p. 170).

Although policy may have embraced this egalitarian concept, contrary beliefs were found in schools participating in this research. These misconceptions are alarming, impacting both on teacher identification and expectations of minority students. Such perceptions were evident in this research, with many teachers stating there were no gifted students within their school or from specific minority populations. Some of these views have their origins in the 1960s in Australia when it was maintained that Aboriginal people had a lower cognitive ability than Europeans (Gibson, 1993). Researchers have long expanded their definition of giftedness and talent from the narrow concept of academic ability, yet educators in this study still appear to maintain a narrow definition based on academic performance, with little acknowledgment of potential. It is difficult to discuss in depth the issues of definition and identification since one becomes dependent on the other; however identification is discussed more thoroughly in the next section.
Frasier (1994) maintains that aptitudes, attributes, and characteristics associated with talent potential may be manifested differently across different cultures. Accordingly, when defining gifts and talents in students it is essential to have knowledge of their cultural values of their families. Teachers in this study used a narrow definition of giftedness. Part of Frasier's model includes ten traits (talents, aptitudes and behaviours - TABS) to assist in the identification of giftedness across various populations. The ten TABS are motivation, interests, communication skills, problem solving ability, memory, inquiry method, insight, reasoning, imagination/creativity and humour. Parents in this study were not asked to evaluate these TABs, but their comments highlighted motivation and communication skills in their home language and English in their discussions of their perceptions of giftedness and talent.

Gibson (1995) collected data in the form of interviews with Aboriginal community members and surveys of Aboriginal teachers in Queensland Department of Education schools regarding their concepts of giftedness and the appropriateness of Frasier's ten attributes in the identification of Aboriginal gifted children. Both sources revealed a frequent usage of the attributes of motivation and communication to describe giftedness and high ability. The attribute of motivation was also cited by parents and teachers in this study. Communication both in the home language and English was also perceived as significant by parents. Overall the results from both data gathering activities demonstrated that all of Frasier's ten TABS were seen as examples as giftedness. Gibson however indicated that for the Aboriginal community she studied, another attribute "Intra/Inter Personal Ability" could be added.

It is recommended that the Intrapersonal/Interpersonal Ability attribute be defined as an unusually heightened understanding of self and others. Examples of the attribute should include such descriptions as knowledge of own strengths, emotions and cognitive style, leader,
organiser, sensitive to the feeling and needs of others, self confident, mature for age (Gibson, 1995a, p. 13).

This study did not seek to validate the attributes identified by Frasier and Gibson, however, like their research it focused on examining views of giftedness and talent which would accommodate the values and cultural attributes of minority communities. With this information it is then possible to develop appropriate identification strategies for minority students. This is discussed further in the next section.

Gibson's work is significant as it is one of the few studies to test the appropriateness of both definitions and selection techniques in an Australian context. Her study is one of the few to investigate urban Aboriginal conceptions of giftedness and talent. There is, however, as Crawford (1993) points out, a considerable amount of research available on the problems Aboriginal children face in education.

Harslett has also investigated conceptions of giftedness and talent in rural non-traditional Aboriginal people in Western Australia. He states that there is

a stereotype perception of Aboriginal children which excludes them from consideration (Harslett, 1993, p. 5).

It is clear that educators' perceptions of giftedness and talent take into account their perceptions of various community groups. In his research Harslett found that Aboriginal children valued the intellectual domain as the most important area to be gifted in. This was followed by sensori-motor and socio-emotional. These results show similarities with this research, which found ATSI students valued academic giftedness and sport. By contrast, parents in Harslett's study valued artistic and sensori-motor ability over academic ability. ATSI parents in
this present study also valued sport and performance such as dance. However, artistic ability, although valued, was not valued above other areas.

In another Australian study by Gauci (1998) of the Arabic Muslim community in Melbourne, it was found that parents particularly valued academic ability, but that there was also emphasis placed on moral and attitudinal attributes. The latter attributes included being co-operative, helping others and being respectful. Gifts were seen as attributes which came from God and were therefore to be used for the good of society. Parents the present study also valued these attributes in addition to the area of religion. Subjects in the Gauci (1988) study also perceived "morale/religious" people to be gifted but did not apply this attribute specifically to gifted children alone, rather to gifted people in general. In another study (Butler-Por, 1983) it was found that 100% of Arabic parents valued, academic achievement. This was closely followed by tidiness and cleanliness (97%) and competitiveness (94%). Parents in the present study also valued neatness of work and presentation. Sport was also highly valued which may include the area of competitiveness.

The limited research on gifted and talented Pacific Islander students indicates that students are affiliation oriented. Human relationships are perceived as more important than individual achievement or personal gain (Wolver & Wolver, 1991). This concept of being a good family and community person was highlighted by parents in the present study. They also valued performance, dance or musical ability, but these tended to be group performances and therefore may not have been interpreted as individual achievement.

The research indicates that Pacific Islanders have a high regard for educational achievement (Reid, 1989; Wolverine & Wolverine, 1991). Reid (1989, p.
35) comments that "to educate oneself is seen as some kind of moral duty ..." He maintains that any concept of giftedness would need to be compatible with the cultural values of the group, and consequently if special provisions were seen to set a person apart from the group they would not be endorsed. However, as a group the parents in the present study held favourable views about their children attending State gifted and talented provisions, which may well separate the child from peers. This view seems to indicate a strong valuing of individual achievement. Indeed the high cultural value placed on performance by this group may provide a possible explanation for the over-representation of this group in Sports and Performing Arts High Schools.

Gauci comments that

within a multicultural society such as Australia, where there is a plurality of cultural mores, it is reasonable to expect different notions of gifts and talents to exist (Gauci, 1988, p. 41).

This present study indicates that this plurality exists but that it is not reflected in the attitudes of many educators in the schools.

Identification Processes

There is a clear link between definitions of giftedness and talent and identification techniques. Different approaches to identification between school personnel and the target group may impact on whether students are nominated for State provisions by teachers or parents. In addition it may assist in explaining why parents may not communicate knowledge about their child's ability to the school.

The following section outlines the techniques used by parents and teachers
across the target groups to identify giftedness and talent. The perceptions of parents and teachers about the way in which the other group identifies giftedness and talent are particularly highlighted. The second section examines these techniques in the light of international research.

Parents

The majority of parents thought that both the school and parents had a role to play in identifying gifted and talented students. ATSI parents perceived that this process was mainly the role of the school but felt their community could contribute as they saw the child constantly and from a different perspective to that of the school. Parents believed they could identify giftedness in specific areas. ATSI parents felt they could identify in the area of sport, while Arabic speaking background parents felt they could identify in the area of language. Although there was certainly a willingness by the majority of parents to work with the school there was also some hesitancy, because they either felt shy or did not wish to brag about their child.

Parents perceived that teachers identified gifts and talents on the basis of test performance and behaviour in class. ATSI and Pacific Islander parents believed that teachers took into account speed in completing work. ATSI parents in particular perceived that teachers valued neatness and tidy work in addition to motivation, as important whereas Arabic parents believed teachers used homework as a criterion.

Parents across the target groups mainly saw their role as supporting and encouraging their child. Arabic speaking background parents were happy to check their child’s homework.
Teachers

The majority of teachers reported that they identified giftedness and talent on the basis of test results, performance and behaviour in class, and speed of learning. Teachers overall were not consistent in their description of procedures to identify gifted and talented students.

Few teachers used different strategies to identify gifted and talented students who were socio-economically disadvantaged or from a non-English speaking background. Some teachers looked at mathematical ability, bilingualism, or took into account the child’s individual learning style. Few teachers utilised available resources such as community language teachers, ESL teachers or AEAs in the identification process. ESL teachers and AEAs are generally with the child only for part of each week, seeing the student either in a team teaching situation or on a withdrawal basis. Community language teachers teach students without the classroom teacher for a set time each week. It is possible that classroom teachers are considered and consider themselves the expert when it comes to identification, as they see the student’s performance in all school areas and for a longer period of time. It is also likely, however, that lack of time to sit down and discuss students with other teachers is part of the problem.

Teachers indicated that identification was mainly the responsibility of the school. Many teachers felt that parents would be unable to identify giftedness and talent, either because they had no idea of the terminology or because they would be too subjective. Some teachers felt they could not identify giftedness and talent themselves. In the case of teachers of ATSI students, 30% of teachers expressed this opinion. Many teachers requested more information
on how to identify gifted and talented minority students.

Teachers saw the main role of parents as encouraging their child, providing rewards and communicating with the school. It was acknowledged that there was a strong need to work with the community to identify giftedness and talent, but it was perceived as mainly up to the teachers to identify such students.

There was no consistency in the way in which teachers identified gifted and talented students from ESL backgrounds. Techniques included using a wider range of activities and in limited cases organised translation of students’ work. Most teachers felt they had no skills to assess these students. Few teachers utilised resources such as Community Language teachers, ESL teachers or other students to translate work.

Discussion

There was agreement by parents and teachers that parents could have a contributing role in the identification process. Some teachers felt that parents could not identify giftedness and talent, because of either lack of knowledge or bias. Parents also saw identification as primarily the school’s responsibility, but felt they could identify in particular areas such as sport and language. Parents expressed willingness to work with the school but in some cases expressed discomfort with the notion of “bragging” about their child.

Teachers identified gifted and talented students on the basis of test performance, class behaviour and speed of learning. Few teachers took into account additional criteria or available resource people to identify giftedness or talent in students from minority backgrounds. Indeed, some teachers felt they were not able to identify students from these populations. Parents perceived
that teachers would identify on the basis of test performance and class behaviour.

Both parents and teachers saw the role of parents of being to encourage their child. Teachers also thought that parents needed to communicate more with the school and be involved in joint school/community activities.

**Findings in Light of International Research**

In 1991 a documentary analysis was conducted to compare the Queensland DSE policy on the education of gifted and talented children with reported educational provisions.

An unexpected finding of the analysis of the 194 organisations responding concerned identification of target groups for gifted and talented programs. Although 57.9% of the programs included in the research stated that children were chosen or identified in some way to participate in the program, the selection process was largely dependent upon teacher nomination and used demonstrated excellence as the primary criterion (Gibson, 1992).

In the present study teachers also relied heavily on test and class performance rather than identification of potential.

Existing research indicates that the practice of using academic excellence and school success as the main identification criteria may disadvantage the hidden gifted from populations such as the culturally diverse (Gibson, 1992, p. 28).

The research is quite severe in its judgement of teachers as identifiers, claiming this practice to be a significant contributing factor to the under-representation of minority groups (Braggett, 1985; Frasier, 1991b).
research claims that teachers often choose conforming rather than gifted children. Teachers in the present study demonstrated this tendency as they also took behaviour into account when identifying talent.

Forster (1991) found that

many teachers who are faced with the demand to provide specifically for gifted children consider that either they do not have the skills or perhaps do not see a need for any skills specific to teaching gifted children. (Forster, 1991, p. 48).

These findings are apparent in the present research with some teachers indicating that they did not have the skills to identify gifted students from minority backgrounds.

From his research with the Aboriginal community, Harslett (1994) emphasised the importance of community members being able to participate in setting the identification criteria. The research literature advocates the use of a variety of sources and data in identifying gifted students. Teachers in this study did not make use of all available resources such as parents, peer nominations, AEAs, community language and ESL teachers or community members to assess talent in their classroom.

Teacher awareness of attributes valued by students' families was not apparent in this present study. Masten argues that

an implied assumption exists throughout the literature that an understanding and awareness of cultural diversity will assist in the identification of gifted minority students. (Masten, 1985, p. 84).

This assumption is the backbone of Frasier's F-TAP (1997) identification model which can be used by teachers in their observation of students as they look for traits, aptitudes and behaviours (TABS) on the Panning for Gold (PFG)
observation form. In addition teachers complete the F-TAP which consists of three sections including information on demographic data, professional recommendations, identification information and information for reference for educational planning. Such a model is needed to prepare teachers to look for potential in minority students and to train them in the collection of data from numerous sources.

A further step is to provide all students with an enriched curriculum and to observe indicators of potential. Porter Jatko (1995) advocates the use of the "whole classroom tryout technique" designed by Van Tassel Baska (1989). This technique involves all children being able to try out "gifted" activities in the normal classroom, so that they can be identified on performance and criteria relating directly to the gifted program's curriculum. This type of model could well assist in preventing teachers from omitting minority students on the basis of personal or stereotyped perceptions of their ability.

Awareness of Available Provisions

The collection of data concerning awareness of available gifted and talented provisions, both State and school based, is a crucial component of this research. It was hypothesised by the researcher that lack of awareness could be a contributing factor to the under-representation of minority groups in gifted and talented provisions. The DSE statistical data highlight the under-representation of the target groups in State provisions but do not indicate any reasons. Accordingly the surveys examined parent, teacher and student awareness of Selective High Schools, OC classes, the Mentor Program and additional school or non-school based programs.

This section is divided into two parts. The first examines the awareness of the three target groups of State and additional provisions; the second part
considers these findings in the light of international research in this area.

Target Groups’ Awareness of Available Provisions

This section examines the target groups’ awareness of the three State gifted and talented provisions: Selective High Schools, OC classes and the Mentor Program. Awareness of additional programs is also reported.

The majority of teachers were aware of most State provisions for gifted and talented students. In contrast, parents and students across the target groups to a large extent were unaware of these provisions. The majority of parents, teachers and students were unaware of the Mentor Program. A summary of parent and student awareness of the three State programs is outlined in the following tables.

Table 8.1.

Parent Awareness of State Gifted and Talented Provisions

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Selective High School</th>
<th>OC Class</th>
<th>Mentor Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATSI</td>
<td>50%</td>
<td>NIL</td>
<td>NIL</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>62%</td>
<td>26%</td>
<td>22%</td>
</tr>
<tr>
<td>Arabic speaking background</td>
<td>45%</td>
<td>41%</td>
<td>23%</td>
</tr>
</tbody>
</table>
Table 8.2.

Student Awareness of State Gifted and Talented Provisions

<table>
<thead>
<tr>
<th>Target group</th>
<th>Selective High School</th>
<th>OC class</th>
<th>Mentor Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATSI</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>22%</td>
<td>26%</td>
<td>12%</td>
</tr>
<tr>
<td>Arabic speaking</td>
<td>45%</td>
<td>41%</td>
<td>27%</td>
</tr>
<tr>
<td>background</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- No ATSI data included as ATSI students were not able to be identified by surveys.

The tables clearly illustrate lack of parent and student awareness of available State provisions, particularly OC classes and the Mentor program. This lack of awareness is in contrast to teachers who as a group were aware of these provisions.

Information about awareness of additional gifted and talented provisions was collected to ascertain the extent of the target groups' knowledge of additional programs initiated by school, regional, outside school or community personnel.

Parents and students had little idea of additional provisions for gifted and talented students within their own region. Some ATSI parents were aware of private dance classes and the majority of Pacific Islander parents were aware of community organised programs such as after school church activities and dance groups. Ninety percent (10) of Arabic speaking background parents were unaware of additional provisions. A small number of these parents were aware of school-based provisions such as debating and sport. As a group...
teachers were aware of a wide range of provisions, but individually they were aware of limited provisions.

None of the Pacific Islander students was aware of additional provisions and 85% (127) of Arabic speaking background students were unaware of provisions. Data from ATSI students was not available as the students surveyed were identified by language.

Discussion

Across the target groups, parents, teachers and students were generally unaware of additional provisions for gifted and talented students in their schools, Regions or communities. It is possible that such lack of awareness is not unusual. Another NSW study surveying over 600 primary school teachers of Years Three and Four students across State and non State schools in NSW found that

... there was a high percentage of teachers who had no knowledge of current practices or options available for gifted students within their school or region (Whitton, 1995, p.2).

In this present study, however, teachers in contrast to students and parents appeared well informed of State provisions. Possible reasons for this discrepancy are discussed below.

The availability of application forms for entrance to Selective High schools and the test date are advertised in a major newspaper and some community language papers. All Principals received written advice from the Selective Schools Unit asking them to inform parents of the selection test for intake in
the following year.

Please ensure that all parents are advised that they may apply for the placement of their children in selective and agricultural high schools. A reproducible copy of the sample letter for parents was forwarded to you in recent correspondence to assist you in this process ... Advertisements have been placed in the press and in the Education Gazette of the School Education News to publicise the location of selective high schools and the closing date for applications (Selective Schools Unit, 1993, p. 1).

Regional Assistant Director-Generals requested Principals to inform their school community of OC testing dates.

The Principal of each primary school will advise parents of all Year 4 students and appropriate Year 5 students ... of the existence of Opportunity "C" classes and invite parent nominations. (DSE, Metropolitan East Region, 1995, p. 1).

The availability of these classes are generally also advertised in local papers as an initiative by primary schools which have OC classes. Regional Gifted and Talented Committees communicate the availability of the Mentor Program to all school Principals in their Region. Schools are well informed about these procedures and accordingly this information is passed on to teachers.

However, the researcher informally was told by teachers that many schools did not inform parents about OC classes as they did not wish to lose students. In some cases schools may lose a teacher if their enrolments are reduced. Testing for Selective High Schools does not impact on primary school enrolments, but the researcher was informed that because Principals may not agree ideologically with the concept they either did not inform their communities or would put an obscure reference to it in the school newsletter.
One of the reasons for parents' lack of awareness appears to be lack of communication with the school. Since in general teachers were aware of at least two of the State provisions, it would appear that parents were uninformed either because school personnel believed the school had no gifted and talented students, or because they were concerned that enrolment figures might fall if students were offered places, or because they were ideologically opposed to such provisions. Any of these reasons raises grave concerns over the accountability of schools for the under-representation of minority students in gifted and talented programs and the abrogating of parents' right to choose specific educational options for their child.

Lack of awareness of available provisions is a factor not highlighted in the international research. However, a research project in South Florida found that parents of "culturally different" children were unaware of educational opportunities in the school and of new programs which were advertised in the local papers. The majority of the homes did not take a daily newspaper (Howells, 1998). Furthermore, in an investigation of the reason for under-representation of "culturally different" students in gifted and talented programs it was found that

... teachers and administrators in inner-city schools were not expecting to find academically gifted students in their classrooms and parents of these children were not aware of gifted programs and their children's academic needs. (Howells, 1998, p. 33).

This research raises two issues of relevance to the present study. The first is the communication of these provisions to parents. Additional alternatives to newspaper advertisements may need to be considered. These could include communicating with parents through translated newsletters, informing students of provisions in year meetings so they in turn can inform their
parents, or using a community contact such as an AEA or a community based consultant such as a RACLO or a Community Liaison Officer. This option was recommended by both parents and teachers in the present study. Newspaper articles in community language papers may be useful, but even if accessible they do not take into account the fact that parents may be illiterate in their own language. These and additional options are discussed further in the conclusion chapter.

The second issue is the attitude of teachers, based on ignorance or bias, that gifted or talented students would be unlikely in certain student populations. These perceptions were evident in this study, as discussed earlier.

Attitudes to Provisions

This part is divided into two sections. The first section examines the attitudes of parents, teachers and students to the three available State gifted and talented provisions, Selective High Schools, OC classes and the Mentor Program. The second section considers the findings in the light of the international research. Personnel within the DSE anticipated that one of the reasons for the under-representation of the target groups in State provisions was the inappropriateness of these provisions for these groups. The attitudes of minority group communities to provisions is not a factor emphasised in the international research, therefore the attitudes of students and parents to these provisions was seen as a necessary component of the study.
Parents

The majority of parents surveyed considered Selective High Schools, OC classes and the Mentor Program to be good or excellent. This information is summarised in table 8.3.

**Table 8.3.**

Percentage of parents surveyed assessing State programs as good or excellent.

<table>
<thead>
<tr>
<th>Target Group parents</th>
<th>Selective High School</th>
<th>OC class</th>
<th>Mentor Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic speaking background</td>
<td>66%</td>
<td>66%</td>
<td>71%</td>
</tr>
<tr>
<td>ATSI</td>
<td>66%</td>
<td>66%</td>
<td>50%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>100%</td>
<td>92%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The Mentor Program, the most popular program with parents, was the only program to have the support of all parent groups. Its lowest rating was satisfactory. The majority of parents interviewed also stated they would encourage their child to apply for State gifted and talented provisions. This information is summarised in table 8.4.
Table 8.4.

Percentage of parents interviewed who would encourage their child to apply for State gifted and talented programs

<table>
<thead>
<tr>
<th>Target group parents</th>
<th>Selective High School</th>
<th>OC class</th>
<th>Mentor Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic speaking background</td>
<td>90%</td>
<td>81%</td>
<td>100%</td>
</tr>
<tr>
<td>ATSI</td>
<td>64%</td>
<td>54%</td>
<td>100%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>85%</td>
<td>85%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Parents who indicated they had not or would not nominate or encourage their child to apply for these provisions gave a variety of reasons. They included transportation problems, social problems (e.g. reservations about creating elitism), and the lack of role models for remaining students. Some parents stated that their child did not have the required academic ability and consequently the need for such programs. Other parents indicated that as the school had never suggested this as an option they had not considered such provisions appropriate.

The reasons stated do not reflect parent perceptions that State programs were inappropriate for gifted and talented students from their community, but appear to reflect a need for increased communication with the school, or a knowledge that the provisions were appropriate but they did not perceive their child to be gifted. The data indicate that the majority of parents did not find the available State provisions culturally inappropriate for their children. This is crucial information as it appears to eliminate one possible reason for the under-representation of the target groups in State gifted and talented programs in
NSW.

Teachers

The majority of teachers stated that they had nominated or would nominate the targeted students for State gifted and talented programs. This information is summarised in Table 8.5 below.

Table 8.5:
Percentage of teachers surveyed who would nominate or had nominated students from the target groups for State gifted and talented provisions

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Selective High School</th>
<th>OC class</th>
<th>Mentor Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic speaking</td>
<td>60%</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>background</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATSI</td>
<td>56%</td>
<td>50%</td>
<td>75%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>67%</td>
<td>86%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Teachers were generally positive in their responses concerning these programs, explaining that the provisions would allow students to work at their own level and not to be held back. Those who were not in favour of the programs provided reasons such as transport difficulties, social problems such as turning the children into snobs and the lack of role models for students not participating in such classes. There was also concern from some teachers that the needs of the individual were not being taken into account, with too much emphasis being on academic aspects rather than the whole child.
It is interesting to note the breakdown of teacher survey responses in more detail. Of the three groups, ATSI students were the least likely to be nominated for Selective High Schools or OC classes. There is a significant difference in the range of percentages of teachers surveyed who would nominate or had nominated ATSI students for Selective High Schools, OC classes and the Mentor Program. From these data it appears that the Mentor Program was perceived as the most appropriate by teachers for this group. One possible explanation that teachers may have felt this program would be the most culturally acceptable to the ATSI community; another is that teachers may not have perceived that as many ATSI students would fall into the gifted and talented category. In contrast, teachers were most likely to nominate Pacific Islander students for any of the State gifted and talented provisions. Teachers were more likely consider nominating students from these groups for the Mentor Program than for any other program, suggesting that teachers perceived the program to be culturally appropriate for each of the target groups. Teachers appeared consistent in their attitude towards Selective High School, which overall appeared to be the least favoured program for nomination.

**Students**

The majority of students across the target groups indicated they would like to attend a Selective High School or an OC class. Students were not asked about the Mentor Program. The interview data are summarised in the Table 8.6.
Table 8.6:

Percentage of students interviewed who would like to attend an OC class or Selective High school.

<table>
<thead>
<tr>
<th>Targeted students</th>
<th>Selective High School</th>
<th>OC class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic speaking background</td>
<td>83%</td>
<td>66%</td>
</tr>
<tr>
<td>ATSI</td>
<td>93%</td>
<td>86%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>85%</td>
<td>85%</td>
</tr>
</tbody>
</table>

The data indicate a positive response from students towards such provisions, especially Selective High Schools. Seventy five percent (9) of Arabic speaking background students, 86% (11) of ATSI students and 100% (7) of Pacific Islander students interviewed felt that their parents would like them to attend these programs. Most student responses indicated a belief that these models produced a superior education which would lead to a better future. These responses also indicate that students felt their parents valued academic giftedness and talent.

These findings are in contrast to the survey data which are summarised in Table 8.7 below.
Table 8.7.
Percentage of students surveyed who would like to attend a Selective High school, OC class or the Mentor Program.

<table>
<thead>
<tr>
<th>Targeted students</th>
<th>Selective High School</th>
<th>OC class</th>
<th>Mentor Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic speaking background</td>
<td>40</td>
<td>68</td>
<td>76</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>72</td>
<td>61</td>
<td>50</td>
</tr>
</tbody>
</table>

The survey responses showed that 40% (60) of Arabic speaking background student respondents would like to attend a Selective High School. This is significantly different from the 83% (10) figure from the student interviews. Sixty eight percent of Arabic speaking background student survey respondents would like to attend an OC class, which is close to the 66% (8) indicated in the interviews. The Mentor Program was popular with 76% (113) of Arabic Speaking background students. In contrast only 50% (9) of Pacific Islander students surveyed would like to take part in the Mentor Program. A smaller percentage of Pacific Islander students surveyed would like to attend a Selective High School or and OC class. Survey data were not available from ATSI students.

It is difficult to ascertain the reasons for the differences in student attitudes towards these programs in the interviews and surveys. The numbers of students surveyed were higher than for the interviews therefore it is possible these findings are more reliable. Twelve Arabic speaking background students were interviewed and 149 surveyed. In the case of the Pacific Islander students 13 were interviewed and 18 were surveyed. Reasons for not wanting to attend these programs included missing their friends, not having
heard of the program before, or feeling they were not gifted and therefore the program would not benefit them. Such comments did not indicate the appropriateness of the program but rather a fear of the unknown or the possibility that such a program might be too hard.

Nevertheless the total interview and survey data indicated that the majority of students were not opposed to these programs and did not suggest that they were culturally inappropriate.

The combined responses of parents, teachers and students across the target groups raise a number of issues. It is interesting to note the apparent discrepancy between teachers being willing to nominate students for the program and parent and student lack of awareness that these programs exist. Certainly the majority of students and parents expressed genuine interest in these programs.

The concerns of parents and teachers regarding transportation problems are an equity issue. Distance appears to be a contributing factor to the under-representation of some of the target groups, particularly those living in more isolated areas. Although there is the possibility to board at two of the State's Selective High Schools, distances of up to two or more hours involved in travel to OC classes and Selective High Schools could be considered unreasonable. The Mentor program, however, has no such limitation, being available in each Region and often operated by telecommunications.

The overall positive attitude towards such programs by teachers, parents and students negates the concept that minority communities find these provisions culturally inappropriate. These communities may request additional cultural provisions as outlined in the next section but the majority of parents and
students are not opposed to the State provisions.

**Findings in Light of the International Research.**

Research investigating minority communities’ attitudes to available gifted and talented provisions is surprisingly limited in view of the strong assertions that such provisions may be culturally inappropriate. Data available are generally not the focus of the research but rather an interesting aside.

In Project Step Up (McIntosh, 1995) parents are actively encouraged to nominate their children for gifted and talented programs as one of the strategies to redress the under-representation of minority and socio-economically disadvantaged students. In that study the reason for parents not identifying their children is seen to be:

“They think the places in the gifted program are going to white, middle class children anyway, so they don’t nominate” (McIntosh, 1995, p. 28).

This perception was not evident among the parents interviewed and surveyed in this study. Parents were generally unaware that these provisions were available.

An Australian project investigated the way in which the Balga Primary Extension and Challenge Centre (PEAC) catered for urban Aboriginal children. It was found that parents who were contacted to inform them of their child’s successful selection were most enthusiastic about the program, which provides for the partial withdrawal of gifted students for an enriched and extended curriculum (Fletcher, Gatti & Michael, 1985). Such responses are further evidence of the positive attitude of the targeted groups to available State
gifted and talented provisions.

There is a need for more research investigating community perceptions to available gifted and talented provisions. If it is shown that communities generally support these provisions as one of a range of appropriate provisions, it may allow for new directions in the research to emerge to address the under-representation of minority groups.

Strategies for Increasing Representation of Minority Groups

A component of the research was to investigate parent, teacher and student suggestions as to how gifted and talented minority students could be better provided for. This information was obtained to investigate the relevance of international research recommendations and the need for possible changes to DSE gifted and talented policy.

This section is divided into two parts. The first part describes the research findings across the target groups and the second considers the findings in relation to the international research.

There was no consistency within the majority of student, parent or teacher responses in suggesting appropriate strategies and or provisions for gifted and talented students. There were, however, some common themes emerging across the target groups.

Parents

The most common theme across the target groups was the perceived need for additional information, whether in the form of training, through a
community contact person or written information. Parents specifically requested information on current models of support both within and outside the school and how they could assist their children at home.

Pacific Islander parents suggested small and more specialised classes. Both Pacific Islander and ATSI parents in particular saw a need for more communication with the school involving the sharing of information. The latter were happy to share their talents with all students at the school.

The majority of ATSI parents wanted their child to be encouraged by the child's teacher, and given extra time and help. They hoped that teachers would take into consideration the individual learning style of their child. They specifically mentioned the importance of the AEA being trained so that the information would be shared by them informally to the community.

In contrast, the majority of Arabic parents wanted Arabic language related programs, additional homework and provisions for specific cultural talents, such as special dancing classes, singing classes. Some parents also requested religious programs and activities.

**Teachers**

Teachers requested inserviceing for both parents and teachers in the areas of identification, classroom strategies and provisions available for gifted and talented students. Teachers specifically requested information about providing for ESL students and those from different cultural groups.

Teachers felt that parents should be encouraged to be involved in conducting activities for gifted and talented students. They recommended that parents be
provided with information particularly regarding definitions of giftedness and talent and identification procedures. Some teachers commented on the importance of the RACLOs and AEAs being trained so they in turn could support their community.

Students

More or additional work, both within and outside the school, was one of the suggestions provided by students in each of the target groups. Pacific Islander and Arabic speaking background students highlighted extra sporting provisions. ATSI students commented on the importance of encouragement by their teacher. Encouragement of students was also raised by ATSI parents. It would appear that these students particularly value teacher support. This could be linked to perceived low teacher expectations or the need for extra encouragement in standing out from their peers. One perception is that

in some cases it is “shame” for the Aboriginal child to be singled out (Crawford, 1993, p.17).

Within the student community, individualism and what is perceived as personal self-aggrandisement may be unacceptable. Harslett (1992) provides another perspective by pointing out that many gifted ATSI children may be underachieving and that programs may need to focus on confidence and skill development initially.

Findings in Light of International Research

The parent focus overall was on the need for information about available provisions and ways in which they could further assist their child whether
through school/community partnerships or additional assistance at home. The Arabic-speaking parents in particular focused on additional culturally related provisions.

Teachers supported the need for parent training in addition to the training of AEs and RACLOs so that they in turn could inform their community. In discussing one of the necessary conditions for change in the identification of gifted American Indians, McCarty (1991) outlined the benefits in training local teachers. These community members tended to share a long history of experience at the school and a vested interest in remaining there. This is particularly relevant to the AEs and RACLOs, who are accepted members of their school community. Such people are under-utilised resources in many schools. With appropriate training these people have the credibility at school and community level to help in the implementation of change.

There is a wealth of research information available about conceptions of giftedness and talent and identification techniques suitable for minority students. It seems that teachers either do not have access to or are not interested in this information. The research links conceptualisation of giftedness with the under-representation of minority students (Harslett, 1993). Provisions for staff development or meetings with community representatives are accordingly one way to begin school/community discussions about these issues.

The concept of school/community partnerships is strongly advocated in the research, which suggests that greater use be made of available community resources (Whitton, 1995). The training of parents was seen as an essential comment of Project Step Up (McIntosh, 1995,) which provided parent seminars in critical and creative thinking, communication skills and the improving of self
concept. Such training not only assisted parents in their understanding of the nature of the gifted program but also empowered them to assist their child at home. Research (Cropper, 1998) indicates that when parents are involved with the school in this way, students' academic scores improve. Such involvement appears to have a significant impact on the self-esteem and motivation of students.

Teachers also desired training in classroom strategies, identification techniques and available provisions. Some teachers also requested specific information relating to students from an ESL or cultural background. The importance of teacher training is highlighted in the research both for identification and provision within the classroom.

The most pressing issue is the training of all teachers to have an understanding in the methods of identification and curriculum modification. (Whitton, 1995, p. 182).

Maker (1996) also stressed that students need access to "rich and varied curriculum opportunities" (p. 41).

In addition, the research (Maker, 1996; Whitton, 1995) recognises that teachers may have little understanding of state policies or access to appropriate resources. Teachers in the present study also showed lack of awareness of DSE policy or available school and regional provisions. An increased focus on policy implementation by education authorities and increased accountability for this by schools may address the problem.

The student focus on more or additional work is consistent with the research indicating that gifted and talented students may be bored in the regular classroom if not provided with appropriate provisions catering for their
abilities. The focus by ATSI students on encouragement could be related to the perceptions of some teachers that there are no gifted and talented students from certain populations or it could simply be a signal for extra support in standing out from their peers.

Conclusion

An interesting contradiction arising from the interview and survey data is apparent. Teachers showed a willingness to nominate gifted minority students and a high awareness of provisions for gifted and talented students. However, students were under-represented in these programs. In addition both parents and students showed a genuine interest but a significant lack of awareness in these provisions.

This study, in agreement with previous international research, highlights a need for greater use of available school resources such as counsellors, AEA's, RACLOs, ESL and Community Language teachers. There is also a clear need for the forging of genuine school/community partnerships where parents are encouraged to participate in the identification process and to provide assistance in the form of sharing their expertise for students gifted or talented in the same area.

Greater communication between the school and the community about available State provisions for gifted and talented, the culture of their students and perceptions of giftedness and talent as well as general classroom practice is also necessary. Teacher training in appropriate State gifted and talented policy including definitions, identification and curriculum modification procedures for gifted and talented students, particularly minority students, is
also required.

These and other recommendations are detailed in the concluding chapter.
chapter nine

conclusion
chapter nine

conclusion

This research investigated the extent to which gifted and talented minority groups are under-represented in State gifted and talented programs in NSW and the reasons for this under-representation. The target groups were Aboriginal and Torres Strait Islander students, Arabic language background and Pacific Islander students.

The methodology consisted of a literature review, analysis of enrolments in State provisions for gifted and talented students, and survey and interview analysis of parents, students and teachers from 15 primary schools, five from each of Metropolitan East, Metropolitan South West and the South Coast regions.

The research questions that guided this study were:

1. To what extent are students from Aboriginal and Torres Strait Islander, Arabic and Pacific Islander communities under-represented in NSW DSE State gifted and talented programs?

2. What are the reasons for this under-representation?

   Are the community cultural perceptions of giftedness and talent different from those expressed in the official policy?

   Are educational personnel aware of any differences in perceptions of giftedness and talent in their school community?
What current procedures are used within the three communities and/or by educational personnel to identify students who are gifted and talented?

Do community and educational personnel consider the State provisions for gifted and talented students appropriate?

3. What level of awareness do the various groups have of aspects of the current policy?

4. What are the communities' perceptions of their role in the identification process, support for gifted and talented students and involvement in school perceptions?

To what extent, if any, are the communities' perceptions at variance with the perceptions of educational personnel?

5. If these groups value the current provisions what can be done to increase their representation in the various programs?

Part one of this chapter addresses these questions in the light of the findings of this research and the current research in gifted education as presented in the literature review. Part two outlines recommendations for further directions in educational practice and research in the field.
Findings

1. **To what extent are students from Aboriginal and Torres Strait Islander, Arabic and Pacific Islander communities under-represented in NSW DSE State gifted and talented programs?**

The under-inclusion of minority groups is well documented in the international literature (Frasier, 1992; Sisk, 1994). The findings of this research concerning the under-representation of ATSI, Arabic speaking background and Pacific Islander students in State gifted and talented programs in NSW, Australia largely concur with the international research. With the exception of Pacific Islander Year Seven enrolments in Selective High schools in 1994, the research indicated that the targeted minority groups were significantly under-represented in Selective High Schools and OC classes (Tables 4.1, 4.2, 4.3, 4.6 & 4.7). Data available on the Mentor Program were limited and consequently the evidence of representation of the Arabic and Pacific Islander students in this program was inconclusive. However, ATSI students (Appendix N) with a nil enrolment were clearly under-represented in this program.

2. **What are the reasons for this under-representation?**

A number of reasons for under-representation of minority groups has been suggested by previous research. These include differing conceptions of giftedness and talent, inappropriate identification procedures and provisions, lack of community involvement and inadequate teacher training.

   *i) Are the community cultural perceptions of giftedness and talent different from those expressed in the official policy?*

The international research suggests that the under-representation of minority groups may be closely linked to conceptualisations of giftedness. It is suggested in the research that these groups value talents which are generally
different to those valued by the dominant culture, and therefore available provisions may be perceived as inappropriate by minority groups (Baldwin, 1985; Bernal, 1980; Braggett, 1985).

Parents from across the targeted groups in this study valued a range of cultural attributes in their community and indicated that definitions of giftedness and talent should emphasise cultural attributes. Students associated sport, academic ability, art, technology and cultural abilities such as language or dance with the concept of giftedness or talent. However, the beliefs by personnel within the DSE that parents did not value State provisions for the gifted and talented, in this case Opportunity Classes, Selective High Schools and the Mentor Links Program, because they did not cater for the minority groups’ values or conceptions of gifted and talented, could not be substantiated.

These communities held perceptions of giftedness and talent which they perceived to be broader than the definition in the DSE policy. Nevertheless it could not be argued that they were opposed to the DSE definition, rather they desired the inclusion of additional concepts.

ii) Are educational personnel aware of any differences in perceptions of giftedness and talent in their school community?

The international research indicates that teacher experience and perceptions of students' cultural backgrounds and gifted education may be a major cause of minority students being unidentified (Avery and Walker, 1993; Maker, 1992; Liston & Zeichner, 1990).

Teachers in this study appeared to have limited knowledge of their student's communities' values or perceptions of giftedness and talent. Some teachers
recognised the importance of religion; however, the majority of teachers were unaware of the value placed on cultural attributes and academic ability. This is despite the fact that one of the criteria for schools to be involved in this study was a significant representation of one or more of the target groups. In addition a criterion for teachers who were interviewed or surveyed was that they were currently teaching or had taught students from the target group.

iii) What current procedures are used within the three communities and by educational Personnel to identify students who are gifted and talented?

The international literature suggests that criteria for the definition and identification of the gifted must take into account historical and cultural realities (Bernal, 1982; Harslett, 1992; Wallace & Adams, 1993; Baldwin, 1995). This practice was not followed by the majority of teachers, who relied heavily on tests and academic performance in class. Teachers often referred to speed with which work was completed and good behaviour as criteria of giftedness and talent. Teachers did not use multiple criteria in assessing students and did not make use of available school resources such as AEsAs, ESL or Community Language teachers. These personnel were in a strong position to identify students with potential because of their knowledge of the student outside school, their culture and/or the ability to translate the students’ work.

Teachers were reluctant to value the credibility of parents as identifiers of giftedness and talent. They perceived parents were either uninformed in this area or too biased. This is contrary to research (Gear, 1976; Gross, 1994) which suggests that parents are reliable identifiers and indeed often more accurate than teachers. Some teachers were happy, however, to take parent recommendations into account.
Parents also identified giftedness and talent using academic performance and motivation at school, but used a range of additional criteria such as sport and specific cultural attributes. These included ability in language, both English and the home language, performance in dance, music and singing. In addition, attributes of being respectful to elders, honest and caring, which the researcher classified under the heading of "being a good person" were highly valued attributes. Parents' perceptions that teachers identified academic performance on the basis of test performance, good behaviour and neatness, both in work and personal presentation, were accurate apart from the latter criterion. Indeed, parents appeared to have better knowledge of how teachers assessed giftedness and talent than teachers did of the identification criteria used by parents.

iv) Do community and educational personnel consider the State provisions for gifted and talented students appropriate?

When parents were asked if they would encourage their child to apply for programs and provisions such as OC classes, Selective High Schools and the Mentor Links program, the majority of parents were in support of all three programs. Results for the Mentor Links Program in particular show there was unanimous support. The majority of teachers were also enthusiastic about these provisions.

The reservations of parents and teachers concerning transportation problems are an equity issue. Distance is most likely the biggest contributing factor to the under-representation of some of the target groups, particularly those living in more isolated areas. Distances of up to two or more hours involved in travel to OC classes and Selective High Schools could be considered unreasonable,
particularly if travel is limited to available public transport.

Minority communities in this research requested additional cultural provisions for gifted and talented students. However, it is clear that the majority of parents and students were not opposed to the State provisions. In addition, those who were opposed to such provisions did not suggest cultural inappropriateness as a reason.

Research investigating minority communities' attitudes to available gifted and talented provisions is surprisingly limited in view of assertions that such provisions may be culturally inappropriate (Goertz, Phemister & Bernal, 1995). Available information is generally not the focus of the research but rather an interesting aside. In Project Step Up, a focus of the project was to encourage minority parents to nominate their children for gifted and talented programs as it was felt that parents assumed places would only go to white, middle class children (McIntosh, 1995). This perception, however, was not evident among the parents interviewed and surveyed in the present study.

An Australian project investigating the way in which the Balga Primary Extension and Challenge Centre (PEAC) catered for urban Aboriginal children found that parents contacted to inform them of their child's successful selection were most enthusiastic about the program (Fletcher, Gatti & Michael, 1985). Such responses are consistent with the positive attitude of the target groups in this research to available State gifted and talented provisions. Although the Mentor Program was the most popular provision, Selective High Schools and OC classes had the support of the majority of parents. This indicates that the target communities are not necessarily opposed to provisions specifically for academic gifts and talents or provisions that will, by attendance at a different school, clearly physically separate children from their
peers.

3. **What level of awareness do the various groups have of aspects of the current policy?**

Awareness of the DSE definition of giftedness and talent, State provisions and identification techniques was the focus of the interview and survey questions about aspects of DSE policy, in particular definitions, identification strategies and available provisions.

The research indicated that there was little agreement among teachers concerning the definition of giftedness and talent or identification procedures for gifted and talented students. Many teachers focused on academic ability, particularly in the form of tests to identify students. Such views are contrary to the DSE definition (1991, p. 2) which emphasises giftedness and talent occurs across a range of areas. In addition the DSE policy clearly states that a range of identification strategies are to be used (DSE, 1991, p. 5). The majority of teachers felt they were not adequately trained to identify gifted and talented students from non English speaking backgrounds and in most cases did not utilise available resources such as the ESL teacher or the school's community language teacher.

Parents interchanged the words “gifted” and “talented” and were unaware of the DSE definition. However, parents in many cases had a much broader concept of giftedness and talent, which they perceived, as encompassing a variety of areas. Their conceptions were more in line with the DSE definition than those of teachers. Parents were unaware of the range of identification techniques outlined in the DSE policy but were accurate in their perceptions of how teachers identified giftedness and talent in the classroom.
Teachers appeared well informed about two of the State gifted and talented provisions, OC classes and Selective High Schools, yet largely unaware of the Mentor Program. In contrast, students and parents across the target groups are largely unaware of all State provisions, particularly the Mentor Program.

Schools are well informed about State provisions and their responsibility in informing their school community by the DSE. Accordingly, on the whole this information is passed on to teachers. The fact that parents and students are not informed indicates a breakdown in communication from the school. This study suggests a number of possible reasons for the communication failure. In some cases teachers felt that students from the targeted groups or from their school as a whole could not be gifted or talented. Consequently, they may not have felt the State provisions would benefit these students. Similarly, if schools perceived that the communities would not value these provisions or find them appropriate again they may have chosen not to inform parents. School personnel opposed to the concept of such provisions, perceiving them as elitist, may have elected not to inform their school community. In other cases, schools raised concerns about losing students and consequently staff. Another possibility is the mode of communication used by the NSW DSE and the school with parents. Written correspondence, whether in advertisements or the school newsletter may not be appropriate unless translated and even if the latter is the case parents may be illiterate in both English and their own language.
4. **What are the communities’ perceptions of their role in the identification process, support for gifted and talented students and involvement in school provisions?**

To what extent, if any, are the communities’ perceptions at variance with the perceptions of educational personnel?

Parents were divided on their perceived role in the identification process. Some parents were happy to inform the school of their child’s gifts whereas other were more reluctant, worried that they would be seen as bragging. Many parents (58% Aboriginal, 45% Arabic speaking background, 39% Pacific Islanders) saw identification as the main responsibility of the school. Parents perceived that they could identify individual talents such as sport and language. Parents were willing to assist in or run activities at the school in their own areas of talent, particularly in cultural areas.

Parents perceived that teachers relied on indicators such as academic performance, good behaviour and neatness in work and presentation as indicators of giftedness and talent. Their assessment of the school identification process was quite accurate apart from the aspect of neatness.

Teachers were willing to consider parent suggestions about their child’s gifts or talents; however they perceived this was mainly the main role of the school. Some teachers maintained that parents lacked credibility as identifiers, either because they were biased or had no training in the area. They were, however, enthusiastic about parents’ involvement in the running of or involvement in activities for gifted and talented students.

Research indicates that the under-representation of minority groups in programs for gifted is closely linked to methods of identification (Baldwin,
1985, Bernal, 1980, Bragget 1985). Much of the research suggests that a major factor contributing to this under-representation is reliance on IQ tests (Maker, 1996). This was not the case in the present study. However, teachers relied predominantly on single class tests, motivation and speed of learning as identification tools. None of these strategies are individually supported by the research literature or the DSE gifted and talented policy. Research (Jacobs, 1971; Passow, 1995; Richert, 1987) also advocates the use of parents as reliable identifiers of giftedness and talent, but suggests as was the case in this study, that teachers did not perceive this to be the case.

5. If these groups value the current provisions what can be done to increase their representation in the various programs?

From this research it is clear that the targeted minority groups do value the current provisions.

Both parents and teachers requested professional development for parents in the area of definitions, available provisions and how they could support their child at home. In addition, teachers and parents desired increased parental involvement in running or assisting in activities for gifted and talented students at school level. The international research maintains that the training of parents and/or awareness raising of programs available is essential. Community involvement in the identification of students, setting up and running of gifted and talented programs is seen as an integral component in obtaining the support of families and increasing student success (Colman, 1991; Feldhusen, 1994; McIntosh, 1995).

Teachers requested training in identifying and catering for gifted and talented minority students in addition to knowledge of available provisions and
resources. They were generally reluctant to rely on parent nominations. Research supports the stance that extensive consultation between the school and the community is necessary for the successful identification and participation of gifted minority students. It is argued that parent and peer nomination are highly recommended as part of the identification process (Garrison, 1993; Harslett, 1992, Hughes & Andrews, 1988; Van Tassel-Baska, 1989). Further, the research is consistent in its advocacy of multiple assessment procedures, with the use of both objective and subjective data (Frasier, 1997; Passow, 1981).

Most teachers had little knowledge of the conceptions of giftedness and talent held by the target groups. As they were unaware of specific cultural gifts or talents valued by these groups they were unlikely to investigate or appreciate the full range of talents students may have exhibited. In addition, teachers did not always have expectations that students from these minority groups could be gifted and talented. Teacher negative perceptions regarding the ability of minority groups is not unusual (Frasier, 1997; Zappia, 1989). Increased teacher knowledge about their school communities and their conceptions of giftedness and talent is suggested by the research as one strategy which could greatly assist to change these perceptions. The resulting change in teacher expectations could impact on student performance and also increase accuracy in identification (Ford & Harris, 1990). In addition an enriched and varied curriculum which takes into account cultural values may also increase the possibility of minority students being identified (Baldwin, 1991; Maker, 1996).
Recommendations

The following recommendations for education authorities and further research are based on the evaluation of data collected and the literature surveyed.

Recommendation 1

That teacher requests for further training courses in the areas of identification and classroom teaching strategies, particularly for students from ATSI and non-English speaking students, be met.

This could be achieved by a number of strategies. Pre-service training could include a component addressing these issues. There could be mandatory or optional professional development for teachers about minority gifted and talented students at school or district level via the district Gifted and Talented Students committee. Such courses could be run in partnership with appropriate community representatives. A coordinated training and development approach could be developed across the various directorates within Government and non-Government Education Departments. These training courses could include information regarding resource people at the school and district personnel who may be of valuable assistance in the identification of gifted and talented students (e.g. AEAs, ESL teachers, RACLOs).

Recommendation 2

That parent and specialised teacher requests for parent training in the areas of definition, identification and parental support of gifted students be met.
In addition to the above strategies, specialised training could be provided to support people such as AEAs, ESL teachers, Community Language teachers, school counsellors and Support Learning Difficulties teachers. Many of these groups have regular meetings and training days where such training could be incorporated.

**Recommendation 3**

That current procedures for informing parents of State provisions for gifted and talented students be examined with the objective to ensure that all parents know about provisions.

This could be implemented by district Gifted and Talented Students Networks providing a newsletter to schools in their districts outlining a list of available State, district and within school provisions for gifted and talented students. This strategy would be enhanced if translated into community languages. The training of appropriate community personnel such as AEAs or community leaders would be another valuable method of communicating this information through informal networks to the wider community, particularly where parents may be illiterate in their home language. This mode of communication by a respected person in the community would also enhance the credibility of such programs and increase the likelihood of community involvement.

**Recommendation 4**

That education authorities consider changes to the current definitions of giftedness and talent to take into account the varying perceptions of these terms in the community.
Individual schools need to examine their gifted and talented policy in consultation with their community to ensure that the values and attributes of gifted and talented minority students are taken into account. This will further result in an increased community awareness of available school provisions, in addition to the identification strategies and conceptions of giftedness and talent used by the school.

**Recommendation 5**

That consideration be given to reviewing, with community consultation and revising if necessary, selection procedures for State provisions of gifted and talented students. This could have the dual function of determining the perceived relevance of these provisions to minority populations and increasing the awareness of and credibility of these provisions.

**Recommendations for further directions in research in the field.**

**Recommendation 1**

**Sample Representation**

To gain a clearer perspective of the underlying causes for the under-representation of minority groups in gifted and talented programs it would be useful to have a control group of non-minority participants as a point of comparison for both the qualitative and quantitative data.

It would be interesting to extend this research project to include participants from both disadvantaged and affluent geographic areas to ascertain the
difference in awareness of and attitudes to available provisions.

**Recommendation 2**

**Quantitative data**

As part of the quantitative data it would be useful to determine the number of minority students applying for acceptance in such provisions, the number of these who were successful and the number who, although offered a place, did not take up the offer. The reasons for non-acceptance of offers could be further probed in interviews and/or surveys.

**Recommendation 3**

**Case Studies**

A follow up of minority students who enrolled in a gifted program and later dropped out would provide further data on the appropriateness of these programs for minority students. This information could be compared with a case study of minority students who successfully completed such programs.

**Recommendation 4**

**Accessibility of provisions for gifted students**

An investigation of the locality of gifted programs for students from both disadvantaged and privileged backgrounds and minority and non-minority students and the reasons for any inequality in access to these provisions may provide further explanation for the under-representation of some groups and
the over-representation of others in gifted and talented programs. Qualitative data in the form of interviews and or surveys may ascertain any differences in the attitudes of these groups to long distance travel or to the option of moving closer to available provisions.

Recommendation 5

A follow up study

One of the purposes of this research was to target students who were in the appropriate range to apply for State gifted programs. It was hoped that as a result of this involvement awareness of such provisions would be enhanced by the process of interviewing and surveying the students, their teachers and parents. It was hoped that whole school awareness of such provisions would be increased by the involvement in the research project.

A follow up study of the application rate and consequent enrolment of students from these schools in State gifted and talented programs, particularly those in the grades targeted by the research would assist in determining to what degree general awareness is responsible for the under-representation of these minority groups.
Recommendation 6

Selection techniques

As an extension of this research, an investigation of the identification techniques used to select students for State gifted and talented programs in NSW may highlight any possible cultural biases in these procedures. This may provide a possible explanation for the non-selection of students who attempted the selection procedures but were unsuccessful.
bibliography
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Appendices
Appendix A.
Permission to Use Research Material by the Department of School Education

DEPARTMENT OF SCHOOL EDUCATION 95/0750

ISSUE:
Permission to use NEPS/GATS data as part of a doctoral thesis

BACKGROUND:

• in 1992 I began my candidature for a Doctor of Education degree at the University of Sydney with the focus of my research on the identification of gifted and talented students from disadvantaged backgrounds.

• in 1994 I was appointed Project Officer for the DEET funded project Models of support for disadvantaged gifted and talented students. In this position I designed the research instruments and analysed the data obtained. This included surveys of and interviews with school executives, teachers (classroom, ESL, community languages, parents and students from 15 schools across 3 regions.

• permission to use this material was first requested in February, 1995.

• thesis topic - Identification strategies and models of support for specific groups of disadvantaged gifted and talented students

• precis - the specific groups of disadvantaged students include Aboriginal students, students from non-English speaking backgrounds (Pacific Islander and Arabic) and English speaking background students from low socio-economic backgrounds. The research data was obtained from the interviews and surveys of parents, teachers and students. This data investigated their views about definitions of giftedness and talent, identification procedures, knowledge of and attitudes to state and local provisions for giftedness and talent in addition to examining the role of the community. This information, in addition to that of national and international research, will be used to further examine existing identification strategies and models of support. A consequence of this thesis will be the further development and evaluation of the processes and models for the identification of a model for disadvantaged gifted and talented students.

COMMENT:
• Sydney University require a letter from the DSE authorising approval to use the research by the end of the university year, 2 December. This information will be included in my progress report

1 November 1995
- DEET have no objection to the material being used provided their stated conditions are met (TAB A)
- a letter from my supervisor confirming my field of research is attached (TAB C)
- the data required are the reports provided to DEET. These include:
  - surveys of parents, teachers, community liaison officers and students and interviews of parents, teachers and students (TAB D)
  - data on the representation of the target groups in OC classes and year 7 in selective schools
  - the literature review
- a completed DSE application to complete research report is attached (TAB E)
- two referees' reports are included (TAB F)
- a letter to principals from the previous Director, Elizabeth George and the letter to parents from Sue Vasilevska outlining the project and ensuring privacy and voluntary participation are attached (TAB G)
- a copy of the complete thesis will be forwarded to the Department of School Education
- it is possible to place a moratorium on the publication and citing of the thesis so the material can not be published for a determined period of time.

RECOMMENDATIONS:

- that approval for the research material to be used for a doctorate thesis be signed and that the attached letter (TAB H) to the project officer's university supervisor be signed

Van Davy
Chief Education Officer
Equity Programs Unit
8 November 1995

Lyndsay Connors
Director of Specific Focus Programs
20. 11. 95.
Appendix B

Permission to Use Research Material by the Department of Employment, Education and Training

DEPARTMENT OF EMPLOYMENT, EDUCATION AND TRAINING

National Office
16-18 Mort Street, GPO Box 9880
Canberra ACT 2601
Tel: (06) 240 8111

Your ref:
Our ref: 93/16036

Ms Sue Vasilevska
6 Samuel Street
WILEY PARK NSW 2195

Dear Ms Vasilevska

Thank you for your letter of 31 January 1995 seeking permission to use the research material collected by you while Project Officer of the 1993 Gifted and Talented Component project, *Models of support for disadvantaged gifted and talented students*, for your Doctorate of Education degree at the University of Sydney.

The Department has no objection to your using the material, provided that you meet the conditions outlined in the attachment and the New South Wales Department of School Education also agrees that the project material may be used for the purpose of your doctoral thesis.

Yours sincerely

[Signature]

Denise Jefferson
Director
National Programs Section

February 1995
Appendix C

Policy for the Education of Gifted and Talented Students

Forward

The Department of School Education identifies and develops gifts and talents among its students.

This policy and the associated implementation strategies, developed through extensive consultation over the past year, specify responsibilities and provide guidance for teachers, schools, regions and the central executive of the NSW Department of School Education.

The new policy is more comprehensive and flexible than its predecessor. It requires teachers and school communities to extend and enrich the curriculum to challenge gifted and talented students. It encourages the continuing development of appropriate strategies including early entry to school and accelerated progression. There will be ongoing community consultation regarding the implementation of the policy, particularly in relation to strategies such as the provision for early entry into schools.

Programs to realise the full potential of gifted and talented young people must be balanced and implemented in a manner appropriate to the needs of the individual.

The NSW Department of School Education Policy for the Education of Gifted and Talented Students, aims to achieve educational equity and high quality outcomes for all gifted and talented students, regardless of race, gender, socio-economic or socio-cultural backgrounds, and to ensure that these students are extended and enriched throughout their schooling.

Denis W Ralph
Acting Director-General of School Education
November, 1991
Rationale

This policy statement complements the NSW Government Strategy for the Education of Gifted and Talented Students. The overall aim of the policy is to maximise the educational outcomes of schooling for gifted and talented students.

Government schools have a responsibility to educate all students to their full potential.

The policy adopts the definitions of gifted and talented articulated in the NSW Government Strategy statement.

Gifted students are those with the potential to exhibit superior performance across a range of areas of endeavour.

Talented students are those with the potential to exhibit superior performance in one area of endeavour.

It is critical for gifted and talented students to be given appropriate opportunity, stimulation and the experiences to develop their potential and satisfy their learning needs. Special emphasis will also be given to identifying those students whose gifts and talents may have been previously overlooked.

Gifted and talented students are to be found in all communities regardless of their socio-cultural or socio-economic backgrounds.

It is important for teachers to be sensitive to factors which can help or hinder the recognition and development of special gifts and talents in young people.

These factors are:

- motivation
- self esteem
- peer pressure
- socio-economic and socio-cultural
- cultural and linguistic
- disability

Giftedness and talent may occur in many different areas including the creative arts, academic subjects, social and leadership skills and sporting interests.
Opportunities for students to achieve their full potential should be provided as a matter of daily routine. Such opportunities may be created within a class, among groups of classes or schools, or by regionally or centrally-designed programs and initiatives.
Policy Statement

This policy statement recognises that decision making in relation to provisions for gifted and talented students is a complex and interactive process.

School principals, in consultation with parents, teachers, school counsellors and other appropriate personnel, have the prime responsibility for decisions in relation to the education of gifted and talented students.

1. School communities have a responsibility to identify their gifted and talented students.

2. School communities have a responsibility to provide a range of opportunities for their gifted and talented students.

2.1 School Principals have the final responsibility for deciding when the early entry to school of a student who is intellectually gifted and talented is appropriate to meet the student's educational, social and emotional needs.

2.2 School Principals have the final responsibility for deciding when any form of accelerated progression is appropriate for individual gifted and talented students in Years K-12 to meet the student's educational, social and emotional needs.

3. Teachers have a responsibility to identify the gifted and talented students in their classes.

4. Teachers have a responsibility to select a variety of teaching strategies for inclusion in programs for the range of gifted and talented students in their classes.

5. Regions and schools have a responsibility to coordinate school provisions for gifted and talented students when it is feasible for more than one school to share this responsibility.

6. Regions and schools have a responsibility to provide staff development opportunities in the education of gifted and talented students for principals, teachers and other appropriate school personnel.

7. The Director-General and the Central Executive have a responsibility to account for the implementation of Government policy to report on the outcomes of schooling for gifted and talented students in NSW Government schools.
This policy statement must be read in conjunction with the NSW Government Strategy for the Education of Gifted and Talented students.
Appendix D
Letter to Principals

New South Wales Government

Department of School Education
City Centre,
Levels 13, 14 & 15, 55 Market Street,
Sydney NSW 2000.

Please address all communications to:
N.S.W. Department of School Education
Box 33, G.P.O., Sydney N.S.W. 2001
Telephone: (02) 561 8400
Fax: (02) 561 6479

Dear Principal

Thank you for volunteering to be part of the 1993/94 National Equity Program for Schools Gifted and Talented Students Project.

This project seeks to investigate and develop appropriate models of support for disadvantaged gifted and talented students. Four broad student groupings within the disadvantaged population have been selected. These are: Aboriginal or Torres Strait Islander, NESB (Tongan and Lebanese) and low socio-economic status English speaking students.

The project will focus on:

- Identification processes
- Developing models of support which emphasise improved learning outcomes for students from these groups
- Approaches to professional development of teachers.

The project will involve interviewing and surveying parents, students, teachers, community liaison officers and Aboriginal education assistants.

The research is being undertaken by Sue Vasiljevska, a teacher who has been seconded to the Equity Programs Unit for this purpose. Participation by schools is voluntary.

Students may only participate with the consent of their parents/guardians. Sue Vasiljevska has undertaken to keep you fully informed, to protect the privacy of all participants and to provide the school with a summary report at the conclusion of the study. I trust that the outcomes of the research will be of direct benefit to your school and the targeted disadvantaged students.

Any queries regarding the research should be directed to Sue Vasiljevska, Equity Programs Unit, 3A Smalls Road, Private Bag 3, Ryde 2112, telephone 808 9525.

Elizabeth George
Director, Specific Focus Programs

4/10/1994

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## Appendix E

### Breakdown of Target Populations by school and region

<table>
<thead>
<tr>
<th>School</th>
<th>Region</th>
<th>Target Group</th>
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<td>Metropolitan East</td>
<td>Arabic, Pacific Islander</td>
</tr>
<tr>
<td>Lorikeet</td>
<td>Metropolitan East</td>
<td>Arabic, Aboriginal</td>
</tr>
<tr>
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<td>Metropolitan East</td>
<td>Arabic, Aboriginal</td>
</tr>
<tr>
<td>Amberville</td>
<td>Metropolitan East</td>
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</tr>
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*The real names of schools have not been used.*
Appendix F

Classroom Teachers Survey about Gifted and Talented Students

This survey is designed to find out what classroom teachers think about programs for gifted and talented students with regard to specific student groups.

The survey is focusing on children who:
* are Aboriginal or Torres Strait Islander
or
* are Lebanese
or
* are Tongan
or
* attend schools which are a part of the Disadvantaged Schools Component

All responses are confidential and anonymous. Please provide the following general information before answering the survey questions.

**General Information**

1. My position is  
   ........................................................................................................................................

2. I am male/female  
   (please circle)

3. The students with whom I work most and will comment about in this survey are:
   
   Aboriginal or Torres Strait Islander
   Lebanese
   Tongan
   Combination  
   (Please circle)
   Attend DSC Schools
   
Minority Students and Gifted and Talented Programs:  
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SURVEY PART I

DEFINITIONS

These are the definitions for gifted and talented students used in NSW Government schools documents:

Gifted students: are those with the potential to exhibit superior performance across a range of areas of endeavour.

Talented students are those with the potential to exhibit superior performance in one area of endeavour.

Giftedness and talents may occur in many different areas including the creative and performing arts, academic subjects, social and leadership skills and sporting interests.

PART I QUESTIONS

S1 From the students you specified, what percentage would you describe as gifted and/or talented according to the above definitions?

S2 What gifts/talents led you to identify these students?

S3 Do these definitions adequately describe the special abilities of this student population?

   YES   NO   DON'T KNOW  (Please circle)

If no, please describe the special abilities.

S4 Does the family or community group of these students value any gifts or talents which are not adequately described by the above definitions?

   YES   NO   DON'T KNOW  (Please circle)

If yes, please describe what these gifts or talents are.

S5 Please add further comments about these definitions for gifted and talented students as they relate to the specific student group with which you work.
SURVEY PART 2

SELECTIVE HIGH SCHOOLS are special schools which provide for students who are gifted in their academic work. Students may request to do special entrance tests to be considered for these schools.

OPPORTUNITY CLASSES are special classes in some primary schools. These specialist classes provide for students in Year 5 and Year 6 who are gifted in their academic work. In Year 4 students may request to do special entrance tests to be considered for these classes.

MENTOR PROGRAM is a program that links very talented students with an expert from the community who is very talented in the same area and who helps the student develop their talent. This program is usually for students who are at least 10 years old. Information about this program is sent to schools and schools provide the information to parents.

S6  Have you nominated or would you nominate students in the specified group for any of these programs?
   i)  Selective High School   YES/NO (Please circle)
   ii) Opportunity Classes   YES/NO (Please circle)
   iii) Mentor Program   YES/NO (Please circle)

   Why/Why not?

S7  Were you aware that each of these programs existed?  
    YES  NO  (Please circle)

S8  What do you think about these programs?
    COMMENT

S9  Are you aware of any programs or activities that are designed to meet the special abilities of these students? YES/NO  (Please circle)
    If yes please give examples.

S10  Can you suggest any programs or activities in addition to the three listed above to meet the special abilities of these students?
    COMMENT

S11  We hope to interview some teachers. If you would consider being interviewed please put your name below

THANK YOU FOR COMPLETING THIS SURVEY.

IT WILL BE COLLECTED ON _______________________________
Aboriginal Education Assistants' Survey about Gifted and Talented Aboriginal and Torres Strait Islander Students

This survey is designed to find out what Aboriginal Education Assistants think about programs for gifted and talented students with regard to specific student groups.

The survey is focusing on children who:

* are Aboriginal or Torres Strait Islander
  or
  * are Lebanese
  or
  * are Tongan
  or
  * attend schools which are a part of the Disadvantaged Schools Component funding

All responses are confidential and anonymous. Please provide the following general information before answering the survey questions.

GENERAL INFORMATION

1. I am male/female (Please circle)

2. I teach in a primary secondary (Please circle)
   school

3. How many years have you been in your current position?
   ..............................................................................................................
**SURVEY PART I**

**DEFINITIONS**

These are the definitions for gifted and talented students used in NSW Government schools documents:

- Gifted students: are those with the potential to exhibit superior performance across a range of areas of endeavour.
- Talented students are those with the potential to exhibit superior performance in one area of endeavour.

Giftedness and talents may occur in many different areas including the creative and performing arts, academic subjects, social and leadership skills and sporting interests.

**PART I QUESTIONS**

**S1** How many Aboriginal or Torres Strait Islander Students would you describe as gifted and/or talented according to the above definitions?
- 5%  
- 20%  
- 50%  
- None  
- Other  

(Please circle)

(Please specify)

**S2** What gifts/talents led you to identify these students.

________________________________________________________________________

________________________________________________________________________

**S3** Do the above definitions adequately describe the special abilities of this student population?
- YES  
- NO  
- DON'T KNOW  
- (Please circle)

If no please describe the special abilities

________________________________________________________________________

________________________________________________________________________

**S4** Does the family or community group of these students value any abilities which are not described by the above definitions?
- YES  
- NO  

(Please circle)

If yes, please describe what these gifts or talents are.

________________________________________________________________________

________________________________________________________________________

**S5** Please add further comments about these definitions for gifted and talented students as they relate to Aboriginal and Torres Strait Islander Students.

________________________________________________________________________

________________________________________________________________________
SURVEY PART 2

Selective High Schools are special schools which provide for students who are gifted in their academic work. Students may request to do special entrance tests to be considered for these schools.

Opportunity Classes are special classes in some primary schools. These specialist classes provide for students in Year 5 and Year 6 who are gifted in their academic work. In Year 4 students may request to do special entrance tests to be considered for these classes.

Mentor Program is a program that links very talented students with an expert from the community who is very talented in the same area and who helps the student develop their talent. This program is usually for students who are at least 10 years old. Information about this program is sent to schools and schools provide the information to parents about how to nominate for this program.

S6 Were you aware that each of these programs existed?
Selective .................. YES/NO (Please circle)
OC ..........................YES/NO
Mentor ...................... YES/NO

S7 What do you think about these programs?
COMMENTS
................................................................................................................................................
................................................................................................................................................

S8 Have you nominated or would you nominate students in the specified group for any of these programs?
i) Selective High School YES/NO (Please circle)
ii) Opportunity Classes YES/NO (Please circle)
iii) Mentor Program YES/NO (Please circle)
Why/Why not?
................................................................................................................................................
................................................................................................................................................
S9 Are you aware of any programs or activities that are designed to meet the special abilities of these students? YES/NO (Please circle) COMMENT

S10 Can you suggest any programs or activities in addition to the three listed above to meet the special abilities of these students?
COMMENT

Name: ________________________________

Phone: ________________________________

School: ________________________________

THANK YOU FOR COMPLETING THIS SURVEY.
IT WILL BE COLLECTED ON _________________
Student Survey
about
Gifted and Talented Students

This survey is designed to find out what you think about programs for gifted and talented students.

Your answers will be confidential.

General Information
Please complete the information below.

1. I am male/female (Please circle)
2. I am in Year 3 Year 4 Year 5 (Please circle)
3. We mainly speak English at home
   YES NO (Please circle)
4. Other language/s spoken. (Please list)
   ............................................................................................................................................................
5. I have been at school in Australia for _ years
SURVEY PART I

Who are gifted and talented students? Students may have gifts and talents in many different areas.
- art, music, drama, dance, sport
- academic subjects such as English, Maths, History and Science
- languages, cooking, sewing, woodwork

Social and leadership skills are just some examples.

The way we explain gifted and talented in New South Wales schools is:

**Gifted Students** have the potential to show superior performance in more than one area.

**Talented Students** have the potential to show superior performance in one area.

**Part 1 Questions**

**S1** Do you know someone who is gifted or talented according to these definitions

*YES*   *NO*   (Please circle)

What area/s are they gifted or talented in?

.................................................................................................................................

**S2** What other abilities might gifted or talented students have?

.................................................................................................................................

.................................................................................................................................

**S3** What would your family think "gifted" or "talented" mean?

.................................................................................................................................
SURVEY PART 2

What are selective High Schools, Opportunity Classes and the Mentor Program?

Selective High Schools are special schools which provide for students who are gifted in their academic work.

Opportunity Classes some primary schools have specialist year 5 and year 6 classes which provide for students who are gifted in their academic work.

Mentor Program is a program that links very talented students with an expert from the community who is (eg vide, cartooning). This mentor helps the student develop their talent.

S5  Before this survey did you know these programs existed? YES/NO
   (i)  Selective High School  YES/NO
        (Please circle)
   (ii) Opportunity classes    YES/NO
   (iii) Mentor Program       YES/NO

S6  Would you like to be nominated for any of these programs?
   (i)  Selective High School  YES/NO
        (Please circle)
   (ii) Opportunity classes    YES/NO
   (iii) Mentor Program       YES/NO

   Why/Why not?
   ........................................................................................................

S7  Do you know any other programs or provisions that are available for gifted or talented students?

YES  NO  (Please circle)

S8  What other programs or activities do you suggest would help gifted or talented students.

..................................................................................................................
..................................................................................................................

THANK YOU FOR COMPLETING THIS SURVEY. PLEASE RETURN IT TO YOUR TEACHER.
Parent Survey About
Gifted and Talented Students

This survey is designed to find out what parent and community groups think about programs for gifted and talented students.
The survey is intended for parents who have children in Years 3, 4 or 5. The survey is focusing on the parents/caregivers of children who:
* are Aboriginal/Torres Strait Islander
  or
* Lebanese
  or
* are Tongan
  or
* attend schools which are a part of the Disadvantaged Schools Program

Please provide the following general information about your child/children before answering the survey questions.
Please return the completed survey immediately to your child/children's school.

General Information
1. Your name .................................................................
   (If you prefer not to give your name please leave blank)
2. In which class is your child/children? (Please circle)
   Year 3 Year 4 Year 5
3.(a) My child/children has only attended schools in Australia.
   YES   NO   (Please circle)
   (b) If no
       Where else has your child/children attended school and for how long?
       ......................................................................................................................
4. My child is:
   Aboriginal/Torres Strait Islander Lebanese Tongan
   (Please circle)
   Religion: .................................................................
5.(a) Years of schooling in Australia
       ......................................................................................................................
   (b) Language spoken at home
       ......................................................................................................................

Please note. All responses are strictly confidential.
SURVEY PART I

What does the Department of School Education mean by Gifted and Talented Students?

Definitions

These are the definitions for gifted and talented students used in NSW schools.

**Gifted students:** are those with the potential to exhibit superior performance across a range of areas.

**Talented students:** are those with the potential to exhibit superior performance in one area of endeavour.

Giftedness and talents may occur in many different areas including; the creative and performing arts, academic subjects, social and leadership skills and sporting interests.

**Part 1 Questions**

S1 If you think your child is gifted or talented according to the above definitions please list the area/areas.

....................................................................................................................................................................
....................................................................................................................................................................

S2 What other special abilities does your child which are not listed here. (eg cultural interests) Please describe.

....................................................................................................................................................................
....................................................................................................................................................................

S3 Does your community value any gifts or talents in children which are not described here?

YES/NO

S4 What do you think of the Department of School Education's definitions for gifted and talented students?

....................................................................................................................................................................
....................................................................................................................................................................

Minority Students and Gifted and Talented Programs:  Page 288
SURVEY PART 2

What does the Department of School Education mean by Selective High Schools, Opportunity Classes and the Mentor Program?

Selective High Schools are special schools which provide for students who are gifted in their academic work. Students may request to do special entrance tests to be considered for these schools.

Opportunity Classes are special classes in some primary schools. These specialist classes provide for students in Year 5 and Year 6 who are gifted in their academic work. In Year 4 students may request to do special entrance tests to be considered for these classes.

Mentor Program is a program that links very talented students with an expert from the community who is very talented in the same area and who helps the student develop their talent. This program is usually for students who are at least 10 years old. Information about this program is sent to schools and schools provide the information to parents.

S5 Before this survey were you aware of all of these programs?
   (i) Selective High School YES/NO (Please circle)
   (ii) Opportunity classes YES/NO
   (iii) Mentor Program YES/NO

S6 Have you nominated or would you nominate your child for any of these programs
   (i) Selective High School YES/NO (Please circle)
      Why/Why not?
                                                                                           .................................................................
   (ii) Opportunity classes YES/NO (Please circle)
      Why/Why not?
                                                                                           .................................................................
   (iii) Mentor Program YES/NO (Please circle)
      Why/Why not?
                                                                                           .................................................................
**S7** What do you think about these programs?  
(Please circle)

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<tr>
<th>Selective High Schools</th>
<th>Opportunity Classes</th>
<th>Mentor Program</th>
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</thead>
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<td>Good</td>
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<td>Good</td>
</tr>
<tr>
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</tr>
<tr>
<td>Other (please specify)</td>
<td>Other (Please specify)</td>
<td>Other (Please specify)</td>
</tr>
</tbody>
</table>

**YES/NO** Please circle  
(Please circle)  
If yes please give examples

**S9** What additional programs or activities do you suggest would cater for your children's special abilities?

**S10** We are hoping to interview some parents. If you would consider being interviewed please put your name below.

**THANK YOU FOR COMPLETING THIS SURVEY.**  
**PLEASE RETURN IT IMMEDIATELY TO YOUR SCHOOL.**  
**All responses are strictly confidential**

Cut off here

\[XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX\]

Name:  
Phone:  

My child/children is in  
Year 3 Year 4 Year 5 (Please circle more than one if appropriate)
Appendix G

Surveys

Combined Survey totals for Metropolitan East, South Coast and Metropolitan South West

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<td>Teachers</td>
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<td>15</td>
<td>10</td>
<td>39</td>
</tr>
<tr>
<td>Support Teachers *</td>
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<td>5</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Community Teachers **</td>
<td>3#</td>
<td>5</td>
<td>NA</td>
<td>8</td>
</tr>
<tr>
<td>Students</td>
<td>##</td>
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<td>Parents</td>
<td>6</td>
<td>74</td>
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<tr>
<td>Total</td>
<td>24</td>
<td>248</td>
<td>40</td>
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</tr>
</tbody>
</table>

312 surveys in total

* Support teachers include: Aboriginal Education Assistants, Aboriginal Homework Centre Teachers, ESL teachers and Community Language teachers.

** Community teachers include: language teachers of the target groups who teach after school hours.

# There were only 3 AEAs at the schools participating in this study

## ATSI students were not able to be identified by survey
Appendix H

Interview Questions

Classroom, ESL & Community Language Teachers

Thank you for assisting in this project. The interview will last for about half an hour.

1. The Department of School Education is interested in analysing the differences between teachers', parents' and students' perceptions of giftedness and talent.

When we are talking about students, what do the words 'gifted' and 'talented' mean to you?

2. Could you describe some of the different interpretations you think your students' parents might have of the words 'gifted' and 'talented'?

3. In your own classroom what are some of the strategies you use to determine which students may be gifted and talented?

4. Do you identify students from non-English speaking backgrounds or low socio-economic status in different or additional ways?

Could you describe this/these identification procedures?

5. Would you encourage gifted and talented students in your class to apply for programs and provision such as o/c classes, selective high schools and the mentor program?

6. What additional information do you think schools and the community need about provisions for gifted and talented students?

7. What role do you see the parents or the community playing in identifying and supporting gifted and talented students?

8. Quakers Hill Primary School has initiated a program to identify and provide for gifted and talented Aboriginal students.

Are you aware of any other programs or provisions which are used to identify or cater for gifted and talented students who are low economic status or non English speaking backgrounds?

Thank you for agreeing to take part in this interview. Your responses have been extremely helpful. Do you have any questions or comments you would like to make?
Interview Questions

Students

Hello ........................................... , my name is ................................. and I would like to ask you a few questions. There are no right or wrong answers. If you don't understand a question just ask. Ok?

1. How many years have you been at school in Australia?

2. What languages do you speak at home?

3(i) If a person was gifted or talented what might they be really good at?

3(ii) Out of school what might someone be really good at?

4. What would your parents most like you to be very good or clever at?

5(i) Would you like to go to an OC class or a selective high school?

   Probe

5(ii) Would your parents like you to go?

   Why/Why not?

6(i) Do you know someone who is gifted or talented?

   If Yes

(ii) What are they gifted or talented at?

   If No

   What do the words gifted or talented mean to you?

7. How could a teacher or parent help a child who was gifted or talented at something?

Thank you for agreeing to take part in this interview. Your responses have been extremely helpful. Do you have any questions or comments you would like to make?
Interview Questions

Parents

Thank you for assisting in this project. The interview will last for about half an hour.

1. The Department of School Education is interested in analysing the differences between teachers', parents' and students' perceptions of giftedness and talent.
   
   (a) What do the words 'gifted' and 'talented' mean to you?

   (b) If someone said a child was 'gifted' or 'talented' what sorts of things do you think they would be particularly good at?

2. When your child's school or teacher is identifying gifted and talented students what qualities do you think they are looking for?

3. How is the schools' definition of 'gifted' and 'talented' different to the qualities your family or community value?

4. If a child in your family were identified as 'gifted' or 'talented' what would you like the school or the child's teacher to do to help?

5. Would you encourage your child to apply for programs and provision such as o/c classes, selective high schools and the mentor program?

6. What role do you see the parents or the community playing in identifying and supporting gifted and talented students?

7. What additional information do you think parents and the community need about provisions for gifted and talented students?

Thank you for agreeing to take part in this interview. Your responses have been extremely helpful. Do you have any questions or comments you would like to make?
Appendix I

Letter to Parents / Guardians

New South Wales Government

Department of School Education

Specific Focus Programs Directorate
3a Smalls Road, RYDE NSW 2112

Please address all communications to:
Private Bag 3 RYDE NSW 2112
Telephone: (02) 808 9444
Facsimile: (02) 808 9545

Dear Parent/Guardian,

The Department of School Education is currently investigating how to best identify and cater for gifted and talented children. Your school has volunteered to be part of this project which involves interviewing and surveying parents, teachers and students. In term 1, 1995 the school and the community will be entitled to professional development.

We seek your permission to have a brief interview with your child. Information gained from such interviews will be completely anonymous. The name of your child and the school will not be referred to in any place outside the school.

I would be grateful if you would sign this form, giving your permission and return it to your child's teacher. Your teacher will pass the form on to me.

Thank you for your support. We believe involvement in the project will benefit students and teachers at the school.

Sue Vasilevska (Project Officer, Gifted & Talented Student)

I give permission for my child ____________________________

at _______________________ school to be interviewed by Sue Vasilevska,

Project Officer, Gifted and Talented Students. The interview will take place at the school, in school hours.

Parent's Name ____________________________

Parent's Signature ____________________________

PLEASE RETURN THIS SLIP TO YOUR CHILD'S TEACHER.
Appendix J

Interviews

Combined Interview totals for Metropolitan East, South Coast and Metropolitan South West

<table>
<thead>
<tr>
<th>Subjects</th>
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<th>ARABIC</th>
<th>TONGAN</th>
<th>TOTAL</th>
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<tr>
<td>Total</td>
<td>45</td>
<td>47</td>
<td>35</td>
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</table>

127 interviews in total

* Support teachers include: Aboriginal Education Assistants, Aboriginal Homework Centre Teachers, ESL teachers and Community Language teachers.

** Community teachers include: language teachers of the target groups who teach after school hours.
Appendix K

Year Seven Enrolments in Selective and Agricultural High Schools - 1992

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* Denotes single sex school

## Year Seven Enrolments in Selective and Agricultural High Schools - 1993

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* Denotes single sex school

## Year Seven Enrolments in Selective and Agricultural High Schools - 1994

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<td>School R</td>
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<td>School T</td>
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<td>School U</td>
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<td>School W</td>
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<td><strong>TOTALS</strong></td>
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<td><strong>1399</strong></td>
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<td><strong>3</strong></td>
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</table>

* Denotes single sex school

Appendix L

Year 7 Enrolments in Performing Arts and Sports High Schools - 1992

<table>
<thead>
<tr>
<th>School</th>
<th>Total Yr Seven Students</th>
<th>ATSI Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>School A</td>
<td>77</td>
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</tr>
<tr>
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<td>82</td>
<td>84</td>
</tr>
<tr>
<td>School C</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>School D</td>
<td>40</td>
<td>68</td>
</tr>
<tr>
<td>School E</td>
<td>56</td>
<td>81</td>
</tr>
<tr>
<td>School F</td>
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<td>39</td>
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<tr>
<td>School G</td>
<td>136</td>
<td>141</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>461</strong></td>
<td><strong>504</strong></td>
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</table>

Data Source: Management Information Services.
### Year Seven Enrolments in

Performing Arts and Sports High Schools - 1993

<table>
<thead>
<tr>
<th>Schools</th>
<th>All Students</th>
<th>ATSI Students</th>
<th>Arabic Students</th>
<th>Pacific Islander Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
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<td>101</td>
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<td>School B</td>
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<td>92</td>
<td>2</td>
<td>3</td>
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<td>13</td>
<td>0</td>
<td>0</td>
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<td>School D</td>
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<td>66</td>
<td>5</td>
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<td>1</td>
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<tr>
<td>School F</td>
<td>63</td>
<td>27</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>School G</td>
<td>146</td>
<td>132</td>
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<tr>
<td></td>
<td>507</td>
<td>520</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>TOTALS</td>
<td>1027</td>
<td>17</td>
<td>12</td>
<td>11</td>
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</table>

Appendix M

Enrolments in OC Classes
Hunter Region - 1993 and 1994

<table>
<thead>
<tr>
<th>Year Admitted</th>
<th>All Students</th>
<th>ATSI</th>
<th>Arabic Speaking Students</th>
<th>Pacific Islander Students</th>
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<td>Female</td>
<td>Male</td>
<td>Female</td>
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<tr>
<td>1993/4 Classes</td>
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<td>37</td>
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<tr>
<td>1994/5 Classes</td>
<td>71</td>
<td>45</td>
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<td>-</td>
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</tbody>
</table>

* These data are the result of a combined return from Biraban, New Lambton South, Rutherford and Tighes Hill Public Schools

Data Source: This information was obtained from Ian Shepherd, Assistant Regional Director Teaching and Learning (Specific Focus Programs)
Enrolments in OC Classes - 1994
Metropolitan North Region

<table>
<thead>
<tr>
<th>Schools</th>
<th>Total</th>
<th>Initial Offer</th>
<th>Class At 3 August 1994</th>
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<td></td>
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<td>19</td>
</tr>
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<td>9</td>
<td>21</td>
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<td>156</td>
<td>204</td>
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</table>

Data Source: Data on Year Five OC classes obtained from Metropolitan North Region
Appendix N

Mentor Links Program

1993 - 1994

Metropolitan*

<table>
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<tr>
<th>YEAR</th>
<th>All Students</th>
<th>ATSI Students</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1993</td>
<td>59</td>
<td>23</td>
</tr>
<tr>
<td>1994</td>
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<td>10</td>
</tr>
</tbody>
</table>

Data Source: These data were provided by Jill Forster who co-ordinated the Mentor Program.

* Information was obtained from the Metropolitan Regions - Metropolitan North, Metropolitan West, Metropolitan South West and Metropolitan East.