CHAPTER FOUR

Identification of Gifted Culturally Diverse Children

Approaches to Identification

During the last two decades a number of approaches have been used to identify gifted students. Kitano and Kirby (1986) note that the set criteria, the matrix method, the revolving door model and the case study are the four identification approaches most often used in the identification of gifted students. The most common approach is the traditional set criteria approach using one or two tests to rank order students and thus determine program placement. This approach is most often used in conjunction with the earlier narrow conceptions and definitions of giftedness. Achievement and intelligence tests are frequently used in the set criteria approach. As is discussed later in this chapter, standardised tests are far less appropriate for use with children from Aboriginal cultures than for children from the Western European cultures in which the cognitive tests originated (Braggett, 1985). Consequently the set criteria approach to identification results in the under identification of gifted Aboriginal children and culturally diverse children generally.

The matrix approach uses several types of test and ratings results which provide combinations of scores used to ascertain the appropriateness of placement into a program for the gifted. The Baldwin Identification Matrix 2 (Baldwin, 1984) is a well known instrument used for this approach. Although frequently recommended as an approach which will find more culturally diverse

gifted students, some (Feldhu:en, Baska & Womble, 1981; Zappia, 1989) criticised the matrix approach for equally weighting data which have been derived from dissimilar sources. Callahan and McIntire (1994) believed that the use of matrices in the identification process was another potential avenue for biases of standardised tests. This is due to the fact that creation of a matrix requires the assignment of point values to a certain range of scores on tests and rating scales which are then summed for a total value to be compared against sets of cutoff limits for identification. Callahan and McIntire (1994) saw the use of such matrices which combine "test scores that measure different constructs and are normed on different populations" (p. 22) as unjustifiable. They asserted that matrices also have the potential to compound test score biases since most give greater weighting to standardised test scores which may have resulted from tests that are inherently biased against minority groups.

On the other hand, McBeath, Blackshear and Smart (1981) reported the matrix approach as a successful method for identifying greater numbers of gifted African American children. Frasier (1989) pointed out that the Baldwin Identification Matrix "allows both objective and subjective data to be collected and used" and presents an approach which reinforces the delay of decision making "until all pertinent data can be reviewed at one time" (p. 219).

The Baldwin Identification Matrix was developed to encourage consideration of data from more sources. It was intended to address under representation of minority groups in gifted programs. Although aspects of the matrix approach are improvements on the set criteria approach, the matrix

approach still exhibits a number of problems when used for identifying culturally diverse gifted students, due largely to its major reliance on test results.

The revolving door model developed by Renzulli (1978) uses tests and observations to select students from the school population to form a 'talent pool.' Renzulli's definition of giftedness with the attributes of above average ability, high creative ability and high evel of task commitment is used to guide the approach. Students "revolve in and out of the program as the need arises" since giftedness is not viewed as "an all or nothing state, but rather one that emerges and subsides as specific interests are pursued and are satisfied" (Coleman, 1985, p. 320). Because of the large proportion (15-25%) of students who are placed in the talent pool, this approach enhances the possibility that a larger percentage of culturally diverse students will be identified. However, Zappia (1989) cautioned that "the concept of task commitment is not clearly defined ... may be culturally based" (p. 24), and therefore, may discriminate against gifted minority culture students in the identification process.

The case study approach involves the collection of information concerning behaviours which may indicate potential ability from many sources such as teachers, other school personnel, parents, extended family members, and community members. It offers a viable alternative assessment method to the reportedly biased standardised test (Tonemah, 1991). In this approach, information is gathered using a variety of instruments and strategies which may include tests, rating scales, testimonies, checklists and anecdotal records. A committee, which is usually composed of the school principal, school resource

personnel, teachers, experts in specific fields and the child's parents, considers all the data to determine the need for program differentiation according to the student's assessed potential or displayed talent (Correll, 1978). The case study approach is seen to be a bette way to ensure that culturally diverse students are considered more fairly on the basis of individual merit (Naval-Severino, 1992). Callahan and McIntire 1994) believe this approach encourages early identification of culturally dive se gifted students, which is important for the enhancement of later success (Clark, 1992; Correll, 1978). The case study approach is seen by Callahan and McIntire (1994) to be essential in the assessment of young Alaska Native and American Indian children because of the inaccuracies of standardised testing with young students which may lead to incorrect assessment outcomes. Zappia (1989) also saw promise in the case study method and concluded that it "may be the best approach for identifying gifted Hispanic students" (p. 25). Because the case study approach decreases the reliance on standardised test results and increases the gathering and consideration of data from culturally referenced sources such as parents and the community, it provides a more culturally sensitive identification method than is offered with the set criteria, rnatrix or revolving door model approach.

One other identification approach associated with culturally diverse students, the quota system model, was found in the literature. Frasier (1989) described the quota system model as one possible way that has been recommended to rectify the under representation of culturally diverse students. Using the quota system, "a fixed percentage of culturally diverse children are

included in a program based or the percentage of those students in the school or district" (Davis & Rimm, 1994 p. 266). This system is seen by some (Davis & Rimm, 1994; Kitano & Kirby, 1986; Smith, LeRose & Clasen, 1991) as a reasonable and effective solution to the representation problem. A longitudinal study by Smith, LeRose and Clasen (1991) of minority students placed in a gifted program through the quota system found that twelve years later all students were still in the program. Hence, they concluded that identification procedures making use of the quota system included minority students who could succeed in the program even though these minority students had not qualified for services according to results from more traditional set criteria methods.

Other writers, however, identified potential problems with the quota system. Kitano and Kirby (1986) ackrowledged that it does ensure participation of culturally diverse students in gifted programs, but their inclusion may cause the exclusion of some highly rated students in other groups. They also recognised the lack of consistency in placement decisions, noting that children who rank highly and are placed in a program at one school may not rank as highly compared to students in another school. Although seeing some benefit of such a system in terms of increased inclusion for culturally diverse students, Frasier (1989) too voiced doubts and suggested that the system may imply that certain gifted students are "second-class gifted" (p. 220). Baska (1989) advanced the opinion that the designation of groups may need to be reconsidered. As the boundaries between various ethnic groups begins to blur in a multicultural

society, it may be necessary to group students in the quota system approach according to socio-economic status, cultural differences or the amount of involvement a parent has in the child's education. Though the quota system may initially be of assistance in creating a more accurate representation of minority culture groups in gifted programs, it is not without problems.

Problems in the Identification of Culturally Diverse Gifted Children

A number of barriers and problems serve to hinder the identification of, and the consequent establishmen of appropriate educational opportunities for, culturally different gifted children. Following are the problems identified in the literature:

- 1. There is a stereotypic view of minority students' lack of ability. Frequently, educators hold the view that there are no gifted students in minority groups (Ford & Harris, 1990; Passow, 1991).
- 2. Often identification procedures are based almost exclusively on narrow, IQ-related definitions (Ford & Harris, 1990; Passow, 1991). Minority students may score lower on standardised tests than their counterparts in the majority culture, which leads to perceptions that they are not as intelligent.
- 3. The use of and over reliance on one type of assessment instrument in the identification procedure which is almost always some form of intelligence test (Bernal, 1981; Callahan & Mc ntire, 1994; Ford & Harris, 1990; Kearins, 1982; Kirschenbaum, 1988; Mercer, 1984; Passow, 1991; Richert, 1987; Sattler, 1992; Tonemah, 1987; Whybra 1992; Zappia, 1989). Cultural biases, discussed later

in this chapter, depress the scores of culturally diverse students, effectively eliminating them from consideration for gifted programs and services.

- 4. There is a gap between what research shows about effective identification of gifted students and in the practice of those procedures (Ford & Harris, 1990).
- 5. Most identification processes still largely operate according to the set criteria approach (Hoge & Cudmore, 1980; McKenzie, 1986) and do not acknowledge the culture or environment of m nority groups (Ford & Harris, 1990).
- 6. Theory about giftedness in minority groups is inadequate. This requires students to express giftedness in terms of the major culture (Braggett, 1985b; Ford & Harris, 1990; McKenzie, 1986).
- 7. There is a lack of appropriate in-service for educators concerning encouragement and identification of exceptional ability in culturally diverse students (Gallagher & Kinney, 1974; Passow, 1991).
- 8. The learning environment does not take into account culturally diverse students' learning needs and styles (Ford & Harris, 1990; Gallagher & Kinney, 1974; Passow, 1991.) This results in a failure to achieve a balance between affective and cognitive modes of learning, and encourages a type of learning for culturally different students which emphasises "socialization into the mainstream culture at the cost of education about one's own cultural heritage" (Gallagher & Kinney, 1974, p. 8).
- 9. Educators have failed, in the past, to ensure that gifted minority students have developed the necessary general education with basic skills and knowing-how-

to-learn skills. Often, there is a different standard of educational attainment for culturally diverse students from the majority culture students (Passow, 1991).

- 10. Often, there has been a failure to assist minority students to enhance their self-esteem (Gallagher & Kinney, 1974; Passow, 1991). Many minority children have low self-esteem and an expectation of failure because of the ongoing discrimination they, as well as their families, experience.
- 11. Appropriate guidance and support services for gifted minority students have not been provided (Passow, 1991). Many culturally diverse gifted students have special needs for guidance in resolving conflicting values and cultural attitudes between home and school.

It can be seen from these eleven statements of problems that cultural differences must be recognised and taken into account in planning the identification procedures and in selecting appropriate assessment criteria. Further, the last three statements highlight the importance of a culturally sensitive learning environment to encourage the development and demonstration of the exceptional abilities of culturally diverse gifted students.

Principles for Identification of Culturally Diverse Gifted Children

The broadening of the conception and definition of giftedness has required a broadening too of the procedures for identifying culturally diverse gifted children (Callahan & McIntire, 1994; Rimm, 1984; Treffinger & Renzulli, 1986). In the past, identification of gifted children focused on eliminating all but a few children who were then labeled gifted. Rather than this emphasis on exclusivity,

writers (Borland, 1986; Callahan & McIntire, 1994; Frasier, 1989; Richert et al., 1982; Treffinger & Renzulli, 1986; Zappia, 1989) today advocate the principle of inclusion. "The goal of identification is not to "screen out," but rather to "screen in" children who may have potential that can be developed" (Callahan & McIntire, p. 21). Treffinger and Renzulli (1986) also called attention to the principle of inclusion when they warned that the focus of identification should not be on labeling and excluding children but rather should be on recognising and responding to the educational needs of students.

Appropriate identification procedures should be based on a clear definition of giftedness which is acceptable to the community. Along with such a definition, general principles of identification should be considered and accepted as underpinning the procedure. The broadening of the definition of giftedness to include a number of ability domains as well as exceptional intellectual ability necessitates an identification procedure which uses a multiple-measure/multiple-criteria approach (Callahan & McIntire, 1994; Frasier, 1989; Renzulli, 1984; Whybra, 1992; Yarborough & Johnson, 1983). Richert et al. (1982) called this the 'comprehensiveness' principle by which the identification procedure should ensure that as many students with gifted potential as possible will be identified and served.

Hadaway and Marek-Schroer (1992) agreed, stating that "to truly evaluate ability, multiple sources of information beyond the scope of traditional norm-referenced ones are required". Utilising a multi-sourced approach with culturally diverse students was stressed by the literature (Braggett, 1985b; Callahan and

McIntire, 1994; Clasen, Midd eton & Connell, 1994; Day, Forbes-Harper, Houston, Langdale, Milne, Raboczi & Watkin, 1991; Frasier, 1989; Kirschenbaum, 1988; Masten, 1985; Renzulli, 1984). In their study, Clasen, Middleton and Connell (1994) found that the use of a multidimensional approach identified greater numbers of minority students with exceptional ability in problem-solving and art than had been recognised in the past. Renzulli (1984) pointed out that diverse identification techniques for a multi-sourced approach should be utilised over an extended period of time in order to be effective. Agreeing, Frasier (1939) addled that every child should be considered each time screening procedures are implemented as circumstances may prevent culturally diverse children from demonstrating their ability or meeting placement criteria during one screening but not necessarily during a future procedure. She also encouraged the principle that identification procedures should be implemented early in a child's school career.

A more expansive view which considers non-test indicators, culture and context in the identification process is desirable (Ford & Harris, 1990; Frasier, 1989; Treffinger & Renzulli, 1986). Supporting the need to recognise culture and context, George (1983) suggested that in the identification process the criteria should be based historically and culturally on the realities of the community; should be set down by the community members; and should reflect specific community values and behaviours. She pointed out that the intellectual operations of Native American children are basically the same as those of other high ability students. However, it was stressed that it is important to remember

that verbal and behavioural manifestations are culturally influenced and, therefore, may appear different to the observer (Braggett, 1985b; Frasier, 1989; George, 1983; Hagen, 1980.) Treffinger and Renzulli (1986) showed support for these ideas and added that the identification techniques should be developed locally to allow for community influences. In this way, instruments which are appropriate for minority populations are more likely to be included (Callahan & McIntire, 1994).

The identification process should employ both objective and subjective assessment to support the broadened conception of giftedness (Frasier, 1989; Jenkins-Friedman, 1982). Assessment instruments and strategies should be chosen which are reliable and /alid and which will identify giftedness across the various ability domains (Callanan & McIntire, 1994; Rimm, 1984; Treffinger & Renzulli; 1986). Any selected instrument should be capable of providing accurate information about the talents of children from minority as well as majority groups (Callahan & McIntire, 1994; Rimm, 1984; Treffinger & Renzulli, 1986).

Recognising that each of ild should be considered as an individual in the identification process was mentioned as another principle by a number of writers (Callahan & Molntire, 1994; Frasier, 1989; Reid, 1992; Rimm, 1984; Treffinger & Renzulli, 1986). Frasier stressed that the individual must be taken into account, stating that it is vise to base identification on "knowledge of the individual, the cultural-experiential context in which the individual has developed, and the fields of activity in which he or she performs" (1989, p. 164).

Reid (1992) agreed and pointed out that interpretation of test results should take account of the student's circumstances and "any known limiting factors" (p. 9). The literature also pointed out that using the case study approach for the organisation of identification in ormation was a valuable way in which to take into consideration the individuality of the child.

The principle that gifted students should be chosen for differentiated programs on the basis of their ¿bilities and their educational needs should also be observed. Identification should not be designed for the convenience or preconceptions of programmers (Richert et al., 1982); should not be restricted by the number of places in a program (Callahan & McIntire, 1994); should not utilise lower standards or add points to test scores to include a target quota of a particular population (Frasier, 1989); and should not be used as a means of "eliminating" children from services (Callahan & McIntire, 1994).

Another identification principle noted by writers (Frasier, 1989; Treffinger & Renzulli, 1986) dealt with the people who were involved in the identification process. These people should be well acquainted with the students and their abilities through direct observation (Treffinger & Renzulli, 1986); be well qualified to judge the quality of student products, processes or performances (Frasier, 1989; Treffinger & Renzulli, 1986); and possess knowledge related to behaviours which are indicative of giftedness (Frasier, 1989).

Finally, results obtained through the identification process should be used in determining the curriculum and planning instruction (Frasier, 1989; Rimm, 1984; Treffinger & Renzulli, 1986). Behaviours observed during screening and

assessment should provide the basis for programming to ensure that appropriate learning experiences and opportunities are designed to stimulate and motivate the student.

From the preceding discussion, it is apparent that in procedures for identifying culturally diverse gifted students the focus should be on diversity; that is both the diversity of the measure and criteria, as well as the diversity of the students. To do otherwise is to regard erroneously the gifted as an homogeneous group which can be assessed according to one standard set of measures. A number of principles for identification of culturally diverse gifted children were discussed in terms of the literature. Reliable and valid instruments should be chosen which are appropriate for the minority populations involved. Objective and subjective data should be collected in an attempt to take into account the effects cultural diversity may have on students and the ways in which they demonstrate their ciftedness. Data should be collected from people who have expertise in the areas of ability, who have an in-depth knowledge of the individual student's abilities, and who have an understanding of giftedness and associated behaviours. Gi ted culturally diverse students should be chosen for differentiated curriculum on the basis of their abilities and educational needs. not according to the number of places available in the program nor according to preconceived notions of the programmers. Finally, the identification data concerned with the student's area(s) of outstanding ability, interests, and learning styles should inform the planning of a differentiated program for the individual student.

Identification and the Importance of Appropriate Curriculum

An appropriate classroom curriculum is essential to the emergence of students' gifted behaviours which can provide valuable information for the identification process (Hadaway & Marek-Schroer, 1992). Identification procedures should be carried out in a context which provides opportunity for culturally diverse students to participate in learning experiences which will evoke their exceptional potential and allow them to demonstrate their abilities (Reid, 1992; Richert, 1987). A nurturing and accepting environment is needed where children and their cultures are respected. Otherwise students "from different ethnic groups will not reveal aspects of their own culture if they believe that the Anglo-Australian culture is the only one valued" (Braggett, 1985, p. 6).

As mentioned earlier in this chapter, the reduction of basic skills deficits in gifted culturally diverse and gifted disadvantaged children should also be a curriculum concern to be addressed (Davis & Rimm, 1994; Passow, 1991). Often such deficits contribute to the under identification of these students. Agreeing with Davis and Rimm, Frasier (1989) described The Program of Assessment, Diagnosis and Instruction (PADI) (Johnson, Starnes, Gregory & Blaylock, 1985) which was developed for African Americans and Hispanic students who were not demonstrating their potential due to gaps in basic skills. PADI focuses on increasing thinking skills and academic skills which are needed for success in gifted programs. Through students performance in the program teachers are able to identify more successfully students for the gifted program.

Additionally, Callahan and McIntire (1994) urged that educators, in general, should begin to re-orient to "a model of potential rather than deficiency" (p. vi). They argued that "a solid and challenging curriculum" (p. v) must be provided for all Native American and Alaskan Native students in order that potential ability can be demonstrated and consequently recognised.

Tonemah (1991) voiced a similar concern, pointing out that the public schools are overly focused on a remediation approach to the education of American Indian students. This deficit model has largely evolved from the lower test scores of Native American students which resulted from test bias. Such test results are often misinterpreted by curriculum designers and serve only to perpetuate the view that culturally diverse students are best served in a remediation model (Mercer, 1973).

The deficit model approach to education for culturally diverse students is still followed today. Simon (1986), cited in Reid (1992), found that more than half of the teachers in her study subscribed to the deficit approach and held "overtly negative views of Maoris" (p. 5). As well, perceptions of a deficit model exist with regard to Aboriginal education curriculum priorities (Braggett, 1985) and may be reinforced through the misinterpretation of recent data. For example, in a study investigating the importance of school location as an influence on student performance in Western Australia government schools, Young (1994) reported a lower performance by Aboriginal and Torres Strait Islander students when compared to non-Aboriginal students in the areas of reading, writing and mathematics. The danger then exists that findings such as

these become the central concern of educators, with a heavy emphasis on remediation needs, while little attention is given to the provision of opportunities in which gifted Aboriginal students can develop and display their potential.

Braggett (1985) describes an environment which is conducive to the expression of gifts and talents as one which "is tolerant of difference, accepting of diversity, ... free from value judgments about the worth of different cultures ... [and] promotes self-esteem and pride in excellence regardless of the area of study" (p. 6). The classroom curriculum should reflect these same attributes in order to enhance students' feelings of worth and to confirm that their ideas, interests and abilities are genuinely accepted and seen as valid. Braggett suggested that teaching strategies which foster the valuing of all cultures include the use of examples of excellence from a wide range of gifted and talented behaviour, working in conjunction with parents, involving representatives from a wide spectrum of the community and providing suitable gifted and talented role models for culturally diverse students. Such a curriculum is not only educationally sound for all children but fosters potential outstanding ability as well.

From a review of relevant literature, it is apparent that curriculum which values cultural diversity, enhances student self-esteem and ensures the acquisition of basic skills by sudents is extremely important to the success of identification procedures. As viell educators should strive to provide classroom curricula which encourage the demonstration of behaviours indicative of giftedness.

Use of Standardised Tests in Identifying Gifted Culturally Diverse Children

Earlier in this chapter, it was pointed out that identification procedures which are based on narrow IQ definitions, and the over-reliance on one type of assessment instrument usually in the form of an intelligence test, often lead to under identification of gifted culturally diverse students. Hoge and Cudmore (1986) called attention to the fact that the individual intelligence test and teacher judgment are still the most frequently utilised assessment methods in the United States. Results from a study by McKenzie (1986) supported the findings that there exists an excessive eliance on standardised tests and teacher nominations. For example, McKenzie determined that in 461 New Jersey school districts, teacher nomination (90.0%), achievement tests (89.6%), and IQ tests (82.0%) were the most frequently cited identification practices.

However, it cannot be disputed that, in the past, intelligence tests have failed to identify gifted culturally diverse students as evidenced by the under representation of these students in programs for the gifted (Baldwin, 1987; Clasen, Middleton & Connell, 1994; Clark, 1992; Cox & Daniel, 1983; Frasier, 1989; McKenzie, 1986; Tonemah, 1987; Zappia, 1989). The traditional assessment and identification practices using the set criteria approach have resulted not only in an under representation of minority students in classes for the gifted, but also in the often inappropriate labeling, and consequent misplacement of many minority students into special education classes (Mercer, 1973). Until the dominant culture uses methods which recognise cultural

indicators of giftedness in minority cultures, there will continue to be an underestimation of the minority's intellectual and creative potential (Reid, 1992).

There are a number of reasons why standardised tests may not be appropriate for use in the identification of gifted culturally diverse students. One concern is that standardised tests by nature are not responsive to the cultural diversity of the students (Kirschenbaum, 1988). Braggett (1985) stressed that intelligence tests are culturally based and therefore, disadvantage culturally diverse students. He pointed out that "even within the Anglo-Australian culture, they favour middle class families who cultivate verbal skills in their children and train them in particular value patterns" (p. 8). Using such tests as a major indicator of giftedness may very likely disadvantage any child whose cultural or experiential backgrounds differ from the norming population (Bernal, 1981; Braggett, 1985; Zappia, 1989).

George (1987) noted that most standardised tests are designed for use with students from the dominant culture. Though not totally discounting the use of such tests with minority students, she did caution that test design of this type means that validity is questionable. "(I)n other words, if a student should test 'low', one cannot be sure if the score is a measure of the test or of the student' (p.17).

A study (McElwain & Kearney, 1973) in Australia showed that Aborigines who had more contact with Western ways performed better on western standardised tests. They found that degree of contact with the white Australian community was the most important determinant of performance. Aboriginal

children from remote, low contact settlements (both coastal and inland desert) obtained very low scores which did not improve greatly with age, while those from low socio-economic status urban areas scored at nearly the same levels as white Australian children of the same areas. In Kearney's (1973) analysis of the Porteus and Gregor (1963) study, he pointed out that the study had found younger desert men with more western schooling performed better than older men, and people of longer established settlements such as Hermannsburg performed better than more recently settled groups such as Yuendumu.

From such findings, it is clear that greater contact with white Australian society led to higher performances by the Aborigines on Western-type cognitive tests. The score differences can therefore be attributed to cultural learning differences rather than to differences in inherent ability or intelligence. Such tests reveal very little for non-Western oriented people (Kearney, 1973; McElwain & Kearney, 1973). 'All we can expect to learn from such tests in relation to many Aboriginal children is something about what they cannot do, and nothing about what they can do" (Kearney, 1973, p. 6).

In order to address the cultural influences identified in standardised tests, culture free tests were experimented with but abandoned because it was shown that tests will always be underpinned with a cultural basis (Anastasi, 1982; Reynolds, 1980). Stinespring (1991) agreed and suggested the most appropriate action to remedy test bias was to concentrate on the design of culture-specific tests.

The failure of a standardised test to take into account culture diversity results in tests which are biased in favour of the major culture group. Cronbach (1975) stated that ever since the use of tests of intelligence began there have been questions and investigations with regard to culture bias. Stinespring noted that test bias "refers to a systematic over- or under-representation of a population group in a sample drawn from the population" and that an individual test item is biased "if equally able members of different groups have unequal chances of success on the item" (1991, p. 59).

One major source of bias of standardised tests may come from the differences in language experience. Kirschenbaum (1988) raised the point that some culturally diverse students may grow up in families where English is a second language. Additionally, general claims that standardised tests are linguistically biased against culturally diverse populations were supported by the studies of Tempest and Skipper (1988) and Mishra (1982). Other writers presented similar findings with relationship to a limited language experience due to circumstances such as the student is a member of a culture which is less dependent on language (Garr son, 1989), in which abilities may be expressed spatially rather than verbally (Montgomery, 1989), or which favours learning through auditory and visual mc des rather than verbal (Sattler, 1988).

Kearins (1982) identified special skills which must have helped Aboriginal people for thousands of years live in almost uninhabitable areas of Australia. These skills, however, do not help Aboriginal children do well on Western-type 'standard' intelligence tests or in Western-type schools. Performances of non-

European people have been compared with the norms derived from people of north-western European origins only. People who did not come from northern or western European stock (Spain, Greece, Yugoslavia, Iran, Iraq, Japan and India) were tested. Their scores, with the exception of Japan, failed to approach the IQ level of 100 which is considered average or normal in the test manual (Kearins, 1982). It seems to be the case then, that individuals coming from the cultures of origin of cognitive tests will in most cases perform better than people from other cultures.

The idea that standardised tests are culturally based and disadvantage students from other cultures was strongly supported throughout the literature. "Even within the Anglo-Australian culture, they favour middle class families who cultivate verbal skills in their children and train them in particular value patterns" (Braggett, 1985, p. 8). "In general, the widespread use of intelligence tests may disadvantage ... all children whose cultural or experiential backgrounds are at variance with the requirements of the test manual" (Braggett, 1985, p. 5).

The type of cognitive style required by most standardised intelligence and achievement tests is another test bias identified by some writers when the tests are used with culturally diverse children. Kirschenbaum (1988) pointed out that Native American students tend to favour a nonanalytical thinking style which puts them at a disadvantage on tests that emphasise analytical thinking. Standardised tests of intelligence tend to tap convergent thinking and make no provision for the demonstration of creative or divergent thinking (Braggett, 1985; Whybra, 1992). A related problem of most standardised tests is that they are

heavily biased in favour of the Anglo/white culture in terms of student experiences, values and testing procedures and conditions (Kearins, 1982; Tonemah, 1991; Tonemah & Brittan, 1985). Obviously aspects based on a major culture will render those standardised tests to be less than appropriate for children from minority cultures.

Another source of bias in standardised tests is associated with the inadequate sampling of students from a given culture group during the development and norming of such tests, resulting in the unavailability of norms for subpopulations (Kirschenbaum, 1988; Reid, 1992; Richert, 1987; Tonemah, 1987). Expanded conceptions of giftedness have resulted in few instruments, even today, which have been developed for or standardised on special populations of students (Kirschenbaum, 1988; Tonemah & Brittan, 1985; Florey et al., 1986). Consequently many tests lack validity for the minority students who come from an experiential background different from that of middle class Anglos upon whom the tests typically are normed (Jensen, 1980; Zigler & Butterfield, 1968).

It was recognised in the literature that standardised tests can be a useful tool in providing valuable information about some aspects of gifted students' abilities (Borland, 1986; Mishra, 1992; Reid, 1992; Richert, 1987; Tonemah, 1987). "If we are looking for students high in academic ability or potential, or for students high in that aspect of intelligence required for the acquisition and processing of knowledge, we cannot conscientiously avoid the use of IQ tests" (Borland, 1986, p. 166). However, the results should be sensitively interpreted,

keeping in mind the individual child (Mishra, 1982; Reid, 1992; Rhodes, 1992); should play a minor role in identification decisions (Rhodes, 1992); and should be used to include rather than to exclude students from programs (Borland, 1986; Reid, 1992).

Writers (Braggett, 1985; Julian & Ostertag, 1982; Mishra, 1991; Reid, 1992; Richert, 1987; Tonemah, 1987) also cautioned that standardised tests should not be the sole means by which data are gained but rather should be used in conjunction with results from other assessment methods. Mishra (1991) argued for standardised test results to be balanced with the use of teacher assessment and student classroom performance in order to create a more complete picture of the student's abilities.

Standardised tests should also be supplemented with non-test measures such as checklists, observational schedules, rating scales and inventories (Braggett, 1985b; Callahan & McIntire, 1994; Clasen, Middleton, & Connell, 1994; Day et al., 1991; Ford & Harris, 1990; Frasier, 1992b; George, 1987; Reid, 1992; Richert, 1987; Schlesinger, 1987). Although, as with standardised tests, non-test measures must be used with culturally diverse children in a cautious manner and selected for the measure's relevance and demonstrated reliability and usability (Reid, 1992).

In Australia, most identification procedures rely heavily on teacher observations (Gibson, 1991; Maltby, 1986). However, teacher observation may prove unreliable when used with culturally diverse students due to some teachers' negative attitudes or expectations of these students. Without an

adequate knowledge of the impact of culture on behaviour, teachers may misinterpret the motivation behind the actions of culturally diverse students, and consequently, overlook the culturally diverse gifted students (Clark, 1992; Jacobs, 1971; Maltby, 1986; Reid, 1992; Woods & Achey, 1990). The teachers fail to identify gifted students be cause their perception of a gifted student often is limited to high achievers.

In looking for ways to overcome teacher misconceptions, it was noted by some (Ashman & Vukelich, 1983; Borland, 1978; Hadaway & Marek-Schroer, 1992; Renzulli & Hartman, 1971) that forms which utilise behavioural characteristics resulted in increased teacher, as well as parent and peer, accuracy in identifying gifted children. George (1987) agreed but emphasised that "... forms which list behavioural characteristics must be culturally relevant" (p. 14). She advocated that the only way to determine the cultural relevance of a form was "... to submit [it] to a panel or committee from that culture' (p. 25). So, like standardised tests, non-test measures are susceptible to cultural bias. However, there is opportunity to increase greatly the cultural relevance on the measures by utilising behavioural characteristics.

Another possible action noted by Kirschenbaum (1988), which may reduce the impact of cultural bias in assessment, is the use of tests of nonverbal reasoning such as Raven's Matrix Analogies Tests (1990). In Kirschenbaum's opinion, these tests have the least possible amount of cultural bias that can be found. Nonverbal reasoning tests are particularly effective as a screening device with minority populations (Frasier, 1989) and with non-English speaking

students (Khatena, 1982). Because language usage for instructions is minimal, another advantage is that directions can be given in the student's dominant language (Gaddis, 1991).

Finally, if standardised tes:s are to be used with culturally diverse students, they should be administered by a professionally trained person, preferably from the same cultural background as the student (Tonemah, 1987). The results should be interpreted by a professional who understands the limitations of the information afforded by the particular test (Mishra, 1991) and who considers the test scores and other indices as the lower bounds of the minority student's ability (Reid, 1992).

The literature showed that the use of standardised intelligence and achievement tests with culturally diverse students is highly questionable. Problems of cultural bias, lack of standardised norms for minority populations, over-reliance on test results for identification decisions and embedded linguistical biases against English as a second language (ESL) children are often cited in the literature.

Standardised tests were recognised as a valuable source of information about students' academic ability or potential if interpreted in a manner sensitive to the individual child and his/her experiential background. However, it was seen as extremely important that standardised tests were used in conjunction with a number of other measures, both objective and subjective.

A quote from Sternberg seemed to sum up succinctly the literature with regard to the use of standardised tests in the identification of culturally diverse gifted children. He wrote:

Tests work for some people some of the time, but they do not work for other people much of the time. Moreover, the people for whom they do not work are often the same again and again. Applied conservatively and with full respect to all of the available information, tests can be of some use. Misapplied or overused, they are worse than nothing ... (Sternberg, 1984b, p.14).

Summary

The five identification approaches of set criteria, the matrix method, the revolving door model, the case study and the quota system were most often referred to in the literature. The case study approach appeared to be the most appropriate for identifying culturally diverse gifted students because decisions are based on various types of information from a number of different sources (Braggett, 1985b; Callahan & McIntire, 1994; Frasier, 1989; Naval-Severino, 1992; Tonemah, 1991; Zappia 1989).

Various barriers and problems which often hinder the identification of gifted culturally diverse children were elaborated. It was found that narrow IQ definitions of giftedness often focus identification practices on the results from standardised tests which are culturally biased. Thus when minority students do not perform as well as majority culture students, a stereotypic view of minority

students as less intelligent is perpetuated (Ford & Harris, 1990; Yarborough & Johnson, 1983). This perception is often not corrected as there is a lack of appropriate inservice for educators concerning culturally diverse students' learning styles and education needs. Such a view can lead to low self-esteem in minority students and consequently a failure to attain basic skills (Gallagher & Kinney, 1974; Passow, 1991).

An appropriate classroom curriculum is essential if culturally diverse students are to demonstrate (lifted behaviours (Braggett 1985b; Hadaway & Marek-Schroer, 1992; Reid, 1992; Richert, 1987). A nurturing, accepting and respectful environment encourages self-esteem and risk taking on the part of minority students. A comprehensive and challenging curriculum is needed rather than a curriculum overly focused on remediation.

Principles, found in the I terature, for identifying gifted culturally diverse children were discussed. It was apparent that attention needs to be given to the recognition of cultural differences, in planning identification procedures and in selecting appropriate assessment criteria which take into account each child's individuality and experiential background (Callahan & McIntire, 1994; Frasier, 1989; Reid, 1992; Rimm, 1984; Treffinger & Renzulli, 1986). Participants in the identification procedure need o be well acquainted with the students and their abilities, and be well qualified to judge the quality of a student's work. Often, standardised tests are culturally biased in favour of the majority culture and do not yield accurate results for culturally diverse students (Baldwin, 1987; Clasen, Middleton, & Connell, 1994; Clark, 1992; Cox & Daniel, 1983; Frasier, 1989;

McKenzie, 1986; Tonemah, 1987; Zappia, 1989). Although it was recognised that standardised test results can play a role in identification processes, the literature emphasised the need to consider information from a number of sources with the general focus of procedures being one of inclusion rather than exclusion (Borland, 1986; Callahan & McIntire, 1994; Frasier, 1989; Richert et al., 1982; Treffinger & Renzulli, 1986; Zappia, 1989). The use of a multi-sourced identification approach allowed for cultural differences and an expanded notion of giftedness (Braggett, 1985b; Callahan & McIntire, 1994; Clasen, Middleton, & Connell, 1994; Day, et al., 1991; Frasier, 1989; Kirschenbaum, 1988; Masten, 1985; Renzulli, 1984).

CHAPTER FIVE

Research Method

<u>Introduction</u>

From the preceding review of the literature, it was determined that in the last forty years conceptions of giftedness have broadened from a narrow IQ focused view of giftedness to one which includes a number of domains. Furthermore, giftedness is a psychological construct which can be inferred through the observation of certain characteristics and behaviours that are culturally determined and will change over time as societal and cultural dimensions change.

It was shown that a broadened conception of giftedness has required a multi-sourced and multi-criteria model of identification which considers subjective as well as objective data. Teacher and parent checklists and nominations, and to a lesser extent peer nomination, are important subjective sources of information in multi-sourced identification procedures. Such checklists and nomination forms have been shown to be more accurate when behavioural characteristics are included (Ashman & Vukelich, 1983). Further, these characteristics should be culturally referenced to increase nominator sensitivity to culturally diverse diffed students (George, 1987). Frasier's (1992b) ten traits, aptitudes and behaviours (TABs) of giftedness may be appropriate for organising conceptions of giftedness held by urban Aboriginal community

members and for seeking behavioural characteristics which may be indicative of giftedness in urban Aboriginal children.

A major aim of this study was to contribute to the currently limited knowledge base concerned with the conception of giftedness held by urban Aboriginal people and to determine indicators of giftedness exhibited by Aboriginal children which might, in turn, inform and focus teacher observations, and act as a guide in the selection of culturally relevant instruments for use in identification procedures. In particular, the study sought to establish the appropriateness of Frasier's (1992b) ten TABs for use in an Australian context with urban Aboriginal populations.

This chapter discusses the selection, development and implementation of two data gathering activities for the study. Also the method of data analysis for each activity is described. Par 1 presents the relevant information concerning the interviews conducted with Aboriginal adults from an urban background. Information regarding a questionnaire of Aboriginal teachers is discussed in Part 2.

Pat 1: Interview Method

This case study required that conceptions of a particular culture group be obtained regarding notions of giftedness and specific behavioural indicators exhibited by gifted children. A qualitative research framework using an interview method is suitable to such a study as it supports the idea of context sensitivity (Smith, 1987), utilises narrative description, and emphasises an holistic

interpretation (Wiersma, 1991). The interview method collects data from part of a group, for the purpose of describing one or more characteristics of the whole group (Jaeger, 1988).

It was anticipated that gaining information regarding urban Aboriginal people's conceptions of gift-dness may be problematic due to cultural differences. The egalitarian nature of Aboriginal cultures, with an emphasis on the importance of the group rather than the individual, may create a values conflict when Aboriginal peorle were required to comment on the idea of giftedness. Reticence to acknowledge intellectual superiority was evidenced in a study (Kearins, 1988) which examined degrees of intelligence in Aboriginal children. Valuing of the group over the individual is also evident in the Aboriginal culture (Braggett, 1985b; Ungunmerr, 1976). Therefore a research method was needed which provided the opportunity to establish a rapport with respondents, allowed a flex ble approach to the order and phrasing of questions, and gave time to clarify respondents' answers by asking additional questions. Within the qualitative research framework, the interview method, with its potential for flexible interactions and its concern with the interviewee's understandings is a productive context in which to explore people's conceptions (Canter, Brown & Groat, 1987)

Two general formats for interviews were identified by Sattler (1988). One is a highly structured interview format which specifies the exact order, wording, and coding of each question. The other is a semi-structured interview which provides general and flexible guidelines for conducting the interview and

recording information. The semi-structured interview was seen as the most appropriate means by which to survey Aboriginal community members for three reasons. Firstly, the interview situation allows for the respondent to provide conceptions and anecdotal ma erial verbally rather than in a written form which may be time consuming and may discourage respondents from offering a detailed and complete answer. Furthermore, in the semi-structured interview setting, opportunity is afforded to clarify respondents' answers by asking additional questions and to provide clarification information to respondents. Finally, the degree of cooperation in interview surveys is usually higher than in telephone or mail surveys (Jaeger, 1988).

The validity and reliability of qualitative research can rarely be determined, due to the subjective nature of the research material (Mostyn, 1987). However, recognition of ways in which validity and reliability may be encouraged and enhanced is important to consider in the research design. The validity of the information obtained in an interview is dependent on the accuracy of the interviewee's information (Bellack & Hersen, 1980). Bias is seen as the greatest threat to validity (Crowl, 1993). The characteristics of the interviewer, characteristics of the interviewee, and the substantive content of the questions are all potential sources of bias (Cohen & Manion, 1994).

Interviewer bias refers to actions by the interviewer which unintentionally encourage or discourage the expression of certain facts or opinions, causing the interviewee to distort the responses to please the interviewer (Sattler, 1988). Sources of interviewer bias include the use of a directive questioning technique

which implies a "right" answer (Brenner, 1987); choice of follow-up responses; and verbal and nonverbal communication such as tone of voice, facial expressions and posture (Sattler, 1983).

Other forms of interviewer bias which should be minimised may arise from the interviewer's attitudes and beliefs. They include: "a tendency for the interviewer to see the respondent in his own image; a tendency for the interviewer to seek answers that support his preconceived notions; and misperceptions on the part of the interviewer of what the respondent is saying" (Cohen & Manion, 1994, p. 302).

Characteristics of the interviewee which may contribute to interview bias include: misunderstandings of what is being asked (Cohen & Manion, 1994); difficulty finding the correct words to respond to a question; and selective memory by which the interviewee interprets events in a way that supports the image they have of themselves and others (Sattler, 1988).

To avoid bias on the part of the interviewer, an effective interview method requires a non directive manner. Questions should never be asked in a leading or directive manner as this exerts pressure on informants to answer in particular ways. The interviewer must maintain a neutral stance; must not express his/her personal views about the issues under consideration as this will likely amount to an explicit interviewer effect on the information which might endanger the validity of the information reported (Brenner, 1987). Clarifying questions when necessary and ensuring adequate wait time assist in minimising potential

interviewee bias (Cohen & Manion, 1994). These comments from the literature were taken into account during the interview design and administration.

Possible problems of bias associated with cross-cultural interviewing also needed to be considered in this study. Verbal and nonverbal communications may be misinterpreted by either the interviewer or the interviewee, particularly if there are cultural differences in styles of nonverbal communication. When a non minority interviewer interacts with a minority interviewee, racial antagonism may prevent the interviewee from reacting to the interviewer as an individual and vice versa. The minority interviewee may also feel suspicious and distrustful of the interviewer who comes from what is seen to be a hostile "non minority world" (Sattler, 1988). Preoccupation with and heightened sensitivity to ethnic differences may lead to distortions, guardedness and evasiveness on the part of the interviewee, and to guardedness, failure to probe, defensiveness and feelings of intimidation on the part of the interviewer (Cohen & Manion, 1994). Due to these negative effects of cultural differences, it was deemed appropriate that the interviews should be conducted by Aboriginal people. However, this strategy was not implemented, as will be discussed later in the chapter.

It is highly desirable to tape record semi-structured interviews (with the consent of the informant) as it allows the interviewer to monitor her actions, in the context of the interview situation, and gauge whether or not the informant's information is adequate. The interviewer must also immediately absorb the accounts and search for inconsistencies; moreover, she must think forward, what questions to ask next; ir more general terms, what to do next (Brenner,

1987). Taping provides a permanent verbatim recording of the account that enables the interviewer to give full attention to the verbal and nonverbal behaviour of the interviewee.

Taping the interviews was also seen to minimise the amount of writing required of the interviewer in recording responses which may inhibit or distract the interviewee (Brenner, 1987; Jaeger, 1988). It may inadvertently encourage respondents to discuss at length issues that the researcher happened to note down and only lightly detail those for which no note is taken. Brenner warned however, that taping may cause the interviewer to cease listening carefully. Therefore, he recommended that some note taking is done to keep track of what has already been talked about and what remains to be talked about.

It was decided that a tape recorder would be used in the interviews since it increases the likelihood of gathering accurate information and therefore encourages greater validity (Brenner, 1987; Crowl, 1993; Sattler, 1988). However, brief notes were made to keep records of topics which had been discussed, to maintain the focus of the interview.

Interview reliability, the degree of consistency in the methods, conditions, and results of the interview, must be considered along with validity (Wiersma, 1991). Factors relating to the reliability of the interview results include: (1) whether information obtained on one occasion is comparable to information that was or would have been obtained on other occasions from the same interviewee (test-retest reliability); and (2) whether the information given by the

interviewee is consistent with other information given by the interviewee in the same interview (internal consistency) (Mash & Terdal, 1981).

It was recommended (Sattler, 1988) that a follow up interview be conducted to enhance reliability of the interview results. Due to time and travel constraints a second interview was not possible for this research study. However, to address these reliability concerns, each interviewee was given a copy of his/her interview transcript and tape, and was asked to verify that the interview had been accurately recorded. At the same time, they were also asked to confirm that their behaviour descriptions had been appropriately interpreted and coded by the interviewer. This activity served to enhance the validity of the data.

Additionally, each interviewee was told they should correct inaccuracies, delete any information they did not wish left in the transcript and add information where they felt it would clarify the intent of any statements made in the first interview. Few corrections, changes or deletions would indicate a consistency in the interviewees' answers and increased confidence in the reliability of the interview method. Only one interviewee made any changes to the interview transcription. This change was to Interview 9 and was in the form of an additional example of how monivated her son was to be successful as an adult, in order to provide properly for his family.

Further, intra-rater reliability was desired. Intra-rater reliability is concerned with the extent to which an interviewer is consistent in the conduct and interpretation of interviews (Wiersma, 1991). In this research, there was

particular concern for consistency in the coding of the interviewee's behaviour descriptions. To ensure high intra-rater reliability, the interviewer undertook coding of the interview transcripts on four separate occasions over a period of six months. On each occasion clean transcripts were used. The second coding session was highly consistent with the first coding. However, as a result of the second coding, some descriptions were given additional category codes. The third and the fourth codings were identical, which indicated an extremely high intra-rater reliability with regarc to the coding of the behaviour descriptions.

In most instances, the reliability of semi-structured interviews benefits from the use of an interview guide to insure consistency in the interview method (Brenner, 1987). Interview guides are typically developed by means of pilot research. A pretest of the first draft of the interview guide reveals whether the interview guide is sufficiently comprehensive to cover the research problem as seen by the interviewer and the interviewee.

Of particular relevance to this study, the pilot research provided first-hand insight into what might be called the "cultural endowment" of the interviewee (Brenner, 1987). Such insight was seen as essential for the preparation of an effective questioning technique. Brenner supported this view, stating that pilot research becomes absolutely essential in cross-cultural research, where the process of questioning and answering is problematic for the interviewer as well as the interviewee.

Additionally, the pilot research provides the interviewer with some knowledge of his/her role as facilitator, namely which questioning techniques to

employ and how to manage the social situation of the interview. With the completion of the pilot research, the interview guide can be finalised.

Development and Pilot Research of the Interview Guide

Literature (Bernal, 1974; Faas. 1982; Frasier, 1992a; Harslett, 1993; Kearins, 1988; Louis & Lewis, 1992; Scott, Perou, Urbano, Hogan & Gold, 1992; Tonemah, 1987) which described research investigating a minority culture member's conception of giftedness was reviewed for the purpose of identifying possible questions for inclusion on the interview guide. The interview formats were either a single general question accompanied by suggested probe questions (Frasier, 1992a; Kearins, 1988; Louis & Lewis, 1992; Tonemah, 1987) or a series of specific questions regarding definitions and characteristics of gifted children which were used in a relatively structured interview format (Bernal, 1974; Faas, 1992; Harslett, 1993; Scott, Perou, Urbano, Hogan & Gold, 1992).

An open-ended general question was deemed appropriate to initiate the interview. Interviewees were herefore asked to describe an Aboriginal child whom they believed had outstanding or extraordinary ability. By asking an open-ended question, although limited to those attributes of a particular child which the interviewee spontaneously volunteered, it was believed that the researcher would be given the opportunity to study systematically the interviewee's own beliefs about giftedness rather than theorists' conceptions which might be implied through specific interviewer questions. In talking about

an Aboriginal child with except onal ability, it was believed that the interviewee would provide various descriptions of what they considered were evidence of exceptional ability. These descriptions in turn would create a general representation of the interviewee's conception of giftedness. It was also anticipated that the open-ended question would provide the chance to study the relationship between the interviewees' behaviour descriptions and Frasier's (1992b) ten TAB categories.

Probe questions were constructed in anticipation of the possible situation where an interviewee might need encouragement to continue with a description or be stimulated to recall other behaviours which indicated to him / her that a particular child was gifted or very clever. These probe questions were designed for each of Frasier's (1992b) 10 TABs and utilised ideas from an interview guide developed by Frasier (1992a). The probe questions can be seen in the interview guide (Appendix A).

Initially, as was indicated earlier in this chapter, it was believed that Aboriginal people should conduct the interviews rather than have a cross-cultural relationship between the interviewer and the interviewee. The administration officer of the Kumbari / Ngurpai Lag Higher Education Centre at the University of Southern Queensland (USQ) was consulted with regard to the identification of possible Abor ginal people who would be appropriate to serve as interviewers. At her suggestion the research proposal was presented to a committee of twelve Aboriginal educators from throughout the state of Queensland at a meeting held on the USQ campus. Although the research was

generally supported and deemed to be worthwhile by this group, no one was available to volunteer their time to conduct the interviews. It was decided that two of the committee members, the administrative officer and a high school Aboriginal community counselor, would each participate in a pilot interview to determine whether or not it was possible that the researcher, though non-Aboriginal, might be able to conduct the interviews. These two people and an Aboriginal primary school teacher (see Table 5.1) were subsequently interviewed and asked to comment on the format of the interview, the interview guide questions, the terminology utilised in phrasing the questions and the actual conduct of the interview from an Aboriginal point of view. Two of the pilot interviews were held in the Kumbari / Ngurpai Lag Higher Education Centre. The other pilot interview was held in the interviewee's office at the high school where she worked. It was obvous that much valuable data would be collected from these three pilot interviews. Therefore, it was decided that pilot interview data would be included with data from the other interviews for analysis and consideration.

Table 5.1 Pilot Interview Participants, Interview Date, Location And Administrative Time

Name	Sex	Date	Location	Admin. time	
Gai	F	28 - 6 - 93	Toowoomba	80 min.	
Linda	F	14 - 7 - 93	Toowoomba	55 min.	
<u>Jane</u>	F	<u> 22 - 7 - 93 </u>	Toowoomba	90 min.	

All advice was considered carefully and incorporated into the format and conduct of the future interviews. A number of points were addressed with the pilot interview participants espousing similar opinions. Firstly, due to the positive nature of the topic, that is, being asked to describe outstanding Aboriginal children, and due to the fact that the data would be used to help major culture teachers to better understand Aboriginal children and their individual educational needs, all interviewees felt that it was appropriate for the researcher to act as the interviewer. Gai commented that at first she was concerned that she may not say the "right thing". But once the interview began, she found she "enjoyed telling [the interviewer] about how clever my grandson is". Jane referred to the positive nature of the interview saying, " Most of the time we [educators] just talk about the [Aboriginal] kids and the trouble they have. It's good when someone hears about kids doing good and being gifted."

Secondly, all three pilot interview participants also agreed that the use of the word "gifted" in the open-ended initial interview question might not be a common expression used by urban Aboriginal community members. As educators they were familiar with the term, but suggested that words such as "bright", "outstanding", "real smart" or "clever" might be more appropriate for use with the general Aboriginal community. It was noted that the term "very clever" was used in a similar study in Western Australia (Harslett, 1993). The researcher felt that "bright" and "real smart" might not be discriminating enough and chose to use "outstanding" and "very clever" in place of gifted.

Thirdly, two of the participants felt it would be easier for interviewees to describe a gifted child if the child were from the interviewee's immediate family rather than the child of a friend or acquaintance. In her interview, Gai began by trying to describe an Aboriginal student she had known. However, with very little knowledge of the student's family background she realised she could only discuss his behaviour in the context of an academic setting. Later in the interview, she began to talk about her grandson who lived with her and her comments became noticeably more graphic and confident. Linda, who talked about her cousin, also found it difficult to describe her cousin's behaviours with anything other than very general statements. She voiced the concern that "If you [the interviewer] really want to know about my cousin you should talk to his mother or father." Therefore the sample was redefined from Aboriginal community members to Aboriginal parents of outstanding or very clever children. In this way it was hoped that with intimate, day-to-day knowledge of the child, the interviewee would be able to provide more behaviours of giftedness with greater detail.

An analysis of the data from the first three interviews, discussed later in this chapter, also revealed that two other indicators should be kept in mind for the future interviews. These were _eadership and Sensitivity. Probe questions were developed for each and included on the interview guide (Appendix A).

All pilot interview participants noted that the probe question should be used as "a last resort" because they believed, as did the interviewer, that there existed a danger of leading the interviewee and thus biasing the results. The

interviewer therefore made every effort to use a questioning strategy which did not explicitly introduce a type of behaviour not previously identified by the interviewee and which followed a pattern of repeating the interviewee's statement, acknowledging an emerging understanding on the part of the interviewer and requesting more explanation about a behaviour description.

Additionally, rather than use the probe questions, the researcher asked questions to refocus the discussion and encourage the interviewee to provide further descriptions. Some examples of this type of question are:

What are other things about her that indicated to you that she is very clever?

What are other things about him that make you think he is very clever?

Have there been other things that indicated to you that s/he is very clever?

What else has impressed you as outstanding about her/his behaviour?

Finally, the interviewer realised that 30 to 45 minutes as an estimated time for completion of the interview was unrealistic in light of the time taken for the pilot interviews as shown in Table 5.1. Therefore, during the initial telephone approach to each potential interview participant, the interviewer gave an estimation of an hour to one and one half hours for completion of the interview session. This information can be seen in Appendix B along with other details which needed to be discussed during the initial telephone contact.

The revised interview guide (Appendix A) was completed with the rewording of the original ques ion. Because the literature (Faas, 1982; Kearins, 1988; Reid 1992) had pointed out the influence of acculturation on the conceptions of culturally diverse population members, it was important to note in

the demographics section how long the interviewee had lived in an urban setting. Thus that particular item was added to the general items usually included in the demographic sections.

Sample

Possible interviewees were nominated by the USQ Kumbari / Ngurpai Lag Higher Education Centre Administrative Officer, a Toowoomba high school Aboriginal Community Counse or and the Queensland Department of Education Aboriginal / Torres Strait Islander Senior Policy Officer. They were asked to identify Aboriginal parents whose children were considered by the Aboriginal community to have exceptional ability. It was emphasised that this exceptional ability was not limited to school achievement but that outstanding ability in community activities should also be considered. This approach was deemed appropriate for research attempting to detail cultural conceptions of giftedness since it moved away from a school perspective which is dominated by the major cultures traditions, values and beliefs.

The final interview sample consisted of 11 Aboriginal adults who were well acquainted with an Aboriginal child they believed was very clever. All classified themselves as coming from an urban background and had lived in an urban area for a minimum of 14 years. All lived either in Toowoomba or within an hour's drive of Toowoomba. As has already been pointed out, the original sample was to be simply Aboriginal community members. However, it became apparent during the pilot interviews that interviewees were more easily able to

produce greater numbers of benavioural descriptions when the very clever child they were describing was a member of their immediate family. Because of this, all subsequent interviewees were parents of the children they were discussing in the interview. In Interviews 6, 7 and 8, the child being discussed attended the interview and contributed comments as well as the parent.

All interviewees had completed high school at least to Year 10. Two are university graduates and three interviewees were enrolled in a university degree program at the time of the interview. It must be recognised that such a large percent of respondents with some degree of tertiary education is not paralleled in the general Aboriginal population. Therefore, this sample was a-typical of urban Aboriginal groups.

There was no attempt made to select a relatively even number of females and males for participation in the interviews. This resulted in the situation where all interviewees, with the exception of one, were female. It is hypothesised that this gender imbalance resulted due to several reasons. First, the two Aboriginal educators who nominated possible interview participants to the researcher were both female. Secondly, in a professional sense, the two female educators had been in contact mainly with the mothers about their children. Finally, interviews were conducted during the day and often this schedule did not allow fathers to leave their workplace and participate in an interview. However, this gender imbalance was not evident in the children described by the interviewees. In all, the eleven interviewees considered and discussed the high abilities of 6 males

and 7 females. (Two interviewes discussed two children, consequently resulting in 13 children being described in the eleven interviews.)

Implementation of the Research Method

Initial contact of each potential interviewee was made by telephone to explain the purpose of the interview, secure agreement to participate and schedule an interview time and place. The demographic details were taken before the taping of the interview began. Information was written onto the interview guide sheet (Appendix A) by the interviewer. This time taken to gather the demographic information, though brief, gave the interviewee an opportunity to become comfortable with the situation and more familiar with the interviewer as she was giving well-known, impersonal information about herself or her child.

During the interview, the interviewer asked clarification questions and occasionally inserted a probe question. (See the interview guide, Appendix A, for a complete list of these questions.) However, the interviewer rarely used any of the probe questions as it was felt that such questions might lead the interviewee to give examples of particular TABs which otherwise might not have been described. In so doing, there was always a danger that the interviewer would have influenced the behavioural representation statements which were then analysed to develop an idea of that interviewee's conception of giftedness.

Since the interviews were tape recorded, only brief notes were made by the interviewer during the interview. The interviewer was aware that wait time was important to allow the interviewee to consider questions and compose a reply. The interviewer consciously attempted to use non judgmental comments to encourage further elaboration of a description made by the interviewee, or clarify interviewee statements.

At the conclusion of the interview, the process to verify the accuracy of the transcript and the classification of behaviour statements was discussed briefly with the interviewee. Each participant was reminded that the transcript, along with relating documents, would be posted to him / her for comment.

When the transcription of the interview was complete and behavioural descriptions coded, each interviewe was given a copy of the interview tape; the interview transcript; a copy of Frasier's (1992b) ten TABs with definitions of each; a copy of how the interviewee's comments had been categorised using the TABs by the interviewer and a letter of instruction (Appendix C). The interviewee was asked to verify that the interview had been accurately recorded and that his/her comments had been correctly interpreted and categorised. Also, as was previously mentioned, each interviewee was requested to correct inaccuracies, delete any information s/he did not wish left in the transcript, and add information where s/he felt it would clarify the intent of any statements made in the first interview. With this feedback, interview transcripts were updated and categorisation of descriptions verified in preparation for the content analysis stage of the research.

Analysis of Interview Data

The data from each interview were analysed as soon as the interview transcription was completed. F'articularly during the first three interviews this was done to ensure that an adequate body of quality data was generated from the interviews. In this way the data collection procedure could be brought into sharper focus if necessary for subsequent interviews. Analysis, interview by interview, also served a second purpose of providing feedback on the appropriateness of the descriptive coding used to assign category labels to each behavioural description (Miles & Huberman, 1984). Eleven categories were proposed for the descriptive coding. These categories were established from Frasier's (1992b) attributes or 10 TABs of the giftedness construct with an eleventh category named 'mispellaneous'. Any of the behavioural descriptions which were not related to at least one of the TABs were coded as miscellaneous. Categories were not considered discrete and therefore it was possible that a description was coded to more than one category.

Miles and Huberman (1984) warned that a miscellaneous category may become unwieldy with a large number of interview segments, if the other coding categories are insufficient in breadth. Therefore, it was determined that part of the initial analysis, focusing on the first three interviews, would examine closely the descriptions categorised as miscellaneous to ascertain possible patterns which might suggest new codes or categories for inclusion during subsequent interviews.

During the data analysis of the first three interviews, seven behavioural descriptions had been coded as miscellaneous. Upon closer scrutiny of these descriptions, it appeared that two new codes might be emerging. Two of the interviewees had provided four descriptions which seemed to be best coded as Leadership (L). The further three descriptions were provided by one interviewee and indicated a valuing of one's ability to empathise with others and be sensitive to their emotions. These three segments were tentatively coded Sensitivity (S) until further data could be gathered which might substantiate such categories. It was assumed that the creation of the two new codes Leadership and Sensitivity would assist in a clearer differentiation of the interview data. The final list o thirteen categories and relating codes may be seen in Table 5.2.

Table 5.2
Original List Of Categories And Corresponding Codes Used To Classify Data From Interviews With Aboriginal Adults

Category	Code		
Communication	С		
Motivation	MOT		
Interests	INT		
Problem solving ability	PS		
Imagination / Creativity	I/C		
Memory	M		
Humour	Н		
Inquiry	INQ		
Insight	INS		
Reasoning	R		
Leadership	L		
Sensitivity	S		
Miscellaneous	MIS		

The researcher read through an unmarked copy of all transcripts on four separate occasions and coded statements according to the core and additional attributes. Categorisation results from the four occasions were compared to ensure intra-rater reliability.

Following the completion of the coding by the researcher and the verification of the coding by the interviewee for the remaining eight interviews, simple descriptive statistics viere established for each of the ten attribute categories, the Miscellaneous category, and the proposed new attribute categories of Leadership and Sensitivity. Within each attribute category, the descriptions were examined in order to determine the types of and frequencies of similar statements reported by the interviewees, and to establish any subcategories which were evident within the attribute category which had not already been used as a general example of the category by Frasier (1992b). Some descriptions were assigned to more than one subcategory.

Part 2: Questionnaire Method

It was believed that another important source of conceptions about gifted Aboriginal children and about the usefulness of Frasier's (1992b) TABs with Aboriginal students would come from Aboriginal teachers. As members of an Aboriginal culture and teachers, it was believed that they have a unique perspective from which to observe Aboriginal children and reflect on their behaviours. The researcher therefore sought to determine a data gathering procedure to ascertain Aporiginal teachers' conceptions about the

appropriateness of Frasier's (1992b) 10 TABs in identifying gifted Aboriginal children and information about the teachers' personal perceptions of possible indicators of giftedness.

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Discussions were held with the Principal Policy Officer of the Aboriginal / Torres Strait Islander Unit, Clueensland Department of Education, about a survey method and sample group. Ideally, face to face interviews are considered best for collecting information concerned with people's ideas, feelings, beliefs, and social and educational background (Fink & Kosecoff, 1985). However, there were a number of factors which worked against the selection of interviewing as the survey method. The two main factors influencing this type of data gathering activity were cost limitations (Jaeger, 1988) and anonymity (Fink & Kosecoff, 1985). As teachers were employed at schools scattered throughout the state, the cost for travel would be considerable and a likely financial burden to the interviewer. Additionally, there was a need to ensure the anonymity of the respondents as the Department of Education policy stated that the names of teachers were confidential. In both cases the questionnaire method was seen as more appropriate than the interview method. Additionally, the Senior Policy Officer felt that meeting the educational needs of gifted Aboriginal children required greater attention in the state, and saw a questionnaire as an efficient way of collecting data about this concern while at the same time raising teacher awareness of these children.

Although some researchers (Fink & Kosecoff, 1985) view the questionnaire as a method incapable of the cathering of more complex information afforded by

the interview, Jaeger (1988) nsisted that complex issues can be examined through a mailed questionraire when the questionnaire population is composed of specialists with a common background and a natural interest in the topic. In this research the Aboriginal teachers were viewed as education specialists, with a common background of being a member of the Australian Aboriginal culture, and with a shared natural interest of recognising and fostering the abilities of all Aborigina children including outstanding ability in some Aboriginal children.

Further, with a small number of Aboriginal teachers in Queensland Department of Education schools, it was seen as desirable to include the entire group in the sample if at all possible. All Queensland Department of Education, Aboriginal teachers could reasonably be surveyed if a questionnaire method was utilised.

Taking account of these considerations, it was decided that a selfadministered questionnaire, though not without some problems, was the most appropriate method with which to survey Aboriginal teachers in Queensland Department of Education schools. It would guarantee anonymity and give opportunity to all Department of Education Aboriginal teachers in the state to contribute to the survey. The criteria of cost and convenience also were addressed more appropriately through the questionnaire survey method rather than the interview method.

As was mentioned in Part 1, reliability and validity refer to the precision and accuracy of the information offered by the survey method, whether questionnaire or interview. Multiple-choice or closed-ended questions are more reliable than open-ended questions because of the uniform data provided since all respondents answer in terms of the same options such as "agree or disagree" and "frequently or infrequently" (Fink & Kosecoff, 1985). To increase reliability, it is necessary to focus on the clarity of the questions and the general format of the questionnaire. Clarity of questions increases the likelihood of all respondents interpreting the question in the same way which increases reliability (Jaeger, 1988). A clear general format for the questions will further enhance the reliability of the questionnaire.

Validity of a questionnaire is encouraged when all topics are included and there is sufficient variety in the generated responses (Fink & Kosecoff, 1985). Additionally, validity is increased in a questionnaire because the threat of bias due to interviewer style is eliminated and respondents who find expression of ideas difficult are allowed as much time as they need to phrase their answers. Checks on the degree of reliability and validity are most effectively conducted through a pilot test (Fink & Kosecoff, 1985).

Development and Pilot Test of he Questionnaire

There are several principles to be considered in the development of a mail questionnaire (Jaeger, 1988). Mail questionnaires must be self-explanatory. The mail questionnaire must clearly tell respondents why they should bother to complete the questionnaire, definitions of terms likely to be unclear to respondents, how they should urnish their answers, what questions they are to

answer, and what to do with their questionnaires once they are finished. A major objective for the questionnaire researcher is to present all respondents with questions that they interpret and understand in exactly the same way. Strict attention to detail and care in phrasing questions, definitions, and instructions is also seen to reduce ambiguity and misunderstanding (Fink & Kosecoff, 1985). Specifically, mail questionnaires should be short and simple, and used when the topic of the questionnaire can be addressed through a few easily understood questions (Jaeger, 1988). It was desired that the format remain as simple as possible so as to be easily understood at first glance which would encourage participants to respond (Fink & Kosecoff, 1985).

People tend to respond best when the first questions of a questionnaire ask for objective facts. Additionally, questions should proceed from the most familiar to the least (Fink & Kosecoff, 1985). It was decided to begin the questionnaire with a short demographics section which requested the location of the school where the teacher worked, current grade taught and years of teaching experience. This was placed on the first page of the questionnaire with a brief description of the questionnaire's purpose.

The questionnaire was divided into four parts to create short sections which could be completed in wo to five minutes. Responding to a number of short sections, as opposed to one or two long sections, enhances respondents' motivation to complete thoroughly the questionnaire (Fink & Kosecoff, 1985).

Respondents' answers depend not only on the wording of the question, but on the series of questions that precede it (Jaeger, 1988). It was necessary then

to consider the sequence in which the four sections should be placed on the questionnaire. Also, definitions for each of the 10 TABs needed to be provided early in the questionnaire in order that subsequent sections dealing with the TABs were easily understood. Therefore, the first section, Part A, of the questionnaire consisted of ten forced answer items, one question with a definition for each of the 10 TABs. This section was designed to elicit the respondents' perceptions of how successful each TAB would be in identifying gifted Aboriginal children. A category scale with the choices of "extremely successful", "frequently successful", "occasionally successful", and "rarely successful" was used to rate each TAB. Four choices were used because an even number of choices forces the respondent away from a "neutral" or "undecided" answer (Fink & Kosecoff, 1985). Also in Part A, respondents were requested to provide for each of the TABs, additional examples of behaviours which they felt would describe the way Aboriginal children might display outstanding ability for the TAB This was done to encourage the description of any culturally specific behaviours seen by the respondents as relevant to the individual TABs.

Parts B and C of the questionnaire referred to the TABs and their definitions in Part A. Using ar open-ended format, Part B requested that the respondents list attributes, other than the ten TABs already given, which they felt were particularly relevant and should be utilised in identifying gifted Aboriginal children. It was hoped that this section would provide information similar to the Miscellaneous category in the interviews, allowing the researcher to determine

if the ten TABs were adequate to describe giftedness in terms of Aboriginal urban cultures or if additional TABs should be added. The section was placed directly following Part A, since this allowed the respondent an immediate opportunity to add any additional descriptors which might have come to mind as they completed Part A.

In Part C, questionnaire participants were asked to review the ten TABs and their definitions presented in Part A and to rank order the ten descriptors, and any additional descriptors they had indicated, in Part B, from the most successful descriptor to the east successful descriptor of gifted Aboriginal children. Part C was included to acquire information with regard to the degree of success each descriptor possessed when compared to the other descriptors; whereas Part A only had required each attribute to be rated individually with no reference to the other attributes. This was deemed important information to report to teachers who will use the TABs with Aboriginal students and who will presumably find it useful to know which TABs are more likely to be successful in identifying gifted Aboriginal students.

The final section of the questionnaire, Part D, was an open-ended response section, which asked teachers to think of Aboriginal children they considered to be gifted and to describe the ways in which these children acted which indicated to the respondent that these children had outstanding ability. This question, which was similar to the interview focus question, was designed to gain the Aboriginal teachers' conceptions of giftedness as well as further examples of behaviours which might indicate giftedness in Aboriginal children.

Comments from the Princ pal Policy Officer of the Aboriginal / Torres Strait Islander Unit in the Queenslar d Department of Education were sought on the draft questionnaire's format, terminology, type of information being solicited and general clarity. In terms of the format, the Principal Policy Officer believed that the questionnaire appeared to be cramped and would be improved if more space was allowed for answers, particularly in Part D. She suggested a terminology change from the use of the word "gifted" to "high ability" or "exceptional ability". Additionally, she pointed out that the demographics section could not ask for the name of the school in which the teacher worked as this could be a threat to respondent confidentiality which was guaranteed by the Department of Education, Queensland.

The Principal Policy Officer noted that the four sections were sufficient to adequately obtain information about the questionnaire topic and there was a balance between open-ended and closed-ended questions. She indicated that, although the questionnaire could not be described as short, it was of a reasonable length to encourage respondents to complete it. She found the directions to be clear and easily understood but suggested that the sequence of the questions might be improved by placing Part C before Part B.

These comments were considered and the following changes made to the draft questionnaire: (a) format increased from four to five pages; (b) word 'gifted' replaced by 'exceptional ability' in all but one place where 'high ability' was utilised; and (c) request for name of school dropped from demographics section. It should be noted that the original sequence of the questions was maintained

since respondents were asked to include their answer from Part B in the rank ordering activity which comprised Part C. This modified draft of the questionnaire was used to conduct the pilot questionnaire.

In a pilot questionnaire respondents should be asked whether the questions proposed for the main questionnaire are clear and understandable, whether the instructions for completing questionnaire instruments and providing data are free of ambiguities, and how long it took them to complete the main questionnaire's instruments (Jaeger, 1988). This information along with information about the appropriateness of the general format, was collected with a feedback form (Appendix D) which was mailed out with the pilot test questionnaire.

The questionnaire was trialed by four Aboriginal teachers not employed by the Queensland Department of Education who had been identified to the researcher by the USQ Kumbari / Ngurpai Lag Higher Education Centre as people who were willing to participate in the pilot test. The questionnaire was mailed to each teacher at her home address along with a stamped envelope in which to return the questionnaire.

All questionnaires were returned within ten days and an analysis was conducted of the pilot test part cipants' comments concerning the questionnaire structure and content. In all, only two comments recommended modifications to the questionnaire. The other comments were statements in support of various aspects of the draft questionnaire. The first modification comment dealt with a suggestion to make the four sections more visually distinct by drawing a box

around each one. The second comment came from a respondent who found the instructions for Part C hard to follow. She was uncertain whether to start numbering from the least successful to the most successful or vice versa and thought an example might add clarity to the instructions. Both these modification ideas were incorporated into the final questionnaire.

The pilot respondents recorded that completion of the questionnaire had required between 18 minutes and 25 minutes, all under 30 minutes which is considered as reasonable for ε self-administered, mailed questionnaire (Fink & Kosecoff, 1985). Therefore, it was seen as unnecessary to contemplate the deletion of any section from the questionnaire. With all pilot respondents' comments considered and the modifications completed, the questionnaire was in its final form (Appendix E).

Sample

The questionnaire sample consisted of 72 preschool, primary or secondary Aboriginal teachers employed by the Queensland Department of Education. Aboriginal teachers are any teachers who identify themselves as Aborigines and are thus recorded as such by the Department of Education. Classroom teaching experience ranged from a beginning teacher level (1-5 years) to the more experienced teachers who had been working in the classroom for over 6 years.

Table 5.3 shows that a to:al of 25 teachers responded to the questionnaire

- 2 preschool teachers, 12 primary teachers, 7 secondary teachers and 4

teachers who were at the time of the questionnaire working in a position outside the classroom. Ten teachers had 1-5 years teaching experience, 7 teachers had been teaching 6-10 years, 6 teachers reported 11-15 years teaching experience and 2 teachers had been teaching more than 15 years. Because of strict Department of Education confidentiality policies, no further general information was available for the sample group.

Table 5.3
Respondents To Aboriginal Teacher Questionnaire By School Level And Number Of Years Teaching Experience (N=25)

	Years Teaching Experience					
School Level	1-5	6-10	11-15	16+	Total	
Preschool	1	-	1		2	
Primary	5	4	2	1	12	
Secondary	3	2	2	-	7	
Non-classroom teachers: (guidance & prof. dev. officers)	1	1	1	1	4	
Total	10	7	6	2	25	

Implementation of the Research Method

The questionnaire designed by the researcher was sent out to all Department of Education Aboriginal teachers with a cover letter (Appendix F) from the Principal Policy Officer. To ensure confidentiality of the participants, the Aboriginal / Torres Strait Islander Unit Senior Policy Officer addressed the questionnaire envelopes and was responsible for the posting of the questionnaire in early July. For ease in returning the questionnaire, a stamped envelope addressed to the researcher was included with the questionnaire. A

second mailing of the questionnaire with a reminder letter (Appendix G) was scheduled to be sent out one month following the initial questionnaire posting. This second mailing was delayed slightly until after the conclusion of the Term 3 school holidays, as it was believed that teachers would be less likely to respond at the end rather than at the commencement of a term. Then, due to illness and long service leave of personne in the Aboriginal / Torres Strait Islander Unit the second mailing eventually had to be abandoned.

Analysis of Questionnaire Data

In all, 28 of the 72 questionnaires were returned to the researcher, representing a response rate of 39%. Such a low response rate was recognised as placing limitations on the generalisability of any results. Of the 28 questionnaires returned, two were excluded from the analysis because they had no parts completed. One other questionnaire was excluded because it was completed by a teacher from the Torres Strait Island community, a minority culture group quite distinct from Aboriginal cultures. For the purpose of this study then, only 25 questionnaire responses plus the four pilot questionnaires were considered in the analysis.

Demographic information and responses from Part A and Part C were analysed using the Statistical Package for the Social Studies (SPSS). Simple frequency tabulations and analyses of variance were run to determine the magnitude of response for each of the ten attributes both for the total group of respondents as well as for the sub-groups, according to the three levels of

grades taught which were preschool/ primary, secondary, and administration/ tertiary. Examples given by respondents in Part A, additional information given in Part B, and comments written on the questionnaire in Part D were recorded verbatim for each part with the case identity number, according to the various attributes. These data were then organised by hand according to the frequency of a given response and the number of teachers making a particular type of response.