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Evaluation of Provisions for Gifted Students in Saudi Arabia

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Evaluation of Provisions for Gifted Students in Saudi Arabia

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STATEMENT OF ORIGINALITY

This thesis reported the original work of the author, except as stated.

It has not been previously submitted for a degree at this or any other university.

Mohammed Al Qarni

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Dedication

To my parents, my wife, my clever children, and to all those gifted students in Saudi Arabia, as well as those who believe and nurture their talent as a recognition of this investment in the future of Saudi Arabia itself.

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ABSTRACT

This study was conducted to evaluate the provision of gifted education in Saudi Arabia, which had not been assessed since its commencement 12 years ago. This study represents a comprehensive and objective evaluation of all the gifted centres that provide care and services for gifted students in Saudi Arabia, in order to achieve the following objectives:

1. Identify and classify different policies of planning and providing programs for gifted students in Saudi Arabia;
2. Identify and evaluate the effectiveness of procedures used in selecting gifted students in Saudi Arabia;
3. Identify and evaluate the effectiveness of procedures used in selecting and training specially qualified teachers and administrative staff who work with gifted students in Saudi Arabia;
4. Identify and evaluate the effectiveness of strategies and curriculum approaches implemented in programs for the gifted students in Saudi Arabia; and
5. Provide a guideline for a Saudi model of evaluating, planning, and implementing programs for gifted students.

In order to carry out these objectives, the study used a mixed method design with data collected through questionnaires, interviews, and observation. The participants of this study were administrators, supervisors and teachers who work in gifted centres in Saudi Arabia, including gifted students and their parents. The total number of participants of both genders numbered 541 participants. This research study sought response to the following questions:

1. What are the current gifted policies, and how have they been implemented?
2. What are the current gifted provisions, and how have they been developed?
3. What procedures are used to select gifted students for gifted programs, and how effective are they?
4. What procedures are used to select and train teachers for gifted programs, and how effective are they?

5. What strategies and curriculum approaches are implemented for gifted students, and how effective are they?
6. How can provisions for gifted students be improved?
7. Are there differences in the provisions for gifted girls and gifted boys in Saudi Arabia? What effects do these differences have on the key stakeholders' satisfaction with the education of gifted students?

The results of the study showed a reduced performance by the Ministry of Education in terms of providing gifted education. There was no clear policy and no follow-up despite the existence of legislation that allows for the implementation of appropriate methodologies for the gifted. In addition, identification of gifted students was also a problem. Provision of this type of education has not yet embodied the means of identifying gifted children nor the selection and training of supervisors and teachers. Further appropriate curricula were also lacking. Finally, there was a notable lack of financial support either from the Ministry of Education or the private sector. This is somewhat puzzling given that it is the latter sector which most benefits from the education of gifted students. This study has suggested best practice for the care of gifted students in Saudi Arabia, based on the recommendations reached by the researcher through the discussion of results.

Chapter one

Introduction and background to study

During the past ten years, educational authorities in Saudi Arabia have begun to provide services and programs for gifted students. Alnafa'a (2000) stated that gifted programs had been neglected in Saudi Arabia since the adoption of an official educational policy in 1969. Before the gifted program started in 1999, there had been small sporadic projects here and there, but these did not include the fundamentals necessary for the proper organization of integrated programs. A review of the educational literature on gifted programs in Saudi Arabia made it generally clear that there was no comprehensive plan written for these programs (Al kaldi, 2002; AlOtaybi, 1995; Ma'jiny, 1990).

Gifted programs in Saudi Arabia, which began of late, have not received sufficient attention from officials in the Ministry of Education and other educational departments. The beginnings were weak and sporadic in several regions of Saudi Arabia, and their existence only linked to some enthusiastic workers for these programs in those areas. By reviewing the effectiveness of these initial programs and their impact in the light of the research literature, the following points were revealed:

1. There is a clear weakness in the implementation of programs for gifted students, with no clear plan and strategy present.
2. The implementation of these programs is linked to the enthusiasm of some people working within the Ministry of Education.
3. They did not include all or most of the components of gifted programs, as described in the literature review.
4. Evaluation appeared to not be one of the elements receiving attention in the programs, whether summative or formative evaluation.
5. These programs had not adopted an agreed upon definition of gifted students.
6. These programs did not receive sufficient financial support from the Ministry of Education, nor from other government agencies or the private sector.

7. Only weak and limited studies were conducted to evaluate gifted programs in Saudi Arabia.
8. Even with these limited studies, no benefit was obtained from their results. Also, the educational authorities had not conducted a comprehensive evaluation of these programs, even after ten years from their commencement. (Abunayyan, 1994; Al Qarni, 2005; Al-Khaldi, 2002; Al-Otaybi, 1995; Alshakas, 1999; Al-Saif, 1998; Maajeeny, 1990)

Evaluation processes should be integral to the organization of any program, in order to develop and improve the program. Callahan, Tomlinson, Hunsaker, Bland and Moon (1995) noted:

> Developing an evaluation plan is one of the most critical elements of providing programs and services for students who are gifted. Many people make the mistake of planning evaluation after the program has been running for a couple of years because they want to make sure that the program is fully implemented before assessment or evaluation. Evaluation should be built in to the original program plan so that you know you are offering services that can be evaluated formatively and summatively. Formative evaluation (usually conducted during implementation) can be used to make sure you are accomplishing what you want to accomplish. Summative evaluation (conducted after the program is fully implemented) tells you the degree to which your program is accomplishing its goals and objectives. (p. 53)

This study aimed to conduct an evaluation, which would explore gaps between research results of previous studies on one hand, and practices taking place in gifted programs in Saudi Arabia on the other, taking into account a number of areas including:

- Policies and philosophy being pursued by these programs.
- The actual implementation of existing projects.
- The application of student selection procedures.
- Teacher selection and training.
- Providing appropriate curriculum for this group of students.

In addition to evaluating existing programs, suggestions and recommendations would be made to increase their effectiveness and efficiency.

Statement of the problem

Ten years have elapsed since the beginning of the implementation of projects for gifted students in Saudi Arabia. There has not been any type of evaluation of these projects so as to identify the nature and effectiveness of practices present in these programs. The development of the programs for the gifted needs to be based on sound scientific methods including evaluation, such as those applied in other countries. The limited evaluation studies conducted in Saudi Arabia provided a strong rationale for the current study. It is also believed that evaluation of gifted programs in Saudi Arabia is an important contribution to the literature because it is a unique educational system, which does not allow the mixing of male and female students, including gifted students. This occurs under the strict gender separation of students and all staff (teachers, supervisors, administrator, and other staff). As such gifted education in Saudi Arabia has been cocooned and unavailable to a wider academic audience. It is the purpose, therefore, of this research to widen the ambit of scrutiny for educational purposes.

Purpose of the study

This study acquires its significance from being the first attempt to:

1. Identify and classify different policies of planning and providing programs for gifted students in Saudi Arabia;
2. Identify and evaluate the effectiveness of procedures used in selecting gifted students in Saudi Arabia;
3. Identify and evaluate the effectiveness of procedures used in selecting and training specially qualified teachers and administrative staff who work with gifted students in Saudi Arabia;

4. Identify and evaluate the effectiveness of strategies and curriculum approaches implemented in programs for the gifted students in Saudi Arabia; and
5. Provide a guideline for a Saudi model of evaluating, planning, and implementing programs for gifted students.

Research Question

1. To what extent do current provisions in Saudi Arabia meet the needs of gifted students according to the key stakeholders?

Sub-questions

1. What are the current gifted policies, and how have they been implemented?
2. What are the current gifted provisions, and how have they been developed?
3. What procedures are used to select gifted students for gifted programs, and how effective are they?
4. What procedures are used to select and train teachers for gifted programs, and how effective are they?
5. What strategies and curriculum approaches are implemented for gifted students, and how effective are they?
6. How can provisions for gifted students be improved?
7. Are there differences in the provisions for gifted girls and gifted boys in Saudi Arabia? What effects do these differences have on the key stakeholders' satisfaction with the education of gifted students?

Glossary of Terms

Throughout this thesis, a number of terms are used. Their definitions are provided below.

Ability Grouping: Class or group organised on the basis of observed behaviour or performance. Ability grouping is not the same as tracking.

Acceleration or Accelerated Learning: A strategy of progressing through education at a faster rate or a younger age than the norm.

Compacted curriculum: A label coined by Joseph Renzulli to describe the 8-step process that pre-assesses what learners already know and replaces this 'bought time' with appropriately differentiated and extension learning experiences.

Differentiation: Modifications to curriculum and instruction according to content, process, product and learning environment to meet unique student needs in the classroom.

Enrichment: Activities that add or go beyond the regular curriculum and which may occur in the regular classroom or as an extra-curricular offering.

Extension: Activities that are completed in the regular classroom that are more difficult than students normally undertake at the stage of learning.

Gifted and Talented Students: In Saudi Arabia, the Gagné definition is generally accepted, with gifted students being those who have above average potential (approximately 10%) and talented students being those whose performance is above average (again, about 10%).

Heterogeneous Grouping: Organisation of students into groups based on mixed ability.

Homogeneous Grouping: Grouping students on the basis of similarity in need, ability, or interest. Differences will still be evident but the purpose is to restrict the range of abilities in the classroom.

Intelligence: The ability to learn, reason, and problem solve.

Intelligence Quotient (IQ): A numerical representation of intelligence derived from a standardised test, where the mean is generally 100.

Pull-out Program: A program which takes a student out of the regular classroom during the school day for special programming.

Social-Emotional Needs: Gifted and talented students have affective needs alongwith their cognitive needs. These may include sensitivity, intensity, high expectations of

themselves or others, a sense of justice, perfectionism, underachievement or depression.

Talent Development: Programs designed for gifted learners that can help translate their potential into performance. (Vialle & Rogers, 2009)

Chapter Two

Literature Review

Introduction

In Saudi Arabia, as in the other countries, the system of selecting and educating gifted learners needs to be evaluated. Previous research in Saudi Arabia demonstrated that many educators in the gifted education field believe that not enough resources are provided to gifted students to assist them to move forward in their education (Al Qarni, 2005). While there are some supporting bodies that are concerned to help eligible students, the lack of systematic evaluation procedures has meant that many fail to achieve their set goals.

The gifted students in any society need special care and suitable planning for their educational needs, to ensure they perform according to their abilities (Kerr, 2009). The term 'gifted students' is not a new one. Every country, culture and era, recognizes the achievements of talented individuals, but teachers tend to believe that these students are naturally able to make the most of their special abilities (Davis & Rimm, 2004; Rogers, 2002). Gifted students, however, are still in need of special care and attention, right from the start of their education. Therefore, it is necessary that such students be identified as early as possible (Porter, 2005).

As stated above, the term 'gifted student' is not new. However, there have always been restraints on providing adequate education for students identified as gifted. Reis (2003) found that programs for gifted students were often weak in structure and faded after promising beginnings. A single person, with minimal involvement of the higher management, often managed such programs. Reis (2003) also reported that there were still a number of places where gifted students, generally, were unable to acquire the education they needed and became lost among other students with their giftedness unrecognized (see also, Lewis & Delisle, 2003). The researchers concluded that supporting bodies and educational institutions need to collaborate to identify gifted

students and provide them with the education they deserve (Lewis & Delisle, 2003; Reis, 2003).

Strip and Hirsch (2000) stated that taking these issues into account, it becomes clear that gifted students are often unable to take advantage of their abilities and capabilities, and their talents are lost to their countries. Therefore, gifted students must be identified early and provided with specialized education to meet their special needs (Renzulli, 1977).

History of Gifted Student Programs in Saudi Arabia

Attention to gifted and talented students across the world was influenced by the development of mental testing between 1875 and 1970. Measurement became, and continues to be, a primary factor in projects seeking to develop gifted students around the world (Jarwan, 2004). The Kingdom of Saudi Arabia, like other countries, only made true progress in gifted education after tools of measurement became available in setting up projects and programs for gifted students (Jarwan, 2004). Saudi Arabia has taken tangible and scientific steps to establish the standards necessary for such projects. Also, the country's political and educational leadership had provided legislation supporting educational projects since the kingdom's foundation in 1902, and appropriate official education policy related to gifted students was formulated in 1969. These developments passed through several stages, which coincided with historical events in the development of Saudi Arabia. These stages can be identified as follows.

The start of interest in gifted and talented students in Saudi Arabia (1969-1989)

Interest in education in Saudi Arabia dates back to its early foundation in 1902, and the essence of education was religious, influencing objectives, content, teachers, teaching techniques, and educational institutions. As such, Saudi education was not so different from that of neighbouring Arab and Islamic states during the first half of the twentieth

century. The prime goal of education was memorizing the Holy Qur'an, learning to read and write basics of mathematics, poetry, along with some history and Islamic jurisprudence. Educational institutions ranged from the traditional Katatib, mosques, to very few charity and private schools in Mecca and Medina.

Teachers were clergymen, sheiks or religion students. Despite the limited objectives and traditional methodology, the Katatib, mosques, schools and teachers were able to nurture gifted and talented students, and adopted educational and psychological principles that have only recently been adopted by other prominent educators and psychologists. Such principles included individualization of education, taking individual differences into account, engaging students in teaching younger or slower fellow students, as well as offering financial and moral support for gifted students (Adas, 1998).

After the establishment of the Ministry of Education in 1953, education underwent an improvement, both quantitatively and qualitatively, as it was extended to include both girls and boys throughout the kingdom. However, it was not until 1969 that official attention started to be paid to gifted students, when the Saudi government endorsed a bill entitled "The Education Policy in the Kingdom", through Decree No. 779 of 16-17 September 1969. One of the quintessential axes of the bill calls for devoting attention to gifted and talented students. This was emphasized by Article 57 of the abovementioned decree which points out that one of the major goals of Saudi education is "identifying gifted students, nurturing them, and providing varied resources and opportunities to develop their gifts within the framework of general programs, and through applying special programs" (Ministry of Education, 1969, p. 16). Furthermore, Articles 192, 193 and 194 of the decree reinforced these goals by calling on the state to offer all possible attention to gifted students for the purpose of "developing and directing their talents, and for the relevant authorities to apply strategies to identify them and to offer them, specially-tailored educational programs, along with incentive rewards" (Ministry of Education, 1969, p. 24). This is the main

reason why 1969 is considered the year of initiating the first stage of the Kingdom's attention to gifted and talented students.

This first stage of developing gifted and talented students spanned 20 years, during which the Saudi educational system was generally expanded and improved. Nonetheless, the attention it gave to gifted and talented students was limited despite the enacted legislation. In this regard, attention was solely confined to holding annual gatherings for gifted and talented students and their families, giving gifts as well as financial and material awards, and scholarships for some students to continue their education inside the kingdom or overseas, and to carry out a number of studies and scientific research in the field. However, quantitative and qualitative progress in the Saudi educational system during this stage, coupled with the aforesaid legislation and the consequent legislative and scientific efforts, all paved the way for the second stage of catering for the gifted and talented students in the Kingdom, which started in 1990.

The stage of formulating and codifying tools for identifying gifted students (1990-1995)

In his report on the Saudi experiment in 2001, Abdullah Al Nafie noted that the main hurdle to the implementation of educational legislation relating to the development of gifted students in Saudi Arabia was the lack of scientific and objective standards and tests tailored to the Saudi environment, through which students gifted in the basics of science, technology, arts and literature could be identified. This scientific and educational problem, along with a few others, motivated those in charge of the Saudi educational system to launch the "National Educational System" which was shared by, and financially and morally supported by:

1. The Saudi Ministry of Education;
2. King Abdul Aziz City for Science and Technology; and,
3. The General Headquarters for Girls' Education.

The project's goals included preparing and codifying tests and standards that befitted the Saudi context and were capable of identifying gifted males and females in Saudi society, as well as formulating two enrichment programs in science and mathematics.

In formulating these procedures, the decision was made to adopt the definitions and identification tools used in the United States and circulated by the National Association for Gifted Children (see NAGC, 2008). By the conclusion of the project in 1995, the following identification protocols were codified:

1. Amended Wechsler Intelligence Scale for Children (WISC);
2. Torrance Test of Creative Thinking;
3. Mental abilities measurement (linguistic, numeric, mechanical, or reasoning); and,
4. Questionnaire for gifted students' characteristics.

Following this, tangible work was undertaken to nominate gifted students in science and mathematics, based on the following criteria:

1. Evaluations made by teachers who had previously worked with the student.
2. Outstanding academic achievement in general, that is, the score of a program candidate should not be less than 90%.
3. Outstanding results in science being not less than 90%.
4. Outstanding results in mathematics being not less than 90%.
5. Outstanding results in the mental abilities test (collective and individual).
6. Outstanding results in the Torrance Test of Creative Thinking.
7. Outstanding results in the Wechsler Intelligence Scale for Children (WISC).
8. Outstanding results in a student's exam in science and mathematics. (Al Nafie, 2001)

It is noteworthy that results of the National Educational Program constituted a scientific and technical basis for implementing gifted student development programs within the Ministry of Education and the General Headquarters for Girls' Education. The results also provided a scientific and technical basis for establishing King Abdul Aziz and His Companions Foundation for the Gifted that was headed by King Abdul Aziz at the time he was a Crown Prince. The king is still heading this foundation.

The stage of preparing and implementing the Enrichment Program in Science and Mathematics

This stage incorporated four steps, as follows.

1. Setting the project ground rules

To ensure conformity of the enrichment program's steps with those of equivalent global programs, the work team reviewed international experiences in caring for gifted and talented students, through relevant reading and field visits to projects in the United States and other advanced countries in this field. The team members agreed that the enrichment approach (at least at this stage) was the optimum strategy to care for gifted students. Al Nafie (2000) maintained that, after defining its detailed objectives, the program was carried out in accordance with the following steps:

- Analysing the content of the general curricula of science and mathematics taught in mainstream schools.
- Determining the objectives of the new approach.
- Defining the teaching strategies through which the new curricula are delivered.
- Devising an introductory test, that precedes the enrichment program, to be applied to all students taking part in a program's trial that involving using pilot, experimental, and control groups.
- Devising a subsequent test to be implemented upon delivering items of the new curriculum.

2. Applying the enrichment program.

The enrichment program was next implemented with a sample of students from the Capital's Exemplary Institute in Riyadh, in the three scientific subjects of biology, physics and chemistry, and in mathematics, in accordance with criteria specified through applying measurements, which had been customized for this purpose. Such measurements include measuring general trends in science, testing research skills, testing mathematical thinking, and a measure of diagnosing students gifted in mathematics, which had been used in Colorado, USA. The sample was divided into three groups (pilot, experimental, and control). The program was applied on a basis of 40 hours per subject for 10 weeks, after preparing the necessary resources.

After analysing the enrichment program results, it was found that the experimental group's performance was better than the control group in terms of enhanced academic accomplishment, improved thinking skills, and development of positive attitudes toward science and mathematics. The difference in performance between the two groups was statistically significant. The conclusion drawn from the results of the enrichment program in science and mathematics subjects was that the presence of a stimulus-rich environment could lead to positive results for gifted students. This conclusion supports similar outcomes previously reached by studies such as that of Stanley and others (Al Nafie, 2000).

3. Implementing the enrichment approach by the Ministry of Education.

Once the scientific team had completed preparing the measuring tools, preparing and approving the enrichment approach in science and mathematics, and its subsequent successful trial on a sample of students, the Ministry of Education decided to implement the Gifted Students Identification and Care Program in public schools, based on the aforementioned National Education Project. In this regard, Al Nafie, et al. (2000) explained that the Ministry of Education had launched the project in boys' schools in 1999, through establishing the Centre for Gifted Students in Riyadh, at the Ministry's headquarters. The centre was charged with identifying gifted students in the last three grades of primary education, that is Years 4, 5 and 6. At the time, the total number of all Saudi students was 710,092 attending 512 schools, of which 426 were state-owned, and 86 were private. Currently, the project is being implemented and gradually extended to encompass other educational levels including secondary schooling, as well as another 42 Saudi educational districts. In order to identify the gifted students, the following steps were defined:

1. Nomination: Schools nominate students based on their academic achievement, and according to standards specified in the program, assessments made by teachers, and by considering characteristics of gifted students, already specified in the program.

2. Identification: Tests and measures that had already been included in the program. These include, the Mental Abilities Test, Torrance Test of Creative Thinking, Wechsler Intelligence Scale for Children (WISC), and a number of specialized tests in science and mathematics, added to student interests and dispositions.
3. Selection and categorization: Students are selected and categorized based on results of tests and measures, and according to specified standard scores mentioned in the program, with the aim of directing them to enrichment programs that best suit their abilities.
4. Evaluation: Students selected for the enrichment programs are followed up to assess the extent of the program's success, accuracy of the selection process, and efficiency of these measures and their predictions. (Al Nafie, et al., 2000)

It is noteworthy that the program was implemented in boys' schools only, as the Saudi educational institutions are gender-segregated, that is, managed by the Ministry of Education (for boys), and the General Directorate for Girls' Education. However, both authorities were amalgamated by a ministerial decree in 2002, and are currently under the Ministry of Education. Both genders, whether of students or teachers, continue to attend separate schools in their educational districts, in line with the Saudi culture and conventions that are based on Islam. Falata (2000) noted that girls' education witnessed some improvement in 1997 in the form of setting up a special program to care for gifted female students. However, the program was not adequately implemented until the National Education Project, for both girls and boys, was launched. Girls' programs have continued to improve significantly, and the Ministry of Education is currently in charge of educating boys and girls alike. Therefore, current expectations of programs for gifted students are equivalent for males and females despite their segregation.

After expanding its Gifted Students Program, the Ministry of Education inaugurated centres for the gifted of both genders in various educational districts, with two separate centres in each district, that is, one for each gender. However, these segregated centres

reported to separate educational authorities. This took place in accordance with a progressive plan aimed at embracing the largest number of Saudi gifted boys and girls so designated.

Reports issued by the office concerned with developing the gifted, indicated that the number of those identified as gifted and offered special care, by the end of 2007, had reached more than 66,000 male and female students (Ministry of Education, 2007). With the aid of a myriad of Saudi gifted projects, launched since 1999, the Ministry of Education has sought to enhance those projects to a level equivalent with other advanced countries. However, due to shortages of resources, lack of social awareness of the importance of such programs and the necessity of developing the gifted, in addition to the constant change in staff in charge of the projects, whether in the ministerial hierarchy or in educational districts, a scene has been created for all sorts of experimentations, interpretations and personal beliefs. According to many educators, parents and even gifted students, these negatively impacted on the level of program outcomes.

Concerns voiced by educators, parents and students were confirmed by studies conducted on the projects. Al-Khaldi (2002) substantiated such concerns in his study to evaluate the gifted programs as seen by different education experts. The same author reported a lack of special strategies to identify gifted students, with only tests to assess academic levels being used. However, this study was confined to two gifted centres only, namely Al-Taif Centre for the Gifted, and Jeddah Centre for the Gifted, although the Kingdom has more than 42 educational districts. Accordingly, the study is considered to have a limited geographic scope, and its findings apply only to the areas it covers.

Earlier, Abunayyan (1994) had conducted a study at the University of Pennsylvania to identify artistic talents in KSA, and to evaluate the relative effectiveness of methods employed by the study to identify gifted Saudi male adolescents. The study found that the difference between Saudi and US definitions of “art” was culturally related.

Nonetheless, the feature-based definition of giftedness showed no difference between the two societies. This indicates that the general features of talent may be found in all societies. The study focused on a single component of talent in males only, excluding females.

Alshakas (1997) was charged by the Arab Education Bureau of the Arabian Gulf States to conduct a study entitled "Methods of Identifying and Nurturing the Gifted in Basic Education of the Arabian Gulf States". This study encompassed all state members of the Gulf Cooperation Council (GCC), which includes Saudi Arabia, Kuwait, Oman, Bahrain, UAE and Qatar. Findings of the study that relate to Saudi Arabia indicate that the Saudi strategies to identify the gifted were limited to academic achievement, extra-curricular activities and nominations made by the supervisors. Codified scientific tools such as the Wechsler Intelligence Scale for Children (WISC), were confined to the city of Riyadh only, and did not cover other aspects of the gifted programs, including the curricula. In this regard, Al-Saif (1998) mentioned that the most common method applied in nurturing the Saudi gifted primary students was through allocating the students to various extracurricular activities depending on their interests, and through offering them moral incentives, boosting the role of the library, and informing parents about their children's talents. The least applied methods involved providing summer or evening classes to teach additional subjects, placing gifted students in special classes for part of the school day, allowing gifted students to attend advanced courses that matched their talents, and allowing students to skip grades. The study shows that there were no specific curricula especially tailored for the gifted; rather, there were activities practised either within or outside the class, and by simply notifying parents of their child's abilities.

These findings echoed those previously provided by Ma'jiny (1990) who maintained that the Saudi gifted students attending mainstream schools needed more enrichment and attention, and that teachers in those schools needed more experience and training in developing gifted students. Ma'jiny also confirmed that the Saudi regular schools

lacked a special system for the gifted, and had no prior experience in nurturing gifted students.

Al-Otaybi (1995) concluded that a number of methods and tools need to be used to identify the gifted, including nomination, codified tests of intelligence, academic achievement, abilities, creativity and personal aptitudes, as well as applying nurturing techniques including acceleration and enrichment. Al-Otaybi advocated an educational plan, to determine relevant objectives, policies, strategies, timeframes and procedures.

These studies clearly indicate an ongoing lack of such methods and tools for identifying and nurturing Saudi gifted students. In another study that endeavoured to investigate current trends in developing the gifted in Saudi public schools, Al-Gamdi (1993) emphasized the need for the Ministry of Education to adopt a single definition of the gifted student concept. Such a definition would take into account various aspects of differentiation between students' talents, more varied criteria or tools in identifying the gifted, and providing in-service professional development for teachers to raise their awareness of the best ways to identify gifted students. The same author proposed a program for nurturing the gifted in Saudi public schools that considers aspects relating to teachers such as enrichment programs, teaching strategies, classes, and schools.

The current study, like the ones previously referred to, repeatedly notes that there is no clear program that includes a philosophy, and there is no specific definition based on tools and measuring criteria to befit comprehensive development programs for gifted students. School is thus seen as an educational institution with an enormous responsibility for devoting special attention to gifted students and their further development within a program with the necessary resources to help teachers identify gifted students and nurture them in mainstream classes. As part of the school's responsibility, Al Sharafi (2002) noted that teacher overloads with duties such as lesson preparation, testing, marking and preparing teaching aids, in addition to an overload of crowded classes, all add to the burden of developing gifted students in the classroom. The same author recommended reducing the workload of the teachers

involved in developing gifted students, as a way to enhance their motivation for and productivity in developing gifted students. Al-Khaldi (2002) also described two gifted education centres as lacking enough financial resources and activities, especially tailored to develop the gifted, and strategies of those centres as mostly suitable only for mainstream students. This author also referred to specific negative aspects, such as lack of evaluation methods within programs, administrative centralization, lack of incentives for gifted students, discontinued student-centre contact after graduation, lack of specialist staff capable of identifying and developing the gifted, and absence of clear mechanisms for selecting suitable teachers and supervisors.

Another study conducted by Al-Sabagh, et al. (2006) compared mental habits (thinking skills) of the Saudi gifted with their Jordanian counterparts. The study called for training students in mental habits, because developing such habits in the growing youth in general, and in the gifted in particular, was seen as essential to establishing a trend in personal and social values that would create a society capable of problem-solving and of making informed decisions (Al-Sabagh et al., 2006).

Along with the above Saudi gifted education programs, and the relevant studies that focused on various program aspects, it is worth noting that the Saudi Ministry of Education is not the sole provider of services for gifted male and female students; rather such service provision is shared by a number of bodies, such as King Abdul Aziz and His Companions Foundation for the Gifted, the Arab Education Bureau of the Arabian Gulf States, the Arab Council for the Gifted, the Arab Educational, Cultural and Scientific Organization (ALESCO), as well as some private sector institutions. Al-Khaldi (2002) points out those bodies, in contributing to services for gifted students, are often motivated by their own objectives and directions. Accordingly, their efforts are limited to serving particular groups of students. Efforts exerted by such bodies are mostly moral in nature, manifested in giving awards to researchers in the field of giftedness, such as the Arab Education Bureau award granted to the team who laid down the scientific program for developing the gifted in KSA. Those bodies also participate in the adopted theoretical and research projects

conducted by researchers from various Arab states, including Saudi Arabia. However, the applied aspects of such projects continue to lack concerted efforts (Al-Khaldi, 2002).

Nevertheless, the King Abdul Aziz and His Companions Foundation for the Gifted, founded in 1999 and headed by the then Crown Prince Abdullah Bin Abdul Aziz, has been and is still a leading institution in fostering gifted education programs, and in nurturing and developing giftedness, both theoretically and practically. In an address delivered on the eve of announcing the creation of the foundation, King Abdullah said:

> Talent, if left uncared for, is like a sapling left uncared for and unwatered. It is against both religion and common sense to ignore or neglect talent. As such, it is our collective duty to nurture our seedlings and grant them our increased attention, so it gets strength and extends leafy branches for the future benefit of an era of creativity and refining of talents that are transferable into reality, and as a service rendered to our religion and homeland. (King Abdul Aziz and His Companions Foundation for the Gifted, 2007)

The Minister of Education also emphasized the same meaningful words, reflecting the political leadership's interest in the gifted, by saying: "A country where leaders care for the gifted is a country that takes the avenue to catch up with the latest of progress and competition; a country proceeding in a march where there is no room for the weak or the inactive" (Mawhiba, 2006). The Saudi political leadership's interest in the gifted, as manifested in the inauguration of such an institution, and the financial and moral support it grants it, is an enormous responsibility for and contribution to the targeted groups be they gifted men or women. Hence, the officials in command have specified the following ambitious objectives:

1. Developing the gifted, be they male or female.
2. Supporting national capabilities to produce innovative ideas.

3. Seeking to produce pioneering creative and gifted young people in science and technology.
4. Offering financial and material support for centres and programs for the gifted.
5. Providing scholarships for the gifted and the creative, to enable them to develop their talents and abilities.
6. Setting up awards in diverse fields of giftedness and creativity.
7. Developing and supporting programs, research and studies in relevant fields, whether separately or in coordination with others.
8. Offering support and care for the gifted and the creative, as well as their families, to help overcome obstacles hindering development of their talents and gifts.
9. Supporting programs for preparing, developing and training of staff specialized in fields of giftedness and creativity.
10. Developing, and investing in, new inventions and creations, whether separately or in coordination with others.
11. Offering advice to governmental and non-governmental bodies in fields of giftedness and creativity.
12. Coordinating with institutions and centres, whether in KSA or overseas, in their respective areas.
13. Establishing, whether separately or in coordination with others, educational and professional institutions specialized in giftedness and creativity.
14. Releasing specialized media materials to spread knowledge and awareness in fields of giftedness and creativity.
15. Undertaking activities deemed necessary to achieve the desired objectives. (King Abdul Aziz and His Companions Foundation for the Gifted, 2007)

It is noteworthy that the name of the leading institution was changed at the outset of 2008 from “King Abdul Aziz and His Companions Foundation for the Gifted” to “King Abdul Aziz and His Companions Foundation for Talent and Creativity” so that the name would match its grand mission, and be in line with its new goals and vision. The Secretary-General of the Foundation explained that the change in the name was, in

fact, an important and strategic requirement for the subsequent stage, and was in response to the demands of globalization, the Kingdom's joining WTO, and the ruthless competition among states as well as among national and multi-national private sector companies. This step has also been triggered by the keenness of the political administration to have the foundation shoulder its mission to the fullest, in a manner that serves the community of talent and creativity in Saudi Arabia.

The decision also aligns with the new phase the Kingdom is witnessing, having been transformed into a knowledge-based community that hinges on a new and more profound understanding of the role of creativity, knowledge and human resources in advancing society. Progress has been brought about through shifting from a traditional to a knowledge-based economy, where knowledge stands as the major part of added value, and is a fundamental component of production. The mission of the Foundation, the Secretary-General added, relies on identifying and nurturing the gifted, in addition to building, supporting and developing an environment for creativity across the Kingdom, so that the gifted in various areas could make the best of their talents. This can be achieved, he said, through diverse mechanisms and tools that range from programs to services, conferences, exhibitions, awards and contests (Mawhiba, 2008).
As previously noted, other private sector bodies have made limited contributions to nurturing giftedness and the gifted.

Samba Bank

The bank has sponsored the summer education camps for the gifted girls in Al Khobar, Riyadh and Jeddah since 2002. The major focus is on the disciplines of business and banking and the gifted girls are funded in order to improve their knowledge and skills in these fields (Salloom, 2004).

Saudi Aramco

A Science and Technology Summer Camp has been financed since Saudi Aramco's inauguration. This camp provides education and support for selected students in the disciplines of science and engineering. The camp is arranged at the company's

Dhahran Headquarters. It supports the students who are interested in science, engineering, problem solving and energy industry (Salloom, 2004).

Exxon Mobil

The Science and Technology Summer program at King Fahad University for Petroleum and Minerals has been fully financed by Exxon Mobil since 2002. It also supplied apparatus for the Riyadh Centre for gifted girls and paid for the First Exhibition of Photographs by Saudi Women (Salloom, 2004).

Microsoft

Microsoft provided finance for three enhancement summer camps in Riyadh and Jeddah for youthful men and women in the summer of 2001. In these camps, the main topic was web designing and other website expertise (Salloom, 2004).

Journalism Camps

A team of national news agencies arranged a succession of summer camps aimed at informing about the disciplines of Public Relations and Journalism in 2002. A Riyadh newspaper established two camps for young men in 2001. OKAZ in Jeddah arranged a camp for young students in 2003. Likewise, Al-Madina financed a Journalism camp for young women in Jeddah in 2003 (Salloom, 2004).

Despite the support emanating from these private companies and the establishment of gifted programs throughout the country, the lack of specialised teacher training at the preservice level has led to inconsistent delivery of gifted programs (Al Qarni, 2005). Further, the delineation of staff responsibilities for gifted students is often unclear between the regular school teachers and those at the gifted centers.

Evaluation of gifted programs

After the review of historical programs for gifted students in Saudi Arabia, it is necessary to consider the evaluation of gifted programs as the key focus of this study.

Evaluation cannot be over-estimated as it underscores all educational measures directed at the recognition and training of the gifted.

'Quality education for gifted students is not a right it is a privilege…' stated VanTassel-Baska (2006) who then continued that 'while we can help improve general education in a number of ways, perhaps the most powerful would be to construct quality gifted programs… so there truly is a visible standard of excellence' (p.209). The questions then logically arise: how best to measure and heighten such visibility? Education for the gifted is about many factors — philosophy and objectives; student identification and placement; the curriculum; the teacher; program organization and operation — but most of all, its success rests on appropriate evaluation, which is perhaps the invisible and often overlooked element of the equation. Evaluation, according to Al Dosery (2000) is a systematic assessment of the program processes and results of a certain policy it adopts, in light of a number of explicit and implicit criteria, as a means of improving the program and its associated policy.

Callahan and Caldwell (1995), in the publication, 'Using Evaluation to Improve Programs for Gifted School Administrators', poses three questions and answers about program evaluation and its relevance for gifted education:

> Why evaluate the program for the gifted? Because we have to.
>
> When is a gifted program ready for evaluation? When the program is established.
>
> What do we evaluate? Student scores.

Perhaps the last succinct response does not readily include all the factors that need to be considered when evaluating programs for the gifted although 'student performance is a critical and non-negotiable dimension' (VanTassel-Baska & Avery, 1997, p. 201). Other considerations include good teaching practice, curriculum differentiation for gifted learners and elements of instructional reform (Van-Tassel-Baska, 2006).

Categories of Evaluation

Program evaluation according to Callahan (2004) can take the form of four categories:

a) the manuscript or forms that provide theory or practical guidelines;
b) reports or descriptions of specific project evaluations;
c) articles that provide stimuli for the discussion of issues surrounding the evaluation process; and,
d) Research on the process of evaluation which is few and far between. (pp. xxiii-xxxi).

In category I of the guidelines set out by Callahan (2004), these are defined as a set of common and useful principles that 'cut across the articles in this category whereby individual authors offer their own interpretations on the fundamental themes' (p. xxiv). She is at pains to point out that evaluation is not a simple process but a set of tools that are direct and valid thus emphasizing the need for direct observation of teachers. Additionally, she stresses the importance of including key decision makers in the selection of foci for evaluation.

Again, another commonality of approach is in Callahan (1986) and Carter and Hamilton (1985) who see identification as one of the essential components of any gifted program (see also Renzulli, 1975) and was incorporated in the development of the NAGC standards for gifted programs (2001).

On the question of Category 2 and the Description of Specific Program Evaluations, there is a lack of instruments to assess student outcome goals (Avery, VanTassel-Baska, & O'Neill, 1977; Callahan, 2006; Landrum, 2001; VanTassel-Baska, Willis & Meyer, 1989). This represents a major structural weakness of all programs for the gifted. Thus student performance remains a neglected area of focus.

In category 3, arguments for and against setting expert performance as the standard in assessing student performance in gifted programs are examined by Baker and Schacter (1996) and Wiggins (1996) (in Callahan, 2004). It is not just a question of assessing teacher quality but analyzing schools' performance as well. Wiggins also cautions against an over-reliance on process, form and content in student products but

emphasizes the need to evaluate the effect of products in preserving the development of creativity. It is a clear division between expectations versus standards as a compelling argument for continued research into evaluation.

Hunsaker and Callahan (1993) have listed some of the prevailing defects in the current literature of evaluation. These include a lack of: awareness of lessons learned; longitudinal evaluation; evaluating programs for special populations of gifted learners; developing uniquely applicable models; and models that incorporate an integrative, qualitative, and quantitative approach.

The Format for Gifted Program Evaluation

Following Hunsaker and Callahan's (1993) directives, it is essential to examine best practice in models for evaluation of gifted programs. The Montana Office of Public Instruction (OPI) has established a philosophical framework as follows:

- Document need for the program;
- Document the case for a particular approach;
- Document the feasibility of implementing the program;
- Document the fact that the program is being implemented;
- Assist in the identification of the program strengths and weaknesses;
- Generate information to assist in making in a progress revision for the programs; and,
- Document results/impact of the program on the school-wide community. (OPI Gifted Education, 2001)

These processes, which can take the form of qualitative and quantitative measures follow from the philosophical base which underwrites OPI.

Evaluation processes of gifted programs

While quantitative measurements are necessary to assess the outcomes of a program's impact on student growth and achievement, the application of such traditional methods as comparing pre-test and post-test gains, product reports, grades and other

quantifiable means may be inappropriate because they only confirm data that were initially collected about the students (OPI Gifted Education Program, 2001).

In planning for program evaluation in the early stages of design a number of questions need to be asked, such as:

- What are the key components of the program?
- What is the focus of the program?
- What questions do stakeholders want answered?

In response to these, OPI have detected the key components for program for providing services for gifted children as follows:

- Identification process;
- Program development/Management;
- Differentiated Curriculum Programming Options;
- Instruction;
- Professional development;
- Parent involvement; and,
- Evaluation.

Writing clear goals and definable objectives for every stage of the program develops a guide to help future evaluation. It also assists the school district to provide a variety of choices for carrying out in-depth assessment or a summative evaluation of an entire program (Tomlinson & Callahan, 1994). All persons linked to gifted programs should be directly or indirectly involved and should have the opportunity to raise and answer questions. Using the Renzulli (1975) model, questionnaires involving stakeholders such as parents, teachers, administrators and students can be used.

According to OPI, there needs to be a well-designed work plan, which should address the following areas:

- Identifying needs and options;
- Involving key stakeholders;

- Determining the financial resources; and,
- Developing procedures for conducting the evaluation.

In so doing there has to be a conscious identification of needs, which considers the scope and focus of the evaluation as well as options available for conducting the program evaluation. Questions evaluators may ask include:

- Is this a formative or summative evaluation?
- What components need assessment?
- What components are missing or incomplete?
- What areas need improvement or are cause for concern?
- What areas need to expand and evolve?
- Is the program in compliance with [relevant legislation]?
- To what degree are we meeting the educational needs of high ability learners?

These are to be measured against a criteria checklist (OPI, 2001).

Process steps have to be taken to cover all aspects of the provision of gifted education in the evaluation procedure. A critical element is to include key stakeholders early in the evaluation process from the general education system and those who have a specific interest in the education of gifted learners. Having knowledge in gifted education as well as in both qualitative and quantitative evaluation will enhance the quality of effectiveness of the evaluation results (Tomlinson & Callahan, 1994). Key stakeholders may represent the following groups:

- School board members;
- Community business leaders;
- Classroom teachers;
- Gifted program specialists;
- School administrators;
- Students; and,
- Parents.

Designing data collection and analysis of effective evaluation

It is critical to have clarity in the tools of measurement in the evaluation process. According to Tomlinson and Callahan (1994) one of the most critical aspects of developing a program evaluation for gifted education is to carefully match evaluation goals and questions with the data collection modes capable of demonstrating both student growth and how the program functions. Questions to consider at this stage:

- Are there plans to use multiple data sources?
- Are there plans to employ varied collection modes?
- Have ways been examined to collect outcome data?
- Have ways been examined to collect process data?

Obstacles that may arise include the use of evaluators who are uncompromised and trustworthy. Clearly defined target evidence for survey, use of a variety of research methods that reflect the unique talents of gifted children and their educational program are recommended.

Finally, in the process of data collection and analysis, attention has to be paid to the data collection modes, the fact that outcome and process data are evident and that the evaluation designs encompass both quantitative experimental designs and qualitative non-experimental designs, the latter lending itself to quite creative approaches.

VanTassel-Baska (2006) has set out a number of findings of gifted program evaluations, which she has categorized into a series of levels.

Level 1:

1. In general stakeholders either found the identification process too liberal or too strict but they lacked a consensus on how to improve such a process;
2. There was a relative lack of adequate curriculum differentiation for gifted students;
3. There was a consistent concern about the nature and quality of staff development;
4. Multiple data suggested a lack of active parental involvement models at the program level;

5. Local gifted programs put limited emphasis on the importance of program evaluation both in terms of frequency of producing formal evaluation reports as well as an over reliance on perceptual data to demonstrate effectiveness;
6. These were significant gaps in subject matter categories especially programs in science mathematics, language being particularly limited; and,
7. In all districts these was a lack of resources of the teacher and co-ordination level which crippled the potential for shifted program development.

At her designated level 2 outcomes of program evaluation, VanTassel-Baska found that:

1. There was evidence of many dedicated personnel;
2. There were perceived and challenging student opportunities;
3. A diversity of approaches were available and applied;
4. A lack of systematic evaluation prevailed;
5. Identification systems were imperfect;
6. There was a general program incoherence;
7. There were limitations in personnel preparation; and,
8. A general understanding prevailed.

Finally, the central idea of Level 3 was that there was a general neglect of gifted program infrastructure and direct service delivery to gifted students in favour of diffusion strategies to all teachers and all learners (Van-Tassel-Baska, 2006, pp. 206-207).

A model in action

Following VanTassel-Baska, it is important to look at the approach of one evaluation model. One of the most successful has been the Context, Input, Process and Product Evaluation Model (CIPP). It was first devised in 1966 by Stufflebeam, published in 1969, and is comprised of four components (Stufflebeam et al., 1971). It was later modified to include formative and summative evaluations (Shinkfeld & Stufflebeam,

1995). In the last modification, the result component was divided into four parts to evaluate long-term goals (Stufflebeam, 2000).

The model was comprehensively designed to assist educators in planning and implementing processes of evaluating educational projects in American state schools. Also, the model was designed to be a reference framework to guide evaluative activities so that they could be integrated to guide efforts aimed at change and development, to provide information required for decision-making, to assist in providing relevant information to parties concerned with various organizational levels, and to use it for guidance while making judgments related to alternative decisions.

The CIPP model rests on two assumptions: first, that the evaluation plays a fundamental role in change and its planning; second, that evaluation is a principal component of the program. Furthermore, the CIPP model aims at providing continuous evaluation service to managers and decision-makers to assist them in finding alternatives. Other reasons for applying the CIPP model are to provide decision-makers with important information to achieve full accountability, and to enable understanding of the program's strategies and components. The value of the model lies in offering a comprehensive view of the program, and in enabling deeper examination of it. According to this model, processes of educational decisions can be divided into four categories, each of which constitutes an evaluation that can be independently or consecutively implemented. These categories include:

- Planning of decisions: Focuses on desired improvement through identifying the main objectives, as well as the procedural objectives of the program.
- Structuring of decisions: Determines procedures, participants, facilitations, resources and the timeframe for implementing a designed program plan.
- Implementation of decisions: This relates to decisions that guide program activities.
- Recycling of decisions: Relates to decisions of program termination, approval, or to introduce substantial changes to the program or some of its components.

Stufflebeam (2002) proposes the following four kinds of evaluation that correspond to the abovementioned four categories of decisions.

1. Context Evaluation

This is intended to determine program objectives and the surrounding circumstances. It assists in decision-making, specifying needs to be met through the program and helps in defining its objectives. Also, it is used in defining the environment within which the program is implemented, revealing needs of various parties, highlighting problems and goals, exposing limits of program financial resources and the efficiency of individuals implementing the program. It answers questions concerning the necessity to introduce such a program, the groups benefiting from it, the local community's need for it, and the possible content and goals intended by the program.

2. Input evaluation

This is concerned with providing information related to potentials and resources of the body charged with program implementation, alternative implementation strategies and assessing these in terms of cost, usefulness, timeframe and potential obstacles; and deciding upon plans that best fit the need for designing the implementation techniques. It also serves the process of decision-making. Furthermore, it determines the procedures, facilities, equipment, tools, staff, budget, training materials, timeframe, and ways of overcoming problems identified in the context. It applies resource analysis, and compares possible solutions to problems.

3. Process evaluation

This is the program's constructivist evaluation, and focuses on program progress and processes, data collection, interactions among individuals, modes of work, suitability of implementation sites, sufficiency of materials, financial resources, and supporting activities. It also serves the process of decision implementation in terms of uncovering aspects of deficiency during program implementation, and whether the program is being implemented as planned and provides feedback to those in charge of the program for quality control of plans and procedures to enable sound decisions for improving the program.

Process evaluation requires techniques and tools that shed light on program implementation such as observation, interviewing, evaluation standards, review lists, daily logs, meeting minutes, consideration of non-official situations, communication with those in charge of the program; that is, regular data collection, analysis and reporting.

4. Product evaluation

This is the final evaluation of the program, and it aims at determining how far the objectives of the program were achieved, linking this to context, input and processes when measuring and interpreting outcomes. It serves to review decisions, and is used in determining program effectiveness based on predetermined absolute or relative criteria. Among the techniques used are measurement of students' achievements, consecutive surveying, and surveying the disposition of staff and supervisors.

Product evaluation relies on skill surveying, job satisfaction standards, and questionnaires that provide indicators of program efficiency. Experimental designs can be used to compare efficiency of ongoing programs, or of program outcomes with measurements in other evaluation areas.

The need for specific standards was argued by Avery and VanTassel-Baska (2001), who noted that programs for the gifted must be carefully planned, and that even programs that have been running for years must be reviewed in terms of their make-up and agreement with modern standards and theories. Recent reformists in gifted education call for reforming the educational system, especially its standard-based outcomes and for considering several evaluation models, side by side with conventional objective-based outcomes that compare objectives of applied programs. Such models include the Provus Model that focuses on discrepancy between different programs' objectives and the actual outcomes of the focus program, and the CIPP Model. They explain that those models may be applied, and the information obtained applied to enhancing the program decisions and quality.

In 1998, the U.S. National Association for Gifted Children (NAGC) published standards for gifted programs for all levels of education from Kindergarten to secondary school (see Appendix 1). These standards were designed to help schools ensure higher quality of their gifted programs. They comprised Minimum Performance Standards and Exemplar Performance Standards. The association maintained that absence of such standards led program providers to offer random and disconnected practices. In many American states there are three levels of applied standards: first, the program does not match the standard; second, the program matches the minimum standard; and third, the program matches the exemplar standard. NAGC defined standards for gifted programs into seven fields: 1. Program design and philosophy; 2. Program management and services; 3. Methods of nominating and selecting students; 4. Curriculum and learning techniques; 5. Social and emotional guiding plan; 6. Professional development program providers; and 7. Program evaluation.

Recently, it became possible to apply the NAGC Exemplar Standards to gifted programs (Landrum, Callahan & Shaklee, 2000). In this regard, Wiggins (1996) notes that the best strategy is to establish steady performance methods and levels and, thus, the guiding principles of the NAGC were used to guide this study's model of evaluating Saudi gifted programs.

Utilization of evaluation results

Decision-makers need the kind of information that helps them tackle issues of continued program implementation, such as increasing the budget, or reducing spending. Moreover, program providers wish to know whether their program is achieving its objectives or not, as well as its most efficient strategies and most necessary elements. Also, program beneficiaries such as students and their parents need more specific information on the expected benefits. While applying evaluation models, many evaluators focus on decisions, and consider alternatives. Decisions relating to outcomes deal with objectives, whereas those relating to tools and strategies

focus on processes and nature of required information and its reporting are affected accordingly. These factors help determine the appropriate evaluation model for the relevant decision area. Additionally, specifying standards of performance enable accountability to be determined in relation to specific responsibilities of all parties.

Weiss classifies the utilization of evaluation into two classes: first, direct utilization, that is, documented utilization and determining evaluation outcomes by decision-makers and other beneficiaries; second, intellectual utilization, that is, using the evaluation to influence views on particular areas of the program, and also to influence future policy and program development through results of sequential evaluations (Ross et al., 2006).

Weiss and Bucuvalass (1980) examined 150 evaluations used for decision-making and report that decision-makers used both the Truth Test and the Utilization Test in classifying evaluation reports. They also emphasize that evaluators need to understand the cognitive styles of decision-makers, in reporting and providing their results. The Truth Tests involve questions of research trustworthiness, usefulness, acceptance of criticism, application of reliable scientific methods and results, matching of expertise, knowledge and values of program provider. Utilization Tests, on the other hand, deal with questions relating to research guidelines, provision of instructions to direct work, finding alternative solutions for problems, explanation of how to introduce changes whenever possible, challenging of current predominant philosophy, programs and practices, and provision of new ideas.

Evaluation studies reveal that the most important conditions for the utilization of evaluation results are: effective communication between evaluators and evaluation users; evaluation users' knowledge of the collected information, and users participating in the evaluation process (Weiss, 1980). In fact, there are studies that show that effective utilization of evaluation results, especially in policies, decision-making and application improvement depends on the quality of information provided in the evaluation reports (Feinstein, 2002). Evaluation needs to become part of program

policy, planning development and application, and a tool for overseeing program progress and correction. Therefore evaluation is both a learning opportunity and an instrument of measurements. Hence the implication of evaluation using the CIPP model, following the work of VanTassel-Baska, Callahan and others, is that it is the core of gifted education and is no longer the invisible aspect of quality learning.

An effective program should contain an evaluation plan from conceptual design commencement. The following discussion will review the major components that should be included in any program for gifted students that can be called effective and should reflect both purpose and outcomes of the original reason for the inclusion.

Effective gifted programs for the Gifted

While the focus of this thesis was on evaluating gifted programs in Saudi Arabia from the perspective of all stakeholders, a brief overview of key issues in the delivery of gifted programs is presented. There is a reasonable level of consensus as to the components of a program designed to challenge gifted students (see, for example, Clark & Callow, 2002; Rogers, 2002; Tomlinson, 2009; VanTassel-Baska, 2006). Tomlinson (2009) suggested that the elements of a high-quality gifted student program are:

(1) Philosophy and Goals. Are the philosophy and goals in-line with the students' needs?

(2) Acceleration and Enrichment. The pace at which it is run and the depth of study in a particular topic.

(3) Multiple Options. Does it have multiple options or one size fits all?

(4) Student Learning Expectations. What the students are expected to learn by the end of the program.

(5) Challenging Curriculum. Is the curriculum stimulating and challenging?

(6) Flexibility. Flexibility is needed in order to respond to the needs of individual gifted students.

(7) Sound Identification Process. How the identification of gifted students is achieved.

(8) Staff Development Plan. Teachers who have been trained to work with gifted students are much more effective than those who have not.

(9) Guidance Component. The counseling given to the student.

(10) Honoring Academic Talent. Appreciating the academic achievements of gifted students.

Similarly, Davis and Rimm (2004) noted:

There are four traditional components to planning any gifted program that may be elaborated as why, who, what, where, when, and how questions.

(1) Program philosophy and goals

Will consider such basic questions as: What is our attitude toward gifted children? Why are we doing this? What are our goals and objectives? What do we wish to accomplish? Can we prepare a defensible statement of philosophy and goals?

(2) Definition and identification

What exactly do we mean by "gifted and talented"? Who will the program be for? Which grades? Which students? What about minority representation? Gifted students with disabilities? How will we identify gifted students, that is, how will "gifted and talented" be operationally defined in our school's program?

(3) Instruction and Students

What are gifted students' needs? Programs: What forms of grouping, acceleration, and enrichment should be used? What options do we have for our gifted program? Which are cost effective? Which programs can be used within strict heterogeneous classes? Personnel: Who will design, coordinate, and oversee the program? Who will teach the students? What in-service training and site visits do we need for teachers of the gifted? For all teachers? Location: Where will we do this? In the regular class? In special classes? At a district resource centre? In a special school? How will

> we use community resources and professionals? Time considerations: When will the G/T services take place? When students finish regular assignments? When regular assignments are "compacted" to free up time for special projects? When can we implement our plan? Can we formulate timelines? For identification? For initiating the instructional program(s)?
>
> (4) Program evaluation
> How will we evaluate gains in students' knowledge and high-level cognitive skills? At the end of term, how will we evaluate program success? (Davis & Rimm, 2004, p.55)

These components and others were not necessary for all gifted programs, as programs in each country differ. These divergences are related to the policy and definition of giftedness adopted by each country's educational system and may be debated by some researchers. Nevertheless, there is a reasonable level of consensus amongst most gifted education academics around the world on the essential elements to be offered in any program for gifted, and these are best encapsulated in the NAGC standards, which have been used in the current study.

An effective program for the gifted anywhere has to include core elements that have been identified earlier. However, local circumstances dictate the number of core inclusions as per the policies or equipment or finance available in each situation. Nevertheless, identification of gifted students is one of the core elements that should be extant in any program. The following discussion details just what comprises identification of gifted students because of its key importance as one of the basic premises of evaluation of this research study.

Identification of Gifted students

Correct selection and identification of gifted students is the foundation of any successful gifted student program. Its importance has long been recognized and by researchers and academics. According to Cramer (1991), a panel of 29 G/T experts

agreed that, among a list of 12 issues, identification is priority number one. Identification can therefore be considered as a fundamental issue regarding gifted students, as without successfully identifying students as being gifted or not, the other issues become superfluous. It is certainly contentious in the Saudi Arabian context where recognition of giftedness is relatively recent and has been sometimes random.

To recognize gifted students and to document their special abilities, many criteria are used. Some programs identify gifted students on the basis of percentages. They consider the top three to five percent of the study group as being gifted (Cassidy & Johnson, 1986). Some programs nominate giftedness on the basis of I.Q. These programs consider students as being gifted who have I.Q. scores over 130 (Davis & Rimm, 2004). There are still some other standardised instruments to assess student giftedness, but these tend to be modifications of the I.Q. test.

There are continual modifications in the programs for the identification of gifted students as in the case of the Scholastic Aptitude Test Mathematics (SAT-M), which has been replaced by Scholastic Assessment Test 1 (SAT-I). This test is widely used to assess the ability of students in verbal communication and in calculations (Davis & Rimm, 2004).

There are several criteria to consider in the identification of gifted students. Amongst them are the criteria developed by the United States Department of Educational Definition. The five criteria developed are: Intellectual ability, specific academic talent, creativity, leadership and talent in the visual or performing arts (Marland, 1972). Similarly, Maker (1996) described gifted students as those with problem solving ability. The criteria she introduced, evaluates the abilities of students on the basis of problem solving and thinking creatively.

Identification in minority groups and different cultures

Identification of gifted students from minority groups and different cultures is a significant issue, although some administrations and teachers would prefer not to admit

that there is any underestimation of students from minority groups and different cultures. This might have been happening in Saudi Arabia because of its distinctive cultural and linguistic base. In IQ systems, successful identification of gifted students from different cultural groups is compromised due to the in-built bias of the I.Q. test (Davis & Rimm, 2004). "Culturally different learners do tend to score, on average, about one standard deviation (15 points) lower than middle-class students on standardized intelligence tests" and "... if I.Q. testing is part of the selection battery, there frequently is a built-in bias against minority and economically disadvantaged children" (Davis & Rimm, 2004, p.84).

In order to compensate for and rectify this bias, a multi-dimensional approach is required. A quota system is often used as a solution for ensuring racial, gender, and geographical or economic balance in labelling gifted students. This system uses a percentage system where, if a school contains a certain percentage of an ethnic group (i.e. African Americans), this percentage will also represent itself in the number of students from this ethnic group in the gifted student program. This has its inherent flaws, as mentioned by Frasier (1997): "One problem with the quota system is that minority students who meet the same high criterion as others in the program might be wrongly assumed to have met only the lower cut-off" (in Davis & Rimm, 2004, p. 86).

In response to low participation by students from minority groups and different cultures, Richert (1997) developed a strategy to increase their participation in a project entitled APOGEE. In this project, students nominated themselves by expressing their level of interest in various programs. This encouraged underachievers who otherwise would be reluctant to participate, to nominate themselves. The results of this program were very positive with a 500 percent increase in culturally diverse students, a 600 percent increase in economically underprivileged students and an 800 percent increase in culturally diverse, economically underprivileged male students. The numerous projects emanating from the Javits grants in the United States demonstrated the success of alternative forms of identification (see, for example, Borland & Wright, 1994).

Intelligence is the basis for which students can be identified as being gifted. To avoid the limitations of using one method, evaluation is based on I.Q. along with other criteria. The use of other criteria is based on the concept that students from different cultures will score differently in different subjects.

Tests

Several types of tests are used in educational institutes. These consist of:

1. Stanford-Binet intelligence scale. This test consists of evaluating the abilities of students by using verbal reasoning, quantitative reasoning, visual/abstract reasoning and short-term memory. This test is not used widely now because of certain limitations.
2. Wechsler Intelligence Scale for Children. This test is widely used in schools and it is essential that school psychologists have knowledge of this test. In spite of a few drawbacks, it provides a good insight into student's cognition and behavior.
3. Group Intelligence Test. In this test, groups of students are judged at the same time. It is considered a reliable intelligence test, as the students having good scores in group intelligence test appeared to have good scores in G/T. One point in favor of group intelligence tests is that underachieving students can be detected.
4. Achievement Tests. Special tests are required to evaluate the students. These tests are highly specific and good for evaluating the attainment level of students.
5. Creativity tests. Creativity tests have been widely used by teachers in classrooms. These tests are not perfect and decisions should not be made on a single test.

Teacher's nomination

This is one of the methods used for recognition of gifted students. It has two forms, formal and informal. A teacher's nomination is considered the least effective way for

identifying gifted students (Davis & Rimm, 2004, p.89). The method can be made more reliable by educating and training the teachers in the selection of gifted students.

Parent's nomination

Parents know more about their children than anyone else. They have intimate knowledge about their developmental milestones and progress, so parents are a good source for the nomination of their children.

As mentioned, the recognition of giftedness in Saudi Arabia is relatively recent, However, identification of talented students had been codified by 1995 and included an amended Wechsler Intelligence Scale for Children (WISC); the Torrance Test of Creative Thinking; various tests of mental abilities that encompassed linguistic, numeric, mechanical or rational processes; a questionnaire for gifted students' characteristics; and finally, nominations from teachers, although these were regarded with a measure of scepticism in some quarters. Pragmatic criteria such as outstanding performance in school examinations in mathematics and science were applied as well.

The gifted programs in Saudi Arabia have adopted measures, including an IQ Test, creative test and special ability test in the selection processes of gifted students. These measures have been accommodated in the Saudi Arabia environment by Saudi scientific teams, prior to formal adoption by the Ministry of Education, which started to apply these kinds of tests in the gifted programs. Discussions about the historical background of gifted programs in Saudi Arabia have indicated such scientific work at the beginning of this chapter. Although these measures have been used for the selection of gifted students in the Centres in Saudi Arabia, they have not achieved the desired results because of errors that appeared in the scientific adaptation of the test (Al Qarni, 2005). In addition there is a lack of specialists to apply the right approach. In view of the selection methods used in similar programs in developed countries, in particular, according to the model published by the NAGC, gifted programs in Saudi Arabia suffer from a weakness and inability to provide valid measurement tools to help professionals in the field of giftedness, that are reliable in the identification of gifted

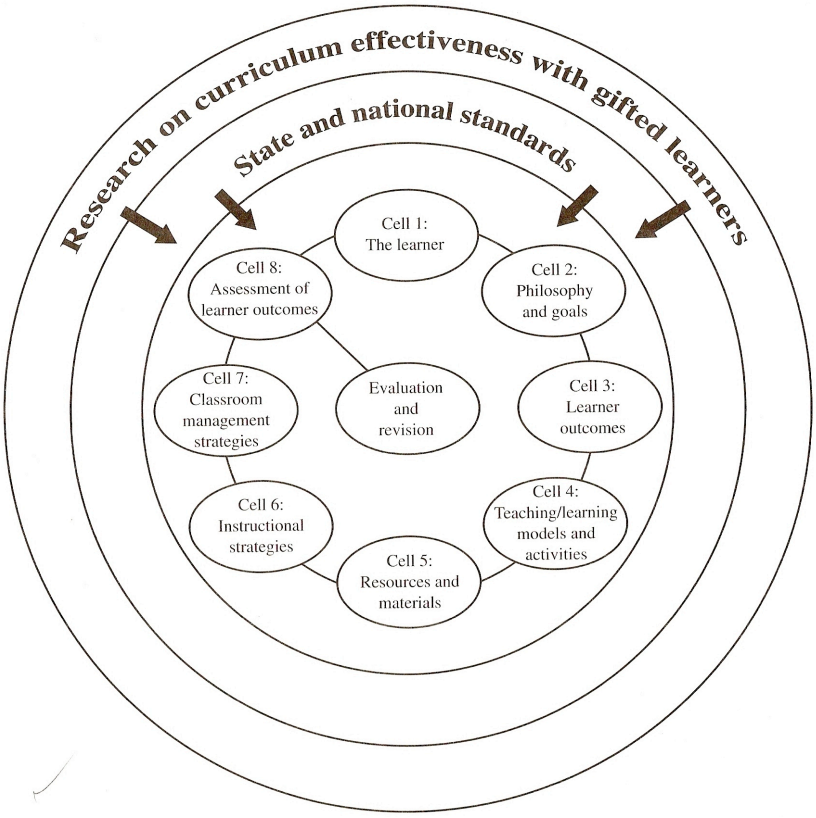
students (al Kaldi, 2002). In summary, gifted programs in Saudi Arabia need the provision of varied and reliable measurement tools and ongoing training programs for gifted teachers working in the centres on how to use these tools and to extract the results to ensure that there is no loss of a gifted student due to weaknesses in measurement tools.

Curriculum and its modification are of equal importance in determining programs for gifted students. The following discussion details some of the processes of curriculum modification and differentiation. Grouping and acceleration will be considered in this discussion as they are pertinent parts of the concept of curriculum.

Curriculum for the gifted

All educational activities and settings require a structural framework that determines practice. A curriculum and instructional design model that has been found useful is the one developed by VanTassel-Baska (2003) (see Figure 2.1).

FIGURE: 2.1 A Curriculum – Instructional Design Model for Constructing Curriculum



Programs need to provide opportunities for all students to use and expand upon their particular abilities and interests. Gifted students require long-term programs including acceleration, enrichment and extension, as well as in-class independent projects and development and application of higher-level thinking skills. Furthermore, underachieving gifted students require different provisions from those designed for the achieving student (Education Queensland, 2004; VanTassel-Baska, 2003).

According to Maker (1982) there are common features which include an identified purpose, underlying and surface assumptions about the nature of learners and the educational process itself, and general guidelines for daily learning experiences, defined requirements for the educational processes and evaluative techniques and models to assess the effectiveness of the curriculum offered.

Furthermore, the process of curriculum development is complex. It involves content modification, process modification, product modification and learning environment modification. In the course of these steps, there is a defined process in curriculum development, which begins with a stage of planning followed by a needs assessment; the development of teams and work scope; an underlying curriculum development approach with appropriate tryouts, piloting and field-testing; implementation; evaluation; and a concluding revision. As with the gifted, no matter how defined the philosophy of curriculum development, the capacity to change and adapt quickly is the essence of such tenuous parameters.

In Saudi Arabia considerable emphasis has recently been placed on Enrichment Programs in Science and Mathematics which has included differentiation from standard curricula; the development of new teaching strategies; use of pilot and experimental groups and appropriate subsequent testing. Such developments have followed the greater codification of identification measures for selecting the gifted that occurred in 1995. However, in practice the Gifted Centres do not use such programs because of logistical difficulties.

Gibson and Mitchell (2005) have examined several curriculum models which have included six approaches taken from Smutny, et al (1997), Clark's Integrative Education Model (1986), Betts' and Kercher's Autonomous Learner Model (1999), High Scope (Schweinhart & Weikart, 1993), Montessori (1995) and Reggio Emilia (Edwards, et al., 1998). These can be analyzed into systems that include (a) a stated philosophy, (b) an explicitly planned environment, (c) a focus on interpersonal interactions that facilitate optimal learning, (d) a developmentally appropriate curriculum plan, (e) instructional strategies that successfully challenge the individual learning needs of the student, (f) systematic student assessment using a variety of methods, and (g) research that provides accountability for the approach and justification for its use (Gibson & Mitchell, 2005, p. 165). Further a critical components model would have seven components, which cover philosophy, environment, interpersonal interactions, curriculum, instruction, assessment and research (Gibson & Mitchell, 2005).

Berger has spoken of the need to take into account the unique characteristics of gifted children in determining an effective curriculum. This includes the concept of differentiation (Berger, 1991).

It is important to look at a curriculum philosophy for the gifted. This has been broken down by VanTassel-Baska (2006) into curriculum as a development of cognitive process; curriculum as technology; curriculum as personal relevance; curriculum of social reconstruction; curriculum as academic rationalism; and, curriculum as precursor to a professional career. It is commonly perceived that educators can choose any of these philosophies; however it has been stated by VanTassel-Baska (2006) that the most effective curricula incorporate all of them. To some extent any other action might appear elitist. Academic rationalism can also be challenged with an emphasis on procedural knowledge above declarative knowledge, while technology-based learning approaches emphasise the former.

Curriculum differentiation is defined as a critical component in teaching the gifted.
This can be delineated into three fundamental points that include awareness of a curriculum that is sequential, carefully integrated and articulated to reach beyond regular curriculum scope. Little, Xuemei, VanTassel-Baska, Rogers and Avery (2007) again reinforce the notion that instructional differentiation is vital to students studying at varying levels so that their learning is not diluted.
The NSW Department of Education and Training policy (2007) reinforces the concept mentioned earlier that gifted children must have qualitatively different content and learning opportunities. Chessman (2007) believes that most curricula planned for the greater number of students are not effective for gifted children. Thus curriculum modification must be all-embracing and influence all curriculum areas. She goes on to say that gifted children have to be given opportunity for acquiring cognitive and affective skills and behaviours (Chessman, 2007, p. 9).

Maker's early work on curriculum set the benchmark for curriculum differentiation for gifted children (Maker, 1982). Building on her work, there is a number of applicable models that have been widely implemented throughout the world (Davis, Rimm & Siegle, 2010).

These include the enrichment triad model, developed by Renzulli and colleagues, that caters for gifted students within the regular classroom (Renzulli & Reis, 1985; Renzulli, 1977). The model emphasises general exploratory activities, termed type 1, which are presented to the entire class, followed by type 2 group training activities. These include such skill categories as cognitive training, effective training, researching how to learn activities, developing advanced research and reference procedures, and developing written, oral and visual communication. The final level is undertaken by gifted students who elect to complete type 3 enrichment, which involves a student carrying out a self-selected problem of original research. This involves applying knowledge and taps into motivation, breadth of cognition, self-directed study and time management.

The school-wide enrichment model is inclusive and, therefore, appealing to educators in its broad applicability. Further, Renzulli's (1997) Menu Model centres on teaching content and thinking processes which can be highlighted by the use of the five menu frameworks of knowledge, instructional objectives, student achievements, instructional sequence, instructional strategies and artistic modification.

Other examples of enrichment models include: the Pyramid Project (Cox, 1986) which differentiates among levels of giftedness with the first level based on enrichment for all above-average learners, followed by higher levels that cater to increasingly smaller numbers of gifted students; the Purdue Three-Stage Enrichment approach, which centres on three levels of skill development; the Autonomous Learner Model (Betts, 1985; Betts & Kercher, 1999), which outlines five dimensions for teachers to develop; and, the Talents Unlimited model (Schlichter, 1997) whereby teachers are initiated in how to recognise and nurture student development in six domains.

Among the most influential educators on gifted curriculum is Kaplan (1974, 2001) who proposed that curriculum differentiation build learning activities around the specific requirements and enthusiasms of the students to integrate what she selected as the three main considerations: content, process and product. In this work, Kaplan is drawing on Maker's original areas of curriculum differentiation, which were content, process, product, and learning environment.

Content Modification

Maker has defined the content of the curriculum as what is taught. She has broken these down into what she terms as ideas, concepts and facts, which can take a variety of forms. These have been deemed to be figural, symbolic, semantic or behavioural. She goes on to say that for gifted students, "content should be organized to be more complex, more abstract, more varied and more organized. It should embrace the study of creative people, the methodology, the areas to study, as well as concepts related to these areas" (Maker, 1982, p. 19).

Maker's model of modification has been supported by research within Australia (Gross, Sleap & Pretorius, 1999), which has adapted aspects of Maker into enhanced lesson preparation carried out in Australian secondary schools for gifted students. These included:

1. Abstractness, whereby the gifted student is introduced to concept and ideas that have a wide range of transferability;
2. Complexity is an added component;
3. Variety, which includes the addition of enriching ideas and content areas beyond the domain of the non-gifted student;
4. Organization and economy to encompass the quickly changing nature and flow of information;
5. A study of people to expose gifted students to the lives of other talented achievers; and,

6. The study of method whereby gifted students are introduced to the investigative techniques of inquiry in other disciplines.

Such practices of organization and economy are reinforced by the learning characteristics of the gifted. The central theme of organizing content based on abstract generalization, according to Maker (1982), is built on the fact that gifted children have vast stores of knowledge that need to be related to higher level ideas.

Maker (1982) has set out the study of people as a part of content modification. It is believed that characteristics of other people's lives such as motivation, family background, personality types, and career direction, including creative processes leadership styles and social abilities and ways of interaction, can be handled through the use of biographies, autobiographies and case studies.

This is of particular importance in Saudi Arabia where a comparison of individuals across cultures and races can be a cultivating process in a tightly knit, religious-based society suitable to an educational scenario where the teaching of males is separate from females. Religious education is a separate area for content modification or a curriculum differentiation in accordance with Saudi Arabian precepts.

Process modification

Content modification naturally incurs a process modification whereby the way teachers deliver their materials is linked to the content. Such methodologies involve the modification of type or level of thought processes, pace of instruction, and the use of an inductive or deductive approach (Maker, 1982). Given that gifted children need to be challenged, and are easily bored and lose motivation if not so, processes should emphasise the higher levels of thinking of analysis, synthesis and evaluation.

Another aspect of process modification is the need to encourage open-endedness rather than closed thinking. Maker (1982) highlights this difference by drawing the comparison between convergent and divergent thinking. The former involves the

individual's attempts to reach a correct answer while divergent thinking is the attempt to generate a variety of possible answers. However, neither approach should be preclusive of the other. Open-endedness, according to Maker implies a different teacher attitude, reflected in the following ways:

- In the manner of questioning as well as content;
- The design of learning experiences; and,
- The evaluation of children's responses to questions.

For example, the content or phrasing of questions is easier to modify than our attitudes (Maker, 1982). This is evident in a more traditional and conservative teacher-centred culture that prevails in a country such as Saudi Arabia where knowledge tends to be dictated rather than developed by the students. When linked with giftedness, the learning characteristics of intuitive, quick awareness encourage the use of open-endedness, where children are allowed to offer ideas, interact and be individuals.

Discovery and inductiveness are closely allied. Promoting inductive learning is guiding discovery. According to Maker, gifted students should be "encouraged to form hypotheses and make informed guesses" (Maker, 1982, p. 41). It develops in stages, first with verification of the situation; second is the determination of relevance and third there is "an induction of rational constructs" or the formation of generalization (Maker, 1982, p. 42).

It is important to remember that an inductive approach should not be adopted to the exclusion of deductive methods. There needs to be a balance. The discovery approach necessitates students developing the logical and reasoning process in how they arrive at conclusions and why questions are integral in creating these processes. Students need to evaluate their own thinking as well as that of others. As Piaget and others have shown, children can understand and benefit from observing the reasoning processes of those slightly ahead of them (cited in Maker, 1982, p.48).

Students need flexibility and freedom of choice according to Maker with an emphasis on self-directed learning. Della-Dora and Blanchard (1979, cited in Maker, 1982) have

described different levels of choice: (1) deciding what is to be learned; (2) selecting the method and materials; (3) communicating with others about the subject; and (4) evaluating achievement of goals.

Group process or group interaction activities provide a setting, however structured or simulated, to develop valuable social and leadership skills and the possibilities of self and group critiquing. Pacing is important for it refers to how slowly or rapidly information is presented in the learning situation; variety is the range of activities used to offset boredom or monotony (Maker, 1982) introduced the concept of assimilation and accommodation activities, and how the rates of processing of such activities distinguish the gifted from the slow learner. It is important to recognize how the gifted transfer their thinking and problem solving skills from one curriculum area to another and from one dimension such as academic to another dimension such as personal. Recognition must be given that transfer is most likely to occur when well taught and modelled by the teacher.

Product Modifications

According to Maker (1982) the "third area of the curriculum that can be modified for the gifted is the nature of the products expected from these individuals… Products can be of many types, both tangible and intangible and can assume a nearly infinite number of forms" (Maker, 1982, p.59). There is a need for real problems and real audiences. Teachers must not accept a 'contrived product' but should lead with provocative questions so that the first basic process is to analyse. Methods that have been suggested include the selection of products for students to undertake individually and collectively so that their capacities can be evaluated in terms of impact on curriculum development. These cover such questions amongst others as how and when students should undertake independent investigations; what generative learning processes are important; what issues, themes and concepts to include; and also how projects should be selected.

Problems should be directed to real audiences (Maker, 1982). In justifying the emphasis on the products that address real problems, Renzulli (1977) used a study by the American college testing program to show that adult accomplishments are related to comparable high school non-academic or extracurricular accomplishments. Therefore each product developed by a gifted student should receive an appropriate evaluation using pre-established criteria by the teacher, self-critiquing by the student and evaluation by a real or simulated audience (Maker, 1982).

In terms of benefits to the gifted, according to Maker (1982), "skill in assessment of individual programs can contribute to a greater degree of independence and self direction; therefore evaluation of gifted students' products must be as realistic and comprehensive as possible" (p.79). However, the question of transformation or synthesis must be examined in terms of product modification. According to Guilford (1967, cited in Maker, 1982) products may be classified into six types – units, classes, relations, systems, transformation and implication. It is critical to draw the distinction between transformations and mere summaries, and involves a different perspective; re-interpretation; elaboration; extending or going beyond and combining elements (Maker, 1982).

Learning environment modifications

According to Maker (1982), "changes of the learning environment to enhance its effectiveness… serves a facilitative function" (p.45) and in doing so, it is necessary to acknowledge the wide spectrum of learning preferences for gifted children: the need to be student-centred; encourage independence; be open; value acceptance; be complex; and, encourage high mobility.

In a student-centred setting, pupils control the degree of verbal interaction. Teacher talk is kept to a minimum so that open-endedness, discovery, freedom of choice and group interaction are allowed free flow. This means that teacher authority is curtailed so that students can assess ideas using "logical coherence, research support, comprehensiveness of examples, generalized ability, reliability rather than challenge

authority" (Maker, 1982). Hence there has to be a move away from the teachers as a focus of authority. Students must be encouraged to focus on a variety of authorities.

In a student-centred classroom the interaction pattern will reflect the degree of student involvement with less teacher direction. This all builds on motivation, learning and creativity. Such outcomes, which go beyond the mere acquisition of knowledge, flow from a student-centred classroom. Independence can be developed in many ways from student choice of what to learn, how to evaluate learning and social interaction in class and school, which creates acceptable deadlines and the ability to solve problems. Teachers also need to be accountable. For the gifted, emphasis on independence is essential especially in non-academic areas although it is impossible to develop independence academically in a climate of teacher intolerance.

Discussion has been made previously of the open versus closed atmosphere in methods and learning activities. The question of an open versus closed environment (including physical aspects) as well as the psychological environment of openness is closely related to independence versus dependence, as openness is a prerequisite to achieving an atmosphere where students can be independent. A variety of teaching styles encourages diversity and divergence in student thinking. Acceptance versus judgment is a concomitant of open versus closed elements as openness implies acceptance and trying to understand based on timing and teacher behaviour as they accept the merits of alternative points of view.

Interestingly, in Saudi Arabia, although there is recognition of giftedness in students, there has been no conscious effort to modify curricula to encompass the special needs of gifted children. Therefore, gifted programs in Saudi Arabia do not adopt a special curriculum for gifted students. Similarly there are no organized efforts to modify the regular curriculum in order to be suitable for gifted students. The Ministry of Education, has provided services to gifted student centres, but no effort has been made in the provision of appropriate curricula (whether private or modified from the regular curriculum), except for some modest efforts by some centres to modify some units of

the regular school curriculum. However, this is not without difficulties. In spite of these modest efforts, it is also dependent on the availability of some enthusiastic teachers who are trying to do what they can to provide topics of study that are at the level of gifted students being taught. These efforts are, especially in the field of science (Physics, Chemistry, Mathematics, etc). Thus, there is no curriculum differentiation in gifted programs in Saudi Arabia according to that recognized by professionals in the field of giftedness (Al Sharafi, 2002). As is well known, the curriculum is one of the most fundamental components of any program in the organization of gifted students. Sadly, it is not yet well considered or developed in Saudi Arabia.

Grouping

Giftedness is about the recognition of ability in children and how best to nurture their unique talents. Grouping or the notion of separation has been a contentious issue according to Kulik (1993) and arguments have raged about whether it is harmful or highly effective (see also Rogers, 1991, 2002). Kulik (1993) has concluded from the research evidence that higher aptitude students usually "benefit academically from ability grouping…. while grouping has less influence on the school work of middle and lower aptitude learners" (p. 2). He believes that the adjustment of curriculum to pupil ability in within-class and cross grade programs may be the key.

In contrast, Oakes (1985) argued that students in the top tracks gain nothing from grouping and other students suffer clear and consistent disadvantages, including loss of academic self-esteem, and ambition. In effect what Oakes is arguing for is a de-tracking of American schools. Saudi Arabia echoes such a de-tracked system.

Kulik strongly rejects such an argument and considers it to be highly damaging. Rogers (1991) is equally supportive of the Kulik viewpoint in her meta-analysis of thirteen research studies on the academic, social and psychological effects upon gifted learners, subject to three grouping practices. These were respectively: (1) ability grouping for enrichment; (2) mixed-ability cooperative grouping for regular instruction; and (3) grouping for acceleration. Rogers concluded that the research

indicated strong, consistent support for the academic efforts emphasizing enrichment and acceleration but that the outcomes predicating socialization and psychological adjustment were weak but positive. Further, mixed grouping had dubious impact and should be re-enforced by cluster groupings when separate classes for the academically gifted were not feasible and be supplemented by acceleration and enrichment wherever possible (Rogers, 1991).

Again, ability grouping remains a neglected area in the teaching of gifted children in Saudi Arabia, and does not exist although a few efforts to introduce this concept may occur at individual centre level.

Acceleration of gifted students

There has been considerable research into the area of curriculum enrichment and modification, according to Davis and Rimm, (2004), which has included the need to accelerate the curriculum in response to the need and interest for rapid advancement by the gifted.

In a brief summary the different ways of accelerating may include the following:

- Acceleration in one or more subject areas;
- Grade skipping;
- Advanced placement programs;
- Early graduation from high school; and,
- Early entrance into college. (Brody & Benbow, 1987, p.106)

As supported by Horne and Dupuy (1981), Gross and Van Vliet (2005), acceleration is a program decision not a placement decision. Gross (1992) has indicated that the curriculum must continue to be challenging for the accelerated student, and subject matter has to be closely monitored and aligned to the students' social and emotional maturity as well as their academic achievement.

Research has shown the benefits of acceleration:

- When gifted students were accelerated, there was an increase in their academic achievement (Colangelo, Assouline & Gross, 2004; Kulik & Kulik, 1984b; Rogers, 1991; Vialle, Ashton, Carlon & Rankin, 2001).
- Accelerated students tended to "outperform students of the same age and ability who are not accelerated" (Kulik & Kulik, 1984b, p. 87).
- Accelerated students achieved "as well as equally gifted older students in the higher grades" (Kulik & Kulik, 1984b, p. 87).
- Accelerated gifted students reported satisfaction emotionally and academically when the curriculum was challenging, provided them with options, and allowed for their input in the design and implementation (Colangelo, Assouline & Gross, 2004; Vialle et al, 2001).
- When course instruction and content was tailored to the individual gifted student's ability, acceleration was more fulfilling and motivating for the student (Colangelo, Assouline & Gross, 2004; Vialle et al, 2001).

However, Horne and Dupuy (1981) speak of precocious youth who have failed in adulthood and offer an alternative of less radical acceleration, which they claim has worked well. This is early graduation from high school or higher placement in subject matter or grade.

Nevertheless, case studies of individual accelerated children who had skipped at least one grade reported that the children were happier socially and emotionally and reported greater self-confidence and fulfilment after their acceleration. These students tended to socialize with older students before they skipped the grade(s) (Vialle et al, 2001). Similarly, a group survey of non-accelerated gifted students and gifted students who had grade-skipped, graduated early or entered college early did not reveal any harmful effects of acceleration. There was no evidence of negative social and emotional adjustment as a result of acceleration (Brody & Benbow, 1987).

Researchers have made the following suggestions of practice that help make acceleration successful:

1. Schools must have clear procedures and criteria for identifying students for acceleration (Colangelo, Assouline & Gross, 2004; Vialle et al, 2001).
2. The classroom teacher should be knowledgeable about the needs of gifted students and must be supportive of the student's placement (Colangelo, Assouline & Gross, 2004; Vialle et al, 2001).
3. Course content must be carefully planned, differentiated, and monitored to meet the student's needs (Colangelo, Assouline & Gross, 2004; Gross, 1992; Vialle et al, 2001).

George, Cohn, and Stanley (1981) reviewed acceleration and enrichment programs and concluded:

1. Academic enrichment may be worthwhile for all students, and not specifically for the intellectually gifted. In this way, enrichment programs seem to be more open to accusation of 'elitism' than acceleration is, since no 'special ' curricula need to be established for the accelerated student.
2. No studies have shown enrichment to provide superior results over accelerated methods. Enrichment at best may only defer boredom until a later time.
3. Much resistance to acceleration (or grade-skipping) is based on preconceived notions and irrational grounds, rather than on an examination of evidence. Most resistance stems from concerns about the socio-emotional development of the accelerated student. When facts are studied, however, we find that such adjustment problems generally are minimal and short-lived.
4. Acceleration students are shown to perform at least as well as, and often better than, normal-aged control students on both academic and non-academic measures.
5. It seems evident that, according to the finding of most of the studies reported here, acceleration appears to be the more feasible method for meeting the needs of gifted students. (pp 339-343)

Acceleration has not been employed as a technique in teaching the gifted in Saudi Arabia despite its theoretical acceptance by the Ministry of Education. It is partly due

to "political" reasons. In spite of accelerated programs having received official approval, in practice they have not been used in gifted centres for logistical reasons. Enrichment programs, on the other hand, are far more flexible in some subject areas and, hence, more easily put in place (Al kaldi, 2002). Nevertheless, the nagging question of the efficacy of accelerated programs has never been answered simply because they are not being used in Saudi Arabia; pragmatism always triumphs over experimentation. Perhaps the explanation for this is the lack of expertise at ground level in the Gifted Centre which leads to a lack of opportunity to implement innovation. It is not, however, applied in practice or if tentative efforts are made to do so, these are piecemeal.

Professional Development of Teachers of the Gifted

It is important to assess the role of the teacher of the gifted, the third component of any effective program. This examination covers the methods for selecting gifted teachers, training strategies and the importance of developing their skills in the education of gifted students. The development of the teacher of gifted students is a key point in the evaluation of the gifted programs in Saudi Arabia that are targeted in this study. Professional development of teachers of the gifted is a concomitant strategy in gifted education improvement. To clarify the importance of its role, it is necessary to isolate and examine the two aspects that combine to foster teacher growth:

a) The qualities that contribute to producing an effective teacher of the gifted; and,
b) The training that supplements these attributes.

However, a starting point to such an examination rests in creating a definition of what constitutes professional development. A number of authors have contributed to a wide ranging definition that “goes beyond the term ‘training’ with its imperfection of learning skills and encompasses...formal and informal means of helping teachers not only learn new skills but also develop new insights into pedagogy and their own practice...including knowledge of current technologies...” (Fullan, 1991, p326).

Against this backdrop is research into the qualities that are the hallmark of a well-developed professional educator in the gifted field which has unique demands on a teacher. Citing Renzulli, Vialle and Quigley (2002) remarked that “there would be little argument that the key to the success of any educational program is the teacher” (p.2). Their subsequent findings were that "while personal and social attributes of the teacher are of prime importance for gifted students, the picture, nonetheless, is more complex and the intellectual qualities are also of significance" (Vialle & Quigley, 2002, p. 11). They go on to conclude that “training of gifted teachers (therefore) needs to be mindful not only of the characteristics of gifted students but also of the complex use of intellectual skills and knowledge of appropriate teaching strategies that teachers of gifted students require” (Vialle & Quigley, 2002, p. 13).

A study of exemplary teachers of African-American students (Ford & Trotman, 2001) highlights the qualities of such teachers to include being culturally sensitive and maintaining a culturally responsive classroom which has “relevant pedagogy, displays equity pedagogy, has a holistic teaching communal philosophy, a respect for the students’ primary language, has culturally congruent instruction practices, culturally sensitive assessment procedures, and strong family-teacher relationships” (pp. 235-239). While discounting the contention that teachers in gifted education should be gifted themselves, the article argues for the development of cultural sensitivities in such teachers working in a plural demographic educational base with gifted students.

Chan (2001), in a study of the characteristics and competencies of teachers of gifted learners in Hong Kong, argues the same point that “characteristics found in successful teachers (of the gifted) were similar to those found in talented and gifted students themselves. These included being highly intelligent, achievement-oriented, knowledgeable and flexible; having cultural and intellectual interests; respecting individual differences; and relating well with gifted individuals” (p. 197).

Chan’s study of Hong Kong teachers divided their qualities into perceived personal characteristics and individual competencies. While endorsing the western social and

personal attributes of gifted teachers, there was a significant emphasis on the specific teaching skills targeted to meet the needs of gifted learners. This does have implications for the design and development of professional training programs for gifted teachers and supports the belief of Vialle and Quigley (2002) that gifted teaching is a complex domain of social and personal abilities as well as high intellectual capacity. What form then should such professional development take that caters to such sophisticated and unique demands?

A model proposed by Karnes and Shaunessy (2004) speaks of the need for individually developed learning plans. These should be closely allied to the attitudes and performance of gifted children, their parents and classroom practices. The components according to Karnes and Shaunessy might include: personal information and professional responsibilities, goals, objectives, activities, the intended impact on the students, a time-line and means of evaluation. All should be linked into the larger objectives of the appropriate governing bodies (Karnes & Shaunessy, 2004, pp. 60-61).

A further study by Cheung and Phillipson (2008), following Chan's earlier research, assessed the desired characteristics and competencies of 177 Hong Kong teachers when 102 were in-service teachers of the gifted while 75 had no prior experience. The results indicated that the two groups had outstanding differences in all the cited competencies except for competency in counselling. Moreover, regression analysis demonstrated that experience working with gifted students was the best predictor of the desired competencies for teaching gifted students.

Further to these delineations, Almekbel (2008) has defined the overall objectives of a training program for teachers of the gifted as follows:

1. The trainee must distinguish the characteristics of gifted students.
2. The trainee must know different ways of thinking. The trainee must master teaching methods appropriate for the care of gifted students.
3. The trainee must master the appropriate evaluation methods for the care of gifted students.

The training of teachers of the gifted is, therefore, as complex and as challenging as the teaching of this elite group.

Finally, a definitive article on teacher development was completed by VanTassel-Baska and Johnsen (2007), which provides a template on such professional development. They believe that there should be a sound knowledge of relevant educational theory, research, pedagogy, and management of classroom-based opportunities to learn for gifted students (VanTassel-Baska & Johnsen, 2007). VanTassel-Baska and Johnsen (2007) propose that a standards-based approach in curricula development, incorporating a coordinated response in schools, needed to be re-organised as collegial and collaborative learning communities. Such a focus is supported by the National Council for Accreditation for Teachers Education (NCATE, 2005).

In Australia, a package of gifted education professional development materialss, published by the Gifted Resource and Information Centre (GERRIC, 2005) of the University of New South Wales, covers six modules that include understanding giftedness; identification of gifted students; social and emotional development of gifted students; underachievement in gifted students; curriculum differentiation for gifted students, and developing programmes and provisions for gifted students. All modules cover the whole ambit of giftedness in schools ranging from early childhood through to secondary school and include rural and urban locations; teaching in the role of the classroom; school administration; teachers working alone or undertaking professional development in small group or in a whole of school situation (See appendix 2).

Another template to be used is the model established by the National Association for Gifted Children (2000) as a minimum set of standards in the professional development of gifted which underlies the research of this study into gifted teaching in Saudi Arabia. The standard that addresses the professionals indicates they should have specialized preparation in gifted education, expertise in appropriate differentiated

content and instructional methods, involvement in ongoing professional development, and possess exemplary personal and professional traits (NAGC, 2001) (See Appendix 1).

It is important to note that while such teacher development modules exist elsewhere, professional development as such is not yet part of formal tertiary training for those Saudi Arabian teachers interested in teaching the gifted. Rather such work in Saudi Arabia is carried out in a non-formal way whereby gifted teachers are linked with gifted students. Further, the teacher is the key to the gifted programs, and the lack of teachers specialised in the care of talented people is a major weakness in any program provided for this group of students. In Saudi Arabia, teachers who work in gifted programs do not have prior preparation in the care of gifted students, nor do they receive adequate in-service training, which qualifies them to work with gifted students at the required level. It remains, therefore, as fertile ground for educational seeding in the next decade, based on these models of western best practice, adopted and adapted within the Saudi Arabia field of gifted education (Al kaldi, 2002).

Chapter three

Method

Introduction

The research method will be described in terms of design, methods, population, instruments and procedures used for data collection as well as procedures used during the data analysis. The research design chosen enabled the researcher to achieve the purpose and objectives of the study.

The overall objective of this study was to evaluate the provisions for gifted students (boys and girls) in Saudi Arabia. Two important aspects of evaluating these provisions were, (1) identifying the current status in order to serve gifted students through the gifted centres that are responsible for providing special programs for their needs, and (2) providing reports which highlight the results of the evaluation of provisions to key stakeholders, in order to recommend ways and practices to improve these provisions.

Forty-eight gifted centres in Saudi Arabia that are responsible for delivering special programs for gifted students (boys and girls), provided the necessary data for this study. Opinions and responses of managers, supervisors and teachers, also provided suitable data for this study through the multiple methods used. These views are concerned with the effectiveness of gifted student programs, how students benefit from these programs, and also the parents' opinions of the impact these programs have on their children's giftedness.

Key points of this study include:

- Procedures for selection of gifted students;
- Provision of curriculum;
- The selection of qualified teachers and the specialised training programs to increase their performance; and,

- Identifying the types of support for these programs (whether financial, personnel or any major stakeholders, such as the Ministry of Education).

The ways that these key points are practised in the gifted student centres were analysed. In addition, worthy of attention is the private sector contribution, as it is a catalyst for the success of government efforts being made in various areas, including caring for gifted students. This can be seen in that any progress and development made by the private sector, is often incorporated by the government into public sector programs. By addressing the aforementioned issues, this study is the first comprehensive evaluation to be conducted on gifted student programs in Saudi Arabia since their establishment in 1998.

Research questions

1. To what extent do current provisions in Saudi Arabia meet the needs of gifted students according to key stakeholders?

Sub-questions

1. What are the current gifted policies and how have they been implemented?
2. What are the current gifted provisions and how have they been developed?
3. What procedures are used to select gifted students for gifted programs and how effective are they?
4. What procedures are used to select and train teachers for gifted programs and how effective are they?
5. What strategies and curriculum approaches are implemented for gifted students and how effective are they?
6. How can provisions for gifted students be improved according to the stakeholders?
7. Are there differences in the provisions for gifted girls and gifted boys in Saudi Arabia? What effects do these differences have on the key stakeholders' satisfaction with the education of gifted students?

Research Design

In order to address the research questions, the researcher implemented a mixed methods evaluation design to obtain necessary data from all participants in this study: administrators, supervisors, teachers, parents and students. This enabled the researcher to evaluate the effectiveness of recent provisions in Saudi Arabia that were established to deliver services for gifted students, as well as recommend improvements to these provisions in order to meet the needs of gifted students. The emphasis was on improvement, as supported by Stufflebeam (2008), who suggested that "the most important purpose of evaluation is not to prove but to improve" (p. 327).

The study utilised quantitative and qualitative information derived from a variety of sources, including questionnaires, individual and group interviews with gifted students, their parents, teachers, centre administrators and through teaching observations. The questionnaire allowed the researcher to collect information from a large number of stakeholders.

The qualitative research method, such as interviews and observations, helped the researcher to give participants the opportunity to provide more in-depth responses. Through understanding the participants' experiences, the qualitative data enabled the researcher to gain a deeper understanding of the effectiveness of the gifted programs for the participants.

Qualitative research is useful, therefore, in providing detailed and comprehensive data. It is particularly useful in the field of gifted education because it allows researching the case from a personal perspective of a variety of participants. The qualitative methods used involved interviews (individual and group) and observations. The advantages of qualitative research are:

- In-depth examination of phenomena;
- Use subjective information;
- Not limited to rigidly-defined variables;

- Examine complex questions that can be impossible with quantitative methods;
- Deal with value-laden questions;
- Explore new areas of research; and,
- Build new theories. (Key, 2002)

As a consequence, qualitative research is purposeful in providing specific details, especially in complementing the data gained from the quantitative measures. This gives the research both strength and depth, and enables the researcher to obtain comprehensive results.

Population and Sampling

Saudi Arabia has 42 separate districts and each district is supposed to have at least one gifted student centre for each gender. This puts the minimum legislated requirement of gifted student centres in Saudi Arabia at 84. However, this has not yet happened as gifted programs are still relatively new and more time is needed for the full establishment of these centres.

These centres are responsible for the provision of gifted education for gifted students in each district, and provide gifted services for every school, both government and private, contained in that district, at all three schooling stages: primary (ages 6–12), secondary (ages 12–15) and high school (ages 15–18). Within each district the number of schools ranges from 50 to 1000 depending on the size of that district. The numbers of students and schools, for the two genders and the three levels of education, which were recently released by the Saudi Ministry of Education, are summarised in the following table (Ministry of Education, 2006).

Table 3.1 Student enrolment data in Saudi Arabia

Schools level		*Gender*		
	Gender	Male	Female	Total
Primary	Schools	6,491	6,531	13,022
	Students	1,239,709	1,146,226	2,385,935
Middle	Schools	3,682	3,204	6,886
	Students	564,747	504,507	1,069,254
Secondary	Schools	2,027	2,013	4,040
	Students	445,769	424,859	870,628
Total	Schools	12,200	11,748	23,948
	Students	2,250,225	2,521,559	4,771,784

There is no statistical information on enrolment of the gifted available within the Ministry of Education records. Such a concept of gifted teaching has only been in place for ten years. This is due to the way in which the Ministry of Education is organised at the district level. Some districts have been assisting gifted students since 1998 while others started later. Twenty percent of the total population of students is nominated to sit the entrance test for gifted centres. The students who are successful in this testing are then eligible to attend the gifted programs.

The subject sample was randomly selected from the available gifted student centres by using SPSS random selection software, so as to obtain correct samples unaffected by any form of bias. The number of centres that participated in this study is shown in Table 3.2. The number of male gifted centres can be noted as exceeding the numbers of female gifted centres, as gifted services for girls were introduced significantly later than those for boys.

Table 3.2 Sample distribution

Gender	*Centres*	*Staff*			*Parents*	*students*
		Administrators	Supervisors	Teachers		
Male	34	27	59	80	60	77
Female	14	28	41	45	52	72
		55	100	125		
Total	48		280		112	149

Instrumentation

As this research utilised a mixed methods design that uses both quantitative and qualitative methods, three complementary tools were used for the collection of data. These were questionnaires, interviews and observation.

Questionnaires

According to Polit and Beck (1991) a questionnaire is a tool for gathering self-report information from the respondents about their attitudes, knowledge, beliefs and feelings. The advantages of questionnaires are many (Lowane, 1990).

- Questionnaires were more cost effective to administer than conducting interviews as interviews might have required the researcher to travel from one institution to another on several occasions.
- The researcher was not present during the completion of questionnaire so there was no bias; the respondents were free to answer questions as they wanted to.
- A sense of anonymity was ensured during data collection as findings could not be linked to specific respondents.
- The questionnaire format was standardised for all respondents.
- The questionnaire was a rapid and efficient data collection tool. (Lowan, 1990, p. 27)

The use of questionnaires allowed the researcher to reach a large number of participants and with a reasonable amount of resources for their distribution. The questionnaires were supplemented by additional data sources gained from interview and observations.

Prior to beginning the research in the Saudi Arabian Gifted Centers, ethics approval was sought from the University and from the relevant educational authorities in Saudi Arabia. Once this permission was received, the researcher collected all data in situ in Saudi Arabia.

The questionnaires took three different forms: a staff questionnaire (administrators, supervisors, and teachers): a questionnaire for parents of gifted students (male and female); and a gifted students questionnaire (boys and girls). Each questionnaire asked general questions about the evaluation of gifted student programs along with specific questions seeking information related to the staff, parents and students themselves. Samples of all three forms are available in Appendix 3, 4, 5 (staff male and female questionnaire English and Arabic copy), 6, 7, 8 (Students: girls and boys questionnaire English and Arabic copy) and 9, 10 (parent questionnaire English and Arabic copy).

The process of constructing and developing the instrumentation used to collect quantitative and qualitative data involved the following steps. This was done to ensure clarity, content validity and reliability of these instruments, in order to obtain the data required to answer the research questions of the study.

The staff questionnaire was developed based on the gifted program standards which were developed by the National Association for Gifted Children (NAGC) published by Landrum, Callahan and Shaklee (2000). The standards are a criterion-based designated level of performance, against which programming success is measured (Worthen, Sanders, & Fitzpatrick, 1997). All questionnaires and the items that were used in the questionnaires were based on relevant literature and information available from the

researcher's experience. The associate supervisor, in Jordan, reviewed the Arabic version of the questionnaires, and his remarks were considered.

To ensure clarity, content validity and appropriateness of the questionnaires, the Arabic versions were reviewed by two academics, one with expertise in the field of gifted education and the assessment of education, and the second with expertise in psychological measurement and research methodology. The staff questionnaire was given to ten Saudi expert academics, who work in the field of gifted education, including some university staff. Based on their arbitration, deletions and additions, appropriate modifications were introduced.

Questions from all three questionnaires covered the following areas:

1. Staff questionnaire:

- Details of gifted students' centres in terms of structure, staff expertise, resources, budget, social and emotional guidance and counselling, strategies of program evaluation, and design of current programs and curricula.

Example: Q1: Are you a (tick one)

____ Administrator
____ Supervisor
____ Teacher (full time)
____ Teacher (part time)

- Selection and training of teachers, and professional development of teaching staff.

Example**:** Selecting and training teachers in centre.
Please read each item carefully and indicate the degree to which you believe the following statements describe the method used to select teachers in your centre. Mark the appropriate box for each item.

SA- Strongly Agree A- Agree U- Undecided D- Disagree SD- Strongly Disagree

No	Item	SA	S	U	D	SD
1	Teachers are selected according to clear criteria					
2	Teachers are selected by a committee of experts and specialist educators					
3	Teachers are selected according to social relationships with the officials at the centre					

- Selection of the gifted students for enrolment

Example: Selection system of gifted students at the centre. Please read each item carefully and indicate the degree to which you believe the following statements describe the selection system in your centre. Mark the appropriate box for each item.

SA- Strongly agree A- Agree U- Undecided D- Disagree SD- Strongly Disagree

No	Item	SA	A	U	D	SD
1	The centre adopts clear procedural definition of gifted students					
2	The centre uses multiple procedures for selection of gifted students					
3	The tests and standards used in the selection are developed specifically for the centre functions					

- The nature of the differentiated curriculum

Example**:** Enrichment Curriculum for gifted students at the centre
Please read each item carefully and indicate the degree to which you believe the following statements describe the enrichment curriculum in your centre. Mark the appropriate box for each item.

SA- strongly agree A- Agree U- Undecided D- Disagree SD- Strongly Disagree

No	Item	SA	A	U	D	SD
1	Enrichment curriculum is a complement to as well as an extension of the regular curriculum					
2	Enrichment curriculum identifies skills and knowledge which gifted students should learn at the centre and which is not possible to learn through the study of the regular curriculum with ordinary students					
3	Enrichment curriculum focuses on high order thinking operations					

2. Students' questionnaire**:**

- Details on study level, age, kind of giftedness of students, amongst others;
- The nature of the assessments or tests to determine the degree and profile of the giftedness;
- To determine the difference between the school and the centres, both positive and negative of any socio-educational impact on the gifted students;
- To assess whether there was any positive or negative socio-educational or emotional impact on the students attending a school rather than a centre;
- To evaluate the kind of curricula used in the centres.

Example: In which of the following areas are you gifted? (Multiple answers can be selected)

☐ Calligraphy and drawing	☐ Computer
☐ Mathematics	☐ Electronics
☐ Scientific inventions	☐ Oration
☐ School acting group	☐ Literary writing

☐ Other, Please, specify. …….

3. Parents' questionnaire:

- To assess all aspect of parents including occupation and socio-economic background;
- To determine the degree of assistance from parents to encourage giftedness and what teaching use or practice help is provided within the family; and,
- To determine the degree of satisfaction amongst parents with gifted programs provided by centres.

Example: When did you first discover that your son/daughter was gifted?

☐ Before elementary school (kindergarten)

☐ During the first three years of elementary school (first – second – third)

☐ During the last three years of elementary school

- During middle school
- During secondary school

Interviews

The qualitative data component comprised interviews (individual and group) and observations of the classroom practice of teachers of gifted students (see Appendix 11, 12, for English and Arabic interview questions). In Saudi Arabia mixing of genders is strictly forbidden and therefore no females were able to be interviewed or observed by the researcher directly. A female assistant who was known by both the interviewer and interviewee had to be utilised. Telephone conversations between the researcher and female participants were also used.

Interviewing administrators, supervisors and teachers who work in gifted student centres was beneficial as direct access to the perspectives and insights of the involved participants was enabled. Burns (2000) noted that "interviews are essential, as most case studies are about people and their activities … [and that interviewees] … provide important insights and identify other sources of evidence" (p. 467). The following issues were focused on during the interviews:

- How satisfied the participants were with the services provided by gifted student centres.
- How satisfied the participants were with the achievements of gifted programs.
- Availability and application of formal policy and legislation in gifted centres.
- The definition of a gifted student and how it applies to gifted centres.
- Amount of support available to these centres and its impact on achieving its objectives.
- Private sector participation in providing support to these centres.
- Provision of facilities which assist these centres in achieving their objectives.
- The nature of the relationship between gifted student centres and the parents, schools and society.

- The success of the procedures and methods used in the assessment and selection of gifted students.
- The success of the training and development programs for the teachers of the gifted students.
- The availability of gifted curriculum and how successful the application is in gifted student programs.

These issues were addressed in the interviews to clarify the results obtained from the quantitative data and strengthen the results of this study.

A semi-structured interview format was utilised in conjunction with other data gathering methods to obtain responses from a variety of participants in order to access a set of attitudes and beliefs. Anderson and Burns (1989) emphasised that the main strengths of the semi-structured interview is that it allows the informant to "not only express an opinion, but to explain why that opinion is held" and that consequently a "richer set of evidence is available" (p. 120).

The interview was composed of twelve open-ended questions, which were developed to gather information about these aforementioned issues (see Appendix 11, 12 English and Arabic copy). These questions were intentionally open-ended in order to encourage the participants to express their perception with as much flexibility as possible. Bell (2005) mentions a benefit of a semi-structured interview is the “freedom to allow the respondent to talk about what is of central significance to him or her rather than to the interviewer is clearly important, but some loose structure does eliminate some of the problems of entirely structured interviews” (p. 161).

The length of the interviews ranged from 60 minutes to 120 minutes. Information gathered in the earlier interviews was then used to inform later interviews. All interviews were transcribed and content analysed.

Observations

Kulieke (1986) stated that "Observations are advantageous because they provide a different conception of how a classroom is functioning" (p. 141). Observation was an appropriate method of qualitative data collection for this study as it increased the researcher's ability to gain specific insight into the classroom behaviour of the teacher participants within an environment where they were comfortable and relaxed. While there are many advantages and disadvantages to the use of observations as a research method, it is still the most useful way to add significant information to the research through enabling conceptualisation of situational practice, which could not be adequately addressed by other research methods. Lincoln and Guba noted: "A major advantage of the interview is that it permits the respondent to move back and forth in time – to reconstruct the past, interpret the present, and predict the future, all without leaving a comfortable armchair. A major advantage of direct observation, on the other hand, is that it provides here-and-now experience in depth. Observation is a powerful tool indeed" (Lincoln & Guba, 1985, pp. 273–274).

The data derived by observation were quite different from other data as the situation of the observation convention enabled the collection of data that did not rely on self-report, thus contributing to gaining valuable insight into situations. Cohen, Manion and Morrison (2000) mentioned that "Observational data are attractive as they afford the researcher the opportunity to gather 'live' data from 'live' situations" (p.305). The researcher is given the opportunity to look at what is taking place in person rather than receiving it as second-hand information.

Classroom observations provide useful information about the gifted teachers' efforts toward implementing teaching strategies which benefit gifted students' education. Therefore experts in gifted education can observe classes of teachers in order to evaluate the effectiveness of teaching strategies used.

An adaptation of the Martinson-Weiner Rating Scale of Behaviours in Teachers of the Gifted (Martinson, 1976, cited in Kulieke, 1986) is the form that was used in this study

to observe classroom practices of gifted education teachers (see Appendix 13, 14). Kulieke (1986) commented that "The Martinson-Weiner Rating Scale identifies and quantifies the existence of teaching behaviours that are important in teaching the gifted. This adaptation is scaled to make more consistent comparisons between each aspect of the classroom being observed. This approach has been used successfully to identify those areas of teacher weakness which can be addressed in in-service training programs" (p. 141). The Martinson-Weiner Rating Scale of Behaviours in Teachers of the Gifted that was used to observe the teacher teaching, is a quantitative method of collecting data, as data are entered in a controlled manner in the form of a scale from one to five (see Appendix 13, 14).

This observation method was conducted to obtain data about teachers' classroom activities, in order to evaluate how they implemented gifted teaching strategies. Martinson noted that "A structured observation instrument provides quantitative information upon which to rank different areas of strength and weakness" (in Kulieke, 1986, p.141).

The applied observation of gifted teacher participants in this study was carried out by the researcher, complemented by expert female assistants to observe female teachers participating in this study. Observers indicated the degree "between" one to five of each educational strategy that the teacher of gifted students applied inside the classroom during the teaching process. In order to ensure that the assisting female observers were aware of the procedures for observation, the researcher contacted the female observers by telephone to explain the correct process of observation.

Data analysis

To analyse the data gathered, the researcher conducted the following procedures. In order to obtain positive results in the study data, it was necessary to organise the collected data through the use of various tools to assist in analysing and drawing appropriate conclusions that answered questions of the study. A number of

fundamentals were important requirements for comparison and determination of an accurate and verifiable conclusion.

The tools which provided the quantitative and qualitative data of the study were the questionnaires, interviews and observations. In other words, this study contained mixed methods. For the desired results, from the data available, there had to be statistical analyses using appropriate statistical methods which obtained the desired results in an accessible and clear manner. Thus the researcher used the following statistical analyses.

Questionnaire

Prior to computer data entry, it was necessary to control and regulate such data by coding the questionnaires with a view to ensuring that nothing was lost. As well, it was essential to quickly erase error in order to substantiate the veracity of statements made. This is supported by Miles and Huberman (1984) who describe codes as "retrieval and organizing devices that allow the analyst to spot quickly, pull out, then cluster all the segments relating to the particular question, hypothesis, concept or theme" (Miles & Huberman, 1984, p. 56).

Descriptive statistics were used to obtain the percentage of the participants' answers about their degree of satisfaction with services provided by the centres for the gifted and talented students, with such representation of data in various forms of graphs. In addition, the research included frequencies in sample according to gender, specialisation and academic qualifications amongst others.

A t-test tower was employed to check the existence of significant statistical differences among the participants in their study where the demographic variables were related as in the case of key questions (15, 25, and 27) of the staff questionnaire.

A special analysis was conducted according to gender to examine the differences between the views of the samples of males and females who carry out similar work for

gifted students (boys, girls) under the system, but are separated in the workplace even though they all belong to the Ministry of Education. This kind of comparison is important to determine whether there are significant positive or negative outcomes amongst gifted students between boys and girls, and which is more effective, and whether gender separation is an obstacle in providing services for this group of gifted students, male and female.

There was a special analysis of the answers to the questions of scale (1-5) in order to determine the extent of agreement between the sample of the contents of questions (15, 25, and 27). It focused on the main components in any program for gifted students organised anywhere including selection and identification, provision of curriculum and the selection and training of teachers.

Interviews

Following the model established by Cohen and Manion (1989), interviews were an integral part of the qualitative research method. Combined with note-taking all interviews were recorded and later transcribed in conjunction with the need for triangulation of the data. The latter method eliminated observer bias that could have occurred during both the verbal interaction and subsequent transcription. These data were then placed into specific units of meaning as per the research questions. It was possible to interpret both general and particular themes for analysis.

Interviews were with staff who worked in gifted centres. These were taped transcribed, content-analysed, and organized around the interview questions. Frequencies were counted for each question; samples of responses were also reported for each question. Information, collected from promotional literature, was analysed and used together with information gathered from the interviews to present an overview of the education of gifted provision in Saudi Arabia, and to supplement the quantitative aspect of the research process (See table 3.3).

Observations

Despite the pre-supposition that observations are usually qualitative, observation in this research assumed quantitative approach whereby the researcher had a pre-determined observation form. This meant that the researcher's role was to decide which teaching strategies were being applied. It is believed that this technique eliminated bias and the random aspect of most qualitative methods. Thus, the analysis could be assessed by computer and the breakdown categorized into standards. To eliminate researcher bias and improve reliability, the principal researcher had to regularly monitor the observational notes. This was supplemented by each teacher keeping a log book of observations as per the table below (See table 3.3).

To enhance the ease of comparison and discovery of these relationships, it was necessary to tabulate the procedures involved. This also ensured that nothing of significance was missing. These procedures are outlined in Table 3.3.

Table: 3. 3 Data Analysis procedures

Data Collection procedures	*Sample*	*Data recording procedures*	*Data preparation procedures*	*Data Analysis procedures*
Questionnaires: Staff Q (M &F)	Administrators (n= 55) Supervisors (n= 100) Teachers (n= 125)	Written Questionnaire completion	Tabulation of questionnaire responses	Categorization onto tables
Students Q (M & F)	Students (n= 149)			
Parents Q (M& F)	Parents (n= 112)			
Interview (grouping and individual)	Supervisors/ Teachers (n= 10)	Field Notes Audio taping	Summarizing and transcribing audio tape data	Categorization onto tables
Observations	Teachers (n=15)	Observation Form filled	Tabulation of observation form responses	Categorization into tables

Conclusion

The area of education for gifted students in Saudi Arabia still borders on the nebulous and is incompletely defined. It is delivered in a cultural construct that is conservative and not easily interpreted within the paradigms used more frequently in western educational analysis. To that extent the methodologies applied — both quantitative and qualitative — suffer from the uncertainties of translation of cultural perceptions and social divides. This research, therefore, is groundbreaking for its use of western modelling in a Saudi Arabian setting, which so far has remained unassessed in its programming for this special group.

It is believed that the mixed methods used are essential and, to a degree, symbiotic in such unique research. Numerical and statistical dissection would not have revealed the deeply personal nature of educating the Saudi gifted group nor made comprehensible to an outside observer the cultural complexities of this society without qualitative evaluation. The methodology has included research at three different levels. It has involved questionnaires focusing on administrative and teaching staff, students and parents as it was felt that each group brought particular perspectives to the realm of caring for gifted students.

These were then broken down into interviews, responses to written questions and observation of both classes and teachers against a backdrop of theory and pedagogical practice in other countries, particularly the United States and the United Kingdom, which are well advanced in program delivery for gifted students. Hence, this hitherto unexplored realm in the spectrum of education and its mysteries and challenges become evident in the finding and analyses of the next chapter.

Chapter 4

Results and Discussion

Introduction

This chapter is set around a discussion of the findings of the research detailed earlier. These results will respond directly to each question at length in a manner which addresses the depth of its content. It will provide a statistical analysis of the data using the tools set out in chapter three.

Research Questions

1. To what extent do current provisions in Saudi Arabia meet the needs of gifted students according to the key stakeholders?

Sub-questions

1. How has the Ministry's Gifted Education policy been implemented in the gifted students centres?
2. What are the current gifted provisions, and how have they been developed?
3. What procedures are used to select gifted students for gifted programs, and how effective are they?
4. What procedures are used to select and train teachers for gifted programs, and how effective are they?
5. What strategies and curriculum approaches are implemented for gifted students, and how effective are they?
6. How can provisions for gifted students be improved according to the stakeholders?
7. Are there differences in the provisions for gifted girls and gifted boys in Saudi Arabia? What effects do these differences have on the key stakeholders' satisfaction with the education of gifted students?

The response to the main question will be defined by an analysis of the sub-questions which will be informed by the mixed methods used. The diagnostic approach of this study is to determine the reality of the provision of education for the gifted and talented in Saudi Arabia. It is intended to expose both its strengths and weaknesses

and, thereby, postulate improvements, if required. Thus, analysis of the results will give a template for such improvements and a substantiated backdrop for the development of value-added approaches in all facets of education for the gifted in Saudi Arabia. The following table explains the research questions with the supporting data sources acting as a guide to the quantitative or qualitative measures used.

Table 4.1 Research questions and data sources

Research main question: *To what extent do current provisions in Saudi Arabia meet the needs of gifted students according to the key stakeholders?*	***Data sources***					
	Questionnaire			**Interviews**	**Observation**	**Analysis of Documents**
	Staff	**Students**	**Parents**			
Sub questions: 1-What are the current gifted policies, and how have they been implemented?	Q: 9,11,12,13, 14	Q: 8, 13, 17	Q: 11,12, 17,18, 19	√	-	√
2-What are the current gifted provisions, and how have they been developed?	All questions except 11, 12,15,25,27	Q:17	Q:7,8, 14,18, 19	√	-	
3-What procedures are used to select gifted students for gifted programs, and how effective are they?	Q:27,29,30	Q:2,3,6, 10,11, 12	Q: 3	√	-	
4-What procedures are used to select and train teachers for gifted programs, and how effective are they?	Q:15,16,17, 18,19,20,21 22	-	-	√	-	
5-What strategies and curriculum approaches are implemented for gifted students, and how effective are they?	Q: 24, 25	Q:7	-	√	-	
6-How can provisions for gifted students be improved?	Q: 14,26,28	-	-	√	√	

7-Are there differences in the provisions for gifted girls and gifted boys in Saudi Arabia? What effects do these differences have on the key stakeholders' satisfaction with the education of gifted students?	All questions	-	-	-	-

Implementation of gifted provisions policy

Staff perspectives

In response to the sub-question of how the Ministry's Gifted Education policy has been implemented in the gifted student centres, five questions in the staff questionnaire assessed the implementation of the policy. Question nine of the staff questionnaire asked the participants to describe the centre where they worked. The majority of centres offered part-time programs only. The largest proportion of respondents was 58.6% who chose a description of the centre as a place for a group of gifted students to learn a specific curriculum part-time, while 17.5% indicated that the centre was a place for a group of gifted students to practise extra activities part-time. A relatively small number of respondents (9.3%) indicated that their program was full-time. This is in accordance with the policy of the Ministry of Education, which suggested that the gifted programs are afternoon activities that allow students to participate in special programs.

With reference to budget availability for these centres, in response to question 11, 77.1% of interviewees confirmed that the Ministry of Education provided the budget. In contrast, 12.5% of respondents indicated that there was no such budget, while 10.4% remained unsure. This result was expected because the Ministry of Education has the responsibility for policy to support centres for the gifted. In response to the question of funding, 57.1% believed that the Ministry of Education provided a special budget while 17.9% believed that the funding comes indirectly from the district budget that is provided by the Ministry of Education. The private sector was put forward as

having no contribution whatsoever according to staff. However, the private sector is one of the principal beneficiaries of these gifted students.

Question 12 asked the participants to define the strength of the relationship between schools and centres. The results showed that 46.4% believed that the relationship between schools and centres is medium while a further 33% saw it as strong or very strong. However, nearly 21% of the respondents indicated a weak relationship. This could mean that those centres have not readily tried to establish a bridge with schools, especially in terms of developing awareness of work at the centres in caring for such a specialist group.

In spite of a moderately positive assessment of the relationship, only 43% claim that the relationship is effective to sufficiently meet the need of gifted students, while 32.1% did not agree and 24.6% remained unsure (Q13). This outcome is significant because it underlines the importance of the centre program and necessity for schools to cooperate.

Question 14 asked the participants if the Ministry of Education provided enough equipment to the gifted centres to help them to meet the needs of gifted students. Most respondents (53.9%) accepted that the Ministry of Education provided enough equipment for the gifted centres while 27.9% of this same group disagreed and 18.2% remained unsure. Their views on particular kinds of support from the Ministry was mixed, as shown in Table 4.2. This categorisation indicated that the provision of equipment was indeed inadequate in most cases.

Table 4.2: The kind of support from the Ministry of Education to the centres

	Staff	*Yes*		*No*	
		Count	%	Count	%
Q 14.1-9	an adequate qualified staff	79	28.2	72	25.7
	provide buildings	43	15.4	108	38.6
	sufficient budget	88	31.4	63	22.5
	official support when dealing with government and others	19	6.8	132	47.1
	provide standards and the necessary tools for identifying gifted	119	42.5	32	11.4
	designing enrichment curriculum for gifted	23	8.2	128	45.7
	media support for the centres	30	10.7	121	43.2
	provide specialized books, journals and others	20	7.1	131	46.8
	provide educational equipment and laboratories for the centres	56	20.0	95	33.9

Usually the more negative responses about the variety of Ministry of Education support might be explained by the fact that the support is restricted to particular financial objectives and excludes a number of important areas where investment is vital. In fact, this is in direct contradiction to stated government policy of total overall financial support for a wide range of dedicated activities and purposes.

Staff Interview

The interviewees were asked whether there was a written philosophy defining the Centre's mission. All participants (n=10) in this interview, whether as individuals or as part of groups affirmed that there is a written policy for the gifted centres, subject to the prevailing overall policies in operation throughout the whole of Saudi Arabia. However, some of the participants voiced a different opinion; for example, in one centre it was said that "there was no written policy for this centre when it was established in 1995 as it was the first centre established in Saudi Arabia, but we put together a vision of how to identify and provide a product for gifted students as it related to the inherent and particular creative talents of these students. Later, once the Ministry of Education had commenced a program for gifted through the establishment

of new centres elsewhere, at that time our specific vision and philosophy, depending on the Saudi government policy, continued not only applying such as approach but also combining it with the newly constructed Ministry of Education programs". One female interviewee commented that “there was no special gifted centre in my district for gifted girls, but we applied our programs, depending on Ministerial policy, through an existing school". Thus, it is apparent from these comments, that early gifted education was in itself creative and although the speakers accepted that there was a Ministerial policy for the gifted program, nonetheless, it was interpreted on the ground according to the educational realities that existed, that is, provision through an adapted gifted centre or through a mainstream school.

Students' perspectives

The staff responses to the questionnaire items above were supported by the students’ perspectives with questions 8, 13 and 17 of their questionnaire dealing with resources. Question 8 referred to transport to centres, 90.6% of students indicated that there was no transport provided and that they were reliant on private means. Further, in response to question 13, 48.3% of students stated that there was no difference between the activities offered at their schools or centre and those offered to all students while 41.6% of this same group remained unsure. This means that only 10% of the gifted students believe their curriculum activities at the centre are differentiated from their curriculum at school; additionally, only 10% of the students believe that the centre’s program is more challenging than the work given to all students. This reveals that the policy of the centre to provide the needed resources for training the gifted is not a reality.

Interestingly, 44.3% students indicated that the equipment and resources provided to centres was better than that available in their schools. However, 38.9% were unsure and 16.8% indicated that the centre’s resources were no different from the resources at their school. Approximately one-third of the students indicated that their teachers at the centre were more effective than those at their school (39.6%) and that they were well trained for their specialist role (37.6%). The mixed results from the students in relation

to differentiated curriculum, teacher quality, and specialist resources suggest that there is a great deal of variability among the regions in Saudi Arabia, with some centres performing very well and others not appropriately meeting the needs of gifted students.

Parents' perspective

Analysis of the parent questionnaire revealed that the parents were in agreement with the students' analyses of the curriculum, resources, and teacher quality available at the centres. For example, over 90% of parents indicated that no transport was provided by centres and that private cars had to be utilized instead, which they saw as an indicator that the centre provisions did not match the official policy of total support for the gifted.

Several questions asked parents about their knowledge of their gifted children. Surprisingly, only 58% of parents reported being knowledgeable about the nature of their gifted offspring; further, they believed that knowing more about giftedness would enable them to help their children and, thus, enhance their children's giftedness. Of the 58% who indicated they had knowledge about giftedness, half reported that their knowledge came from widespread private reading; other sources of information included mass media (9.8% of total sample), their own educational training in the field (4.5% of total sample), or an orientation session provided by their child's school (13.4% of total sample). Only 5.4% (6 parents) indicated that they had received information from the centre. Thus, it is evident that in spite of their mandate to develop awareness of nature of the gifted and their education, the centres were failing to carry out such an important task.

In response to question 17, 100% of parents confirmed the importance of this mandate that centres must provide such information and awareness. However, they also believed that the responsibility for raising awareness and building knowledge of parents about giftedness should also come from the Ministry of Education (64.3%), the media (19%), universities (3.6%) or other unspecified sources (12.5%).

When questioned on the desirability of placing students in full-time special schools to cater for their giftedness, only 58% of parents believed that this would enhance their child's education and 12.5% were unsure; by contrast, 29.5% indicated that enrolment in special full-time schools was not needed to enhance their children's performance. It is unclear from these data whether the resistance from about one-third of the parents to full-time provision is a result of their lack of knowledge about gifted students and their needs or whether it derives from a belief that the combination of regular school and gifted centre is suitable. But their responses to question 19, which asked them to select one approach only, would suggest that they would prefer some form of special provision. As Table 4.3 indicates, 34.8% of parents indicated that gifted students should be placed full time in special schools and the same percentage (34.8%) agreed that they should be placed in centres for afternoon, weekend and holiday tuition, that is, an extra-curricular offering that currently exists. These data indicate that many parents do not agree with the government policy, which is only to provide part-time centres.

Table 4.3 Parents' views of the appropriate approach to develop gifted children

Q 19.1-4	*Question*	*Responses*	*Count*	*%*
	What is the most appropriate approach to develop gifted students?	Enrolling them in special full-time schools	39	34.8
		Establishing special centres	39	34.8
		Placing them in special classes in their regular schools	20	17.9
		Develop them in their regular schools	14	12.5

Analysis of documentation

With reference to government documentation on the importance of organized programming for the gifted, it is evident that there is a clear and comprehensive policy for such provision for the gifted in Saudi Arabia. It was not until 1969 that official attention started to be paid to gifted students, when the Saudi government endorsed a bill entitled "The Education Policy in the Kingdom", through Decree No. 779 of 16-17 September 1969. One of the quintessential axes of the bill calls for devoting attention to gifted and talented students. This was emphasized by Article 57 of the abovementioned decree which points out that one of the major goals of Saudi education is "identifying gifted students, nurturing them, and providing varied resources and opportunities to develop their gifts within the framework of general programs, and through applying special programs" (Ministry of Education, 1969, p. 16). Furthermore, Articles 192, 193 and 194 of the decree reinforced these goals by calling on the state to offer all possible attention to gifted students for the purpose of "developing and directing their talents, and for the relevant authorities to apply strategies to identify them and to offer them, specially-tailored educational programs, along with incentive rewards" (Ministry of Education, 1969, p. 24).

Nevertheless, there is huge disparity in practice. All results from the data analyzed earlier confirmed this division between legislation and delivery. It must be stated from an educational point of view how difficult it is to overcome such a wide gap. It is easy to write policy but extremely difficult to enact the legislation in the real world if assistance is not given totally to support government mandates in the complex arena of gifted education.

Gifted provisions

In response to the sub-question exploring the current gifted provisions and how they have been implemented, the data cover all aspects of current practices from policy, procedures, selection process of teachers and students, curricular modification, facilities, equipment and so forth. Such an analysis should be thorough and penetrating because it draws from multiple stakeholders. It reflects the fundamental target of this

study, which is to reveal the reality of gifted education in Saudi Arabia. Following the format for the previous question, responses to the staff questionnaire will be analyzed first, followed by students, parents and completed by a review of the interviews carried out.

Staff perspectives

Demographic data of the staff linked to the centres was collected and is displayed in Table 4.4. This indicates that the ages of the respondents formed a normal curve ranging from 26 to above 51 (Q. 3) and they ranged in experience from one year to above 16 years at the centre (Q. 6). This reveals the relative youthfulness of the staff involved in the gifted centres. In terms of their qualifications, 75.7% of the participants had a Bachelors degree and 13.6% held an Education Diploma. Only 10% of the participants possessed a Master's degree and only one person held a Doctoral degree. The majority of participants (89.3%) work full time, with a total of 96.8% of respondents working in the morning. These results are in direct contradiction of Ministry of Education policies, which have determined their gifted education activities should be in the afternoon, at the weekend or in summer holidays.

As can be seen in Table 4.4, 58.6% of respondents described their gifted centre as a place for a group of gifted students to learn a specific curriculum part time, while a total of 28.2% selected other part-time options. Fewer than 10% of the staff respondents indicated that their centre was full-time, which is not surprising given that part-time offering is what is supported by policy. It should be noted that the centres were never established as schools with planned curricula or other prescribed school activities.

Table 4.4 Demographic data of the staff respondents

	Question	*Responses*	*Count*	*%*
Q1	Current position	administrator	55	19.6
		supervisor	100	35.7
		teacher full time	112	40.0
		teacher part time	13	4.6
Q2	Gender	male	166	59.3
		female	114	40.7
Q3	Age	from 20-25	0	.0
		from 26-30	52	18.6
		from 31-35	90	32.1
		from 36-40	72	25.7
		from 41-45	47	16.8
		from 46-50	17	6.1
		51+	2	.7
Q4	Work status	full	250	89.3
		partial	30	10.7
Q5	Work time	morning	271	96.8
		evening	9	3.2
Q6	Years at the centre	from 1-3	116	41.4
		from 4-6	120	42.9
		from 7-9	31	11.1
		from 10-12	9	3.2
		from 13-15	3	1.1
		more than 16	1	.4
Q7	Years of work before work at the centre	none	13	4.6
		from 1-3	42	15.0
		from 4-6	48	17.1
		from7-9	49	17.5
		from10-12	55	19.6
		from 13-15	30	10.7
		from 16-+	43	15.4
Q8	Highest degree earned	Bachelor	212	75.7
		Education diploma	38	13.6
		Master	28	10.0
		PhD	1	.4
		Other	1	.4
Q9	Description of the centre	full-time school	26	9.3
		a place for a group of gifted students to learn a specific curriculum part time	164	58.6
		a place for a group of gifted students to practise extra activities part time	49	17.5
		a place for a group of gifted students to learn a specific curriculum at week-end or in summer	13	4.6
		a place for a group of gifted students to practise extra activities at the week-end or in summer	17	6.1
		other	11	3.9

Gifted students' programs are not available at all levels of schooling. They commence in the latter three years of elementary school according to 88.9% of the respondents and even later in some districts; regrettably, this may preclude the opportunity to educate these students at an earlier age. But 9.3% of the respondents indicated that the gifted program commenced in the early grades of primary school.

As indicated previously, there were mixed responses from teachers regarding the supply of equipment and resources to the centres, which suggested uneven implementation of the policy. Another critical factor in successful gifted education is the necessity to have well-trained, knowledgeable and committed teachers. Such teachers are usually chosen from mainstream schools to work in the centres because there are no specialist teachers currently in Saudi Arabia since tertiary educational institutions have not yet provided such special education. Thus, any teacher now working in centres would have to participate in in-service training in the field of gifted education and this is the responsibility of the gifted centres.

The responses to question 16 in the staff questionnaire indicate that 87.5% have not completed a specialization course on working with gifted students, whether at college or university. A total of 80.4% of teachers do not have a degree in gifted education, although many said that they received a workshop or on-the-job training within the centre or outside the district. Finally, 9% of the gifted teachers at the centres reported that had not received any type of training at all.

It is apparent from this outcome that centres are not accepting their responsibility to have well-trained staff. When asked to rate the adequacy of their training in gifted education, almost half the staff believed that it was average. Moreover, question 18 of the staff questionnaire asked the participants to comment on the need for additional training. Most respondents (89.6%) agreed that the teachers needed additional training to help them meet the needs of gifted students while 4.6% of this group disagreed and 5.7% remained unsure.

Furthermore, question 19 of the staff questionnaire asked the participants to define the kind of additional training that teachers need to enhance their teaching of gifted students. The majority of respondents indicated that they needed specialist undergraduate (36.8%) or postgraduate degrees (42.9%) to be appropriately qualified and able to teach the gifted students. Twenty percent of the respondents believed that a short course following their degree or visits to exemplary programs would be sufficient to enhance their teaching effectiveness with gifted students.

Question 20 of the staff questionnaire asked the participants how the supervisor of the gifted centre is selected. Most of the participants responded that the supervisors were selected to work in gifted centres according to their qualifications and experience. The majority (58.2%) of the respondents indicated that qualifications were pre-eminent and 68.9% nominated experience as a selection criterion.

Question 21 of the staff questionnaire asked the participants how the centre's teachers were selected. The majority of the participants indicated that the selection of teacher candidates for positions at the centre were based on a combination of qualifications (64.6%), experience (57.1%) and judgements of their pedagogical and creative excellence (70%). While this indicates that the method of nomination and selection of teachers for the gifted centres is conducted in accordance with the policy's established criteria, it does not mean that those selected are the best-trained or most appropriate to work with gifted students. This is because their qualifications, experience and pedagogical skills are relevant to general education rather than specific to gifted children.

Question 22 of the staff questionnaire asked the participants their views on the minimum educational qualifications the teacher should have. From the result of this question, it is evident that more than 85% of respondents indicated that the minimum qualification of a teacher should be a bachelor's degree. The remaining respondents believed that higher qualifications were necessary.

Question 23 of the staff questionnaire asked the participants whether an acceleration system was utilised in the district because it is considered one of the effective means for catering for the needs of gifted students, and is well supported by research evidence (see Chapter 2). Acceleration was not widely evident in the centres as revealed in the 77.5% negative response; 6.4% of this group reported that acceleration was utilised and 16.1% remained unsure. Furthermore, Question 23.1 of the staff questionnaire asked the participants what kind of acceleration procedures applied. This question continues from the previous question and, not surprisingly, very few teachers responded. Where acceleration was used, it predominantly consisted of accelerating students into the next level of work (4.6% of total sample), early admission into the first grade of elementary school (0.7%), or some other unspecified form of acceleration (1.1%).

Such discussion naturally leads to Question 24 of the staff questionnaire, which asked the participants about the type of curriculum offered for gifted students as the curriculum offered to gifted students is critically important in this field. The majority (69.3%) of respondents indicated that there were some specially-designed curricula for gifted students in place at the centres, while a further 17.5% reported that there was a modified curriculum of the mainstream curriculum; however, 13.2% of the staff participants responded that there was no differentiated curriculum on offer in the gifted centre for the gifted students. Again, this finding illustrates the sporadic and uneven nature of the provisions for gifted students across the districts in Saudi Arabia.

Question 29 of the staff questionnaire asked the participants whether the selection method that was used in the school to nominate gifted students to the gifted program in the centre was appropriate. The results indicated that 48.9% of respondents believed that the selection procedures utilised to nominate the gifted students were appropriate; 26.1% believed that the selection procedures were not appropriate and 25.0% remained unsure. This result will be discussed further under procedures for selection of students.

Question 30 of the staff questionnaire asked the participants what measures were used by the district to identify gifted students. It is clear from the results that the centres

used a broad range of measures to identify gifted students. The measures that were most frequently used in identification of giftedness, however were IQ tests, teacher rating scales and teacher nomination. The usage of these measures according to the participants' responses was 80.7% for IQ testing, 60.4% for teacher rating scales and 77.5% for teacher nomination. Full results are displayed in Table 4.5.

Table 4.5 The measures used by districts to identify gifted students

	Selection procedures	*Yes*		*No*	
		Count	%	Count	%
Q 30	identify gifted by IQ test	226	80.7	54	19.3
	identify gifted by achievement test	122	43.6	158	56.4
	identify gifted by creativity test	71	25.4	209	74.6
	identify gifted by teaching rating scales	169	60.4	111	39.6
	identify gifted by student products / portfolios	110	39.3	170	60.7
	identify gifted by student interview	35	12.5	245	87.5
	identify gifted by teachers' nomination	217	77.5	63	22.5
	identify gifted by parents' nomination	80	28.6	200	71.4
	identify gifted by peer nomination	32	11.4	248	88.6
	identify gifted by students' self-nomination	37	13.2	243	86.8
	not sure	2	.7	278	99.3
	identify gifted by other means	21	7.5	259	92.5

Staff Interviews

Ten staff members were interviewed to gain additional insights into the kind of academic and educational services that the gifted centre offered its enrolled gifted students. All ten of the respondents described the programs provided for the gifted as enrichment courses. However, many of them defined enrichment in ways that differ from the literature (see Chapter 2). The staff participants indicated that enrichment programs were created by making choice of some subject matter taken from the normal

mainstream curricula. According to all the interviewees, no other specialised programs were specifically provided by the gifted centres.

Some attention was given to the social and emotional aspects of the education of the gifted students. For example, one supervisor working in a centre reported that "there is an ancillary service provided in [his] centre to support a gifted student, which included counselling and a preparation and orientation program to overcome any anxieties felt by potential students. It is a form of socialization". Another female supervisor commented that "there is an extra program provided for gifted girl students, which is called thinking-learning training so that the students learn different analytical strategies to help in avoiding the more traditional rote learning methods of normal mainstream classes. This allows the students to demonstrate their giftedness and skills in an enrichment program, whether in the school or a centre". This would indicate that, while the content of the curriculum was similar to the mainstream, there was some differentiation at the level of processes, at least for some gifted students.

The interviewees were also asked about the nature of the relationship between the gifted centre and the parents after enrolling their children in the program. Nine of the ten interviewees stated that the relationship between parent and the gifted centres was not smooth, although teachers from the centres, both male and female, were recognised as trying to bridge this gap. In contrast, one interviewee said that the relationship between the two groups was good. One of the centre directors explained that “We feel we are in quarantine from the culture of Saudi Arabian society. The reason for this is that the parents do not have the capacity to maintain contact with centres to keep a cordial relationship. From our side we are trying to improve the link.” In addition, he said, “It may be that the parents have not sufficient conviction to come to the centres and improve the relationship despite our offer of a firm welcome to them. We want to maintain a harmonious and co-operative relationship.”

Another one of the interviews stated: “We tried to organize an annual meeting for the parents to explain all centre activities in order to win the trust of parents and their co-

operation in the development of their children's giftedness." This interview refers to the strong opposition from a certain number of parents towards accepting their children's participation in the centre's program. One participant explained such opposition by saying that "Parents were worried that participation would impact negatively on their children's achievement in the normal school."

In response, the centre director stated, "We visited some parents in their homes to explain that the children's participation in the gifted centre programs was important. Equally important was co-operation from the parents in caring for their children which would confirm that their children's participation would not have a detrimental impact on school performance."

To summarise, nearly all interviewees agreed that there were some issues in the relationship between parents and centres that represented a weakness in the effectiveness of the gifted centres meeting the needs of their gifted clientele. Perhaps this is due to the lack of parental conviction about the efficacy of gifted centre programs or the fact that the parents had not witnessed any obvious achievement in their children because of these programs. The severity of this problem impacts on the provision of gifted programs on Saudi Arabia because the success of such programs is interconnected with every player being linked in the equation of gifted education.

A related issue that was raised in the interviews was the relationships between the gifted centres and their local community and concerned institutions, including schools. A proportion of respondents indicated that there was a major structural weakness in the relationship between Saudi Arabian society and the centres. The centres cannot strengthen this weak link because they cannot provide sufficient equipment and support to indicate just how valuable gifted centres really are and to convey the importance of their message that all sectors of Saudi Arabian society need to be involved in such activities.

One participant reported that "we organized a scientific meeting to try to explain the centre's vision but received no response from either the government or private sector even though some persons in both sectors had actually been involved in providing service to gifted centres." Again, all participants confirmed the inadequacies of the relationship between society at all levels with gifted centres. In fact, sometimes there existed simply nothing that could be defined as a connection.

This result is not so strange because the relationship between parents and gifted centres is weak; therefore, at a one-step remove, the relationship between the wider Saudi Arabian society and the gifted centres is even weaker. That this is so is in itself a metaphor whereby society reflects a general indifference towards gifted students and their education.

This finding is of critical importance, revealing how large a problem this is for gifted education in Saudi Arabia. The staff views suggest that gifted centres are suffering in Saudi Arabia because the centres cannot completely carry the responsibility of wholly handling the gifted as this finally rests on total co-operation between all segments of society. In the end, if this co-operation does not occur, therein lies the failure of society to recognise the importance of giftedness in Saudi Arabia.

Students' perspectives

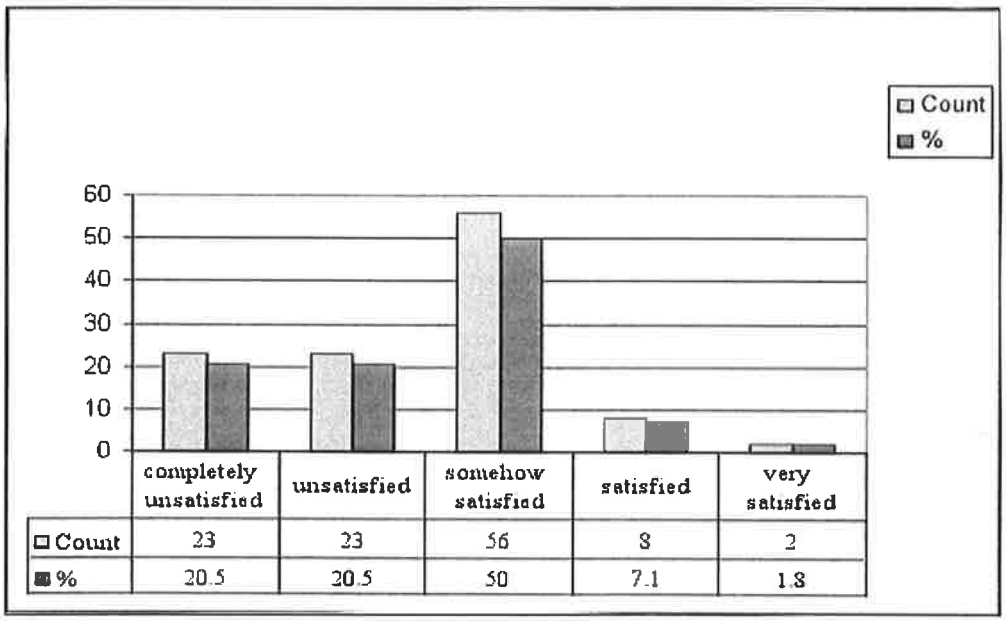
As indicated previously, the students indicated that there were differences between their schools and the gifted centres in terms of resources, teacher quality and effectiveness, and curricula. However, the results were highly variable and there was a relatively large of unsure responses for each item. This suggests that there is a great deal of variability in these areas across the districts in Saudi Arabia.

Parents' perspectives

To gauge parents' satisfaction with the gifted program their children were receiving, the questionnaire posed two questions. Question 7 of the parent questionnaire asked

the participants whether their gifted child was enrolled in any gifted program. In response, 89.3% of the parents indicated that their child was enrolled while 10.7% indicated that their child was not enrolled. The parents were asked to specify the kind of program in which their child was enrolled. Interestingly, more than half the parents indicated that their child was involved in a gifted program at their school (59.8%) and only 23.2% of the respondents indicated that their child was enrolled in the gifted centre program. This is an interesting finding as the Ministry policy on gifted education led to the establishment of the gifted centres as the primary means for catering to their needs. This finding reinforces the reluctance that some parents have in enrolling their children in the gifted centre because all the parents who took part in the survey were selected because their child had been selected to attend the gifted centre.

Question 8 of the parent questionnaire asked the participants how satisfied they were with what is being offered to their gifted children in the program in which they were enrolled. As indicated in Figure 4.1, there are not high levels of satisfaction with over 90% of parents indicating a moderate level of satisfaction or dissatisfaction.



	completely unsatisfied	unsatisfied	somehow satisfied	satisfied	very satisfied
Count	23	23	56	8	2
%	20.5	20.5	50	7.1	1.8

Figure 4.1 Parents' level of satisfaction with the gifted program offered

Question 14 of the parent questionnaire asked the participants to rate the components that they believe have the most effect (family; school; family and school; gifted centre; and, all of the above) on developing gifted students. They were asked to rate the components using a scale ranging from 0-5, with 0 representing unsure, 1 representing very important and 5 not at all important. As indicated in Table 4.6, participants agreed that all components were involved in the development of their children's giftedness to varying degrees. The relative ambivalence in terms of the importance of the gifted centre in developing giftedness is not surprising, given the number of parents who indicated that their child attended the gifted centre.

Table 4.6 Source of the greatest effect on the development of gifted students

	Source of influence		*0*	*1*	*2*	*3*	*4*	*5*
Q 14	Family	Count	27	32	22	12	9	10
		%	24.1	28.6	19.6	10.7	8.0	8.9
	School	Count	26	7	23	28	21	7
		%	23.2	6.3	20.5	25.0	18.8	6.3
	Both the family and school	Count	29	20	20	24	13	6
		%	25.9	17.9	17.9	21.4	11.6	5.4
	The centre for the gifted	Count	29	20	20	24	13	6
		%	26.8	10.7	16.1	15.2	23.2	8.0
	All of the above	Count	21	51	1	4	35	26
		%	18.8	45.5	.9	3.6	31.3	23.2

Question 18 of the parent questionnaire asked the participants whether it was preferable to have gifted students enrolled in special full-time schools in order for them to succeed. More than half of the respondents (58%) indicated that having gifted students enrolled in special full-time schools was appropriate for success in their gifted program. However, a third of the parents (29.5%) indicated that full-time special schools were not necessary and a further 12.5% indicated that they were unsure. This result suggests some parental concern about the part-time nature of the program that has been provided by the centres and may be one of the reasons that more parents support the school's curriculum. As presented previously, the parents indicated a

preference for full-time programs, with 34.8% suggesting that enrolling gifted students in full-time schools was the most appropriate approach, while another 34.8% wanted them enrolled in full-time special centres.

Selection of Gifted Students

Staff perspectives

Question 27 of the staff questionnaire asked the participants to indicate their support for statements that described the selection system of gifted students in the gifted centre. These statements were adopted for this study and were based wholly on the NAGC standards. The participants responded to a five-point scale, ranging from strongly disagree (SD) to strongly agree (SA). For most of the modified NAGC-standard statements, the responses from the staff indicated agreement with the procedures used in the identification of gifted students for the gifted centres, although a reasonably-sized percentage of the respondents remained undecided on all items (range from 7.5% to 35.4%). The items on which there was clear agreement from a significant number of participants included the existence of a definition of giftedness (89.3%), the use of multiple selection procedures (83.2%), the selection methods matching the centre's targets and educational programs (80%), the availability of nomination forms in schools (80.7%), selection tools are administered by a specialist trained in measurement techniques (83.9%), and the centre defines cut-off scores for selection (76.8%). The responses would indicate that these standards are practised widely across the districts in Saudi Arabia.

However, there were several standards where there was a marked spread across all possible responses or where there were relatively large percentages of participants selecting 'unsure' — for example, the reliability of tools used and their usefulness with low achieving students. These mixed responses suggest, again, variability in practices across the regions in a number of procedures considered important by the NAGC. The full details on the responses of participants to the selection standards are displayed in Table 4.7.

Table 4.7 The selection system of gifted students in the centre

Q		*Selection Standards*		*SD*	*D*	*U*	*A*	*SA*
27	1	The centre adopted a definition of gifted students	count	1	8	21	142	108
			%	.4	2.9	7.5	50.7	38.6
	2	Uses multiple procedures in selection	count	1	16	30	118	115
			%	4	5.7	10.7	42.1	41.1
	3	The tools used were developed specifically for the centre	count	13	20	70	112	65
		functions	%	4.6	7.1	25.0	40.0	23.2
	4	Tools used have high reliability	count	9	37	99	95	40
			%	3.2	13.2	35.4	33.9	14.3
	5	Tools reflect the centre targets and its educational	count	5	18	91	129	37
		programs	%	1.8	6.4	32.5	46.1	13.2
	6	Tools reflect the centre targets and its educational	count	1	17	38	141	83
		programs	%	4	6.1	13.6	50.4	29.6
	7	The selection system is effective with low achievement	count	16	38	89	101	36
		students	%	5.7	13.6	31.8	36.1	12.9
	8	The school achievement rate for the nominated students	count	9	54	60	107	50
		should have specific limit	%	3.2	19.3	21.4	38.2	17.9
	9	Decisions of the selection are taken by a specialist	count	8	38	39	136	59
		committee	%	2.9	13.6	13.9	48.6	21.1
	10	An annual awareness campaign of the selection system was	count	23	63	57	100	37
		organized	%	8.2	22.5	20.4	35.7	13.2
	11	Decisions for selecting those students who were on the cut-	count	22	67	92	77	22
		off scores based on case study	%	7.9	23.9	32.9	27.5	7.9
	12	Distributed nomination forms for enrolment in all targeted	count	3	12	39	123	103
		schools	%	1.1	4.3	13.9	43.9	36.8
	13	Reviews and evaluates the system of selection on a regular	count	10	23	84	114	49
		basis	%	3.6	8.2	30.0	40.7	17.5
	14	There is a specialist trained in measurement technique to	count	5	15	25	111	124
		apply the tools	%	1.8	5.4	8.9	39.6	44.3
	15	The centre defines cut-off scores for selection	count	6	10	49	107	108
			%	2.1	3.6	17.5	38.2	38.6

Question 29 of the staff questionnaire asked the participants whether the selection methods used with the gifted students were appropriate. The responses showed that almost half the respondents (48.9%) agreed that the selection method was appropriate. However, 26.1% reported that the selection procedures were not appropriate and 25%

reported that they were unsure. Again, this finding signals variability in practice and knowledge across the regions in Saudi Arabia.

As indicated in the previous section, question 30 of the staff questionnaire asked the participants which measures were used by the centres to formally identify gifted students. The responses indicated that predominantly three methods were used, which were IQ tests (80.7%), teachers' rating scale (60.4%) and teachers' nomination (77. 5%). These limited selection procedures are in contradiction to the points raised in the literature of the need for a great variety of selection means when assessing gifted students. IQ tests were the preferred choice whereas wider readings consider IQ as only one possible instrument.

Staff Interview

The interviews with ten staff members examined the specific definition of the notion of talent and giftedness used in the districts and whether the identification means matched this definition. Opinions on this question were divided with a variety of responses. A small number of interviewees confirmed that there was a definition of giftedness that could be correlated with the tools of measurement used to identify the gifted (n=3). Other respondents responded that they did not follow any definition specifically but agreed that it formed a framework that could define the components that would measure the student through such components. In fact, these components would define giftedness or otherwise (n=5). However, the measurement's tools were the final arbiter of giftedness. Therefore, if a high score was achieved on the Wechsler Test or the Torrance Test then these were the criteria to place a student in a gifted program.

Another tool was to look for creative results from the student in specialist subjects, such as mathematics, physics, chemistry and so on, that help teachers identify a student for a gifted program. They added, however, that some students performed very well on a measurement test but failed to succeed in specialist enrichment subjects like mathematics or science courses. Because of this apparent contradiction, the Ministry of

Education tried to focus on programs that were more targeted enrichment programs rather than comprehensive enrichment programs. This meant a focus on specialist subjects suited to the particular talents of the gifted students, or in other words, an emphasis on quality rather than quantity in the Ministry of Education programs.

Two respondents voiced their concern with accepting a single definition. Rather they believed that it was necessary to delve beneath a surface definition and answer such questions as: What do we want? Who is the target group? What equipment is available? What are the expected outcomes? Pursuant to responding to these questions a definition can then be refined according to actual needs. One interviewee commented: "In fact, an educational specialist has indicated that there are more than 150 definitions of giftedness according to these questions. What is necessary is to adopt and adapt these to a Saudi Arabia education setting." He went on to say that "the use of the American Psychologists Association (sic) definition of giftedness, which includes IQ test, Creativity, general and special Ability [should] be modified to suit Saudi Arabian conditions."

Another speaker stated that one of the indications used in their program was the student's record of the previous four years of high achievement as well as creative output and teacher nomination. He was critical of this procedure and particularly emphasized that "teacher nomination was unprofessional because teachers were not trained to recognize the qualities and characteristics of giftedness and often resorted to favouritism or parental pressures".

The selection procedures used to determine gifted students varied from district to district, according to one respondent. He said: "This may be due to ignorance of measurement tools or over-application of such tools because of the lack of specialists in the measurement of gifted students. And also [the] lack of clear direction and oversight by the Ministry of Education in ensuring equitable and consistent application of such measurement."

It can be concluded from the significant differences in response, that the failure to be consistent in applying the same measurements in all the districts, both in the male and female centres, may have resulted in the loss of gifted students who have not been recognised. A student may have been selected in one district but fail to be recognised in a neighbouring district because different procedures are used. This also represents a failure in implementing equity in the systems adopted.

The researcher queried whether the identification data were placed at the disposal of the teachers to be used in meeting the needs of the gifted students selected. Three interviewees indicated that identification results were provided to the teachers so that they would know the outcomes and so provide appropriate training for the gifted (n=3). However, the remaining seven interviewees indicated that there was little point in providing results to teachers because there were no specialist teachers able to interpret these results and design a program appropriate to the needs of the gifted students based on the test data.

There were also some concerns expressed about the privacy of the individuals. One female participant stated, in reference to the test data, that "this result is confidential and should not be publicly available but the director who does know the outcome in the gifted program can indicate some of the parameters that a program might be for the students in that centre". Another supervisor of the centre said that "a teacher would not know the results because the gifted students do not stay a long time in the centre, but instead I would give a teacher an indication of what the teacher should provide in specific subjects that enhance their enrichment."

It is obvious that there is a lack of confidence still amongst the management of the identification programs of students within centres. Perhaps these results derive from the measurement tools utilised and also the absence of knowledge about implementing and judging the measurement processes. There is no clear vision or approach in the centres of how to use the right instruments, indicating a major structural weakness in the current system.

Students' perspectives

Question 2 of the student questionnaire asked the participants who first discovered their giftedness. There was a divided response about who first discovered the giftedness in an individual, whereby 49.9% indicated that such discovery occurred with the gifted program supervisor in the school. This was followed by a second category where 27.5% of parents made the initial discovery; fewer responses were obtained for the categories of a class teacher (14.1%), a classmate (3.4%), and other sources that totalled 5.4%.

Question 3 of the student questionnaire asked the participants at what stage of their schooling that their giftedness had been identified and 69.1% of students indicated that it had occurred in the last three years of primary school and 2.7% indicated that it was in middle school. Given the need to identify giftedness as early as possible, this statistic is disappointing as it meant that the first three years of elementary school ay have been wasted for these students in terms of more closely meeting their needs. It is somewhat encouraging that nearly 30% of the students were identified as gifted at an earlier stage of their schooling, with 19.5% indicating that they were selected in the first three years of elementary school and a further 8.7% reporting that they were identified as gifted prior to starting elementary school.

Question 6 of the student questionnaire asked the participants by which criteria gifted students were identified. According to the student respondents, there were predominantly three tools used to select their giftedness, including IQ tests (64.4%), special abilities (63.8%) and teacher nomination (50.3%). The remaining six measurement tools were rarely used. This outcome mirrors the results of the staff questionnaire discussed earlier.

Question 10 of the student questionnaire asked the participants whether they were informed of the purpose and nature of the identification measures before taking the

identification test. For most students this did not occur as 30.9% of the participants indicated they had been given this information while 69.1% indicated that they were unaware of the purpose and nature of the procedures. The low level of awareness by students of the identification measurement purpose and procedures may have influenced student performance and possibly have had a negative impact, with the final outcome of on-identification of some gifted students.

Question 11 of the student questionnaire asked the participants whether they were nominated first by the school or the centre. The responses show that 81.9% of the students indicated that the school was the source of nomination, while 13.4% of the students indicated that they were first nominated by the centre.

Question 12 of the student questionnaire asked the participants about the measures adopted by their school to nominate gifted students. About half (54.4%) of the respondents indicated that teacher nomination was the primary tool used by their school to nominate them for entry into the centre gifted programs. Moreover, 32.9% reported that school grades were utilised. The remaining students selected other forms of nomination as can be seen in Table 4.8. The issue for Saudi Arabia in these results is that these forms of nomination have proved problematic according to Ministry of Education senior personnel (Ahamad, personal communication, July 5, 2007). In addition to the advice of senior Ministry personnel, the researcher's own experience of 35 years working for the Ministry of Education suggests that there is a lack of reliability in the selection process relying so heavily on teacher nomination and school grades. It has been widely reported to the Ministry that some students who have been nominated by their teachers in the schools, subsequently have failed to reach the IQ cut-off required (Ahamad, personal communication, July 5, 2007). Where students were allowed to enter the centre directly from teacher nomination, many have been unable to cope with the work and returned as "failures" to the schools after having dropped out of the centres (Ahamad, personal communication, July 5, 2007). Again, there is variability across the regions in how students are nominated, selected and then matched to an appropriate program in the gifted centre.

Table 4.8 The measures adopted by the school to nominate gifted students

	Question	*Responses*	*Count*	*%*
Q 12	The measures adopted by school to nominate you for the Gifted Program	Teacher's nomination	81	54.4
		Outstanding grades in school	49	32.9
		School nomination	14	9.4
		The nomination of a relative of mine who works at the school	1	.7
		The nomination of one of my classmates, who joined the program first	1	.7
		A personal desire and self-nomination	3	2.0

Parents' perspectives

Question 3 of the parent questionnaire asked the participants when their child was first diagnosed as gifted. More than fifty percent (53.6%) of the parent participants indicated that their children's giftedness was detected in the final three years of elementary school which confirms the similar finding in the student questionnaire discussed earlier. But a number of parents also indicated that this occurred earlier with 15.2% reporting that their child was identified in Kindergarten and another 28.6% reporting that their child was identified in the first three years of elementary school.

Teachers' selection and training

Staff perspectives

Question 15 of the staff questionnaire asked the participants whether they supported the statements of the NAGC as modified for the context of the selection system of teachers to work in the gifted centre. The results (see Table 4.9) overall demonstrated the participants' agreement with the procedures used to select and train gifted teachers in the gifted centres. For most items, the level of agreement was in the 65% to 90% range. Variations to this agreement patter pertain to items 3 and 7. Item 3 was a negative item – namely, "Teachers are selected according to social relationships with the officials at the centre" – and therefore, the level of disagreement with such a statement is heartening. Item 7 concerned the educational qualifications of the

teachers, with the results showing that fewer than 30% of respondents agreed that the staff at the gifted centres possessed higher educational qualifications. A review will occur later in the staff interview analysis of their perspective on the procedure for teacher selection and training to confirm this outcome.

Table 4.9 Procedures associated with teacher selection and training (modified from the NAGC Standards)

	Q 15: Standards		*SD*	*D*	*U*	*A*	*SA*
1	Teachers are selected according to clear criteria	count	6	23	41	106	104
		%	2.1	8.2	14.6	37.9	37.1
2	Teachers are selected by a committee of experts and specialist	count	17	34	53	113	63
	educators	%	6.1	12.1	18.9	40.4	22.5
3	Teachers are selected according to social relationships with the	count	87	84	59	32	18
	officials at the centre	%	31.1	30.0	21.1	11.4	6.4
4	Teachers enrol in a training program in the care of gifted	count	2	22	39	107	110
	students before they are assigned to the centre	%	7	7.9	13.9	38.2	39.3
5	Teachers enrol in a variety of training programs after joining	count	4	5	33	139	99
	work at the centre	%	1.4	1.8	11.8	49.6	35.4
6	Most teachers at the centre are full-time	count	5	13	34	85	143
		%	1.8	4.6	12.1	30.4	51.1
7	Teachers in the centre obtain high educational qualifications	count	44	85	69	55	27
	(high Diploma, MA)	%	15.7	30.4	24.6	19.6	9.6
8	Teachers go through supervision, guidance and periodic	count	2	13	48	129	88
	evaluations	%	.7	4.6	17.1	46.1	31.4
9	Teachers follow descriptive written instructions in their job for	count	8	18	66	120	68
	tasks required	%	2.9	6.4	23.6	42.9	24.3
10	Teachers use a variety of methods in evaluation of students'	count	9	28	65	133	45
	achievement (such as tests or others ...)	%	3.2	10.0	23.2	47.5	16.1
11	Teachers participate in the development of educational units'	count	13	45	78	109	35
	enrichment through the regular school curriculum	%	4.6	16.1	27.9	38.9	12.5
12	Teachers are fully aware of the characteristics, needs and	count	5	21	80	121	53
	problems of gifted students	%	1.8	7.5	28.6	43.2	18.9
13	Teachers are committed to have parents participate in the	count	4	37	77	125	37
	centre activities	%	1.4	13.2	27.5	44.6	13.2
14	Teachers are well oriented in how to use the computer	count	1	3	37	128	111
		%	.4	1.1	13.2	45.7	39.6

Question 16 of the staff questionnaire asked the participants about the teacher training in gifted education they had received and 91.8% of respondents indicated that they had received no specialised teacher training of any kind. Further, 80.4% indicated that the teacher did not receive even a short course on giftedness in their initial degrees at college or University. Additionally, 80.4% indicated that it was not possible to obtain a degree in gifted education. These results suggest potential weaknesses in teacher preparation and training to work effectively in the gifted centres. This has implications for how well the teachers can cater to their gifted students in the absence of systematic and specialised training.

As indicated previously, question 17 of the staff questionnaire asked the participants to what extent their general training had adequately prepared them to teach gifted students. The majority of respondents indicated that they were poorly or moderately trained to teach gifted students, which indicates that centres still have a great deal of scope to professionally develop their staff. This was reinforced by the finding, discussed earlier, that 89.6% of staff indicated the need for additional training to assist in their daily educational tasks with gifted students.

Staff Interview

The staff interviewees were asked measures were being followed in selecting teachers, and what kind of training courses, if any, were offered. Participants in the interviews defined the selection processes for teachers of the gifted as follows:

> *No measures exist to uniquely select teachers either from the Ministry of Education or within the centres themselves (N= 3);*
> *Some measures exist but come from the centres themselves and are regarded as inadequate in choosing outstanding teachers able to work with highly gifted students;*
> *Due to the lack of overall control, teachers have slipped through the system and are teaching the gifted while lacking any serious qualifications or experience with such a group, many of whom come straight out of university*

and lack any prior professional background in gifted education. They have no appropriate training. Worse, a number has no knowledge of the concept and nature of gifted education (N=2).

A female supervisor commented: "There are measurement tools from the Department of the Gifted in the Ministry of Education, which included graded levels relating to personal characteristics, academic qualifications, experience, and training including some other considerations. After that we provide for the nominated teachers intensive training courses in areas of gifted education."

Another supervisor stated: “There is no specific measurement either from the Ministry of Education or the centres but rather assessment depends on the experience and vision of workers in the centre.” In addition, he mentioned that “the selection caused huge problems such as the Ministry of Education’s failure to employ specialist teachers and the requirement of twenty four hours per week of input by teachers to this group did not occur. As well, there is no encouragement to these teachers to undertake such specialist work. As a result, when we select teachers from any school, unfortunately, because of their employment conditions, they continue to be assessed as teachers within the school and not the centre. Thus, their loyalties remain with the schools.” In another interview, it was stated that “many teachers nominated themselves to work in centres but they lacked commitment to respond to the rigorous responsibilities that gifted teaching entailed, despite even getting appropriate training and awareness of such obligation to gifted students and the nature of gifted education.”

Some centre directors indicated that “there is no complete program in Saudi Arabia to prepare gifted teachers which includes scientific subjects, teaching strategies and measurement tools to specifically prepare teachers to be able to work with gifted students and meet their needs.”

It is clear from the above responses that a review of the selection procedures is vital in preparing gifted teachers because such selection is the major component of any gifted

program. It appears that there is no systematic control from the Ministry of Education or the centres with the result there is no official recognition of the efforts of current practising teachers in accordance with mainstream thinking about gifted education. Hence, at the moment teachers of the gifted are not developing Saudi Arabians to their full potential. The Saudi Arabian Ministry of Education, thus, faces huge difficulties because it is not able to systematically approach and plan for gifted education delivery to all centres in a consistent fashion.

The curriculum

Staff perspectives

As previously indicated, question 24 of the staff questionnaire asked the participants whether there were specific curricula offered to the gifted students in the centre. The results showed that 69.3% of respondents indicated that there were some special curricula in place at the centre, 17.5% indicated that there were modified versions of mainstream curriculum, and 13.2% reported that there were no differentiated curricula offered to the gifted students in the centre.

Question 25 of the staff questionnaire asked the participants their level of agreement or disagreement with a number of statements related to the curriculum enrichment provided for gifted students in the gifted centre. For each statement, the most popular response was agreement (see Table 4.10). The items that received high levels of agreement (defined as above 75% for Agree and Strongly Agree combined) were those that described an enrichment curriculum as one that included knowledge and skills beyond that covered in the regular curriculum for average students (82.8%); high level thinking skills (82.5%); self-directed activities that develop research skills (80.3%); and, flexibility (81.1%). This indicates that these characteristics of an enriched curriculum are generally well understood by the staff. The remaining statements, however, attracted moderate levels of support, which indicates greater variety in the depth of knowledge across the respondents and the regions of Saudi Arabia. What is of

particular concern is the relatively high proportion of respondents who indicated they were unsure, which reinforces the inconsistent level of knowledge across the districts.

The later analysis of staff interviews will illustrate whether this result is reflected in the practices at the centres or not.

Table 4.10 Enrichment curriculum for gifted students

Q 25	*Characteristics of Enriched Curriculum*		*SD*	*D*	*U*	*A*	*SA*
1	Enrichment curriculum is a complement to as well as an extension of the regular curriculum.	count	23	69	51	95	42
		%	8.2	24.6	18.2	33.9	15.0
2	Enrichment curriculum identifies skills and knowledge which gifted students should learn at the centre and which is not possible to learn through the study of the regular curriculum with ordinary students.	count	4	7	37	144	88
		%	1.4	2.5	13.2	51.4	31.4
3	Enrichment curriculum focuses on a high level of thinking.	count	3	3	43	134	97
		%	1.1	1.1	15.4	47.9	34.6
4	Enrichment curriculum includes self-directed activities and projects as conducted by students to acquire research skills and methods.	count	0	8	47	142	83
		%	0	2.9	16.8	50.7	29.6
5	Teachers participate in the development of the enrichment curriculum because they are more aware of the needs of their students.	count	8	21	53	128	70
		%	2.9	7.5	18.9	45.7	25.0
6	Enrichment curriculum is comprehensive, providing enrichment, acceleration, and extension options.	count	3	11	78	144	44
		%	1.1	3.9	27.9	51.4	15.7
7	Enrichment curriculum is flexible.	count	2	12	39	149	78
		%	.7	4.3	13.9	53.2	27.9
8	Enrichment curriculum long-term aims are specific.	count	5	17	103	113	42
		%	1.8	6.1	36.8	40.4	15.0
9	Curriculum enrichment builds students' skills in a coherent manner.	count	1	10	97	124	48
		%	.4	3.6	34.6	44.3	17.1
10	Enrichment curriculum provides experiences which achieve integration between different academic areas.	count	2	16	91	139	32
		%	.7	5.7	32.5	49.6	11.4
11	Enrichment curriculum achieves integration between the cognitive, emotional and social needs.	count	2	12	72	149	45
		%	.7	4.3	25.7	53.2	16.1
12	Enrichment curriculum contains clear guidance to assist the teacher in its application.	count	4	32	78	129	37
		%	1.4	11.4	27.9	46.1	13.2
13	Enrichment curriculum is evaluated on a regular basis.	count	5	25	97	118	35
		%	1.8	8.9	34.6	42.1	12.5
14	Gifted students are involved in the development of the enrichment curriculum that responds to their needs.	count	9	35	56	128	52
		%	3.2	12.5	20.0	45.7	18.6
15	Enrichment curriculum is characterized as sequential and continuous.	count	5	7	65	142	61
		%	1.8	2.5	23.2	50.7	21.8

Staff Interview

The interviewees were questioned whether teachers participated in developing the enrichment programs that were offered by the gifted centres. All individuals in the interviews confirmed that there was no difference in curricula in the centre from that found within mainstream schools (n=10). However, they all mentioned that the procedures followed to provide appropriate centre curricula contained an element of enrichment, especially in science and mathematical subjects, which deviated from the mainstream delivery.

One supervisor of an enriched curriculum in a centre stated, "We use an approach that is multi-directional, which is both horizontal and vertical in the enrichment curriculum. Although there are no available specialist teachers for these programs, we have tried to provide some training program for these teachers so that they are able to then train other teachers in the schools that choose to apply some curriculum enrichment evening courses for gifted students." Another said, "In spite of such efforts towards the enrichment programs, nevertheless, they do not sufficiently deviate from mainstream curricula to be labelled uniquely courses for the gifted." A female supervisor commented, "We in female education train female teachers to apply different enrichment strategies thus giving the freedom to choose the appropriate subject for a gifted student and thereby adopt an approach that is different from mainstream curricula method. We use this approach because we don't have specialist teachers in the enrichment programs nor do we have any enrichment programs from the Ministry of Education."

From the previous responses, it is clear that in gifted education in Saudi Arabia, much effort is directed towards the scientific subjects in a way that is different from what students learn in mainstream schools. Despite this it is believed the efforts in relation to science subjects are not extended to other areas and therefore are insufficient to challenge the gifted students and provide the skills and opportunities that are appropriate for them. As curricula are considered fundamental to learning in any gifted

program throughout the world, the lack of specialised curricula in the programs in Saudi Arabia indicates a major structural weakness of its provision for gifted students.

Students' perspectives

Question 7 of the student's questionnaire asked the participants about the curricula offered in the gifted program for gifted students at the school or centre. According to 59.1% of participants, there is a specialised curriculum for them as gifted students. This represents only slightly more than half the participants, indicating that there is not a consistent widespread application of differentiated curricula for gifted students across the regions in Saudi Arabia. Other respondents (22.8%) indicated that the curriculum offered a variety of topics to cater to diverse interests but these were conducted during free time at their school. Further, 11.4% indicated that no special curricula or activities offered for the gifted students.

The improvement of provisions for gifted students

Staff perspectives

Analysis of the staff questionnaires, as presented in the previous sections, reveals that there are three major impediments to the provision of a gifted program for gifted students across the regions that is consistent and systematic. The first of these relates to resources. There was a strong indication in the staff questionnaires that the financial resources, which range from the materials provided to the transport of students and adequacy of buildings, were not consistently applied and resulted in some gifted centres not having adequate resources to meet the needs of the gifted students. A second area was the provision of specialist staff. It was agreed by staff that, in the absence of pre-service training, the centres should be providing more systematic training of teachers for work in the gifted centres. Finally, the third area relates to the curriculum with the results showing that there is not sufficient differentiation of the curriculum across all regions.

Staff Interviews

The interviewees were asked what they saw as the biggest problems and obstacles facing the Centre. This question received a clear consensus amongst the participants that gifted programs in Saudi Arabia suffered acutely from many problems. These have had a negative impact on the administration of these programs. According to the interviewees, the following problems exist:

1. There is normally little financial support for this program, and even when some was available, it was always inadequate to wholly fund every activity;
2. There is no special building for these centres;
3. There is no variety of equipment to supplement the programs;
4. There is no flexibility in the system that comes down from the Ministry of Education to accommodate the different performances of centres according to the degree of specialist and experienced teachers;
5. There are no evaluation tools to gauge the success or otherwise of the gifted programs equitably; and,
6. The principals and teachers appeared to lack conviction about meeting the needs of these gifted students or to promote a vision about them to the wider Saudi Arabian society. Indeed they evinced a complete lack of co-operation in dealing with all other interested parties.

One of the supervisors mentioned that "there are huge gaps between the Ministry of Education advice about the provision of gifted education and the centres' vision of what form this should take." He was specifically referring to his centre which happened to be the first of its kind. He spoke from his considerable experience, which was based on his knowledge as an educator in a strong and well-recognised institution for the gifted. He added that "the important problem we faced is that there is no particular financial support to the centres according to my knowledge of the Ministry of Education. There is no special category of monies allocated or broken down into resources for the gifted programs in general. Thus, we base our activities on the small allocation of funds given by my district department which is a sub-organisation of the

larger Ministry of Education. These funds are linked, alas, to the degree of vision or conviction about gifted education held by the provincial director."

One female supervisor remarked that "the greatest problem we suffer in the gifted program is that there are no qualified staff that can provide value or effort to care for female gifted students. Another problem, as well, is the inflexibility of the system that does not give us sufficient opportunity to deal with the gifted in line with the experience of these children coming out of other countries and which are leading the way in gifted education."

One interviewee responded quite strongly with the comments that it was detrimental that there was "the total lack of conviction about the value of gifted education held by all supposedly interested parties from the centre directors, the teachers, the principals and District Officers right up to the Ministry of Education itself." Another mentioned that "this lack of a compelling belief was the largest obstacle facing the development and growth of the programs and their success in the future while these blockages remain. This is because there is a type of cultural illiteracy amongst relevant officials and a lack of will power in furthering the objectives of such programs. Furthermore, we are at the coalface and suffer from such blurred vision and lack of tangible cooperation, and as a result, the outcomes are tragic because of the loss of these gifted students due to the ignorant mind-set of all concerned. Sadly there is no positive solution to drive the program in the right direction to achieve all its potential."

The interviewees were asked, also, whether the activities and events they offered at the centres were regularly assessed. The respondents answered in the positive and added "but there is a variety of evaluation and procedures" as follows:

1. The evaluation conducted through the measurement of outcomes of gifted participants - but such methods lack reliable tools to achieve adequate results; the other measure was the outcome from teacher reports on the level of satisfaction of program administration and results (N=7).

2. The annual and final reports prepared by teachers and supervisors were another evaluation tool. The participants in the group interview said that "there is no way to evaluate the gifted centre program that could be reliable and that a final decision was not possible to estimate the value or otherwise of the program." They added that "the total outcome was that the personal conviction of teachers differ from teacher to teacher due to qualifications, equipment availability and experience in the evaluation process such as questionnaire development, thus impacting on whether the program for the gifted should be modified or not."

One female supervisor said that "we completely based the evaluation on the teachers' reports that were prepared every session according to the forms specifically developed for this purpose". She added also "this report was beneficial but the problem was the result did not truly reflect practice of the program in a way that could be helpful in how to modify or adapt the gifted program."

The summary of the above opinions was that there was no substantive annual evaluation that would appropriately examine the gifted centres in a way that could have a positive improvement for future delivery.

Finally, the interviewees were asked for any proposals to improve the work of the gifted centres in the Kingdom of Saudi Arabia. All respondents put forward some suggestions for future development of centres and these are as follows:

1. Objectives for the gifted program should be clearly defined by the Ministry of Education. One supervisor said that "we haven't ever known exactly what was the definition of giftedness that the Ministry of Education proclaimed. Hence there is no specific objective to focus on so we work haphazardly in many directions which has a detrimental effect on performance and outcome."

2. There is a need to provide enough financial support for these programs. One Director of a centre opined that "the Ministry of Education should define one category in the budget under the nomenclature of the gifted program. If this happens, it will support gifted education and point towards long term success." He added that "this did occur only when a residue remained from other Ministry of Education budgets and this penurious amount was then directed at the gifted. As a result such piecemeal efforts did not allow for long term planning simply because of such unpredictability."

3. There is a need to specifically define a category of teacher of the gifted as an official employee of the Ministry of Education responsible for this section of gifted teaching because it will be more attractive to potential university graduates and an added encouragement to push students into this specialisation at tertiary study level.

4. There is a need to provide specialists in measurement and evaluation as this is critical to centre provision of such tools and their appropriate application.

5. There is a need to develop measurement tools through review and refinement rather than continuing to use decade-old measurement instruments.

6. There is a need to provide training programs that are constantly changing and responding to the needs of gifted education so as to elevate standards amongst gifted education workers.

7. There is a need to provide sufficient equipment to the centres in a way that allows adequate implementation and practice of the gifted programs.

8. There is a need to provide specific curricula that are consistent across all centres and are readily applicable. These should be prepared in a rational, scientific manner that follows precedents set elsewhere.

9. There should be flexibility in application of gifted education systems because it provides an opportunity for competition amongst centres in a way that can further elevate gifted education standards which is an opportunity that can only help gifted children.

Teacher observations

To supplement the other data collected, the researcher conducted observations of teachers of gifted students in the Saudi Arabian centres. These observations were carried out by utilising an observation protocol sheet as was discussed in Chapter 3. Twenty-four sessions were observed and a rating sheet was completed, which contained several observable behaviours. The teachers were scored against these behaviours every five minutes and then rated from Very poor to Excellent, depending on the number of times the behaviour was observed during the session.

With the exception of the item "Withholds ideas", the results showed generally positive performances from the teachers in the gifted centres with the majority falling between good and excellent ratings (see Table 4.11). It needs to be noted that the level of the teachers' performances, through the application of certain teaching strategies, assisted the gifted students to develop their skills. One example was their use of analytic questions which encouraged analogical thinking, with students comparing different issues. The complete set of ratings on the observations are displayed in Table 4.11.

Chapter 5 will discuss how the positive data gained from the observations relate to the perspectives of the participants (staff, students and parents) in this research. The teachers' performances are considered as indicative either positively or negatively in gifted provision in Saudi Arabia.

Table 4.11 Teacher observation data

			Very poor	*Poor*	*Fair*	*Good*	*Excellent*
1	Withholds ideas	Count	10	5	3	4	2
		%	41.7	20.8	12.5	16.7	8.3
2	Encourages participation in discussions	Count	0	1	1	8	14
		%	.0	4.2	4.2	33.3	58.3
3	Poses interpretive questions	Count	0	2	1	13	8
		%	.0	8.3	4.2	54.2	33.3
4	Students evaluate situations	Count	0	0	6	8	10
		%	0	.0	25.0	33.3	41.7
5	Analytic questions	Count	0	0	5	13	6
		%	.0	.0	20.8	54.2	25.0
6	Generalize from concrete to abstract	Count	0	2	5	13	4
		%	.0	8.3	20.8	54.2	16.7
7	Sensitive to students' responses	Count	0	1	1	5	17
		%	.0	4.2	4.2	20.8	70.8
8	Maintains a balance between active and passive activities	Count	0	2	1	6	15
		%	.0	8.3	4.2	25.0	62.5
9	Deliberately shifts teaching strategies with students	Count	0	4	0	4	16
		%	.0	16.7	.0	16.7	66.7
10	Apply techniques in classroom	Count	0	2	2	3	17
		%	.0	8.3	8.3	12.5	70.8
11	Encourages students' development of argument skills	Count	0	1	1	6	16
		%	.0	4.2	4.2	25.0	66.7
12	Encourages analogical thinking	Count	0	1	2	5	16
		%	.0	4.2	8.3	20.8	66.7
13	Students compare different issues	Count	0	1	3	11	9
		%	.0	4.2	12.5	45.8	37.5
14	Students engage in lively debate of controversial issues	Count	0	0	4	12	8
		%	.0	.0	16.7	50.0	33.3
15	S + T reflect an open/challenging attitude toward knowledge	Count	0	1	3	5	15
		%	.0	4.2	12.5	20.8	62.5
16	Encourages students to try new approaches	Count	0	0	3	6	15
		%	.0	.0	12.5	25.0	62.5
17	Find solutions to problems	Count	0	0	2	5	17
		%	.0	.0	8.3	20.8	70.8
18	Encourages guesses by students	Count	0	1	0	8	15
		%	.0	4.2	.0	33.3	62.5
19	Helps to realize that research involves trial and error	Count	0	0	1	8	15
		%	.0	.0	4.2	33.3	62.5
20	Uses implications of characteristics	Count	0	2	1	8	13
		%	.0	8.3	4.2	33.3	54.2
21	Uses management procedures in learning process	Count	2	4	1	8	9
		%	8.3	16.7	4.2	33.3	37.5
22	Uses advanced organizers in curriculum	Count	0	3	1	8	12
		%	.0	12.5	4.2	33.3	50.0

Gender differences

Further to the results already discussed in this chapter, additional information reflecting the unique nature of gifted education in Saudi Arabia is now examined, including a review of the difference in provisions of gifted girls and gifted boys in Saudi Arabia. In particular, the responses to Questions 15, 25 and 27 were explored. These comprised the main components of gifted programs, which are identification and selection procedures; selection and training of gifted teachers; strategies, and availability of special curricula with appropriate enrichment.

These questions were organised using the NAGC standards published in 2000 (see Appendix 1) and which were adopted in this study to evaluate the gifted programs in Saudi Arabia. These three questions considered the important elements of the staff questionnaire because they focused on the nature and processes related to gifted programs.

Before discussing the results of these questions, it has to be clarified that despite the assumption that the gifted males and females are equal, because they are control under of the Ministry of Education and follow the same policy, in fact there are significant differences which are supported by the outcomes from the t-test analysis.

Question 15 relating to the procedures utilised in the selection and training of teachers for work with gifted students included fourteen items. Nine of these showed no significant differences between males and females. However, five items were different in outcome according to the result of the statistical analysis (see Table 4.12). About two-thirds of the items involved in the standards of selection, then, indicated little distinction between the procedures in the male and female gifted centres. This would suggest some adherence unilaterally to Ministry of Education policy.

The items in which the higher mean was for the female cohort were that teachers in the centre were full-time; that they were committed to parent participation in the centre; and, they were able to incorporate the computer in the work at the centre. Females also scored a significantly lower mean on the negatively-worded item related to selection based on nepotism. The only desirable trait on which males performed better than females was on the possession of higher qualifications. This is a surprising result because the assumption would be that gifted provision for boys was better than that for females because of an earlier start in gifted education as referred to in the literature review of Chapter 2 when the background to gifted education in Saudi Arabia was examined.

Table 4.12 Significant gender differences in teacher selection and training

Items No in question (15)	*Items*	*Gender*	*N*	*Mean*	*Sig (2-tailled)*
3	Teachers are selected according to social relationships with the officials at the centre.	M	166	2.45	.034
		F	114	2.14	
6	Most teachers at the centre are full-time.	M	166	4.08	.001
		F	114	4.47	
7	Teachers in the centre have obtained high educational qualifications (high Diploma, MA).	M	166	2.95	.000
		F	114	2.52	
8	Teachers are committed to have parents participate in the centre activities.	M	166	3.94	.003
		F	114	4.16	
15	Teachers are well oriented in how to use the computer.	M	166	4.15	.037
		F	114	4.35	

Question 25 of the staff questionnaires contained fifteen items related to the Enriched Curriculum. Again, for the majority of these items, there were no significant differences between the male and female respondents and their corresponding centres catering for boys or girls. This would reflect the centres' adherence to the Ministry of Education directives as well as similar levels of knowledge imparted to male and female teachers. Four items relating to enriched curriculum showed significant

differences in the statistical analysis between the male and female respondents, as displayed in Table 4.13. Females showed significantly higher levels of awareness in relation to teachers being involved in the development of enriched curricula based on student need; a curriculum that incorporates enrichment, extension and acceleration options; and, the involvement of gifted students in the development of enriched curricula. The male respondents scored significantly higher on the item that indicated that an enriched curriculum complements and extends the regular curriculum.

An explanation of the slightly stronger results for females might reflect the female teachers' enthusiasm to be better performing than males and are, thus, more competitive because provision for gifted girls started at a later time and females are disposed towards quickly catching up with their male counterparts.

Table: 4.13 Significant gender differences in Curriculum Enrichment

Items No in question (25)	*Items*	*Gender*	*N*	*Mean*	*Sig (2-tailled)*
1	Enrichment curriculum is a complement to as well as an extension of the regular curriculum.	M	166	3.37	.015
		F	114	3.02	
5	Teachers participate in the development of the enrichment curriculum because they are more aware of the needs of their students.	M	166	3.70	.013
		F	114	4.00	
6	Enrichment curriculum is comprehensive, providing enrichment, acceleration, and extension options.	M	166	3.67	.014
		F	114	3.90	
14	Gifted students are involved in the development of the enrichment curriculum that responds to their needs.	M	166	3.41	.000
		F	114	3.97	

In relation to the selection procedures for gifted students, Question 27 of the staff questionnaire contained fifteen items, most of which showed no significant differences in practices between the male and female systems. The five items, which differed in

response according to the statistical analysis, were split across males and females (see Table 4.14). The male respondents scored higher means for the items related to the centre having a clear definition of gifted students; use of multiple selection procedures; and, the use of cut-off scores for selection purposes. The female respondents scored higher means for the items related to teacher familiarity with the selection procedures; and, the regular review of selection procedures. These results indicate that the differences between male and female gifted provision relating to the procedures of selecting and training of gifted students were negligible.

Table: 4.14 Significant gender differences in gifted student selection procedures

Items No in question (27)	*Items*	*Gender*	*N*	*Mean*	*Sig (2-tailled)*
1	The centre adopts clear procedural definition of gifted students.	M	166	4.32	.037
		F	114	4.13	
2	The centre uses multiple procedures for selection of gifted students.	M	166	4.29	.010
		F	114	4.02	
6	Teachers at the centre are familiar with the selection system procedures.	M	166	3.94	.033
		F	114	4.16	
13	The centre reviews and evaluates the system of selection on a regular basis.	M	166	3.51	.038
		F	114	3.75	
15	The centre defines cut-off scores for selection.	M	166	3.98	.047
		F	114	4.21	

Summary

In conclusion, Chapter 4 has set out, through both qualitative and quantitative measures, the results from the evaluation of the provision of gifted education in Saudi Arabia. It has also demarcated the fine distinctions in delivery between male and female students. In effect what has been offered is a range of different perspectives in the questionnaire format from parents, staff, students and teachers of the gifted. The results illustrate a number of critical deficiencies and raise a number of questions on the modes of delivery, the underlying ethos and the nature and roles of all participants. Chapter 5 will analyse such implications and provide recommendations that will enable the provision of gifted education in Saudi Arabia to satisfy the stated policy.

CHAPTER FIVE
DISCUSSION AND CONCLUSIONS

Discussion

From the data presented in the previous chapter, a number of significant trends emerged in relation to the research questions for this study. Because this research project was quantitative and qualitative in nature, the results have presented the perspectives and experiences of the participants involved with the aim of increasing awareness of this particular field of educational research. It is important to note that this study has only evaluated the provision of gifted students in Saudi Arabia; it has not investigated this field in comparison to the education of the mainstream students in normal education.

The themes that emerged from the data analysis process not only answered the research questions for this study, but also revealed a number of areas for future research. In this chapter, the findings have been discussed in terms of the research questions and the literature, and implications for further research have been made.

The response to the main question will be defined by a discussion of the sub-questions which were informed by the mixed methods used. The diagnostic approach of this study is to determine the reality of the provision of education for the gifted and talented in Saudi Arabia. It is intended to expose both its strengths and weaknesses and, thereby, postulate improvements, if required. Thus, discussions of the results will give a template for such improvements and a substantiated backdrop for the development of value-added approaches in all facets of education for the gifted in Saudi Arabia.

The main Research Question is:

To what extent do current provisions in Saudi Arabia meet the needs of gifted students according to the key stakeholders?

The First Sub-Question

What are the current gifted policies, and how have they been implemented?

All the findings obtained through the different data sources of this study demonstrate that there is an obvious disparity between the written policy of the Ministry of Education regarding programs for gifted students in Saudi Arabia, and their practical application. Most of these findings highlight this disparity, which has negatively affected the optimal application of such programs. This, in turn, has compromised the success of such programs in meeting the needs of the gifted students in a way that would realize their aspired benefits. Such benefits are hoped to help gifted students develop their skills and talents, which represents the primary goal of applying such programs. The disparity between the written policy and what is really practised by the Gifted Student Care Centres is manifest in the responses of the informants of this study (staff, students, parents). They all maintained that one major obstacle for the Gifted Student Programs in Saudi Arabia, and their failure in catering for the needs of gifted students, is the misapplication of the policy of the Ministry of Education calling for following sound and appropriate procedures in caring for the gifted students. Participants in the study pointed out, too, that despite the existence of a written policy, there has not been a good follow-up by the Ministry of Education regarding the unification of the application procedures of the Gifted Student Programs in all areas and in the boys' and girls' sectors.

As indicated in the findings in Chapter 4, the informants differed in their viewpoints concerning many points. One of these points is the description of a Gifted Student Centre, which should be a place for the gathering of gifted students to study special curricula part-time. The policy of the Ministry which established such centres to be run only in evenings for extra activities, and in which there are no special curricula, is not in line with this definition. In addition, the Gifted Student Centres could not provide such students with the auxiliary facilities, e.g. the different labs, inside and outside the centres, necessary for learning and developing skills in a way that is different from the ways offered by the facilities available in normal schools. This failure is in addition to

the lack of transportation that would facilitate students' ability to go to and from centres.

With reference to heightening the awareness of parents and society, the centres have not accomplished their role despite this being a cornerstone of their success. Hence, many of the participants' responses (obtained through questionnaires and interviews) stress that these centres are remote from the local community. They have not managed to communicate their message clearly to the parents, in particular, and the local community in general. They also have not built an efficacious relationship with the schools, and this in turn has led to the sector's lack of contribution in supporting such centres with any sort of aid. Thus, the burden of providing support, financial and in kind, falls solely on the shoulders of the Ministry of Education to the exclusion of all other governmental bodies.

One of the major factors that have led to the disarray in the application of the Ministry's policy of implementing successful programs for gifted students is the Ministry itself. Some of the participants met by the researcher mentioned that each region differs from the others in the implementation of its Gifted Student programs. Some regions have Gifted Student programs while others do not, and these implement their programs within schools. Furthermore, there is a clear difference between the boys' and the girls' sectors with reference to the options of either establishing special Gifted Student Centres or implementing the programs targeting them within the normal schools, which usually lack teachers specialized in the field of giftedness.

The Second Sub-Question

What are the current gifted provisions, and how have they been developed?

The different sources of the study indicate that current projects in the KSA suffer from weakness in all aspects. This has compromised their success in offering appropriate services for gifted students who have joined the Gifted Student Centres. Such centres were established with a view to providing good care through the implementation of specialized highly efficient programs that would help develop the skills of such a category of students and the current models have deviated from the initial premises.

The findings indicate that the weakness of such programs lies in their inability to practise the true role for which they were established, namely offering enriching programs for the gifted students in the evenings. Initially they were not set up to serve the function of a special school where gifted students study full-time. As indicated in Chapter 4, 96.8% of the participants in the study pointed out that they worked during the mornings only. Moreover, such centres were not able to develop appropriate relationships with the schools, which provided them with gifted students. Such a weak relationship has had a negative impact on the cooperation between schools and centres in realizing their aim of serving gifted students. Perhaps the major reason for such a weak relationship is that the centres have not made the schools and their staff aware of their real mission so that both parties can have a common goal and clear communication leading to the realization of such a goal.

In addition, the centres could not offer the training programs needed for teachers, whether it is at the schools, so that they would be able to identify gifted students according to specific criteria, or at the centre, so that they could practise their role of offering the care suitable for the capabilities and skills of such gifted students. The schools and centres lack specialized teachers as well. Again one of the major negativities of the centres is not raising the awareness of society and clarifying the centres' goals and mission to all those involved in caring for gifted students. Furthermore, the private sector, which is part of the larger society responsible for caring for and supporting such a category of gifted students, does not contribute to boosting such programs at all.

The findings indicated that the Ministry of Education supports such centres only financially, even though their needs, in order to fulfil their role and mission, are not limited to merely financial support. There should be other facilities that help them in carrying out quite a complex set of tasks. Though the findings demonstrate that the centres apply a clear mechanism in the selection of teachers and supervisors, still they

are in dire need of training and in-service programs that would enable them to work efficiently and professionally to hone and develop the gifted students' skills.

The findings also illustrate that the centres have not applied acceleration programs, considered among the most successful programs to help students develop their talents and skills. In addition, the curricula studied by the gifted students have not contributed to developing their skills or honing their talents. This indicates that such curricula either had not been well-prepared, or that the efforts exerted in enriching the normal curricula to suit the gifted students were not successful and were not sufficiently adequate and challenging enough to help such students refine their talents and develop their skills.

In summary, the projects for the gifted students in Saudi Arabia have not provided programs capable of helping such students develop their talents and skills despite having been initiated 12 years ago. Such programs have not received enough support from the stakeholders (schools, families, society) concerned with caring for the gifted students. This has resulted from their failure to build links with all such parties that would induce cooperation and the provision of the necessary support.

The Third Sub-Question

What procedures are used to select gifted students for gifted programs, and how effective are they?

The findings related to this question indicate that the procedures for selecting the gifted students follow the model published by NAGC, which is part of the assessment model adopted in this study to evaluate the Gifted Student programs in the KSA. This result is confirmed by 80% of the participants in this study. Chapter 4 shows that the procedures used in the selection of the gifted students are appropriate despite the fact that the tools used are limited to three only, namely IQ tests, teachers' checklists, and teachers' nominations. Of all the available tools for identification and recommendations in the literature that multiple methods are used, only the three mentioned above are used singly. The students and parents participating in the study agree with the teachers that the tools used in identifying them are limited to IQ tests

and teachers' nominations. This suggests that some gifted students may be overlooked because of the limited means utilised to identify them.

The interviews with the participants in the study indicate that, despite the use of several measurement tools in selecting gifted students (e.g. the. *Wechsler IQ test*, *Torrance Tests for Creativity*, etc), the nominated students do not achieve positive results during their participation in the care programs offered to them. The reason may be the weakness of such measurement tools or the inability of the teachers to apply them properly due to the lack of specialists in the field of measurement and evaluation at the Gifted Student Centres. In addition, there are no teachers specialized in the fields of giftedness or excellence working at the schools or centres whose nominations can be considered reliable.

Participants in the study added that the measurement tools used could not be trusted owing to the difference in their application from one region to another. In addition, there is no mentoring or supervision from the Ministry of Education to secure proper application for producing results, which reflect the level of the students' giftedness and its type, thus facilitating their subsequent handling according to their capabilities and satisfaction of their needs.

Further, participants in the study pointed out that besides the difference in the application of the measurement tools used in student nomination, there is also another difference in defining gifted students adopted by the centres. There are also differences in the nomination procedures in different regions, as well as in adopting a clear and precise definition of what a gifted student is in the programs for boys and girls. Such differences and inconsistencies between the regions, and failure to comprehensively follow clear and specific nomination procedures, have had a negative effect on a major pillar of any Gifted Student program, namely identifying and testing the gifted students. The use of unsound procedures may result in choosing non-qualified students and omitting others who are more eligible for being among the gifted and more appropriate for gifted education.

The aforementioned weakness in the procedures of identifying gifted students was emphasized by participants' indication that the data obtained through the application of the measurement tools are not available for the benefit of teachers in designing appropriate programs for such students. Participants added that managers usually retain such data as confidential. He or she, in turn, guides the male and female teachers to prepare suitable programs for the students according to his or her own vision and not according to the vision and experience of the teacher, who should be the one responsible for setting a program suitable for each student according to their needs, inclinations, and the type of talent.

Teachers participating in the study also stressed that the measurement tools are not reliable according to the results they achieve, and do not reflect the real level of gifted students. Such students may stumble through the Gifted Student programs after joining them because of the difficulty of the material that exceeds their abilities. Such students thus become victims of the wrong measurement tools used. Moreover, the teachers also proposed that there is no clear and specific view of the Gifted Student programs in the KSA. They are rather the result of the discretionary efforts made by the centres on the basis of both what seems satisfactory to their staff and their ability to arrange a program which may, nevertheless, lack the basics of any Gifted Student program anywhere. Further, students underscore the weakness of the nomination procedures used at the Gifted Student Centres since they are not familiarized with such procedures before they are conducted. This makes it impossible to clarify how to deal with such measurement tools in a way that would help specialists attain sound results.

Generally, the gifted student projects in Saudi Arabia suffer from issues regarding the measurement tools, which are a cornerstone in the arrangement of any Gifted Student program. As was pointed out in Chapter 2, the tools and measurements, which were developed at the time such projects were initiated in 1995, after the lapse of 15 years, have become in need of re-development and modification. This is in order to be in line with the changes that have occurred in the field of gifted education worldwide and to

keep up with the circumstances, and the social and cultural changes in each of the Saudi regions, which amount to more than 42, some of which are radically different from the others in social, cultural, and economic aspects. This is an issue that is vital to consider as the cultural variation in the KSA is huge, and this directly affects the type of measurement tools used to fit that wide cultural and geographical variability.

The Fourth Sub-Question

What procedures are used to select and train teachers for gifted programs, and how effective are they?

The participants in the study taken from the Gifted Student Centres' staff angle agreed that the procedures of the nomination and training of centres' teachers are adequate, according to the form developed by NAGC. This is the viewpoint of the informants who filled in the questionnaire prepared for this purpose. However, the participating interviewees have contrasting perceptions. They almost unanimously agreed that there are no clear or specific procedures for the nomination of teachers for the centres followed by either the Ministry or the centres themselves. In addition, the participants maintained that all the procedures are based on mere discretionary measures set by the centres as a routine practice to control the procedures for selecting the teachers suitable for working at such centres. Such procedures, nevertheless, according to the participants of the study, have more negative than positive outcomes. This is clear in the type of selected teachers who have not positively contributed to raising the level of the services offered to the gifted students, nor do they differ much from the normal teachers at normal schools. Hence, the failure of the Gifted Student programs in raising the level of such students' abilities and skills is noticeable, according to the interviewees.

The discrepancy in these results is due to the data that were collected through the interviews were more in-depth than the data collected from questionnaires. In addition this confirms that the use of mixed method data collection for this study is an important factor in obtaining the clearest results. Furthermore, the result derived from

mixed method will be positive to helping key stakeholders to take the appropriate decision based on these results.

Participants in the study – both those who answered the questionnaires and those who were interviewed – agreed that the teachers selected according to the aforementioned procedures are not offered enough training programs to qualify them to work efficiently with gifted students. They indicated that the level of the training programs offered to such teachers is considered average. There was also unanimity of the participants concerning the teachers' need of extra training programs to help raise their level in dealing with gifted students. Moreover, they outlined the type of extra training that is needed for the teachers working at Gifted Student Centres. Participants pointed out such teachers are in need of academic degrees — a BA, or a diploma, or a post-graduate study in the field of giftedness. This indicates that most of these teachers lack any such academic qualification. This finding is a strong indication of the weakness of the programs at the Gifted Student Centres since the teacher is the basis of any program offered to gifted students anywhere in the world. If the teacher selected for work at the Gifted Student Centres in Saudi Arabia is not qualified, how can the programs responsible for providing specialized services and care for gifted students be successful?

The findings also emphasize that the procedures for choosing the supervisors working at the Gifted Student Centres are beset with the same problems as those of selecting teachers. This is despite the centres' attempts to control these procedures in view of the fact that a supervisor plays a major role in selecting the teachers and setting the proper syllabi and plans for caring for the gifted students. Participants point out that the supervisors are not different from the teachers who are even sometimes better than the former, many of whom may not have enough experience to work in the field of gifted students. They are also not specialized in giftedness, and may not have any prior experience in this field of education.

Furthermore, participants unanimously agreed that the major problem resulting in the weakness in the level of teachers and supervisors is the lack of any guidance in programs either from universities or from the Ministry of Education in the KSA to prepare teachers to handle gifted students. This is a serious problem, which cannot be solved by the efforts of centres, nor can its negative effects on the level of the programs offered to the gifted students be minimized. Such negative effects are due to the weakness of the level of the teacher as well as the supervisor who is the principal person in charge of setting the basics, frames, and programs that positively challenge students' potential, hence raising their level and developing their abilities. This represents an indicator of the success of the gifted programs within and outside the KSA. Many of the participants stressed that there are huge problems facing the process of selecting and training the teachers chosen to work at the Gifted Student Centres, and that there is no assistance from the Ministry of Education in helping or diminishing such problems.

The Fifth Sub-Question

What strategies and curriculum approaches are implemented for gifted students, and how effective are they?

The findings related to this question demonstrated a clear disagreement among the participants as to the availability or unavailability of special syllabi for the gifted students. The statistical analysis of the data collected through the questionnaire answered by the centres' staff and students indicates the availability of special syllabi for the gifted students offered by the centres. However, the staff and teachers who were interviewed believe that there is not a syllabus that was specially prepared for this category of students. Rather what is available is nothing but material produced by the centres' staff to enrich units in the subjects of science and mathematics. It may be that the answers of those who responded positively in the questionnaire are based on the belief that the units that were enriched in the normal syllabi of sciences and mathematics represent the special syllabus for the gifted students. This justification is reasonably acceptable owing to the lack of experience and specialization in the fields of giftedness and excellence.

Some of the participants in the interviews emphasized that the efforts exerted by the Gifted Student Centres' teachers were not successful in offering a "special" syllabus for the gifted students in the proper sense of the word. This is due to the fact that they are not specialized in the field of giftedness and excellence. Besides, they have not received any training in this field, which would help them enrich the selected units in the normal syllabi of mathematics and science in a way that results in appropriate and specialist syllabi.

Interviewees stressed that the teachers in the two sectors, boys and girls, are in desperate need of planned, intensive programs in the fields of enriching syllabi to enable them to provide suitable challenging syllabi that would help raise the level of the students and develop their skills. They assert that the Ministry of Education does not exert any effort in this regard, nor does it provide enough support for the centres to prepare special syllabi for gifted students. Participants in the study unanimously agreed that one of the major reasons for the weaknesses of the Gifted Student Programs in the KSA, and its inability to provide programs that meet the needs of gifted students, is the lack of suitable syllabi for such students through which they can learn to work more creatively than their peers.

The Sixth Sub-Question

How can provisions for gifted students be improved?

The Ministry of Education provides the adequate basic requirements to the Gifted Students Centres to help them meet gifted students' needs. This finding was agreed upon by the participants of the study but participants contradicted themselves when they classified the type of supports offered by the Ministry. The results of the statistical analysis of this question indicated that the Ministry provides the staff, budget, and some of the tools used in identifying the gifted students. Nevertheless, such staff are neither qualified nor trained, and the identification tools are not reliable, and their results cannot be trusted in preparing programs that match the abilities and talents of the gifted students.

Participants maintained that there are many serious problems and obstacles that face Gifted Student Centres and hinder them from performing their mission of offering a differentiated to the gifted students. The following are some of obstacles pinpointed by them:

1. There is normally little financial support for this program, but when some was available, it was inadequate to wholly fund every activity;
2. There is no special building for these centres;
3. There is no variety of equipment to supplement the programs;
4. There is no flexibility in the system that comes down from the Ministry of Education to accommodate the different performances of centres according to the degree of specialist and experienced teachers;
5. There are no evaluation tools to gauge the success or otherwise of the gifted programs equitably; and,
6. The principals and teachers appeared to lack conviction about meeting the needs of these gifted students or to promote a vision about them to wider Saudi Arabian society. Indeed, they evinced a complete lack of co-operation in dealing with all other interested parties.

Moreover, participants mentioned that there is a huge gap between the vision of the Ministry of Education and that of the centres as regards providing total and distinctive care of gifted students. This gap is getting wider over time. The increasingly diverse needs of the centres are not only financial. They include all types of support (e.g. staff, qualified trained teachers, labs, good tools for identifying gifted students, etc).

Participants added also that one of the major obstacles in the approach of Gifted Student Centres, which hinders the development of their standard and the improvement of their services, is the inflexibility of the Ministry system which controls the work of such centres and causes their inability to deal with gifted students according to the circumstances and facilities available at each centre. Furthermore it fails to accommodate the rapid changes that are taking place in the field of gifted student education all over the world.

Moreover, the participants focused on the lack of conviction of the necessity of offering highly efficient programs for the gifted students by the stakeholders, namely the centres' directors, teachers, school principals, and education directors in all regions. Even within the Ministry itself, most of the staff do not have the necessary conviction, which would prompt them to support the Gifted Student Centres so that they can improve their work and develop their performance in serving such students. Participants pointed out the rather dismal outcome that has resulted from such failures to address the daily problems faced by Gifted Student Centres.

In the context of evaluating the Gifted Student Programs, which is considered one of the major techniques that could boost improvement and development, participants mentioned that the periodical evaluation depends on weak tools, which do not offer reliable results that can be trusted and used in development, modification, and improvement. In addition, there is no control or measure according to which the evaluation of such programs is done with consistency among the teachers or regions. It is rather done according to the personal convictions of the program staff that do not reflects the actual practices within the centres nor give a clear image of the negative and positive sides.

In summary, despite the positive remarks of the teachers about the way programs are implemented within the centres, based on the form used to monitor teachers' performance within the centre classes, there are still a lot of suggestions made by the different categories of participants. Among these suggestions are the needs for:

1. Specifying clear goals for gifted provisions in Saudi Arabia based on a strategic plan to provide the desired success of the services for gifted students with high quality. Furthermore, the goals of the provisions should include an evaluation method that ensures the success of these provisions.
2. Providing various types of official support from the Ministry of Education, such as budgets and other resources that gifted projects need, in order to

provide adequate services to meet the needs of gifted students. In addition, there needs to be the establishment of mechanisms to encourage the private sector to participate effectively to provide consistent and continuous support of the gifted provision in Saudi Arabia.

3. Specifying an official job title for gifted teacher because in the Ministry of Education there is no job title for the field of gifted education; this would encourage students to specialize in the field of gifted education. This is an important factor for the preparation and provision of specialist teachers to work in schools or centres for the gifted and talented.
4. Preparing special measurement tools for identifying gifted students through reviewing the existing tools as well as developing new ones in the field of: intelligence, creativity, special abilities that help to discover the gifted students.
5. Providing the necessary requirements for such projects (buildings, labs, syllabi, teachers, etc.).

There should be sufficient flexibility in the system governing such projects so that the staff can have the opportunity to improve and keep up with world changes in the field of gifted student care.

The Seventh Sub-Question

Are there differences in the provisions for gifted girls and gifted boys in Saudi Arabia? What effects do these differences have on the key stakeholders' satisfaction with the education of gifted students?

The findings related to this question show that there is no big difference between the male and female Gifted Student programs, though such programs are presented in a context where there is full separation between the genders. This finding is in line with the supposition that there should not be a difference as the programs of both males and females are derived from a single Ministry, namely the Ministry of Education, and follow a single policy and unified procedures.

The results illustrate that there is no big difference in the items of the model developed by NAGC for evaluating the procedures of the selection of teachers, providing the

syllabi for the gifted students, and selecting and nominating the gifted students. There are some small differences with regard to the programs of males and females, which match the nature of each gender as well as the circumstances and nature of work in Saudi Arabia. For instance, the mathematical average for the item 'Most teachers work full time', is in favour of females. This is normal since the nature of women's work, their family commitments, and the culture of the society, all of which need full commitment, do not allow women to work beyond the regular working hours, i.e. in the evenings. There are some other differences related to the nature of the men, their circumstances, and culture.

Conclusion and Recommendations

The result of the study in total has shown both positives and negatives in the provisions of gifted education in Saudi Arabia. It is clear through these outcomes that the provision needs comprehensive review from all dimensions. Most participants in this study agreed that the procedures of identification and selection of gifted students were not appropriate. This occurred as a result of the measurements used not being able to identify or select the true level of students when applied. Consequently, these did not differentiate between the gifted students and others. This is a huge problem facing gifted centres in Saudi Arabia. The outcome is a loss of financial resources, human effort and the loss of giftedness itself. Why is this so? Most probably, it is because these students are not able to interact in harmony with the program and its in-built activities that would have helped them to realise their giftedness and talent, thus having a great impact on appropriate provision of gifted education in Saudi Arabia.

In addition, this result also reflects the weakness of procedures of selection and training of the supervisors and teachers to work in the gifted centres. This is the other major negative outcome which gifted centres in Saudi Arabia have not yet been able to control or solve. However, if this continues, then the success of the gifted program is severely compromised. This matter is important because the supervisors and the teachers are the cornerstone of any gifted student program. The people responsible and able to design an appropriate and comprehensive program that allows gifted students to

contribute their skills and innovations to the community in various fields are, therefore, an integral part of the gifted centre network.

Furthermore, the results highlight also the lack of critical curricula in these centres, which are inadequate because of lack of variety, and stimuli in a wide range of subjects and do not allow the gifted students to acquire new knowledge. Unfortunately, many of the curricula are targeted at mainstream schools and while highly efficient in providing for the normal or average student are not sufficient to develop the gifted students' capacities. Thus, they do not aid them in achieving their potential talents in diverse subjects.

On the other hand, additional to the above weaknesses of the provision of gifted education in terms of programs and the procedures and tools, it has to be noted that there is another major obstacle to success. This is the lack of clear and coherent policy directives on gifted education from the Ministry of Education. Most of the staff of the Ministry do not hold compelling convictions on the importance of gifted education in Saudi Arabia and this is reflected in the wider community, including all educational workers throughout the whole country. As a result, this has had a deleterious effect on the provision of gifted education in districts, indeed throughout Saudi Arabia. What began as an indifference at official level has now reached a society-wide indifference towards the delivery of gifted education. Consequently, the gifted centres and the Ministry of Education have not been able to resolve their lack of agreement on common principles according to the participants in this research. In effect what has happened is a breakdown in perceptions of gifted education between all parties - the schools, the community, the private sector, parents, citizens and government bureaucracy. This would explain why the private sector, which is one of the most prominent beneficiaries of gifted students and teachers, does not contribute in any meaningful way to the gifted program in Saudi Arabia.

Finally, there is a lack of clarity in Ministry of Education objectives in providing a special program for gifted students that develops their unique skills, whether through

the school, gifted centres or any other mode of appropriate provision that encapsulates such excellence and does not cause the loss or slow dissolution of their talents in a very average society of average students. In the long term, such loss to the country is profound. To be a clever country requires a clever cohort of well-trained and gifted young people. Given that Saudi Arabia is now part of a set of global processes, it must nurture these young seedlings so that the inadequacies discussed earlier are recognised as being of great moment. They signify that, currently, gifted education delivery in Saudi Arabia is not reaching what remain as ill-defined goals. Neglect and indifference have yet to be countered.

Limitations to study

This study has a number of inherent limitations, which need to be taken into account when reading. For logistical reasons, the research was restricted to a delimited geographical area. The research had to take into account the complexities of human relationships between all the personnel involved – staff (administrators, supervisors and teachers); parents of gifted students; and the students themselves who had been nominated as gifted. Therefore the decision was made to restrict the research to a number of centres selected through randomization procedures. Some caution needs to be exercised, therefore, in generalizing the results to the whole of Saudi Arabia.

Strict gender divisions in Saudi Arabia changed the nature of the research simply because male and female staff and male and female students are separated so that contact between the research was limited when assessing the delivery of educational programs for female students by female staff. The researcher is male and therefore it was necessary for some training to occur of appropriate personnel to collect the data relevant to gifted girls. As a result, there may be some differences between the results obtained in the qualitative component of the study.

A third limitation was the use of the NAGC model. Given that the NAGC model (2000) and criteria were used in this research, it necessarily established a framework, which includes three major significant components: the procedure of identification and

selection of gifted students; and training for teachers of the gifted; plus development and modification of curricula for this specialist group. The issue of the cultural appropriateness of this model, developed in the United States, is a limitation of the study. However, many of the policies and procedures adopted in Saudi Arabia have come from the United States and the use of the NAGC model was the most appropriate available for this reason. Nevertheless, the uniqueness of the Saudi cultural context needs to be remembered when applying the results of this research.

Finally, this research may be inhibited a little by the passage of time. Policies and procedures for the gifted in the Saudi Ministry of Education are changing rapidly. Further, with the rapid development of such programs within schools, while still maintaining the centers, the disjunction between schools and centers may disappear. It is recommended, therefore, that future researchers could concentrate, using similar methodology, on these new school-based programs, especially in teacher professional development and student identification / selection as well as appropriate curriculum modification.

Recommendations for Practice

There is a need to review and modify the policy of the Ministry of Education related to identifying gifted students and caring for them. In particular, the creation and adoption of a definition of giftedness that is relevant to the Saudi Arabian education system is vital. Upon modification, the policy should include clear strategies of field application and should be more flexible in dealing with the latest developments in the field of gifted student care.

It is suggested that mechanisms be developed to promote the relationship between the Gifted Students Centres, on the one hand, and schools, parents, and society as a whole, on the other, with a view to realizing interaction based on a common clear mission. This will lead to positive cooperation, which will help all parties care for the gifted students.

It is recommended that training should be provided for the teachers and supervisors working in the sector of Gifted Student programs in order to qualify them to offer the appropriate care for such students to develop their skills and talents.

There is a need to prepare special challenging curricula for gifted students that will help develop their skills and talents. This should be done in addition to arranging specialised training programs to train the teachers in the field of enriching the normal curricula.

There is a clear need to arrange acceleration programs at all stages to provide students with the opportunity to develop their skills and benefit from the time factor in doing work that suits their mental abilities. However, some guiding programs should be made available to avoid any negative social or psychological effect on the students.

It is recommended that measurement tools be provided to identify gifted students. This involves reviewing the current tools as well as developing new ones, which suit the social and cultural circumstances of society. Such measurement tools should be able to distinguish between students and determine the true level of their talents, so that it will be possible to depend on their results in setting suitable programs that meet the needs of gifted students.

It is recommended that the Ministry establish clear mechanisms and procedures for selecting distinguished supervisors and teachers who are adequately qualified and have sufficient specialization and experience to work in Gifted Student Projects. There is also a need for coordination with the universities to open a new major for handling gifted and excellent students, and establishing large bonuses to encourage teachers to specialize and work in the field of caring for gifted students.

There is a need for the Ministry of Education to provides for the Gifted Student programs in all fields in order to meet not only their financial needs but also their needs for such things as buildings, labs, measurement tools, training programs, etc.

The Ministry of Education is embracing a major awareness-raising policy targeting all sectors of society. This should be done in cooperation with the other stakeholders, e.g. the Ministry of Culture and Information and all the other mass communication bodies in the society in order to communicate a strong and clear message about the necessity of caring for the gifted, providing suitable programs for developing their skills, and spreading the culture of giftedness for everyone.

It is recommended that Ministry of Education should guide and support schools (for males and females) at all stages of education in a way that would help them care for gifted students and encourage them to collaborate with each other. This should be done through opening special classes for gifted students at all schools (primary, preparatory, secondary) and preparing specialized teachers capable of arranging suitable programs for them.

The main objective of this study was to highlight the findings of the evaluation of the provision of gifted education in Saudi Arabia, to be made available to the officials and decision makers in the Ministry of Education, and the directors of gifted centres in different districts of Saudi Arabia. To take advantage of these results suggesting improvements and development in the provision of gifted education to the students in Saudi Arabia, it is proposed that the Ministry of Education discuss the results of this study by establishing a special committee, to identify the positive and negative outcomes of the existing provisions, and drawing a strategic plan for the application, practice and evaluation of the gifted education for both genders.

The most important procedures and practices should be followed to improve the current provisions of gifted according to the findings of this study. There is a need to organize a new plan for the provision of gifted education in Saudi Arabia with clear objectives and definite vision emanating from the policy of education in Saudi Arabia that include a clear indication that underpins the need to pay attention to gifted people

and provide appropriate programs for the development of their talents. This should take the form of enacted legislation.

Moreover, the new plan should include the best way to provide care and attention to gifted students, whether through existing gifted centres or by opening private schools or special classes of gifted students in regular schools, or applying all of these methods together with a high degree of coordination. Cooperation and integration will be matched to meet the needs of gifted students and ensure equal opportunities for all of them without exception.

The researcher suggests that the adoption of these suggested approaches should be flexible to fit the cultural and geographical diversity of the KSA and the availability of equipment and facilities. Especially it should be applied in the education of girls which is completely separated in all districts of Saudi Arabia. These districts are also different from each other in size, material resources, number of schools and students, which deals with the Ministry of Education with a high degree of flexibility. This proposed program for the care of gifted students in the capital of Riyadh, for example, is not considered suitable for other small regions where materials and human resources are limited.

In addition, it is suggested that there should be a scientific group dedicated to creating standards and tools to identify and select gifted students and comprehensively regulate and adapt these standards to suit the large cultural diversity in Saudi Arabia.

Moreover, there should be a large awareness campaign implemented by all entities of the Ministry of Education (Education Administration, gifted students centres, schools and others) in coordination with the Ministry of Information and other information agencies in the community to instruct and educate all segments of the society of the importance of the care of gifted students.

In addition, others, particularly the private sector should be invited to participate in the programs for the support of these talented students and to encourage all aspects of development. The private sector in Saudi Arabia is very large and financial and investment returns are difficult to assess, in its non-participation in programs for gifted students, but it is the biggest beneficiary of gifted students and their creativity in various fields. This situation needs to change.

Recommendations for Further Research

According to the research findings, the researcher proposes a number of topics suitable for future research on gifted programs in Saudi Arabia:

1. Evaluation of specific aspects of gifted programs for female students in Saudi Arabia.
2. Further evaluation via a comprehensive study of gifted programs for male students in Saudi Arabia.
3. A comparative study between gifted programs of boys and girls that would be deeper and more inclusive of the changes that have occurred since this current study.
4. The conduct of a study to evaluate and develop the measures of selection that have been currently used in the provision of gifted education in Saudi Arabia after more than 12 years of application and is the outcome of dissatisfaction of contemporary practitioners in gifted programs in Saudi Arabia.
5. Conduct a study on the best scientific tools and strategies to enrich the gifted curriculum to take advantage of its results and provide appropriate curricula for gifted programs in Saudi Arabia as the next stage of development.
6. Conduct a survey to monitor the direction of Saudi society towards the gifted programs involving different samples from the diverse classes of society (educated, uneducated, males, females, senior, junior, government agencies, private sector ... etc) in order to benefit from their findings and develop a plan to educate the community and urge them to participate more in the support of gifted programs in Saudi Arabia.

7. Conduct a study to identify the reasons for the reluctance of the private sector to participate and support the gifted programs in Saudi Arabia.

Final Words

This thesis has reported on stakeholders' views of the effectiveness of gifted programs in the Kingdom of Saudi Arabia. It has demonstrated that, while there has been some progress toward meeting the needs of gifted students, much more work needs to occur. Consequently, recommendations for practice and for further research have been made, based on the evaluation research undertaken. This thesis has also illustrated the importance of cultural differences in how giftedness is understood and treated. As reported, many procedures for gifted students in Saudi Arabia have been adopted from work completed in the United States. While some of this work has been modified for the Saudi Arabian context, it is important that future efforts continue to forge approaches that match this unique culture's needs and beliefs.

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Appendixes

Appendix 1 National Association for Gifted Children (NAGC) Standards

Introduction

In 1998, NAGC developed and released the *Pre-K—Grade 12 Gifted Program Standards* to assist school districts in examining the quality of their programming for gifted learners. Recognizing that the ongoing evaluation and re-tooling of a successful gifted program is an evolutionary process, the NAGC Standards detail a framework including both *minimum standards* (nominal requirements for satisfactory programs) and *exemplary standards* (characteristics of excellence in gifted education programming).

To help you focus on important aspects of gifted programming, the current *Standards* are divided into seven criterion areas: Program Design, Program Administration and Management, Student Identification, Curriculum and Instruction, Socio-Emotional Guidance and Counseling, Professional Development, and Program Evaluation.

Several **organizing principles** guided the work of the task force, including:

- Standards should encourage but not dictate approaches of high quality.
- Standards represent both requisite program outcomes and standards for excellence.
- Standards establish the level of performance to which all educational school districts and agencies should aspire.
- Standards represent professional consensus on critical practice in gifted education that most everyone is likely to find acceptable.
- Standards are observable aspects of educational programming and are directly connected to the continuous growth and development of gifted learners.

For more information and guidance about using the *NAGC Pre-K—Grade 12 Gifted Program Standards*, visit www.nagc.org.

Definitions

Gifted learners are "Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities." (*No Child Left Behind*, 2002).

Gifted education programming is a coordinated and comprehensive structure of informal and formal services provided on a continuing basis intended to effectively nurture gifted learners.

A standard is a criterion-based designated level of performance against which programming success is measured (Worthen, Sanders, & Fitzpatrick, 1997). The *Standards* here allow us to evaluate existing programs, compare services across schools and districts, and provide guidance for developing new programs for gifted learners. This document contains both ***minimum standards***—requisite conditions for acceptable gifted education practice and ***exemplary standards***—desirable and visionary conditions for excellence in gifted education practice.

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Pre-K–Grade 12 Gifted Program Standards

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Gifted Education Programming Criterion: Student Identification

NAGC Standards

Description: Gifted learners must be assessed to determine appropriate educational services.

Guiding Principles	Minimum Standards	Exemplary Standards
1. A comprehensive and cohesive process for student nomination must be coordinated in order to determine eligibility for gifted education services.	1.0M Information regarding the characteristics of gifted students in areas served by the district must be annually disseminated to all appropriate staff members. 1.1M All students must comprise the initial screening pool of potential recipients of gifted education services. 1.2M Nominations for services must be accepted from any source (e.g., teachers, parents, community members, peers, etc.). 1.3M Parents must be provided with information regarding an understanding of giftedness and student characteristics.	1.0E The school district should provide information annually, in a variety of languages, regarding the process for nominating students for gifted education programming services. 1.1E The nomination process should be ongoing and screening of any student should occur at any time. 1.2E Nomination procedures and forms should be available in a variety of languages. 1.3E Parents should be provided with special workshops or seminars to gain a full meaning of giftedness.
2. Instruments used for student assessment to determine eligibility for gifted education services must measure diverse abilities, talents, strengths, and needs in order to provide students an opportunity to demonstrate any strengths.	2.0M Assessment instruments must measure the capabilities of students with provisions for the language in which the student is most fluent, when available. 2.1M Assessments must be culturally fair. 2.2M The purpose(s) of student assessments must be consistently articulated across all grade levels. 2.3M Student assessments must be sensitive to the current stage of talent development.	2.0E Assessments should be provided in a language in which the student is most fluent, if available. 2.1E Assessment should be responsive to students' economic conditions, gender, developmental differences, handicapping conditions, and other factors that mitigate against fair assessment practices. 2.2E Students identified in all designated areas of giftedness within a school district should be assessed consistently across grade levels. 2.3E Student assessments should be sensitive to all stages of talent development.
3. A student assessment profile of individual strengths and needs must be developed to plan appropriate intervention.	3.0M An assessment profile must be developed for each child to evaluate eligibility for gifted education programming services. 3.1M An assessment profile must reflect the unique learning characteristics and potential and performance levels.	3.0E Individual assessment plans should be developed for all gifted learners who need gifted education. 3.1E An assessment profile should reflect the gifted learner's interests, learning style, and educational needs.
4. All student identification procedures and instruments must be based on current theory and research.	4.0M No single assessment instrument or its results denies student eligibility for gifted programming services. 4.1M All assessment instruments must provide evidence of reliability and validity for the intended purposes and target students.	4.0E Student assessment data should come from multiple sources and include multiple assessment methods. 4.1E Student assessment data should represent an appropriate balance of reliable and valid quantitative and qualitative measures.
5. Written procedures for student identification must include, at the very least, provisions for informed consent, student retention, student reassessment, student exiting, and appeals procedures.	5.0M District gifted programming guidelines must contain specific procedures for student assessment at least once during the elementary, middle, and secondary levels. 5.1M District guidelines must provide specific procedures for student retention and exiting, as well as guidelines for parent appeals.	5.0E Student placement data should be collected using an appropriate balance of quantitative and qualitative measures with adequate evidence of reliability and validity for the purposes of identification. 5.1E District guidelines and procedures should be reviewed and revised when necessary.

NAGC Standards

Gifted Education Programming Criterion: Professional Development

Description: Gifted learners are entitled to be served by professionals who have specialized preparation in gifted education, expertise in appropriate differentiated content and instructional methods, involvement in ongoing professional development, and who possess exemplary personal and professional traits.

Guiding Principles	Minimum Standards	Exemplary Standards
1. A comprehensive staff development program must be provided for all school staff involved in the education of gifted learners.	1.0M All school staff must be made aware of the nature and needs of gifted students. 1.1M Teachers of gifted students must attend at least one professional development activity a year designed specifically for teaching gifted learners.	1.0E All school staff should be provided ongoing staff development in the nature and needs of gifted learners, and appropriate instructional strategies. 1.1E All teachers of gifted learners should continue to be actively engaged in the study of gifted education through staff development or graduate degree programs.
2. Only qualified personnel should be involved in the education of gifted learners.	2.0M All personnel working with gifted learners must be certified to teach in the areas to which they are assigned, and must be aware of the unique learning differences and needs of gifted learners at the grade level at which they are teaching. 2.1M All specialist teachers in gifted education must hold or be actively working toward a certification (or the equivalent) in gifted education in the state in which they teach. 2.2M Any teacher whose primary responsibility for teaching includes gifted learners, must have extensive expertise in gifted education.	2.0E All personnel working with gifted learners should participate in regular staff development programs. 2.1E All specialist teachers in gifted education should possess a certification/specialization or degree in gifted education. 2.2E Only teachers with advanced expertise in gifted education should have primary responsibility for the education of gifted learners.
3. School personnel require support for their specific efforts related to the education of gifted learners.	3.0M School personnel must be released from their professional duties to participate in staff development efforts in gifted education.	3.0E Approved staff development activities in gifted education should be funded at least in part by school districts or educational agencies.
4. The educational staff must be provided with time and other support for the preparation and development of the differentiated education plans, materials, curriculum.	4.0M School personnel must be allotted planning time to prepare for the differentiated education of gifted learners.	4.0E Regularly scheduled planning time (e.g., release time, summer pay, etc.) should be allotted to teachers for the development of differentiated educational programs and related resources.

Gifted Education Programming Criterion: Socio-Emotional Guidance and Counseling

NAGC Standards

Description: Gifted education programming must establish a plan to recognize and nurture the unique socio-emotional development of gifted learners.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Gifted learners must be provided with differentiated guidance efforts to meet their unique socio-emotional development.	1.0M Gifted learners, because of their unique socio-emotional development, must be provided with guidance and counseling services by a counselor who is familiar with the characteristics and socio-emotional needs of gifted learners.	1.0E Counseling services should be provided by a counselor familiar with specific training in the characteristics and socio-emotional needs (i.e., underachievement, multipotentiality, etc.) of diverse gifted learners.
2. Gifted learners must be provided with career guidance services especially designed for their unique needs.	2.0M Gifted learners must be provided with career guidance consistent with their unique strengths.	2.0E Gifted learners should be provided with college and career guidance that is appropriately different and delivered earlier than typical programs.
3. Gifted at-risk students must be provided with guidance and counseling to help them reach their potential.	3.0M Gifted learners who are at risk must have special attention, counseling, and support to help them realize their full potential.	3.0E Gifted learners who do not demonstrate satisfactory performance in regular and/or gifted education classes should be provided with specialized intervention services.
4. Gifted learners must be provided with affective curriculum in addition to differentiated guidance and counseling services.	4.0M Gifted learners must be provided with affective curriculum as part of differentiated curriculum and instructional services.	4.0E A well-defined and implemented affective curriculum scope and sequence containing personal/social awareness and adjustment, academic planning, and vocational and career awareness should be provided to gifted learners.
5. Underachieving gifted learners must be served rather than omitted from differentiated services.	5.0M Gifted students who are underachieving must not be exited from gifted programs because of related problems.	5.0E Underachieving gifted learners should be provided with specific guidance and counseling services that address the issues and problems related to underachievement.

Gifted Education Programming Criterion: Program Evaluation

NAGC Standards

Description: Program evaluation is the systematic study of the value and impact of services provided.

Guiding Principles	Minimum Standards	Exemplary Standards
1. An evaluation must be purposeful.	1.0M Information collected must reflect the interests and needs of most of the constituency groups.	1.0E Information collected should address pertinent questions raised by all constituency groups, and should be responsive to the needs of all stakeholders.
2. An evaluation must be efficient and economic.	2.0M School districts must provide sufficient resources for program evaluation.	2.0E School districts should allocate adequate time, financial support, and personnel to conduct systematic program evaluation.
3. An evaluation must be conducted competently and ethically.	3.0M Persons conducting the evaluation must be competent trustworthy. 3.1M The program evaluation design must address whether or not services have reached intended goals. 3.2M Instruments and procedures used for data collection must be valid and reliable for their intended use. 3.3M Ongoing formative and summative evaluation strategies must be used for substantive program improvement and development. 3.4M Individual data must be held confidential.	3.0E Persons conducting the evaluation should possess an expertise in program evaluation in gifted education. 3.1E The evaluation design should report the strengths and weaknesses found in the program, as well as critical issues that might influence program services. 3.2E Care should be taken to ensure that instruments with sufficient evidence of reliability and validity are used, and that they are appropriate for varying age, developmental levels, gender, and diversity of the target population. 3.3E Formative evaluations should be conducted regularly with summative evaluations occurring minimally every five years or more often as specified by state or local district policies. 3.4E All individuals who are involved in the evaluation process should be given the opportunity to verify information and the resulting interpretation.
4. The evaluation results must be made available through a written report.	4.0M Evaluation reports must present the evaluation results in a clear and cohesive format.	4.0E Evaluation reports should be designed to present results and encourage follow-through by stakeholders.

Gifted Education Programming Criterion: Program Design

NAGC Standards

Description: The development of appropriate gifted education programming requires comprehensive services based on sound philosophical, theoretical, and empirical support.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Rather than any single gifted program, a continuum of programming services must exist for gifted learners.	1.0M Gifted programming services must be accessible to all gifted learners.	1.0E Levels of services should be matched to the needs of gifted learners by providing a full continuum of options.
2. Gifted education must be adequately funded.	2.0M Gifted education funding should be equitable compared to the funding of other local programming.	2.0E Gifted education programming must receive funding consistent with the program goals and sufficient to adequately meet them.
3. Gifted education programming must evolve from a comprehensive and sound base.	3.0M Gifted education programming must be submitted for outside review on a regular basis. 3.1M Gifted programming must be guided by a clearly articulated philosophy statement and accompanying goals and objectives. 3.2M A continuum of services must be provided across grades pre-K–12.	3.0E Gifted education programming should be planned as a result of consultation with informed experts. 3.1E The school or school district should have a mission/ philosophy statement that addresses the need for gifted education programming. 3.2E A comprehensive pre-K–12 program plan should include policies and procedures for identification, curriculum and instruction, service delivery, teacher preparation, formative and summative evaluation, support services, and parent involvement.
4. Gifted education programming services must be an integral part of the general education school day.	4.0M Gifted education programming should be articulated with the general education program. 4.1M Appropriate educational opportunities must be provided in the regular classroom, resource classroom, separate, or optional voluntary environments.	4.0E Gifted services must be designed to supplement and build on the basic academic skills and knowledge learned in regular classrooms at all grade levels to ensure continuity as students progress through the program. 4.1E Local school districts should offer multiple service delivery options as no single service should stand alone.
5. Flexible groupings of students must be developed in order to facilitate differentiated instruction and curriculum.	5.0M The use of flexible grouping of gifted learners must be an integral part of gifted education programming.	5.0E Gifted learners should be included in flexible grouping arrangements in all content areas and grade levels to ensure that gifted students learn with and from intellectual peers.
6. Policies specific to adapting and adding to the nature and operations of the general education program are necessary for gifted education.	6.0M Existing and future school policies must include provisions for the needs of gifted learners.	6.0E Gifted education policies should exist for at least the following areas: early entrance, grade skipping, ability grouping, and dual enrollment.

NAGC Standards

Gifted Education Programming Criterion: Program Administration and Management

Description: Appropriate gifted education programming must include the establishment of a systematic means of developing, implementing, and managing services.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Appropriately qualified personnel must direct services for the education of gifted learners.	1.0M The designated coordinator of gifted education programming must have completed coursework or staff development in gifted education and display leadership ability to be deemed appropriately qualified.	1.0E The designated gifted programming coordinator must have completed a certification program or advanced degree program in gifted education.
2. Gifted education programming must be integrated into the general education program.	2.0M The gifted education program must create linkages between general education and gifted education at all levels.	2.0E Responsibility for the education of gifted learners is a shared one requiring strong relationships between the gifted education program and general education school wide.
3. Gifted education programming must include positive working relationships with constituency and advocacy groups, as well as with compliance agencies.	3.0M Gifted programming staff must establish ongoing parent communication. 3.1M Gifted programs must establish and use an advisory committee that reflects the cultural and socio-economic diversity of the school or school district's total student population, and includes parents, community members, students, and school staff members. 3.2M Gifted education programming staff must communicate with other on-site departments as well as other educational agencies vested in the education of gifted learners (e.g., other school districts, school board members, state departments of education, intermediate educational agencies, etc.).	3.0E The gifted education programming staff should facilitate the dissemination of information regarding major policies and practices in gifted education (e.g., student referral and screening, appeals, informed consent, student progress, etc.) to school personnel, parents, community members, etc. 3.1E Parents of gifted learners should have regular opportunities to share input and make recommendations about program operations with the gifted programming coordinator. 3.2E The gifted education program should consider current issues and concerns from other educational fields and agencies regarding gifted programming decision making on a regular basis.
4. Requisite resources and materials must be provided to support the efforts of gifted education programming.	4.0M Resources must be provided to support program operations. 4.1M Technological support must be provided for gifted education programming services. 4.2M The library selections must reflect a range of materials including those appropriate for gifted learners.	4.0E A diversity of resources (e.g., parent, community, vocational, etc.) should be available to support program operations. 4.1E Gifted education programming should provide state-of-the-art technology to support appropriate services. 4.2E The acquisition plan for purchasing new materials for the school should reflect the needs of gifted learners.

Gifted Education Programming Criterion: Curriculum and Instruction

NAGC Standards

Description: Gifted education services must include curricular and instructional opportunities directed to the unique needs of the gifted learner.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Differentiated curriculum for the gifted learner must span grades pre-K–12.	1.0M Differentiated curriculum (curricular and instructional adaptations that address the unique learning needs of gifted learners) for gifted learners must be integrated and articulated throughout the district.	1.0E A well-defined and implemented curriculum scope and sequence should be articulated for all grade levels and all subject areas.
2. Regular classroom curricula and instruction must be adapted, modified, or replaced to meet the unique needs of gifted learners.	2.0M Instruction, objectives, and strategies provided to gifted learners must be systematically differentiated from those in the regular classroom. 2.1M Teachers must differentiate, replace, supplement, or modify curricula to facilitate higher level learning goals. 2.2M Means for demonstrating proficiency in essential regular curriculum concepts and processes must be established to facilitate appropriate academic acceleration. 2.3M Gifted learners must be assessed for proficiency in basic skills and knowledge and provided with alternative challenging educational opportunities when proficiency is demonstrated	2.0E District curriculum plans should include objectives, content, and resources that challenge gifted learners in the regular classroom. 2.1E Teachers should be responsible for developing plans to differentiate the curriculum in every discipline for gifted learners. 2.2E Documentation of instruction for assessing level(s) of learning and accelerated rates of learning should demonstrate plans for gifted learners based on specific needs of individual learners. 2.3E Gifted learners should be assessed for proficiency in all standard courses of study and subsequently provided with more challenging educational opportunities.
3. Instructional pace must be flexible to allow for the accelerated learning of gifted learners as appropriate.	3.0M A program of instruction must consist of advanced content and appropriately differentiated teaching strategies to reflect the accelerative learning pace and advanced intellectual processes of gifted learners.	3.0E When warranted, continual opportunities for curricular acceleration should be provided in gifted learners' areas of strength and interest while allowing a sufficient ceiling for optimal learning.
4. Educational opportunities for subject and grade skipping must be provided to gifted learners.	4.0M Decisions to proceed or limit the acceleration of content and grade acceleration must only be considered after a thorough assessment.	4.0E Possibilities for partial or full acceleration of content and grade levels should be available to any student presenting such needs.
5. Learning opportunities for gifted learners must consist of a continuum of differentiated curricular options, instructional approaches, and resource materials.	5.0M Diverse and appropriate learning experiences must consist of a variety of curricular options, instructional strategies, and materials. 5.1M Flexible instructional arrangements (e.g., special classes, seminars, resource rooms, mentorships, independent study, and research projects) must be available.	5.0E Appropriate service options for each student to work at assessed level(s) and advanced rates of learning should be available. 5.1E Differentiated educational program curricula for students pre-K–12 should be modified to provide learning experiences matched to students' interests, readiness, and learning styles.

Appendix 2 Australian Gifted education professional development package

Gifted Education Professional Development Package

Using the Package

All modules in the Package contain a pre-test for teachers to determine what they might already know. Both the Core Modules and the Extension and Specialisation modules contain practical components with case studies and tasks for teachers to demonstrate that they have understood the module before moving on to the next one.

The modules contain an overview of current research about particular areas of gifted education. This research, in plain language, is illustrated by cartoons, case studies and examples of how it can be applied in the mainstream classroom.

The modules cover all levels of schooling: early childhood (the initial years of schooling), Primary (later years of primary schools), and secondary (secondary school). The modules are also ordered according to whether a teacher is in a rural or urban school, teaching in the classroom or involved in school administration, or whether the teacher is working alone or undertaking professional development in a small group or whole school situation.

The Extension and Specialisation Modules consist of the same six topics as in the Core Modules with additional advanced material, case studies, further reading and examples for use in the classroom. While the Core Modules were designed to cover the essential information every teacher should know, the Extension and Specialisation Modules are designed to build on this knowledge to allow teachers and teachers in training, principals and school staff to develop a deeper understanding of the issues in gifted education, develop more complex responses to addressing the needs of gifted students in the classroom, and be confident in sharing these skills with colleagues and parents.

Coloured Icons throughout the modules allow quick identification of research, case studies, information and activities according to individual needs.

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Module One. Understanding Giftedness

This module contains the essential information a teacher needs to understand the nature of giftedness and talent; what the terms mean; levels and types of giftedness. It covers the cognitive and affective characteristics of gifted and talented students over the years of schooling and introduces teachers to key concepts.

Module Two. The Identification of Gifted Students

This module covers a range of subjective and objective identification procedures that can be used by teachers and schools. It pays particular attention to procedures which are effective in identifying gifted students from minority and disadvantaged groups and emphasises the use of a combination of approaches rather than a single measure to address differences in student ability and background.

Module Three. Social and Emotional Development of Gifted Students

This module is designed to help teachers understanding the social and emotional characteristics and needs of gifted students and the ways in which gifted students may differ somewhat from their classmates in social-emotional development. It contains advice about supporting gifted students and their parents and covers teaching strategies and class structures which foster the development of positive social attitudes and supportive peer relationships in gifted students.

Module Four. Underachievement in Gifted Students

This module covers the causes of underachievement in gifted students. It provides solutions for teachers to identify gifted underachievers and plan interventions to prevent and reverse cycles of underachievement.

Module Five. Curriculum Differentiation for Gifted Students

This module is perhaps the key module of the Package. Building on the information in the first four modules, this module covers teaching strategies and methods of curriculum differentiation to enhance the learning of gifted students in the mainstream classroom. It covers appropriate use of different, well-known enrichment models that international research has found to be effective with gifted and talented students, such as Bloom, Williams, Maker and Kaplan. It includes practical applications of pre-testing, curriculum compacting and individualised programming for teachers. It also contains templates for teachers to use in re-designing their own curriculum programmes to cover the needs of all students.

Module Six. Developing Programmes and Provisions for Gifted Students

This model covers practical strategies for the establishment and monitoring of ability,

achievement or interest grouping in classes, and the many forms of accelerated progression through schooling. Particular attention is paid to the effects of various strategies on students' academic and social development.

Appendix 3 Staff Questionnaire E

Gifted/Talented provision Evaluation Questionnaire

☐ **I understand that by returning the survey I give my consent to participate in this research and use the results of my survey for the purpose of professional publications. When answering the questions keep in mind that there are no right or wrong answers: your personal opinion is highly valuable for our research. Thank you for agreeing to participate in the survey! (Please tick the box)**

Please check the box that describes you:

Q1: Are you a (tick one)

☐ administrator
☐ supervisor
☐ teacher (full time)
☐ teacher part time)

Q2: Gender ☐ male ☐ female

Q3: Age: ☐ 20-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 41-45 ☐ 46-50 ☐ 51- +

Q4: The type of work at the Center:

☐ full ☐ partial

Q5: The time of Action at the Center:

☐ morning ☐ evening

Q6: Years of work at the Center:

☐ 1-3 ☐ 4-6 ☐ 7-9 ☐ 10-13 ☐ 14-16 ☐ 17- +

Q7: Years of work before work at the center:

☐ 1-3 ☐ 4-6 ☐ 7-9 ☐ 10-13 ☐ 14-16 ☐ 17- +

Q8: Highest Degree Earned ☐ Bachelor ☐ Education diploma ☐ Master ☐ PhD ☐ Other

Q9: What is the best description of the gifted students center where you work: (please tick the appropriate choice)

☐ only full-time school

☐ a place for a group of gifted students to learn a specific curriculum part-time

☐ a place for a group of gifted students to practise extra activities part-time

☐ a place for a group of gifted students to learn a specific curriculum at week-end or in summer holidays

☐ a place for a group of gifted students to practise extra activities at the week-end or in summer holiday

☐ other ----------

Q10: What is the lowest school grade level for which there is a formal gifted program in your district ☐ early grades of the primary stage ☐ late grades of the primary stage

☐ elementary school ☐ intermediate ☐ secondary school

Q11: Is there a special budget for the Center?

☐ yes ☐ no ☐ not sure

(If the answer is yes, please indicate the source of funding)

☐ a special budget provided by the Ministry

☐ within the district budget provided by the Ministry

☐ the budget provided by the Center

☐ donations from companies and individuals

☐ collect fees from students

☐ other

Q12: How strong is the relationship between the centers and schools of the district What is the level ? (please circle: (1) very weak , (5) very strong)

Very weak	1	2	3	4	5	very strong

Q13: Is the present relationship between the centers and schools effective enough to meet the needs of gifted students?

☐ yes ☐ no ☐ not sure

Q14: Does Ministry of Education provide enough equipment to the gifted and talented centers to help them to meet the need for gifted and talented students.

☐ yes ☐ no ☐ not sure

Which of the following support does the Ministry provide to your center (tick as many options as apply)

- ☐ an adequate number of qualified and trained teachers (teachers - supervisors - Identifying specialists - student counselors)
- ☐ buildings for the center's needs
- ☐ sufficient budget for the center
- ☐ official Support for the centers when dealing with government and private sectors
- ☐ Provide standards and the necessary tools and standards for identifying gifted and talented students
- ☐ designing enrichment curriculum for educating of gifted and talented students or modifying the regular curriculum and supply to the centers
- ☐ medial support to the programs that the centers provide through coordination with the different media means
- ☐ provide the centers with the latest specialized books, journals and periodicals in the field of giftedness
- ☐ educational equipment and laboratories for the centers

Q15: Selecting and training teachers in center.

Please read each item carefully and indicate the degree to which you believe the following statements describe the method used to select teachers in your center.

Mark the appropriate box for each item.

SA- strongly agree

A- agree

U- undecided

D- disagree

SD- Strongly Disagree

No	Item	SA	S	U	D	SD
1	Teachers are selected according to clear criteria					
2	Teachers are selected by a committee of experts and specialist educators					
3	Teachers are selected according to social relationships with the officials at the center					
4	Teachers enroll in a training program in the care of gifted students before they are assigned at the center					
5	Teachers enroll in a various of training programs after joining work at the center					
6	Most teachers at the center are full-time					
7	Teachers in the center obtain high educational qualifications (high Diploma, MA)					
8	Teachers go through supervision, guidance and periodic evaluations					
9	teachers follow descriptive written instructions in their job for task required					
10	teachers used a variety of methods in evaluating of students' achievement (such as tests or others ...)					
11	Teachers participate in the development of educational units' enrichment through the regular school curriculum					
12	Teachers are fully aware of the characteristics, needs and problems of gifted students					
13	Teachers are committed to have parents participate in the center activities					
14	teachers are well oriented in how to use the computer					

Q16: Training in teaching of gifted/talented (check all that apply)

☐ course (s) at college/university ☐ educational degree in area ☐ training during the job

☐ workshop outside district ☐ workshop in the center ☐ none

Q17: To what extent do you think this training has adequately prepared you to teach gifted students? (please rank (1) not at all prepared , (5) very prepared)

Not at all prepared	1	2	3	4	5	very prepared

Q18: Do you think you need additional training to enhance your teaching of gifted students?

☐ yes ☐ no ☐ not sure

Q19: What additional kinds of training do you think you need to enhance your teaching of gifted students?

☐ postgraduate degree

☐ higher diploma after degree

☐ short course after degree

☐ pilot visits to good programs

☐ others (specify)

Q20: The center's supervisor is selected: (tick as many that apply)

☐ based on educational qualification

☐ based on valid experience

☐ nominated by an authority

☐ nominated by himself

☐ written test

☐ personal interview

Q21: The center's teachers are selected: (tick as many as apply)

☐ based on educational qualification

☐ based on valid experience

☐ nominated by an authority

☐ nominated by himself

☐ written test

☐ personal interview

Q22: the minimum educational qualifications the teacher should have:

☐ BA

☐ Master

☐ PhD

Q23: Does your district have a system regarding the acceleration of the regular curriculum for high ability students?

☐ yes ☐ no ☐ not sure

If yes, which of the following applies?

☐ accelerate students into the next level

☐ the admission of gifted students in the first grade of elementary school before the completion of legal age

☐ Others (specify)_____

Q24: The curricula offered to the gifted students in the center is:

☐ specific for the gifted students

☐ modified or developed version of the mainstream curriculum

Q25: Enrichment Curriculum for gifted students at the center

Please read each item carefully and indicate the degree to which you believe the following statements describe the enrichment curriculum in your center.

Mark the appropriate box for each item.

SA- Strongly agree A- Agree U- Undecided

D- Disagree SD- Strongly Disagree

No	Item	SA	A	U	D	SD
1	Enrichment curriculum is a complement to as well as an extension of the regular curriculum					
2	Enrichment curriculum identifies skills and knowledge which gifted students should learn at the center and which is not possible to learn through the study of the regular curriculum with ordinary students					
3	Enrichment curriculum focuses on high of thinking operations					
4	Enrichment curriculum includes self-directed activities and projects as conducted by students to acquire research skills and method					
5	Teachers participate in the development of the enrichment curriculum because they are more aware of the needs of their students.					
6	Enrichment curriculum is comprehensive, providing enrichment, acceleration, and extension options					
7	Enrichment curriculum is flexible					
8	Enrichment curriculum long-term aims are specific					
9	Curriculum enrichment builds students' skills in a coherent manner					
10	Enrichment curriculum provides experiences which achieve integration between different academic areas					
11	Enrichment curriculum achieves integration between the cognitive, emotional and social needs					
12	Enrichment curriculum contains clear guidance to assist the teacher in its application					
13	Enrichment curriculum is evaluated on a regular basis					
14	Gifted students are involved in the development of the enrichment curriculum that responds to their needs					
15	Enrichment curriculum is characterized as sequential and continuous					

Q26: How could the curriculum be improved? ----------

Q27: Selection system of gifted students at the center. Please read each item carefully and indicate the degree to which you believe the following statements describe the selection system in your center. Mark the appropriate box for each item.

SA- Strongly agree A- Agree U- Undecided

D- Disagree SD- Strongly Disagree

No	Item	SA	A	U	D	SD
1	The center adopts clear procedural definition of gifted students					
2	The center uses multiple procedures for selection of gifted students					
3	The tests and standards used in the selection are developed specifically for the center functions					
4	tests and standards used in the selection have high reliability					
5	The tests and standards of selection at the center reflect the center targets and its educational programs					
6	Teachers at the center are familiar with the selection system procedures					
7	The selection system at the center is effective in identifying gifted students with low achievement					
8	Decisions of the selection of gifted students are taken by a committee which includes specialists in measurement and gifted education					
9	It is a condition that the school achievement rate for the nominated students applying to the selection tests is not below a specific limit					
10	The center organizes an annual awareness campaign in the local community about the selection system					
11	Case study method is used in making decisions for selecting those students who are on the cut-off scores					
12	The center administration distributes nomination forms and requests for enrollment on all targeted schools					
13	The center reviews and evaluates the system of selection on a regular basis					
14	There is a specialist trained to train other teachers in gifted education principles and strategies					
15	The center defines cut-off scores for selection					

Q28: How could selection of students be improved? ----------

Q29: Do you think the selection method of the gifted students in the schools is appropriate ? ☐ yes ☐ no ☐ not sure

Q30: Which of the following measures and/or checklists does your district use to formally identify gifted students?

(Check all that apply)

☐ IQ tests (group or individual) ☐ teacher nomination ☐ creativity tests

☐ achievement tests ☐ parent nomination ☐ student interview

☐ teacher rating scales ☐ student self-nomination ☐ not sure

☐ student products portfolios ☐ peer nomination ☐ other, specify:----------

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Appendix 4 Staff Questionnaire A-M

بسم الله الرحمن الرحيم

أخي الفاضل **تحية طيبة**

السلام عليكم ورحمة الله وبركاته وبعد:

يسرني أن تكون أحد المشاركين في هذه الدراسة العلمية من خلال التفضل بمنحنا جزءاً قليلاً من وقتك للإجابة على بنود هذه الاستبانة المعدة لجمع بيانات دراسة علمية لنيل درجة الدكتوراه من جامعة Wollongong بأستراليا في مجال رعاية الطلاب الموهوبين بعنوان " **تقييم مشاريع رعاية الطلاب الموهوبين والمتفوقين في السعودية**" وتشمل عينة الدراسة جميع مراكز أو برامج الموهوبين والموهوبات في المملكة العربية السعودية.

أرجو التفضل بالإجابة على بنود الاستبانة بكل حرية ووضوح بوضع إشارة (√) في المربع الخالي يمين كل إجابة مع ملاحظة أن بعض البنود قد تحتاج إلى كتابة رأيك الشخصي الذي سيكون محل تقديرنا في المكان المخصص تحت ذلك البند وإذا احتجت إلى ورقة إضافية فيمكن مع الإشارة إلى ذلك في آخر تلك الإجابة، ولتعلم أخي الفاضل وأنت تجيب أنه ليس هناك إجابة صحيحة أو خاطئة على جميع البنود. شاكراً وممتناً لك اهتمامك ومشاركتك الإيجابية وتأكد أن ما ستبذله من مجهود في الإجابة على بنود هذه الاستبانة سيكون له الأثر الإيجابي والدور الفاعل في الوصول إلى نتائج مفيدة جدا في تحقيق الهدف العلمي من وراء إجراء هذه الدراسة وبالتالي المساهمة في تحسين برامج رعاية أبنائنا الموهوبين والموهوبات في المملكة العربية السعودية، وتأكد أيضا أن ما ستدلي به من معلومات ومقترحات ستكون سرية لدى الباحث وسيقتصر استخدامها لغرض البحث العلمي فقط.

وفقكم الله وشاكراً لكم تعاونكم سلفا،،،

أخوكم الباحث

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استبانة تقويم مشاريع رعاية الطلاب الموهوبين والمتفوقين في السعودية

الرجاء وضع علامة (√) في المربع الذي تختاره:

الأسم: (إختياري) ----------

س1: العمل الحالي

☐ مديراو مشرف على مركز او برنامج رعاية الطلاب الموهوبين

☐ مشرف تربوي

☐ معلم متفرغ

☐ معلم متعاون

س2: الجنس ☐ ذكر ☐ أنثى

س3: العمر

☐ 25-20 ☐ 30-26 ☐ 35-31 ☐ 40-36 ☐ 45-41 ☐ 50-46 ☐ 51 فأكثر

س4: نوع الدوام في المركز أو البرنامج :

☐ كلي ☐ جزئي

س5: فترة الدوام بالمركز أو البرنامج :

☐ صباحي ☐ مسائي

س6: سنوات العمل في المركز أو البرنامج:

☐ 1-3 ☐ 4-6 ☐ 7-9 ☐ 10-13 ☐ 14-16 ☐ 17- فأكثر

س7: سنوات العمل قبل الإلتحاق بالمركز أو البرنامج:

☐ 1-3 ☐ 4-6 ☐ 7-9 ☐ 10-13 ☐ 14-16 ☐ 17- فأكثر

س8: أعلى مؤهل علمي حصلت عليه ☐بكالوريوس ☐دبلوم تربوي بعد الجامعه ☐ماجستير
☐دكتوراه ☐غيرها

س9: ما هو أفضل وصف لمركز أو برنامج رعاية الطلاب الموهوبين الذي تعمل به مما يلي: (ضع إشارة مقابل الاختيار المناسب)

☐ مدرسة خاصة دوام كامل
☐ برنامج خاص للموهوبين يطبق داخل المدرسة العادية
☐ مقر لتجمع الطلاب الموهوبين لدراسة مناهج متخصصة للموهوبين دوام جزئي
☐ مقر لتجمع الطلاب الموهوبين لممارسة انشطة إضافية خاصة دوام جزئي
☐ مقر لتجمع الطلاب الموهوبين لدراسة مناهج متخصصة في إجازة نهاية الأسبوع أو في العطل الصيفية
☐ مقر لتجمع الطلاب الموهوبين لممارسة أنشطة إضافية خاصة في إجازة نهاية الأسبوع أو في العطل الصيفية
☐ تعريف آخر (أذكره) ----------

س10: ما هو المستوى الدراسي الأدني المعتمد لإنضمام الطلاب الموهوبين إلى مشاريع رعاية الطلاب الموهوبين في منطقتك

☐ الصفوف الأولية من المرحلة الإبتدائية
☐ الصفوف المتأخرة من المرحلة الإبتدائية
☐ المرحلة المتوسطة
☐ المرحلة الثانوية

س11: هل يتوفر للمركز أو البرنامج ميزانية خاصة

☐نعم ☐لا ☐غير متأكد

إذا كانت الإجابة بنعم فحدد ممايلي:

☐ميزانية خاصة توفرها الوزارة
☐ضمن ميزانية المنطقة توفرها الوزارة
☐ميزانية يوفرها المركز أو البرنامج بجهود ذاتية
☐تبرعات من شركات و أفراد
☐ تحصيل رسوم من الطلاب
☐ أخرى حددها

س12: ضع درجة تحدد مستوى العلاقة بين مركز أو برنامج رعاية الطلاب الموهوبين ومدارس المنطقة (ضع دائرة على الدرجة التي تمثل وجهة نظرك مع ملاحظة أن: (1) تعني ضعيفة جدا وأن (5) تعني علاقة قوية جدا)

علاقة ضعيفة جدا	1	2	3	4	5 علاقة قوية جدا

س13: هل العلاقة الحالية بين مراكز أو برامج رعاية الطلاب الموهوبين ومدارس المنطقة فعالة بما يكفي لتحسين مشاريع الرعاية للطلاب الموهوبين

☐ نعم ☐ لا ☐ غير متأكد

س14: تقدم وزارة التربية والتعليم الامكانات الكافية لمراكز أو برامج الطلاب الموهوبين والمتفوقين لمساعدتها على القيام بدورها تجاه الطلاب الموهوبين والمتفوقين بشكل جيد.

☐ نعم ☐ لا ☐ غير متأكد

إذا كانت الإجابة (بنعم) فأي من الآتي تقدمه الوزارة (حدد أكثر من خيار)

- ☐ توفير العدد الكافي من المعلمين المؤهلين والمدربين (معلمين – مشرفين – اخصائيين – مرشدين)
- ☐ توفير المباني اللازمة لتنفيذ البرامج (مراكز – أو غيرها)
- ☐ توفير الميزانية الكافية للمراكز أو البرامج
- ☐ دعم المراكز أو البرامج رسميا لدى الجهات الحكومية والقطاع الخاص
- ☐ توفير المقاييس والأدوات اللازمة للكشف عن الموهوبين
- ☐ بناء مناهج خاصة لتعليم الطلاب الموهوبين أو تعديلها من المنهج العادي وتقديمها للمراكز أو البرامج
- ☐ دعم برمج الطلاب الموهوبين إعلاميا من خلال التنسيق مع وسائل الإعلام المختلفة
- ☐ تزويد المراكز أو البرامج بأحدث الكتب والمجلات والدوريات المتخصصة في مجال الموهبة
- ☐ تزويد المراكز أو البرامج بالأجهزة والمعامل التعليمية اللازمة لرعاية الموهوبين

س15: اختيار معلمي الطلاب الموهوبين والمتفوقين وتدريبهم في المركز أو البرنامج

يرجى قراءة كل فقرة بتمعن وتقدير درجة موافقتك على مضمونها بوضع إشارة (√) مقابلها في العمود المناسب ، علماً بأن سلم تقدير الاستجابات يتكون من المستويات التالية :

(أ) أوافق بشدة (ب) أوافق (جـ) غير متأكد (د) لا أوافق (هـ) لا أوافق بشدة

الرقم	الفقرات	التقديرات				
		(أ)	(ب)	(جـ)	(د)	(هـ)
1	يتم أختيار المعلمين وفق معايير واضحة					
2	يتم اختيار المعلمين عن طريق لجنة من الخبراء والمختصين التربويين					
3	يتم اختيار المعلمين وفقا للعلاقات الإجتماعية مع المسؤولين في المركز او البرنامج					
4	يخضع المعلمون لبرنامج تدريب في مجال رعاية الموهوبين قبل تعيينهم في المركز أو البرنامج					
5	يخضع المعلمون لبرامج تدريب متنوعة بعد التحاقهم بالعمل في المركز أو البرنامج					
6	معظم المعلمين في المركز أو البرنامج متفرغون					
7	لدى المعلمين في المركز او البرنامج مؤهلات تربوية عليا (دبلوم عالي، ماجستير)					
8	يخضع المعلمون لعمليات إشراف وتوجيه وتقييم دورية					
9	يسترشد المعلمون في عملهم بوصف وظيفي مكتوب للمهمات المطلوبة منهم					
10	يستخدم المعلمون أساليب متنوعة في تقييم تحصيل الطلاب (مثل: الإختبارات أو غيرها....)					
11	يشارك المعلمون في تطوير الوحدات التعليمية الإثرائية من خلال المنهج المدرسي					
12	المعلمون على وعي تام بخصائص وحاجات ومشكلات الطلبة الموهوبين					
13	يحرص المعلمون على مشاركة أولياء أمور الطلاب في نشاطات المركزأو البرنامج					
14	المعلمون في المركز أو البرنامج يجيدون إستخدام الحاسوب					

س16: ما هو البرنامج التدريبي الذي حصلت عليه في تعليم الطلاب الموهوبين (يمكن اختيار أكثر من برنامج)

- ☐ مادة أو مواد دراسية في كلية أو جامعة
- ☐ شهادة تربوية في التخصص
- ☐ برنامج تدريبي أثناء العمل في المنطقة
- ☐ ورشة عمل خارج المنطقة
- ☐ ورشة عمل داخل مركز أو برنامج رعاية الطلاب الموهوبين
- ☐ لم أحصل على أي برنامج تدريبي في المجال

س17: إلى أي مدى تعتقد أن ما ورد من برامج تدريبة ملائم أو كاف لإعدادك لتدريس الطلاب الموهوبين والمتفوقين (ضع دائرة على الدرجة التي تمثل وجهة نظرك؛ مع ملاحظة أن (1) تعني إعداد ضعيف جدا، وأن (5) تعني إعداد ممتاز جدا)

إعداد ضعيف جدا	1	2	3	4	5 إعداد ممتاز جدا

س18: هل تعتقد أنك بحاجة إلى تدريب إضافي لتجويد عملية إعدادك لتدريس الطلاب الموهوبين والمتفوقين

☐نعم ☐ لا ☐ غير متأكد

س19: ما هو الحد الأدني من الدراسة النظامية أو التدريب الذي تعتقد أن المعلم يحتاج إلية لتدريس الطلاب الموهوبين

☐ بكالوريوس

☐ دبلوم بعد الجامعة

☐ دراسات عليا (ماجستير – دكتوراه)

☐ دورة تدريبية بعد الجامعة

☐ زيارات إستطلاعية لبرامج متميزة

☐ أخرى (أذكرها).....

س20: يُختار المشرف التربوي للعمل بالمركزبناءً على (يمكن اختيار أكثر من خيار)

☐الدرجة العلمية

☐الخبرة التربوية

☐اختبار تحريري

☐مقابلة شخصية

☐ ترشيحه من قبل مسؤول

☐ترشيحه لنفسه

س21: يتم اختيار المعلم للعمل بالمركزأو البرنامج بناء على: (يمكن اختيار أكثر من خيار)

- ☐ الدرجة العلمية
- ☐ الخبرة التربوية
- ☐ التميز التعليمي والإبداعي
- ☐ اهتمامه بفئة الطلاب الموهوبين والمتفوقين
- ☐ اختبار تحريري
- ☐ مقابلة شخصية
- ☐ ترشيحه من قبل مسؤول
- ☐ ترشيحه لنفسه

س22: ما هو الحد الأدنى من المؤهلات الدراسية الواجب توفرها لدى المعلم ليكون مؤهلاً للعمل بالمركز أو البرنامج

- ☐ شهادة جامعية
- ☐ ماجستير
- ☐ دبلوم عالي
- ☐ دكتوراه

س23: هل يتبع في منطقتك نظام التسريع الدراسي للطلاب الموهوبين والمتفوقين في المناهج العادية

☐ نعم ☐ لا ☐ غير متأكد

إذا كانت الإجابة بنعم فأيٌ من الآتي يطبق:

- ☐ يتم ترفيع الطلاب استثنائيا لصف دراسي أعلى (تخطي الصفوف)
- ☐ يتم قبول الطلاب الموهوبين في الصف الأول الإبتدائي قبل إستكمال السن القانونية
- ☐ إجراءات أخرى(حددها).....

س24: المناهج المقدمة للطلاب الموهوبين هي:

- ☐ مناهج مخصصة لهم
- ☐ مناهج معدلة من المناهج العادية

س25: المنهج الإثرائي للطلاب الموهوبين والمتفوقين في المركز او البرنامج

يرجى قراءة كل فقرة بتمعن وتقدير درجة انطباقها على المنهج المطبق بالمركز او لبرنامج من عدمه بوضع إشارة (√) مقابلها في العمود المناسب ، علماً بأن سلم تقدير الاستجابات يتكون من المستويات التالية :

(أ) أوافق بشدة (ب) أوافق (جـ) غير متأكد (د) لا أوافق (هـ) لا أوافق بشدة

الرقم	الفقرات	التقديرات				
		(أ)	(ب)	(جـ)	(د)	(هـ)
1	المنهج الإثرائي مكمل وامتداد للمنهج العادي					
2	يحدد المنهج الإثرائي المهارات والمعارف التي يجب أن يتعلمها الطلاب الموهوبين في المركز أو البرنامج و لا يتسنى لهم تعلمها من خلال دراسة المنهج العادي مع الطلاب العاديين					
3	يركز المنهج الإثرائي على عمليات التفكير العليا					
4	يتضمن المنهج الإثرائي نشاطات ومشروعات للدراسة الحرة يقوم بها الطلاب لإكتساب مهارات البحث وطرائقة					
5	يشارك معلمو الطلاب الموهوبين في تطوير المنهج الإثرائي لكونهم أكثر قدرة على تحسس حاجات طلابهم وخاصة في الجانب المعرفي ولكونهم أيضا هم المعنيون بالتنفيذ والتقييم					
6	يحقق المنهج الإثرائي الشمولية من خلال توفير خبرات إثرائية وتسريعية تستجيب لإحتياجات الطلاب الموهوبين وقدراتهم					
7	يتصف المنهج الإثرائي بالمرونة					
8	أهداف المنهج الإثرائي البعيدة المدى محددة					
9	خبرات المنهج الإثرائي متدرجة بصورة علمية					
10	يوفر المنهج الإثرائي خبرات تحقق التكامل بين المجالات الدراسية المختلفة					
11	يحقق المنهج الإثرائي التكامل بين الأهداف المعرفية والإنفعالية والوجدانية					
12	يتضمن المنهج الإثرائي إرشادات واضحة لمساعدة المعلم في تطبيقه					
13	يتم تقييم المنهج الإثرائي ومراجعته في ضوء التطبيق بصورة منتظمة					
14	يشارك الطلاب في تحديد بعض موضوعات المنهج الإثرائي التي تستجيب لحاجاتهم					
15	يتميز المنهج الإثرائي بالتتابع والإستمرارية					

س26: كيف يمكن تطوير المناهج؟ ----------

س27: نظام الكشف عن الطلاب الموهوبين والمتفوقين في المركز أو البرنامج

يرجى قراءة كل فقرة بتمعن وتقدير درجة انطباقها على ما يجري في المركز أو البرنامج من عدمه بوضع إشارة (√) مقابلها في العمود المناسب ، علماً بأن سلم تقدير الاستجابات يتكون من المستويات التالية :

(أ) أوافق بشدة (ب) أوافق (جـ) غير متأكد (د) لا أوافق (هـ) لا أوافق بشدة

الرقم	الفقرات	التقديرات				
		(أ)	(ب)	(جـ)	(د)	(هـ)
1	يتبنى المركز أو البرنامج تعريفا إجرائيا واضحا للطلاب الموهوبين					
2	يستخدم المركز أو البرنامج عدة محكات للكشف عن الطلبة الموهوبين					
3	الإختبارات والمقاييس المستخدمة في الكشف طورت خصيصا لأغراض المركز أو البرنامج					
4	تتصف الإختبارات والمقاييس المستخدمة في الكشف بدقة عالية					
5	تعكس محكات الكشف واختباراتها أهداف المركز أو البرنامج وبرامجه التربوية					
6	المعلمون في المركز أو البرنامج على إطلاع تامّ على نظام الكشف وإجراءاته					
7	نظام الكشف فعال في التعرف على الطلاب الموهوبين متدني التحصيل					
8	تُتخذ قرارات إختيار الطلاب الموهوبين من قبل لجنة تضم متخصصين في القياس وتعليم الموهوبين					
9	يشترط ألا يقل معدل التحصيل المدرسي للطلبة المرشحين لتقديم إختبارات الكشف عن حد معين					
10	ينظم المركز أو البرنامج حملة توعية سنوية في المجتمع المحلي حول إجراءات الكشف والإختيار					
11	يستخدم أسلوب دراسة الحالة في اتخاذ قرارات اختيار الطلبة الذين يقعون على الحدود الفاصلة للدرجات					
12	تقوم إدارة المركز أو البرنامج بتوزيع نماذج الترشيح وطلبات الإلتحاق على جميع المدارس المستهدفة					
13	تقوم إدارة المركزأو البرنامج بمراجعة وتقييم نظام الكشف بصورة منتظمة					
14	يوجد بالمركز أو البرنامج أخصائي أو أكثر مدرب على تطبيق المقاييس واستخراج الدرجات					
15	يحدد المركز أو البرنامج درجات فاصلة يتم الإختيار على أساسها					

س28: كيف يمكن تطوير طريقة أختيار الطلاب الموهوبين والمتفوقين ؟----------

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س29: هل تعتقد أن طريقة ترشيح الطلاب الموهوبين والمتفوقين التي تستخدمها المدارس لإلحاقهم بمراكز أو برامج رعاية الطلاب الموهوبين مناسبة:

☐ نعم ☐ لا ☐ غير متأكد

س30: :أيُ من المقايس أو القوائم أو الإجراءات التالية تُطبق لاكتشاف الطلاب الموهوبين والمتفوقين بشكل رسمي في منطقتك (حدد كل ما يطبق):

☐ اختبار ذكاء (فردي أو جماعي)

☐ اختبار تحصيل

☐ اختبار إبداع

☐ قوائم تقديرات المعلمين

☐ إنتاج الطلاب أو ملفاتهم

☐ مقابلة الطلاب

☐ ترشيح المعلمين

☐ ترشيح الوالدين

☐ ترشيح الأصدقاء

☐ ترشيحهم لأنفسهم

☐ غير متأكد

☐ أخرى (حددها)_____

Appendix 5 Staff Questionnaire A-F

بسم الله الرحمن الرحيم

أختي الفاضلة **تحية طيبة**

السلام عليكم ورحمة الله وبركاته وبعد:

يسرني أن تكوني إحدى المشاركات في هذه الدراسة العلمية من خلال التفضل بمنحنا جزءاً قليلاً من وقتكِ للإجابة على بنود هذه الاستبانة المعدة لجمع بيانات دراسة علمية لنيل درجة الدكتوراه من جامعة Wollongong بأستراليا في مجال رعاية الموهوبين بعنوان " **تقييم مشاريع رعاية الطلاب الموهوبين والمتفوقين في السعودية**" وتشمل عينة الدراسة جميع مراكز أو برامج الموهوبين والموهوبات في المملكة العربية السعودية.

أرجو التفضل بالإجابة على بنود الاستبانة بكل حرية ووضوح بوضع إشارة (√) في المربع الخالي يمين كل إجابة مع ملاحظة أن بعض البنود قد تحتاج إلى كتابة رأيكِ الشخصي الذي سيكون محل تقديرنا في المكان المخصص تحت ذلك البند وإذا احتجتِ إلى ورقة إضافية فيمكن مع الإشارة إلى ذلك في آخر تلك الإجابة، ولتعلمين أختي الفاضلة وأنتِ تجيبين أنه ليس هناك إجابة صحيحة أو خاطئة على جميع البنود. شاكراً وممتناً لكِ اهتمامكِ ومشاركتكِ الإيجابية وتأكدي أن ما ستبذلينه من مجهود في الإجابة على بنود هذه الاستبانة سيكون له الأثر الإيجابي والدور الفاعل في الوصول إلى نتائج مفيدة جدا في تحقيق الهدف العلمي من وراء إجراء هذه الدراسة وبالتالي المساهمة في تحسين برامج رعاية أبنائنا الموهوبين والموهوبات في المملكة العربية السعودية، وتأكدي أيضا أن ما ستدلين به من معلومات ومقترحات ستكون سرية لدى الباحث وسيقتصر استخدامها لغرض البحث العلمي فقط.

وفقكم الله وشاكراً لكم تعاونكم سلفا،،،

أخوكم الباحث

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استبانة تقويم مشاريع رعاية الطالبات الموهوبات والمتفوقات في السعودية

الرجاء وضع علامة (√) في المربع الذي تختارينه:

الأسم: (اختياري) ----------

س1: العمل الحالي

☐ مديرة أو مشرفة على مركز او برنامج رعاية الطالبات الموهوبات والمتفوقات

☐ مشرفة تربوية

☐ معلمة متفرغة

☐ معلمة متعاونة

س2: الجنس ☐ ذكر ☐ أنثى

س3: العمر

☐ 25-20 ☐ 30-26 ☐ 35-31 ☐ 40-36 ☐ 45-41 ☐ 50-46 ☐ 51 فأكثر

س4: نوع الدوام في المركز أو البرنامج :

☐ كلي ☐ جزئي

س5: فترة الدوام بالمركز أو البرنامج :

☐ صباحي ☐ مسائي

س6: سنوات العمل في المركز أو البرنامج:

☐ 1-3 ☐ 4-6 ☐ 7-9 ☐ 10-13 ☐ 14-16 ☐ 17- فأكثر

س7: سنوات العمل قبل الإلتحاق بالمركز أو البرنامج:

☐ 1-3 ☐ 4-6 ☐ 7-9 ☐ 10-13 ☐ 14-16 ☐ 17- فأكثر

س8: أعلى مؤهل علمي حصلتِ عليه ☐ بكالوريوس ☐ دبلوم تربوي بعد الجامعه ☐ ماجستير

☐ دكتوراه ☐ غيرها

س9: ما هو أفضل وصف لمركز أو برنامج رعاية الطالبات الموهوبات والمتفوقات الذي تعملين به مما يلي: (ضعي إشارة مقابل الاختيار المناسب)

- ☐ مدرسة خاصة دوام كامل
- ☐ برنامج خاص للموهوبات والمتفوقات يطبق داخل المدرسة العادية
- ☐ مقر لتجمع الطالبات الموهوبات والمتفوقات لدراسة مناهج متخصصة للموهوبات والمتفوقات دوام جزئي
- ☐ مقر لتجمع الطالبات الموهوبات والمتفوقات لممارسة انشطة إضافية خاصة دوام جزئي
- ☐ مقر لتجمع الطالبات الموهوبات والمتفوقات لدراسة مناهج متخصصة في إجازة نهاية الأسبوع أو في العطل الصيفية
- ☐ مقر لتجمع الطالبات الموهوبات والمتفوقات لممارسة أنشطة إضافية خاصة في إجازة نهاية الأسبوع أو في العطل الصيفية
- ☐ تعريف آخر (أذكريه) ----------

س10: ما هو المستوى الدراسي الأدنى المعتمد لإنضمام الطالبات الموهوبات والمتفوقات إلى مشاريع رعاية الطالبات الموهوبات والمتفوقات في منطقتك

- ☐ الصفوف الأولية من المرحلة الإبتدائية
- ☐ الصفوف المتأخرة من المرحلة الإبتدائية
- ☐ المرحلة المتوسطة
- ☐ المرحلة الثانوية

س11: هل يتوفر للمركز أو البرنامج ميزانية خاصة

☐نعم ☐لا ☐غير متأكدة

إذا كانت الإجابة بنعم فحددي ممايلي:

- ☐ميزانية خاصة توفرها الوزارة
- ☐ضمن ميزانية المنطقة توفرها الوزارة
- ☐ميزانية يوفرها المركز أو البرنامج بجهود ذاتية
- ☐تبرعات من شركات و أفراد
- ☐ تحصيل رسوم من الطالبات
- ☐ أخرى حدديها

س12: ضعي درجة تحدد مستوى العلاقة بين مركز أو برنامج رعاية الطالبات الموهوبات والمتفوقات ومدارس المنطقة (ضعي دائرة على الدرجة التي تمثل وجهة نظركِ مع ملاحظة أن: (1) تعني ضعيفة جدا وأن (5) تعني علاقة قوية جدا)

علاقة ضعيفة جدا	1	2	3	4	5 علاقة قوية جدا

س13: هل العلاقة الحالية بين مراكز أو برامج رعاية الطالبات الموهوبات والمتفوقات ومدارس المنطقة فعالة بما يكفي لتحسين مشاريع الرعاية للطالبات الموهوبات والمتفوقات

☐ نعم ☐ لا ☐ غير متأكدة

س14: تقدم وزارة التربية والتعليم الامكانات الكافية لمراكز أو برامج الطالبات الموهوبات والمتفوقات لمساعدتها على القيام بدورها تجاه الطالبات الموهوبات والمتفوقات بشكل جيد.

☐ نعم ☐ لا ☐ غير متأكدة

إذا كانت الإجابة (بنعم) فأي من الآتي تقدمه الوزارة (حددي أكثر من خيار)

- ☐ توفير العدد الكافي من المعلمات المؤهلات والمدربات (معلمات – مشرفات – اخصائيات – مرشدات)
- ☐ توفير المباني اللازمة لتنفيذ البرامج (مراكز – أو غيرها)
- ☐ توفير الميزانية الكافية للمراكز أو البرامج
- ☐ دعم المراكز أو البرامج رسميا لدى الجهات الحكومية والقطاع الخاص
- ☐ توفير المقاييس والأدوات اللازمة للكشف عن الطالبات الموهوبات والمتفوقات
- ☐ بناء مناهج خاصة لتعليم الطالبات الموهوبات والمتفوقات أو تعديلها من المنهج العادي وتقديمها للمراكز أو البرامج
- ☐ دعم برامج الطالبات الموهوبات والمتفوقات إعلاميا من خلال التنسيق مع وسائل الإعلام المختلفة
- ☐ تزويد المراكز أو البرامج بأحدث الكتب والمجلات والدوريات المتخصصة في مجال الموهبة
- ☐ تزويد المراكز أو البرامج بالأجهزة والمعامل التعليمية اللازمة لرعاية الطالبات الموهوبات والمتفوقات

س15: اختيار معلمات الطالبات الموهوبات والمتفوقات وتدريبهم في المركز أو البرنامج

يرجى قراءة كل فقرة بتمعن وتقدير درجة موافقتكِ على مضمونها بوضع إشارة (√) مقابلها في العمود المناسب ، علماً بأن سلم تقدير الاستجابات يتكون من المستويات التالية :

(أ) أوافق بشدة (ب) أوافق (جـ) غير متأكدة (د) لا أوافق (هـ) لا أوافق بشدة

الرقم	الفقرات	التقديرات				
		(أ)	(ب)	(جـ)	(د)	(هـ)
1	يتم اختيار المعلمات وفق معايير واضحة					
2	يتم اختيار المعلمات عن طريق لجنة من الخبيرات والمختصات التربويات					
3	يتم اختيار المعلمات وفقا للعلاقات الإجتماعية مع المسؤولات في المركز او البرنامج					
4	تخضع المعلمات لبرنامج تدريب في مجال رعاية الموهوبات والمتفوقات قبل تعيينهم في المركز أو البرنامج					
5	تخضع المعلمات لبرامج تدريب متنوعة بعد التحاقهم بالعمل في المركز أو البرنامج					
6	معظم المعلمات في المركز أو البرنامج متفرغات					
7	لدى المعلمات في المركز او البرنامج مؤهلات تربوية عليا (دبلوم عالي، ماجستير)					
8	تخضع المعلمات لعمليات إشراف وتوجيه وتقييم دورية					
9	تسترشد المعلمات في عملهم بوصف وظيفي مكتوب للمهمات المطلوبة منهم					
10	تستخدم المعلمات أساليب متنوعة في تقييم تحصيل الطالبات (مثل: الاختبارات أو غيرها....)					
11	تشارك المعلمات في تطوير الوحدات التعليمية الإثرائية من خلال المنهج المدرسي					
12	المعلمات على وعي تام بخصائص وحاجات ومشكلات الطالبات الموهوبات والمتفوقات					
13	تحرص المعلمات على مشاركة أولياء أمور الطالبات في نشاطات المركزأو البرنامج					
14	المعلمات في المركز أو البرنامج يجيدون إستخدام الحاسوب					

س16: ما هو البرنامج التدريبي الذي حصلتِ عليه في تعليم الطالبات الموهوبات والمتفوقات (يمكن اختيار أكثر من برنامج)

- ☐ مادة أو مواد دراسية في كلية أو جامعة
- ☐ شهادة تربوية في التخصص
- ☐ برنامج تدريبي أثناء العمل في المنطقة
- ☐ ورشة عمل خارج المنطقة
- ☐ ورشة عمل داخل مركز أو برنامج رعاية الطالبات الموهوبات والمتفوقات
- ☐ لم أحصل على أي برنامج تدريبي في المجال

س17: إلى أي مدى تعتقدين أن ما ورد من برامج تدريبة ملائم أو كاف لإعدادك لتدريس الطالبات الموهوبات والمتفوقات (ضعي دائرة على الدرجة التي تمثل وجهة نظركِ مع ملاحظة أن (1) تعني إعداد ضعيف جدا، وأن (5) تعني إعداد ممتاز جدا)

إعداد ضعيف جدا	1	2	3	4	5 إعداد ممتاز جدا

س18: هل تعتقدين أنك بحاجة إلى تدريب إضافي لتجويد عملية إعدادكِ لتدريس الطالبات الموهوبات والمتفوقات

☐نعم ☐ لا ☐ غير متأكدة

س19: ما هو الحد الأدنى من الدراسة النظامية أو التدريب الذي تعتقدين أن المعلمة تحتاج إلية لتدريس الطالبات الموهوبات والمتفوقات

☐ بكالوريوس

☐ دبلوم بعد الجامعة

☐ دراسات عليا (ماجستير – دكتوراه)

☐ دورة تدريبية بعد الجامعة

☐ زيارات استطلاعية لبرامج متميزة

☐ أخرى (أذكريها).....

س20: تُختار المشرفة التربوية للعمل بالمركزبناءً على (يمكن اختيار أكثر من خيار)

☐الدرجة العلمية

☐الخبرة التربوية

☐اختبار تحريري

☐مقابلة شخصية

☐ ترشيحها من قبل مسؤولة

☐ ترشيحها لنفسها

س21: يتم اختيار المعلمة للعمل بالمركزأو البرنامج بناء على: (يمكن اختيار أكثر من خيار)

- ☐ الدرجة العلمية
- ☐ الخبرة التربوية
- ☐ التميز التعليمي والإبداعي
- ☐ اهتمامها بفئة الطالبات الموهوبات والمتفوقات
- ☐ اختبار تحريري
- ☐ مقابلة شخصية
- ☐ ترشيحها من قبل مسؤولة
- ☐ ترشيحها لنفسها

س22: ما هو الحد الأدنى من المؤهلات الدراسية الواجب توفرها لدى المعلمة لتكون مؤهله للعمل بالمركز أو البرنامج

- ☐ شهادة جامعية
- ☐ ماجستير
- ☐ دبلوم عالي
- ☐ دكتوراه

س23: هل يتبع في منطقتكِ نظام التسريع الدراسي للطالبات الموهوبات والمتفوقات في المناهج العادية

☐ نعم ☐ لا ☐ غير متأكدة

إذا كانت الإجابة بنعم فأيٌ من الآتي يطبق:

- ☐ يتم ترفيع الطالبات الموهوبات والمتفوقات استثنائيا لصف دراسي أعلى (تخطي الصفوف)
- ☐ يتم قبول الطالبات الموهوبات والمتفوقات في الصف الأول الإبتدائي قبل إستكمال السن القانونية
- ☐ إجراءات أخرى(حدديها).....

س24: المناهج المقدمة للطالبات الموهوبات والمتفوقات هي:

- ☐ مناهج مخصصة لهم
- ☐ مناهج معدلة من المناهج العادية

س25: المنهج الإثرائي للطالبات الموهوبات والمتفوقات في المركز او البرنامج

يرجى قراءة كل فقرة بتمعن وتقدير درجة انطباقها على المنهج المطبق بالمركز اوالبرنامج من عدمه بوضع إشارة (√) مقابلها في العمود المناسب ، علماً بأن سلم تقدير الاستجابات يتكون من المستويات التالية :

(أ) أوافق بشدة (ب) أوافق (جـ) غير متأكدة (د) لا أوافق (هـ) لا أوافق بشدة

الرقم	الفقرات	التقديرات				
		(أ)	(ب)	(جـ)	(د)	(هـ)
1	المنهج الإثرائي مكمل وامتداد للمنهج العادي					
2	يحدد المنهج الإثرائي المهارات والمعارف التي يجب أن تتعلمها الطالبات الموهوبات والمتفوقات في المركز أو البرنامج و لا يتسنى لهن تعلمها من خلال دراسة المنهج العادي مع الطالبات العاديّات					
3	يركز المنهج الإثرائي على عمليات التفكير العليا					
4	يتضمن المنهج الإثرائي نشاطات ومشروعات للدراسة الحرة تقوم بها الطالبات لإكتساب مهارات البحث وطرائقة					
5	تشارك معلمات الطالبات الموهوبات والمتفوقات في تطوير المنهج الإثرائي لكونهن أكثر قدرة على تحسس حاجات طالباتهن وخاصة في الجانب المعرفي ولكونهن أيضا هن المعنيات بالتنفيذ والتقييم					
6	يحقق المنهج الإثرائي الشمولية من خلال توفير خبرات إثرائية وتسريعية تستجيب لإحتياجات الطالبات الموهوبات والمتفوقات وقدراتهن					
7	يتصف المنهج الإثرائي بالمرونة					
8	أهداف المنهج الإثرائي البعيدة المدى محددة					
9	خبرات المنهج الإثرائي متدرجة بصورة علمية					
10	يوفر المنهج الإثرائي خبرات تحقق التكامل بين المجالات الدراسية المختلفة					
11	يحقق المنهج الإثرائي التكامل بين الأهداف المعرفية والإنفعالية والوجدانية					
12	يتضمن المنهج الإثرائي إرشادات واضحة لمساعدة المعلمة في تطبيقها					
13	يتم تقييم المنهج الإثرائي ومراجعته في ضوء التطبيق بصورة منتظمة					
14	تشارك الطالبات في تحديد بعض موضوعات المنهج الإثرائي التي تستجيب لحاجاتهن					
15	يتميز المنهج الإثرائي بالتتابع والإستمرارية					

س26: كيف يمكن تطوير المناهج؟ ----------

س27: نظام الكشف عن الطالبات الموهوبات والمتفوقات في المركز أو البرنامج

يرجى قراءة كل فقرة بتمعن وتقدير درجة انطباقها على ما يجري في المركز أو البرنامج من عدمه بوضع إشارة (√) مقابلها في العمود المناسب ، علماً بأن سلم تقدير الاستجابات يتكون من المستويات التالية :

(أ) أوافق بشدة (ب) أوافق (جـ) غير متأكدة (د) لا أوافق (هـ) لا أوافق بشدة

الرقم	الفقرات	التقديرات				
		(أ)	(ب)	(جـ)	(د)	(هـ)
1	يتبنى المركز أو البرنامج تعريفا إجرائيا واضحا للطالبات الموهوبات والمتفوقات					
2	يستخدم المركز أو البرنامج عدة محكات للكشف عن الطالبات الموهوبات					
3	الاختبارات والمقاييس المستخدمة في الكشف طورت خصيصا لأغراض المركز أو البرنامج					
4	تتصف الاختبارات والمقاييس المستخدمة في الكشف بدقة عالية					
5	تعكس محكات الكشف واختباراتها أهداف المركز أو البرنامج وبرامجه التربوية					
6	المعلمات في المركز أو البرنامج على إطلاع تامّ على نظام الكشف وإجراءاته					
7	نظام الكشف فعال في التعرف على الطالبات الموهوبات والمتفوقات متدنيات التحصيل					
8	تُتخذ قرارات إختيار الطالبات الموهوبات والمتفوقات من قبل لجنة تضم متخصصات في القياس وتعليم الموهوبات					
9	يشترط ألا يقل معدل التحصيل المدرسي للطالبات المرشحات لتقديم اختبارات الكشف عن حد معين					
10	ينظم المركز أو البرنامج حملة توعية سنوية في المجتمع المحلي حول إجراءات الكشف والاختيار					
11	يستخدم أسلوب دراسة الحالة في اتخاذ قرارات اختيار الطالبات اللاتي يقعن على الحدود الفاصلة للدرجات					
12	تقوم إدارة المركز أو البرنامج بتوزيع نماذج الترشيح وطلبات الإلتحاق على جميع المدارس المستهدفة					
13	تقوم إدارة المركزأو البرنامج بمراجعة وتقييم نظام الكشف بصورة منتظمة					
14	يوجد بالمركز أو البرنامج أخصائية أو أكثر مدربة على تطبيق المقاييس واستخراج الدرجات					
15	يحدد المركز أو البرنامج درجات فاصلة يتم الاختيار على أساسها					

س28: كيف يمكن تطوير طريقة اختيار الطالبات الموهوبات والمتفوقات ؟----------

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س29: هل تعتقدين أن طريقة ترشيح الطالبات الموهوبات والمتفوقات التي تستخدمها المدارس لإلحاقهن بمراكز أو برامج رعاية الطالبات الموهوبات والمتفوقات مناسبة:

☐ نعم ☐ لا ☐ غير متأكدة

س30: :أيُ من المقايس أو القوائم أو الإجراءات التالية تُطبق لاكتشاف الطالبات الموهوبات والمتفوقات بشكل رسمي في منطقتك (حددي كل ما يطبق):

☐ اختبار ذكاء (فردي أو جماعي)

☐ اختبار تحصيل

☐ اختبار إبداع

☐ قوائم تقديرات المعلمات

☐ إنتاج الطالبات أو ملفاتهن

☐ مقابلة الطالبات

☐ ترشيح المعلمات

☐ ترشيح الوالدين

☐ ترشيح الأصدقاء

☐ ترشيحهن لأنفسهن

☐ غير متأكدة

☐ أخرى (حدديها)_____

Appendix 6 Students Questionnaire E

An Evaluative Questionnaire
of Gifted Students Development Projects in KSA
(Students Questionnaire)

Dear gifted student

This questionnaire is designed to collect data to obtain a PhD degree from Wollongong University in Australia in the field of developing gifted students. The dissertation, entitled "An Evaluation of Gifted Students Development Projects in KSA", aims at identifying positive and negative aspects of Gifted Students Development Programs. Being the main beneficiary of these programs and the prime participant therein, you must have recognized the points of strength and weakness of these programs through the extent of benefit that was achieved and which enriched your gift. It is therefore our pleasure to invite you to partake in evaluating these programs, as your input shall be of great interest to us and of immense impact in delineating the true image of these programs, as well as in recommending appropriate solutions that will contribute in achieving the desired results for you and your classmates in the future. You are simply requested to put a (✓(in the blank square next to each statement. Please, note that there is no right or wrong answer. We merely seek to learn more about your opinion through your answers. Rest assured that the information you will be submitting shall be treated with utter confidentiality and shall be exclusively used for purposes of scientific research.

Thank you and best wishes

Mohammed bin Abdel Khaleq Al Qarni,
A researcher
Wollongong University, Australia
Cellular: 0555682821
Fax: 027467690
P. O. Box: 25248 Postal code: 21944,
Ta'iff
Email: alqarni121@yahoo.com

Q1: Name (optional) .....

Age: 6-12 13-15 16-18

Education stage: Elementary Middle Secondary

Q2: Who of the following people first discovered your gift?

Your parents

Your classmate

Your teacher in class

Your gifted students program supervisor

Other. Please, specify: .....

Q3: When was your gift discovered?

Before elementary school

During the first three years of elementary school (first – second – third)

During the last three years of elementary school

During middle school

During secondary school

Q4: In which of the following areas are you gifted? (Multiple answers can be selected)

Calligraphy and drawing

Computer

Mathematics

Electronics

Scientific inventions

Oration

School acting group

Literary writing

Other. Please, specify. .....

Q5: Have you joined Gifted Students Development programs:

Yes No

If "yes", please, specify where you joined the program:

At the school I go to

At the Gifted Students Center in our neighborhood

Through summer programs arranged by the Ministry

Through summer programs arranged by private or other governmental bodies

Other. Please, specify. .....

Q6: Name which of the following criteria (tests) were applied on you, based on the results of which you were nominated for Gifted Students Development Program at school or Gifted Students Development Center in the neighborhood (Place a check mark next to all applicable items):

IQ test

Special abilities test

Creativity test

Arabic and Mathematics tests

Teachers nomination

School nomination

Classmates nomination

Self-nomination

Academic achievement

Other. Please, specify. .....

Q7: Curricula offered in the Gifted Students Development program at school or at the Center are:

Specially-tailored curricula for gifted students

Developed curricula, derived from regular courses taught at school

Various activities practiced during free time at school

Various activities practiced on weekends or during the summer vacation

No special course or activity for gifted students

Q8: Which of the following means of transportation do you use to go to Gifted Students Program at school or the Center?

A Center bus

A school bus

A private vehicle

Q9: Do you find it difficult to make new friends from among your fellow gifted classmates?

Yes No

Q10: Have you been informed of the identification measures before taking gift identification tests?

Yes No

Q11: Have you been nominated for the Gifted Students Program at school first, then at the Center. Which of the following applies:

I was first nominated by school

I was first nominated by the Center

There is no Gifted Students Program at school

Q12: Which of the following were the measures adopted by school to nominate you for the Gifted Students Program?

My teacher's nomination

My outstanding grades in school

My school nomination

The nomination of a relation of mine who works at school

The nomination of one of my classmates, who joined the program first

A personal desire and self-nomination

Q13: Is there any disagreement between participating in Gifted Students' Program activities at school or center, and other regular activities for all students?

Yes No Not sure

Q14: Are there students in your class who believe they are gifted, but who have not been identified by the school or center Gifted Students' Program?

Yes No Not sure

Q15: Did you receive support from your parents upon signing for in the Gifted Students' Program?

Yes No

Q16: Have parents received some orientation or guidance from the school or the Center concerning the importance of recognizing and developing a gift?

Yes No Not sure

Q17: Is there any discrepancy between the support and resources made available to gifted students to assist them in practicing their activities, as part of the Program, and what is available at the Center?

Yes No Not sure

If the answer is "yes", please, specify aspects of difference. Multiple choices can be selected:

The Center building is better than the school building as it accommodates more convenient places to exercise the training program

Teachers at the Center are specialists and trained in the field of gifted students development

The Center has sufficient resources and departments to train gifted students

The Center boasts laboratories in every field that are not available at school

The curriculum offered at the Center is different than that offered in school and befits gifted students

Teacher at school encourage giving feedback and ideas better than at the Center

Making new friendships at the Center is more difficult than at school

Other. Please, specify. ……..

Appendix 7 Students Questionnaire A-M

استبانة تقويم مشاريع رعاية الطلبة الموهوبين في السعودية

(استبانة الطالب)

أخي الطالب الموهوب..

هذه الاستبانة معدة لجمع بيانات دراسة علمية لنيل درجة الدكتوراه من جامعة ولنجونج Wollongong بأستراليا في مجال رعاية الموهوبين بعنوان " **تقييم مشاريع رعاية الطلبة الموهوبين في السعودية**" وتهدف إلى التعرف على إيجابيات وسلبيات برامج رعاية الطلبة الموهوبين التي تنفذ في المدارس أو مراكزرعاية الموهوبين في المملكة العربية السعودية. ولكونك المستفيد من هذه البرامج والمشارك الرئيس فيها فلا بد أنك قد تعرفت على الإيجابيات والسلبيات لهذه البرامج من خلال مدى الإستفادة التي تحققت لك واثرت في موهبتك. لهذا يسعدني أن تكون أحد المشاركين في تقويم هذه البرامج لأن رأيك سيكون محل اهتمام وذا أثر بالغ في رسم الصورة الحقيقية لهذه البرامج واقتراح الحلول المناسبة التي تساهم في تحقيق الفائدة المرجوة لك ولزملائك الآخرين في المستقبل. والمطلوب تعبئة حقول هذه الاستبانة بوضع إشارة (✓) في المربع الخالي أمام كل عبارة وللعلم فإنه ليس هناك إجابة صحيحة أو خاطئة وإنما هو رأيك الذي نحترمه ويهمنا التعرف عليه من خلال إجاباتك على جميع فقرات الاستبانة، وتأكد أن المعلومات التي تدلي بها ستكون محل السرية وتستخدم لإغراض البحث العلمي فقط.

أشكرك وأتمنى لك التوفيق والنجاح،،

أخوكم الباحث

محمد بن عبد الخالق القرني

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بريد ألكتروني: alqarni121@yahoo.com

س1 : الاسم (اختياري) .....

العمر: ☐ 6ـ 12 ☐ 13ـ 15 ☐ 16ـ 18

المرحلة الدراسية : ☐ ابتدائي ☐ متوسط ☐ ثانوي

س2 : حدد مما يلي من كان وراء اكتشاف موهبتك

☐ الوالدان

☐ زميل في الصف

☐ مدرس الصف بالمدرسة التي أدرس بها

☐ المشرف على برنامج الموهوبين في المدرسة

☐ غير ذلك حدد : .....

س3 : حدد مما يلي متى تم اكتشاف موهبتك :

☐ قبل مرحلة الدراسة الإبتدائية

☐ في السنوات الثلاث الأولى من المرحلة الإبتدائية (أولى ــ ثانية ــ ثالثة)

☐ في السنوات الثلاث الأخيرة من المرحلة الأبتدائية

☐ في المرحلة المتوسطة

☐ في المرحلة الثانوية

س4 : حدد مما يلي مجال موهبتك (يمكن الإشارة إلى أكثر من مجال) :.

☐ في الخط والرسم ☐ في الحاسب الألي

☐ في الرياضيات ☐ في الإلكترونيات

☐ في الإختراعات العلمية ☐ في الخطابة

☐ في التمثيل المدرسي ☐ في الكتابة الأدبية

غير ذلك (حدد) .....

س5 : هل التحقت ببرنامج لرعاية الموهوبين ؟

☐ نعم ☐ لا

إذا كانت الإجابة بنعم فحدد مما يلي أين التحقت :.

☐ في المدرسة التي أدرس بها

☐ في مركز الموهوبين في منطقتنا

☐ في البرامج الصيفية التي تقدمها الوزارة

☐ في البرامج الصيفية التي تقدمها بعض الجهات الخاصة أو الحكومية الأخرى

☐ غير ذلك حدد .....

س6 : حدد أيّ من المقاييس (الاختبارات) التالية طبقت عليك وبناءً على نتائجها رُشحت للالتحاق ببرنامج رعاية الموهوبين في المدرسة أو بمركز رعاية الموهوبين في المنطقة (ضع إشارة بجانب كل البنود التي طبقت عليك):

☐ اختبار ذكاء

☐ اختبار قدرات خاصة

☐ اختبار إبداع

☐ اختبار تحصيلي في اللغة العربية والرياضيات

☐ ترشيح المعلمين

☐ ترشيح إدارة المدرسة

☐ ترشيح زملاء

☐ ترشيحي لنفسي

☐ معدل التحصيل الدراسي في مدرستي

☐ غيرذلك (حدد) .....

س7 : المنهج المقرر في برنامج رعاية الموهوبين في المدرسة أوالمركز هو :

☐ منهج خاص للطلاب الموهوبين

☐ منهج مطور من المنهج العادي الذي ندرسه في المدرسة

☐ أنشطة متنوعة تمارس وقت الفراغ داخل المدرسة

☐ أنشطة متنوعة تمارس في إجازة نهاية الأسبوع والإجازة الصيفية

☐ لايوجد أي منهج أو نشاط مخصص للموهوبين

س8 : ماهي وسيلة الموصلات التي تستخدمها في الذهاب الى برنامج الموهوبين في المدرسة أو المركز مما يلي ؟

☐ وسيلة نقل جماعية يوفرها المركز

☐ وسيلة نقل جماعية توفرها المدرسة

☐ وسيلة خاصة

س9 : هل تجد صعوبة في تكوين اصدقاء من بين الطلاب الموهوبين الذين يدرسون معك؟

☐ نعم ☐ لا

س10:هل اطلعت على اجراءات الكشف قبل اجراء الاختبارات الخاصة بالكشف عن الموهوبين؟

☐ نعم ☐ لا

س11:هل تم ترشيحك لبرنامج الموهوبين في المدرسة اولاً ثم مركز الموهوبين ثانياً

اختر مما يلي؟

☐ رشحت لبرنامج الموهوبين من قبل المدرسة أولاً

☐ رشحت لبرنامج الموهوبين من قبل مركز الموهوبين اولاً

☐ لايوجد برنامج للموهوبين داخل المدرسة

س12:الاجراءات التي اتبعتها المدرسة لترشيحك لبرنامج الموهوبين المقام بمركز رعاية الموهوبين هي:

(حدد) ممايلي:

- ☐ ترشيح معلم الصف لي
- ☐ تفوقي في التحصيل الدراسي بالمدرسة
- ☐ ترشيح إدارة المدرسة
- ☐ ترشيح قريب لي يعمل بالمدرسة
- ☐ ترشيح احد زملائي الملتحقين بالبرنامج قبلي
- ☐ بناءً على رغبتي وترشيح نفسي

س13: هل يوجد تعارض بين المشاركة في انشطة برنامج الموهوبين في المدرسة أو المركز والأنشطة العادية الأخرى لجميع الطلاب؟

☐ نعم ☐ لا ☐ غير متأكد

س14: هل هناك طلاب في صفك يعتقدون انهم موهوبون ولم يتم اكتشافهم ضمن برنامج الموهوبين في المدرسة او المركز؟

☐ نعم ☐ لا ☐غير متأكد

س15 : هل وجدت دعماً وتشجيعاً من والديك عند انضمامك لبرنامج الموهوبين؟

☐ نعم ☐ لا

س16: هل حصل الوالدان على توعية أو توجيه من المدرسة أو المركز بأهمية اكتشاف الموهوب ورعايته؟

☐ نعم ☐ لا ☐ غير متأكد

س17: هل هناك اختلاف بين مايتوافر بالمدرسة للطلاب الموهوبين من دعم وامكانات تساعدهم على ممارسة نشاطهم ضمن برنامج الموهوبين وبين مايتوافر بالمركز :

☐ نعم ☐ لا ☐ غير متأكد

إذا كانت الاجابة بنعم فحدد مما يلي اوجه الاختلاف : (يمكن الإشارة إلى أكثر من اختيار)

☐ مبنى المركز افضل من مبنى المدرسة لتوفر الاماكن المناسبة لممارسة برنامج الرعاية

☐ المعلمون في المركز متخصصون ومدربون في مجال رعاية الموهوبين

☐ يتوافر بالمركز مصادر وادارات كافية لتعليم الموهوبين

☐ يتوافر بالمركز معامل لجميع التخصصات ولاتوجد بالمدرسة

☐ المنهج المقرر في المركز مختلف عن المقرر في المدرسة ومناسب للموهوبين

☐ المعلمون في المدرسة يشجعون على المشاركة بالأراء والافكار الخاصة افضل من المركز

☐ تكوين علاقات وصداقات مع الطلاب الاخرين في المركز اصعب من المدرسة

☐ اخرى أذكرها .....

Appendix 8 Students Questionnaire A-F

استبانة تقويم مشاريع رعاية الطلبة الموهوبين في السعودية

(استبانة الطالبة)

أختي الطالبة الموهوبة..

هذه الاستبانة معدة لجمع بيانات دراسة علمية لنيل درجة الدكتوراه من جامعة ولنجونج Wollongong باستراليا في مجال رعاية الموهوبين بعنوان " **تقييم مشاريع رعاية الطلاب الموهوبين في السعودية**" وتهدف إلى التعرف على إيجابيات وسلبيات برامج رعاية الطلبة الموهوبين التي تنفذ في المدارس أو مراكزرعاية الموهوبات في المملكة العربية السعودية. ولكونكِ المستفيده من هذه البرامج والمشاركة الرئيسة فيها فلا بد أنكِ قد تعرفتِ على الإيجابيات والسلبيات لهذه البرامج من خلال مدى الإستفادة التي تحققت لكِ واثرت في موهبتك. لهذا يسعدني أن تكوني إحدى المشاركات في تقويم هذه البرامج لأن رأيك سيكون محل اهتمام وذا أثر بالغ في رسم الصورة الحقيقية لهذه البرامج واقتراح الحلول المناسبة التي تساهم في تحقيق الفائدة المرجوة لكِ ولزميلاتك الآخريات في المستقبل. والمطلوب تعبئة حقول هذه الاستبانة بوضع إشارة (✓) في المربع الخالي أمام كل عبارة وللعلم فإنه ليس هناك إجابة صحيحة أو خاطئة وإنما هو رأيكِ الذي نحترمه ويهمنا التعرف عليه من خلال إجاباتك على جميع فقرات الاستبانة، وتأكدي أن المعلومات التي تدلين بها ستكون محل السرية وتستخدم لإغراض البحث العلمي فقط.

أشكركِ وأتمنى لكِ التوفيق والنجاح،،

أخوكم الباحث

محمد بن عبد الخالق القرني

جامعة Wollongong بأستراليا

جوال: 0555682821

فاكس: 027467690

ص.ب 25248 الرمز البريدي 21944 الطائف

بريد ألكتروني: alqarni121@yahoo.com

س1 : الاسم (اختياري) .....

العمر: ☐ 6ـ 12 ☐ 13ـ 15 ☐ 16ـ 18

المرحلة الدراسية : ☐ ابتدائي ☐ متوسط ☐ ثانوي

س2 : حددي مما يلي من كان وراء اكتشاف موهبتكِ

☐ الوالدان

☐ زميلة في الصف

☐ معلمة الصف بالمدرسة التي أدرس بها

☐ المشرفة على برنامج الموهوبات في المدرسة

☐غير ذلك (حددي) : .....

س3 : حددي مما يلي متى تم اكتشاف موهبتكِ :

☐ قبل مرحلة الدراسة الإبتدائية

☐ في السنوات الثلاث الأولى من المرحلة الابتدائية (أولى ــ ثانية ــ ثالثة)

☐ في السنوات الثلاث الأخيرة من المرحلة الابتدائية

☐ في المرحلة المتوسطة

☐ في المرحلة الثانوية

س4 : حددي مما يلي مجال موهبتكِ (يمكن الإشارة إلى أكثر من مجال) :.

☐ في الخط والرسم ☐ في الحاسب الألي

☐ في الرياضيات ☐ في الإلكترونيات

☐ في الإختراعات العلمية ☐ في الخطابة

☐ في التمثيل المدرسي ☐ في الكتابة الأدبية

غير ذلك (حددي) .....

س5 : هل التحقتِ ببرنامج لرعاية الموهوبات ؟

☐ نعم ☐ لا

إذا كانت الإجابة بنعم فحددي مما يلي أين التحقتِ :.

☐ في المدرسة التي ادرس بها

☐ في مركز الموهوبات في منطقتنا

☐ في البرامج الصيفية التي تقدمها الوزارة

☐ في البرامج الصيفية التي تقدمها بعض الجهات الخاصة أو الحكومية الأخرى

☐ غير ذلك (حددي): .....

س6 : حددي أيٍّ من المقاييس (الاختبارات) التالية طبقت عليك وبناءً على نتائجها رشحت للالتحاق ببرنامج رعاية الموهوبات بالمدرسة أو ببرنامج رعاية الموهوبات بالمنطقة (ضعي إشارة بجانب كل البنود التي طبقت عليكِ):

☐ اختبار ذكاء

☐ اختبار قدرات خاصة

☐ اختبار إبداع

☐ اختبار تحصيلي في اللغة العربية والرياضيات

☐ ترشيح المعلمات

☐ ترشيح إدارة المدرسة

☐ ترشيح زملاء

☐ ترشيحي لنفسي

☐ معدل التحصيل الدراسي في مدرستي

☐ غيرذلك (حددي): .....

س7 : المنهج المقرر في برنامج رعاية الموهوبات في المدرسة أوالمركز هو :

☐ منهج خاص للطالبات الموهوبات

☐ منهج مطور من المنهج العادي الذي ندرسه في المدرسة

☐ أنشطة متنوعة تمارس وقت الفراغ داخل المدرسة

☐ أنشطة متنوعة تمارس في إجازة نهاية الأسبوع والإجازة الصيفية

☐ لايوجد أي منهج أو نشاط مخصص للموهوبات

س8 : ماهي وسيلة الموصلات التي تستخدمينها في الذهاب الى برنامج الموهوبات في المدرسة أو المركز مما يلي ؟

☐ وسيلة نقل جماعية يوفرها المركز

☐ وسيلة نقل جماعية توفرها المدرسة

☐ وسيلة خاصة

س9 : هل تجدين صعوبة في تكوين صديقات من بين الطالبات الموهوبات اللاتي يدرسن معكِ؟

☐ نعم ☐ لا

س10:هل اطلعتِ على اجراءات الكشف قبل اجراء الاختبارات الخاصة بالكشف عن الموهوبات؟

☐نعم ☐ لا

س11:هل تم ترشيحك لبرنامج الموهوبات في المدرسة اولاً ثم مركز الموهوبات ثانياً اختاري ممايلي ؟

☐ رشحت لبرنامج الموهوبات من قبل المدرسة أولاً

☐ رشحت لبرنامج الموهوبات من قبل مركز الموهوبات اولاً

☐ لايوجد برنامج للموهوبات داخل المدرسة

س12:الاجراءات التي اتبعتها المدرسة لترشيحك لبرنامج الموهوبات المقام بمركز رعاية الموهوبات هي (حددي) ممايلي:

- ☐ ترشيح معلمة الصف لي
- ☐ تفوقي في التحصيل الدراسي بالمدرسة
- ☐ ترشيح إدارة المدرسة
- ☐ ترشيح قريبة لي تعمل بالمدرسة
- ☐ ترشيح احدى زميلاتي الملتحقات بالبرنامج قبلي
- ☐ بناءً على رغبتي وترشيح نفسي

س13: هل يوجد تعارض بين المشاركة في انشطة برنامج الموهوبات في المدرسة أو المركز والأنشطة العادية الأخرى لجميع الطالبات العاديات؟

☐ نعم ☐ لا ☐ غير متأكدة

س14: هل هناك طالبات في صفك يعتقدن أنهن موهوبات ولم يتم اكتشافهن ضمن برنامج الموهوبات في المدرسة او المركز؟

☐ نعم ☐ لا ☐ غير متأكدة

س15 : هل وجدتِ دعماً وتشجيعاً من والديكِ عند انضمامكِ لبرنامج الموهوبات؟

☐ نعم ☐ لا

س16: هل حصل الوالدان على توعية أو توجيه من المدرسة أو المركز بأهمية اكتشاف الموهوبة ورعايتها؟

☐ نعم ☐ لا ☐ غير متأكدة

س17: هل هناك اختلاف بين مايتوافر بالمركز للطالبات الموهوبات من دعـم وامكانـات تـساعدهن علـى ممارسة نشاطهن ضمن برنامج الموهوبات وبين مايتوافر بالمدرسة:

☐ نعم ☐ لا ☐ غير متأكدة

إذا كانت الاجابة بنعم فحددي مما يلي اوجه الاختلاف :

☐ مبنى المركز افضل من مبنى المدرسة لتوافر الاماكن المناسبة لممارسة برنامج الرعاية

☐ المعلمات في المركز متخصصات ومدربات في مجال رعاية الموهوبات

☐ يتوافر بالمركز مصادر واداوات كافية لتعليم الموهوبات

☐ يتوافر بالمركز معامل لجميع التخصصات ولاتوجد بالمدرسة

☐ المنهج المقرر في المركز مختلف عن المقرر في المدرسة ومناسب للموهوبات

☐ المعلمات في المدرسة يشجعن على المشاركة بالأراء والافكار الخاصة افضل من المركز

☐ تكوين علاقات وصداقات مع الطالبات الاخريات في المركز اصعب من المدرسة

☐ اخرى اذكريها

Appendix 9 Parents Questionnaire E

An Evaluative Questionnaire
of Gifted Students Development Projects in KSA

(Parents Questionnaire)

Dear parent,

This questionnaire is designed to collect data to obtain a PhD degree from Wollongong University in Australia in the field of developing gifted students. The dissertation, entitled "An Evaluation of Gifted Students Development Projects in KSA", aims at identifying positive and negative aspects of Gifted Students Development Programs. As your son/daughter is the main beneficiary of this program, you will surely have an idea about the nature of the program and its workings, and perhaps some of its strengths and weaknesses when following up with your son/daughter and communicating with those in charge of the program whether at school, or the Center of Gifted Students Development. It is therefore our pleasure to invite you to partake in evaluating these programs, as your input will be of great interest to us, and of immense impact in delineating the true image of these programs, as well as in recommending appropriate solutions that will contribute to achieving the desired results for your son/daughter and his/her classmates in the future. You are simply requested to put a (✓(in the blank square next to each statement. Please, note that there is no right or wrong answer. We merely seek to learn more about your opinion through your answers. Rest assured that the information you submit shall be treated with utter confidentiality and shall be exclusively used for purposes of scientific research.

Thank you and best wishes

Mohammed bin Abdel Khaleq Al Qarni,
A researcher
Wollongong University, Australia
Cellular: 0555682821
Fax: 027467690
P. O. Box: 25248 Postal code: 21944, Ta'iff
Email: alqarni121@yahoo.com

Q1: Name (optional) ..... Gender: Male Female

- Number of children (State the number in the vacant square):

  Boys Girls

- Number of gifted children:

  Gender: Boys Order among siblings

  Girls Order among siblings

- Level of education:

  Illiterate

  Literate

  Below university.

  A university graduate (B.S.)

  M.A.

  PhD.

- Employment: Civil servant Private sector Retired

Q2: Name your son/daughter's current education of stage:

Elementary Middle Secondary

Q3: When did you first discover that your son/daughter was gifted?

Before elementary school (kindergarten)

During the first three years of elementary school (first – second – third)

During the last three years of elementary school

During middle school

During secondary school

Q4: Did you encourage your son/daughter to join the Gifted Students Program when you first realized that s/he was gifted: Yes No

Q5: Who of the following people discovered your son/daughter'sgift?

I and his (her) mother/ I and his (her) father

His (her) mother/his (her) father

A teacher in elementary school

The Gifted Students teacher in his/her school

A committee in the Gifted Students Center

S/he informed me

Other. Please, specify. ……..

Q6: In which of the following areas are is your son/daughter gifted?

Calligraphy and drawing	Computer
Mathematics	Electronics
Scientific inventions	Oration
School acting group	literary writing

Other. Please, specify. ……

Q7: Has your son/daughter signed up for any Gifted Students Program?

Yes No

If the answer is "yes", please, specify the name of the program:

The Gifted Students Program at the school I go to

The Gifted Students Program in the Gifted Students Center in our neighborhood

Through summer programs arranged by the Ministry

Through summer programs arranged by private or other governmental bodies

A private program organized by a private institution in return for fees

Other. Please, specify. ……

Q8: How satisfied are you about what is being offered to your son/daughter in the program s/he has enrolled in?

Very satisfied Satisfied Somewhat satisfied

Unsatisfied Completely dissatisfied

Q9: Have you detected an improvement in you son/daughter's level after s/he joined the program?

Great improvement Improvement Medium improvement

Little improvement No improvement

Q10: Has your son/daughter's joining the Gifted Students Program had an impact on his/her grades?

A positive impact a negative impact No impact No specified

Q11: Which of the following means of transportation does your son/daughter use to go to the Gifted Students Program s/he joined?

A Center bus

A school bus

A private vehicle

With classmates

I drive him/her myself

Other. Please, specify. ……..

Q12: Do you have a background on or knowledge about how to deal with your gifted son/daughter to help him/her develop his/her talent?

Yes No

If the answer is "yes", please, explain how you came to acquire that background or knowledge:

Personal reading about talent

An orientation given by my son/daughter's school

An orientation given by the Gifted Students Center in our neighborhood

Mass media

I have a degree in the field of gift development

Q13: Do you think that parents' level of education has an impact on early detection of their son/daughter's gift and its development?

Yes No Not sure

Q14: please order the following that have had the most effect on developing gifted students:

(Place a number from 1 to 5 in vacant squares)

Family

School

Family and school

Gifted Students Center

All the above

Q15: Do you think that the resources and home educational programs that parents offer their son/daughter helped identify his/her gift and develop it?

Yes No Not sure

Q16: Is your son/daughter being taught a curriculum, within the Talents Students Program s/he has joined, that is different from regular curricula offered in ordinary schools?

Yes No Not sure

Q17: Do you think that family and society must be oriented regarding the importance of developing gifted students, as a necessary factor in the success of programs targeting them?

Yes No

If the answer is "yes", which of the following bodies is responsible for this orientation:

The Ministry of Education, in particular, and other educational institutions, in general

Mass media

Universities and faculties in various disciplines

Community service centers

Other. Please, specify. ……..

Q18: Is it more convenient to have gifted students enrolled in special full-time schools in order for programs targeting them to succeed?

Yes No Not sure

Q19: Which of the following is the most convenient approach to develop gifted students?

Enrolling them in special full-time schools

Establishing special centers which they can attend in the evenings, on weekends and in summer.

Placing them in special classes in their regular schools

Nurturing them in their regular schools and amongst ordinary students

Q20: Has your son/daughter experienced some positive emotional or social impact as a result of his/her joining a Talent Students Development Program?

Yes No Not sure

Q21: Was the impact positive or negative?

Yes No Not sure

Q22: Do you think that orientation and guidance for your gifted son/daughter help in his/her emotional and social stability?

Yes No Not sure

If the answer is "yes", who is responsible for orienting and guiding gifted students?

The school that the student attends

The Gifted Students Center through specialized advisors

The family of the gifted student

Other. Please, specify. .....

Q23: Has your son/daughter faced difficulty in making new friends from among students identified as gifted in the program s/he signed up for?

Yes No Not sure

Appendix 10 Parents Questionnaire A-MF

استبانة تقويم مشاريع رعاية الطلبة الموهوبين في السعودية

(استبانة الوالدين)

أخي ولي الأمر/ أختي ولية الأمر

هذه الاستبانة معدة لجمع بيانات دراسة علمية لنيل درجة الدكتوراه من جامعة ولنجونج Wollongong بأستراليا في مجال رعاية الموهوبين بعنوان " **تقييم مشاريع رعاية الطلبة الموهوبين في السعودية**" وتهدف إلى التعرف على إيجابيات وسلبيات برامج رعاية الطلبة الموهوبين التي تنفذ في المدارس أو مراكز رعاية الطلبة الموهوبين في المملكة العربية السعودية ومن ثم اقتراح الحلول ورسم التوجهات العلمية السليمة المتبعة في الدول المتقدمة في هذا المجال للمساهمة في تطوير هذه البرامج بالشكل الذي يحقق الهدف من إقامتها. ولكون أبنك/ إبنتك أحد/ إحدى الطلبة المستفيدين من هذه البرامج فلا بد أن لديك فكرة عن طبيعة هذه البرامج ونظامها وربما بعضا من إيجابياتها وسلبياتها من خلال متابعة أبنك/ أبنتك واتصالك بالمسؤولين عن هذه البرامج سواء في المدرسة أو مركز رعاية الطلبة الموهوبين. لهذا يسعدني أن تكون/ تكوني أحد/ إحدى المشاركين/ المشاركات في تقويم هذه البرامج لأن رأيك سيكون محل اهتمام وذا أثر بالغ في رسم الصورة الحقيقية لهذه البرامج واقتراح الحلول المناسبة التي تساهم في تحقق الفائدة المرجوة لأبنك ولزملائه الآخرين / لأبنتك وزميلاتها الأخريات في المستقبل. والمطلوب تعبئة حقول هذه الاستبانة بوضع إشارة (✓) في المربع الخالي أمام كل عبارة وللعلم فإنه ليس هناك إجابة صحيحة أو خاطئة وإنما هو رأيك الذي نحترمه ويهمنا التعرف عليه من خلال إجاباتك على جميع فقرات الاستبانة، وتأكد/ تأكدي أن المعلومات التي تدلي/ تدلين بها ستكون محل السرية وتستخدم لإغراض البحث العلمي فقط.

أشكرك وأتمنى لكم التوفيق ولإبنكم/ أبنتكم النجاح والتفوق،،

أخوكم الباحث
محمد بن عبد الخالق القرني
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بريد ألكتروني: alqarni121@yahoo.com

س1 : الاسم (اختياري) ..... الجنس ☐ ذكر ☐ أنثى

- عدد الأبناء: (ضع رقما في المربع الخالي) ☐بنين ☐ بنات
- كم عدد الموهوبين من الأبناء: ☐ الجنس: ☐ ذكر ☐ ترتيبه بين الأبناء

☐ أنثى ☐ ترتيبها بين الأبناء

- المستوى التعليمي. حدد/حددي ممايلي:

☐ أمي

☐ أقرأ وأكتب

☐ دون المرحلة الجامعية

☐ المرحلة الجامعية (بكالوريوس)

☐ ماجستير

☐ دكتوراه

- العمل: ☐ حكومي ☐ قطاع خاص ☐ متقاعد

س2 : حدد/حددي مما يلي المستوى الذي يدرس به أبنك/أبنتك حالياً:

☐ ابتدائي ☐متوسط ☐ ثانوي

س3 : حدد/حددي مما يلي متى اكتشفت أن أبنك موهبٌ/ أبنتك موهوبةٌ:

☐ قبل دخول المدرسة (الروضة)

☐ في السنوات الثلاث الأولى من المرحلة الإبتدائية (أولى ــ ثانية ــ ثالثة)

☐ في السنوات الثلاث الأخيرة من المرحلة الأبتدائية

☐ في المرحلة المتوسطة

☐ في المرحلة الثانوية

س4: هل شجعت أبنك/ أبنتك على الالتحاق ببرنامج الطلبة الموهوبين عند ما عرفت أنه موهوب/ أنها موهوبة؟ ☐نعم ☐ لا

س5 : من كان السبب في اكتشاف موهبة أبنك/أبنتك حدد/حددي ممايلي:

☐ أنا ووالدته/ أنا ووالده

☐ والدته/والده

☐ معلم/ معلمة الصف بالمرحلة الابتدائية

☐ معلم/ معلمة الموهوبين بالمدرسة التي يدرس بها

☐ لجنة من مركز الموهوبين

☐ هو أبلغني بذلك

☐ غير ذلك. (حدد) .....

س6: ما نوع موهبة أبنك/أبنتك حدد ممايلي؟

☐ الخط والرسم ☐ الحاسب الألي

☐ الرياضيات ☐ الإلكترونيات

☐ الإختراعات العلمية ☐ الخطابة

☐ التمثيل المسرحي ☐ الكتابة الأدبية

☐ غير ذلك (حدد) .....

س7 : هل ابنك/أبنتك ملتحق/ملتحقة بأي برنامج لرعاية الطلبة الموهوبين؟

☐ نعم ☐ لا

إذا كانت الإجابة بنعم فحدد/حددي اسم البرنامج مما يلي :.

☐ برنامج رعاية الطلبة الموهوبين في المدرسة التي يدرس/تدرس بها

☐ برنامج رعاية الطلبة الموهوبين في مركز الموهوبين/ الموهوبات في منطقتنا

☐ في البرامج الصيفية التي تقدمها الوزارة

☐ في البرامج الصيفية التي تقدمها بعض الجهات الخاصة أو الحكومية الأخرى

☐ برنامج خاص تنظمه مؤسسة خاصة بمقابل مادي

☐ غير ذلك (حدد) .....

س8: ما مدى رضاك عن ما يقدم لأبنك/لأبنتك من رعاية في البرنامج الملتحق/الملتحقة به:

☐راض تماماً ☐راض ☐راض إلى حد ما ☐غير راض ☐غير راض تماماً

س9: هل لاحظت تحسناً في مستوى موهبة أبنك/أبنتك بعد التحاقه/التحاقها بالبرنامج؟

☐ تحسناً كبيراً ☐ تحسناً ☐ تحسناً متوسطا ☐ تحسناً قليلا ☐ لايوجد تحسن

س10: هل أحدث التحاق أبنك/أبنتك ببرنامج رعاية الطلبة الموهوبين أثرا في مستواه/مستواها الدراسي؟

☐أثرا إيجابيا ☐أثرا سلبيا ☐لم يؤثر

س11: حدد مما يلي وسيلة النقل التي يستخدمها ابنك/ ابنتك للوصول مقر برنامج الموهوبين/الموهوبات الملتحقين به:

☐وسيلة نقل عامة يوفرها مركز الموهوبين

☐ وسيلة نقل عامة توفرها المدرسة التي يدرس بها

☐ بسيارة خاصة

☐ يذهب مع زملائه/مع زميلاتها

☐ أوصله/أوصلها بسيارتي الخاصة

☐ غير ذلك (حدد) .....

س12: هل لديك خلفية أو معرفة بكيفية التعامل مع أبنك/أبنتك الموهوب/الموهوبة لمساعدته/لمساعدتها في تطوير وتنمية موهبته/موهبتها؟

☐ نعم ☐ لا

إذا كانت الإجابة بنعم فحدد/حددي ممايلي كيف تكونت لديك هذه الخلفية أو المعرفة:

☐ عن طريق قرآءات خاصة في مجال الموهبة

☐ عن طريق توعية قامت بها المدرسة التي يدرس بها أبني/أبنتي

☐ عن طريق توعية نفذها مركز الموهوبين بمنطقتنا

☐ عن طريق وسائل الإعلام المختلفة

☐ لدي مؤهل تعليمي في مجال الموهبة

س13: هل تعتقد أن المستوى التعليمي للوالدين يؤثر في الكشف المبكر لموهبة أبنهم/أبنتهم ثم بعد ذلك تنمية هذه الموهبة؟ ☐ نعم ☐ لا ☐ غير متأكد

س14: **رتب** مما يلي الأكثر أثرا في رعاية الطلاب الطلاب الموهوبين:

(ضع رقما في المربع الخالي من 1-5)

☐ الأسرة

☐ المدرسة

☐ الأسرة والمدرسة

☐ مركز الموهوبين

☐ كل ما ذكر

س15: هل تعتقد أن ما يوفره الوالدان لأبنهم/لأبنتهم من مواد وبرامج تعليمية في المنزل تساعد في اكتشاف موهبته/موهبتها ومن ثم تنميتها؟ ☐ نعم ☐ لا ☐ غير متأكد

س16: هل يتعلم أبنك/أبنتك في برنامج الطلبة الموهوبين الملتحق/الملتحقة به من خلال منهج يختلف عن المنهج العادي الذي يدرسه/تدرسه في المدرسة العادية ؟ ☐ نعم ☐ لا ☐ غير متأكد

س17: هل تعتقد أنه يجب توعية الأسرة والمجتمع بأهمية رعاية الموهوبين لأن ذلك يساعد في نجاح البرامج الموجهة لهم؟ ☐ نعم ☐ لا

إذا كانت الإجابة بنعم فمن المسؤول ممايلي عن هذه التوعية:

☐ وزارة التربية والتعليم خصوصا والجهات التعليمية الأخرى عموما

☐ الإعلام بمختلف وسائله

☐ الجامعات والكليات بمختلف تخصصاتها

☐ مراكز خدمة المجتمع

☐ غيرها (حدد) .....

س18: هل الأنسب أن يوضع الطلبة الموهوبون في مدارس خاصة بهم يتعلمون بها طوال الوقت لكي تنجح البرامج الموجهة لهم؟ ☐ نعم ☐ لا ☐ غير متأكد

س19: ماهي الطريقة المناسبة لرعاية الطلبة الموهوبين من الطرق التالية؟

☐ وضعهم في مدارس خاصة بهم طوال الوقت

☐ انشاء مراكز خاصة لرعايتهم في الفترة المسائية والعطلات الأسبوعية والصيفية

☐ فتح فصول خاصة بهم في مدارسهم العادية

☐ رعايتهم في فصولهم العادية وبين الطلبة العاديين

س20: هل تأثر أبنك/أبنتك عاطفيا أو أجتماعيا بطريقة إيجابية نتيجة للتحاقه/للتحاقها ببرنامج لرعاية الطلبة الموهوبين:

☐ نعم ☐ لا ☐غير متأكد

س21: هل كان التأثر إيجابيا أم سلبيا؟ ☐نعم ☐لا ☐ غير متأكد

س22: هل تعتقد أن التوجيه والإرشاد لابنك/لابنتك الموهوب/الموهوبة يساعد في أستقراره/أستقرارها عاطفيا واجتماعيا:

☐نعم ☐لا ☐غير متأكد

إذا كانت الإجابة بنعم فمن المسؤول عن توجيه الطلبة الموهوبين وإرشادهم:

☐ المدرسة التي يدرس/تدرس بها الطالب/الطالبة

☐ مركز الموهوبين عن طريق المرشدين المتخصصين به

☐ اسرة الطالب الموهوب/الطالبة الموهوبة

☐ غير ذلك حدد.....

س23: هل وجد ابنك/ابنتك صعوبة في تكوين أصدقاء/صديقات من بين الطلبة المكتشفين على انهم موهوبون في البرنامج الذي التحق/التحقت به: ☐ نعم ☐ لا ☐ غير متأكد

Appendix 11 Staff Interview Questions E

An Assessment Study of Talented Students Projects in KSA

(Sample Interview Questions for Managers, Supervisors and Experts of Both Genders within the Talented Students Care Program)

Q1: Is there a written philosophy defining the Center mission?

Q2: Is there a specific definition of the notion of talent and brilliance? Do identification criteria match this definition?

Q3: What kind of academic and educational services does the Center offer enrolled students?

Q4: Is the identification data placed at the disposal of teachers to be used in meeting their needs?

Q5: Do teacher take part in developing enriching programs offered by the Center?

Q6: What measures are being followed in selecting teachers, and what kind of training courses are they offered, if any?

Q7: What is the relation that holds between the Center and parents after enrolling their children in the program?

Q8: What is the relation that links the Center and the local community and concerned institutions, including schools?

Q9: In your opinion, what signs indicate the success of the program targeting talented students?

Q10: In your opinion, what is the biggest problems and obstacles facing the Center?

Q11: Are the activities and events your offered being regularly assessed?

Q12: Do you have proposals to improve the work of talented students care center in the Kingdom?

Appendix 12 Staff Interview Questions A

دراسة تقويم مشاريع الطلبة الموهوبين في السعودية

(نموذج أسئلة المقابلة للمدراء والمشرفين والمختصين من الجنسين ببرامج رعاية الطلاب الموهوبين)

س1: هل يوجد فلسفة مكتوبة تحدد رسالة المركز؟

س2: هل يوجد تعريف محدد لمفهوم الموهبة والتفوق؟ وهل تتطابق محكات الكشف مع هذا التعريف؟

س3: ماهي طبيعة الخدمات الأكاديمية والتربوية التي يقدمها المركز للطلبة الملتحقين؟

س4: هل توضع بيانات الكشف عن الطلبة الموهوبين بين أيدي المعلمين لاستخدامها في تلبية احتياجاتهم؟

س5: هل يساهم المعلمون في تطوير المناهج الاثرائية التي يقدمها البرنامج؟

س6: ماهي الإجراءات المتبعة في اختيار المعلمين، وما طبيعة البرامج التدريبية المقدمة لهم إن وجدت؟

س7: ماهي طبيعة العلاقة بين المركز وأولياء الأمور بعد التحاق أبنائهم في البرنامج؟

س8: ما هي طبيعة العلاقة بين المركز والمجتمع المحلي والمؤسسات المختصة بما فيها المدارس؟

س9: ما هي مؤشرات نجاح عمل البرنامج الموجه لخدمة الطلبة الموهوبين من وجهة نظركم؟

س10: ما هي أبرز المشكلات والصعوبات التي تواجه المركز من وجهة نظركم؟

س11: هل يتم تقييم نشاطات وفعاليات البرامج التي تقدمونها بصفة دورية؟

س12: هل يوجد لديك اقترحات لتطوير عمل مراكز رعاية الموهوبين في المملكة؟

Appendix 13 Observation Teacher's Form E

The Role of Evaluation in Inservice and Staff Development

Observation Form for Use with Teachers of the Gifted*

Directions:
Taking into account the content of this class, how proficient do you feel the teacher is at using each of the following teaching strategies? It is recommended that teachers be observed for *two* 30-minute periods before and after relevant inservice work, using this form as a guide.

Conducts Group Discussions ***Excellent Good Fair Poor Very Poor***

Teacher withholds own ideas and conclusions.

Teacher encourages participation of students in discussions.

Teacher poses interpretive questions for students.

Selects Questions That Stimulate Higher-Level Thinking
Students evaluate situations, problems, issues.
Students ask analytic questions.
Students generalize from concrete to abstract at advanced levels.

Uses Varied Teaching Strategies Effectively
Teacher is sensitive to students' responses.
Teacher maintains a balance between active and passive activities.
Teacher deliberately shifts teaching strategies with students.

Utilizes Critical Thinking Skills in Appropriate Contexts
Teacher utilizes inductive and deductive reasoning and is able to apply techniques in classroom.
Teacher encourages student development of inference and evaluation of argument skills.
Teacher encourages analogical thinking.

Encourages Independent Thinking and Open Inquiry
Students compare and contrast different issues, using objective evidence.
Students engage in lively debate of controversial issues.
Students and teacher reflect an open/challenging attitude toward knowledge.

Understands and Encourages Student Ideas and Student-Directed Work
Teacher encourages students to try new approaches.
Teacher is tolerant to students' attempts to find solutions to problems.
Teacher encourages "guesses" by students and facilitates evaluation of guesses by students.
Teacher helps students to realize that research involves trial and error.

Demonstrates Understanding of the Educational Implications of Giftedness
Teacher uses implications of characteristics in the classroom operation, selection of materials, schedules, and questions.
Teacher uses management procedures that maximize individual differences of students in the learning process.
Teacher uses advanced organizers for instruction and organizes curriculum around the highest level skill, concept, or idea that a group of gifted learners can master.

'Adapted from *Martinson-Weiner Rating Scale of Behaviors in Teachers of the Gifted* (Martinson, 1976).

Appendix 14 Observation Teacher's Form A

نموذج ملاحظة أداء معلم الطلاب الموهوبين في الفصل

(هذا النموذج هو أحد أدوات جمع بيانات دراسة علمية لتقييم برامج الموهوبين في السعودية للحصول على درجة الدكتوراه من جامعة ولنجونج Wollongong بأستراليا)

تعليمات: من خلال محتوى هذا التصنيف، كم من المهارات التي تشعر أن المعلم يوظفها في استخدم كل من الاستراتيجيات التعليمة التالية؟ استخدم هذا الدليل لملاحظة إداء المعلم داخل الصف أثناء تدريسه للطلاب الموهوبين. ضع التقدير المناسب أمام كل استراتيجية مطبقة كما هو واضح في الجدول.

المحتوى	ممتاز 5	جيد 4	مناسب 3	ضعيف 2	ضعيف جدا 1
▪ **يوجه المناقشات الجماعية:**					
1- يحجب المعلم الأفكار والاستنتاجات الخاصة بها					
2- يشجع المعلم مشاركة الطلاب في المناقشات					
3- يطرح المعلم أسئلة تفسيرية للطلاب					
▪ **يختار الأسئلة التي تحفز إلى المستويات العليا من التفكير:**					
1- يقييم الطلاب المواقف، الحالات، القضايا التي تطرح					
2- يسأل الطلاب أسئلة تحليلية					
3- يعمم الطلاب من التعقيد إلى التجريد في المستويات العليا					
▪ **يستخدم مختلف الاستراتيجيات التعليمية بفعالية:**					
1- المعلم حساس لإجابات الطلاب					
2- يوازن المعلم بين النشاطات الايجابية والسلبية					
3- يحول المعلم استراتيجيات التعليم مع الطلاب بطريقة مقصودة					
▪ **يستعمل مهارات التفكير الناقد في السياقات المناسبة :**					
1- يستعمل المعلم التفكير الاستقرائي والاستنتاجي وقادر على تطبيق هذه التقنيات في الصف الدراسي					
2-يشجع المعلم الطلاب على تطوير مهارات الحوار باستخدام أساليب الاستدلال والتقييم					
3- يشجع المعلم على التفكير المنطقي					
▪ **يشجيع التفكير المستقل والأسئلة المفتوحة:**					
1- يقارن ويمايز الطلاب بين مختلف القضايا باستخدام شواهد موضوعية					
2- يشتغل الطلاب بالمناقشات الحية للقضايا الخلافية					
3- يعكس الطلاب والمعلمين مواقف التحدي المفتوحة نحو المعرفه					
▪ **يشجع على فهم الأفكار ويوجه الطلاب للعمل:**					
1- يشجع المعلم الطلاب على المحاوله بطرق جديدة					
2- يتسامح المعلم للمحاولات الطلابية لإيجاد حلول للمشاكل					
3- يشجع المعلم " تخمينات" الطلاب ويسهل تقييم هذه التخمينات من قبلهم					
4- يساعد المعلم الطلاب على إدراك أن البحث عن الحقائق يتم بالمحاولة والخطأ					
▪ **يبين مضمون التطبيقات التربوي للموهبة:**					
1- يوظف المعلم مضامين سمات الموهوبين في عملية التدريس داخل الفصل الدراسي، واختيار المواد، والجداول، والأسئلة					
2- يدير المعلم الصف أثناء عملية التعليم بما يزيد من وضوح الفروق الفردية بين الطلاب					
3- يستخدم المعلم تعليمات متقدمة في تنظيم منهج التدريس بمفاهيمه وأفكاره حول اعلى مستوى من المهارة التي يمكن أن يتقنها الطلاب الموهوبين					

مع جزيل شكري وتقديري لكل من ساهم في تعبئة هذا النموذج مستشعرا المسؤولية في تحري الدقة خدمة للبحث واهدافه المرجوة في تطوير برامج الطلبة الموهوبين في السعودية.

أخوكم الباحث
محمد بن عبد الخالق القرني
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Appendix 15 Staff questionnaire analysis results

Staff questionnaire analysis results

			Count	Table Total N %
Q1	recent work	administrator	55	19.6%
		supervisor	100	35.7%
		teacher full time	112	40.0%
		teacher part time	13	4.6%
Q2	gender	male	166	59.3%
		female	114	40.7%
Q3	age	from 20-25	0	.0%
		from 26-30	52	18.6%
		from 31-35	90	32.1%
		from 36-40	72	25.7%
		from 41-45	47	16.8%
		from 46-50	17	6.1%
		more than 51-+	2	.7%
Q4	work time	full	250	89.3%
		partial	30	10.7%
Q5	time of action	morning	271	96.8%
		evening	9	3.2%
Q6	years of work	from1-3	116	41.4%
		from 4-6	120	42.9%
		from 7-9	31	11.1%
		from 10-12	9	3.2%
		from 13-15	3	1.1%
		more than 16-+	1	.4%
Q7	years of work before work at the center	non	13	4.6%
		from 1-3	42	15.0%
		from 4-6	48	17.1%
		from7-9	49	17.5%
		from10-12	55	19.6%
		from 13-15	30	10.7%
		from 16-+	43	15.4%
Q8	highest degree earned	bachelor	212	75.7%
		education diploma	38	13.6%
		master	28	10.0%
		PhD	1	.4%
		Other	1	.4%
Q9	description of the center	only full-time school	26	9.3%

		a place for a group of gifted students to learn a specific c	164	58.6%
		a place for a group of gifted students to practise extra ac	49	17.5%
		a place for a group of gifted students to learn a specific	13	4.6%
		a place for a group of gifted students to practise extra ac	17	6.1%
		other	11	3.9%
Q10	lowest school grade	early grades of the primary stage	26	9.3%
		late grades of the primary stage	249	88.9%
		intermediate	2	.7%
		secondary school	3	1.1%
Q11	budget	yes	216	77.1%
		no	35	12.5%
		not sure	29	10.4%
Q11.1-6	source of funding	a special budget provided by the Ministry	160	57.1%
		within the district budget provided by the Ministry	50	17.9%
		the budget provided by the Center	6	2.1%
		donations from companies and individuals	0	.0%
		collect fees from students	0	.0%
		other	0	.0%
Q12	relationship with school	very weak	22	7.9%
		weak	36	12.9%
		Medium	130	46.4%
		strong	73	26.1%
		very strong	19	6.8%

Q13	effective relationship with school	yes	121	43.2%
		no	90	32.1%
		not sure	69	24.6%
Q14	the Ministry provide equipment for the centers	yes	151	53.9%
		no	78	27.9%
		not sure	51	18.2%
Q14. 1-9	an adequate qualified staff	yes	79	28.2%
		no	72	25.7%
	provide buildings	yes	43	15.4%
		no	108	38.6%
	sufficient budget	yes	88	31.4%
		no	63	22.5%
	official support when dealing with government and others	yes	19	6.8%
		no	132	47.1%
	provide standards and the necessary tools for identifying gifted	yes	119	42.5%
		no	32	11.4%
	designing enrichment curriculum for gifted	yes	23	8.2%
		no	128	45.7%
	medial support for the centers	yes	30	10.7%
		no	121	43.2%
	provide specialized books, journals and others	yes	20	7.1%
		no	131	46.8%
	provide educational equipment and laboratories for the centers	yes	56	20.0%
		no	95	33.9%
Q15	selecting teachers q15-1	strongly disagree	6	2.1%
		disagree	23	8.2%
		undecided	41	14.6%
		agree	106	37.9%
		strongly agree	104	37.1%
	selecting teachers q15-2	strongly Disagree	17	6.1%
		disagree	34	12.1%
		undecided	53	18.9%
		agree	113	40.4%
		strongly agree	63	22.5%
	selecting teachers q15-3	strongly Disagree	87	31.1%
		disagree	84	30.0%
		undecided	59	21.1%
		agree	32	11.4%
		strongly agree	18	6.4%

selecting teachers q15-4	Strongly Disagree	2	.7%
	disagree	22	7.9%
	undecided	39	13.9%
	agree	107	38.2%
	strongly agree	110	39.3%
selecting teachers q15-5	Strongly Disagree	4	1.4%
	disagree	5	1.8%
	undecided	33	11.8%
	agree	139	49.6%
	strongly agree	99	35.4%
selecting teachers q15-6	Strongly Disagree	5	1.8%
	disagree	13	4.6%
	undecided	34	12.1%
	agree	85	30.4%
	strongly agree	143	51.1%
selecting teachers q15-7	Strongly Disagree	44	15.7%
	disagree	85	30.4%
	undecided	69	24.6%
	agree	55	19.6%
	strongly agree	27	9.6%
selecting teachers q15-8	Strongly Disagree	2	.7%
	disagree	13	4.6%
	undecided	48	17.1%
	agree	129	46.1%
	strongly agree	88	31.4%
selecting teachers q15-9	Strongly Disagree	8	2.9%
	disagree	18	6.4%
	undecided	66	23.6%
	agree	120	42.9%
	strongly agree	68	24.3%
selecting teachers q15-10	Strongly Disagree	9	3.2%
	disagree	28	10.0%
	undecided	65	23.2%
	agree	133	47.5%
	strongly agree	45	16.1%
selecting teachers q15-11	Strongly	13	4.6%

		Disagree		
		disagree	45	16.1%
		undecided	78	27.9%
		agree	109	38.9%
		strongly agree	35	12.5%
	selecting teachers q15-12	Strongly Disagree	5	1.8%
		disagree	21	7.5%
		undecided	80	28.6%
		agree	121	43.2%
		Strongly agree	53	18.9%
	selecting teachers q15-13	Strongly Disagree	4	1.4%
		disagree	37	13.2%
		undecided	77	27.5%
		agree	125	44.6%
		strongly agree	37	13.2%
	selecting teachers q15-14	Strongly Disagree	1	.4%
		disagree	3	1.1%
		undecided	37	13.2%
		agree	128	45.7%
		strongly agree	111	39.6%
Q16	training teachers/ course	yes	35	12.5%
		no	245	87.5%
	training teachers/ degree	yes	55	19.6%
		no	225	80.4%
	training teachers/ training during the job	yes	213	76.1%
		no	67	23.9%
	training teachers/ workshop outside district	yes	177	63.2%
		no	103	36.8%
	training teachers/ workshop in the center	yes	178	63.6%
		no	102	36.4%
	none	yes	23	8.2%
		no	257	91.8%
Q17	the training adequately prepared the teachers for teaching	very weak	16	5.7%
		weak	48	17.1%
		medium	125	44.6%
		strong	75	26.8%
		very strong	16	5.7%
Q18	need additional training	yes	251	89.6%
		no	13	4.6%

		not sure	16	5.7%
Q19	additional kind of training to enhance teaching	Bachelor	103	36.8%
		higher diploma after degree	64	22.9%
		postgraduate degree	56	20.0%
		short course after degree	45	16.1%
		pilot visits to good programs	12	4.3%
		others	0	.0%
Q20	supervisor selected/ baesd on qualification	yes	163	58.2%
		no	117	41.8%
	supervisor selected/ baesd experience	yes	193	68.9%
		no	87	31.1%
	supervisor selected/ nomainated by an authority	yes	89	31.8%
		no	191	68.2%
	supervisor selected/ nomainated by himself	yes	163	58.2%
		no	117	41.8%
	supervisor selected/ by written test	yes	157	56.1%
		no	123	43.9%
	supervisor selected/ by personal interview	yes	76	27.1%
		no	204	72.9%
Q21	teachers selected/ based on qualification	yes	181	64.6%
		no	99	35.4%
	teachers selected/ based on experience	yes	160	57.1%
		no	120	42.9%
	teachers selected/ educational and creative exclellence	yes	196	70.0%
		no	84	30.0%
	teachers selected/ attention of gifted students	yes	145	51.8%
		no	135	48.2%
	teachers selected/ authority nominated	yes	71	25.4%
		no	209	74.6%
	teachers selected/ himself nominated	yes	166	59.3%
		no	114	40.7%
	teachers selected/ written test	yes	129	46.1%
		no	151	53.9%
	teachers selected/ personal interview	yes	64	22.9%
		no	216	77.1%
Q22	minimum education of the teachers	BA	239	85.4%
		master	14	5.0%
		High diploma	25	8.9%

		PhD	2	.7%
Q23	acceleration system	yes	18	6.4%
		no	217	77.5%
		not sure	45	16.1%
Q23.1-3	Kind of acceleration system	accelerate students into the next level	13	4.6%
		early admission in the first grade of elementary school	2	.7%
		others	3	1.1%
Q24	type of the curriculum offered	specific for gifted	194	69.3%
		modified of mainstream curriculum	49	17.5%
		none	37	13.2%
Q25	enrichment curriculum q1	strongly disagree	23	8.2%
		disagree	69	24.6%
		undecided	51	18.2%
		agree	95	33.9%
		strongly agree	42	15.0%
	enrichment curriculum q2	strongly disagree	4	1.4%
		disagree	7	2.5%
		undecided	37	13.2%
		agree	144	51.4%
		strongly agree	88	31.4%
	enrichment curriculum q3	strongly disagree	3	1.1%
		disagree	3	1.1%
		undecided	43	15.4%
		agree	134	47.9%
		strongly agree	97	34.6%
	enrichment curriculum q4	Strongly Disagree	0	.0%
		disagree	8	2.9%
		undecided	47	16.8%
		agree	142	50.7%
		strongly agree	83	29.6%
	enrichment curriculum q5	Strongly Disagree	8	2.9%
		disagree	21	7.5%

	undecided	53	18.9%
	agree	128	45.7%
	strongly agree	70	25.0%
enrichment curriculum q6	Strongly Disagree	3	1.1%
	disagree	11	3.9%
	undecided	78	27.9%
	agree	144	51.4%
	strongly agree	44	15.7%
enrichment curriculum q7	Strongly Disagree	2	.7%
	disagree	12	4.3%
	undecided	39	13.9%
	agree	149	53.2%
	strongly agree	78	27.9%
enrichment curriculum q8	strongly disagree	5	1.8%
	disagree	17	6.1%
	undecided	103	36.8%
	agree	113	40.4%
	strongly agree	42	15.0%
enrichment curriculum q9	Strongly Disagree	1	.4%
	disagree	10	3.6%
	undecided	97	34.6%
	agree	124	44.3%
	strongly agree	48	17.1%
enrichment curriculum q10	Strongly Disagree	2	.7%
	disagree	16	5.7%
	undecided	91	32.5%
	agree	139	49.6%
	strongly agree	32	11.4%
enrichment curriculum q11	Strongly Disagree	2	.7%
	disagree	12	4.3%
	undecided	72	25.7%
	agree	149	53.2%
	strongly agree	45	16.1%
enrichment curriculum q12	Strongly Disagree	4	1.4%
	disagree	32	11.4%
	undecided	78	27.9%

		agree	129	46.1%
		strongly agree	37	13.2%
	enrichment curriculum q13	Strongly Disagree	5	1.8%
		disagree	25	8.9%
		undecided	97	34.6%
		agree	118	42.1%
		strongly agree	35	12.5%
	enrichment curriculum q14	Strongly Disagree	9	3.2%
		disagree	35	12.5%
		undecided	56	20.0%
		agree	128	45.7%
		strongly agree	52	18.6%
	enrichment curriculum q15	Strongly Disagree	5	1.8%
		disagree	7	2.5%
		undecided	65	23.2%
		agree	142	50.7%
		strongly agree	61	21.8%
Q27	selection system of gifted q1	Strongly Disagree	1	.4%
		disagree	8	2.9%
		undecided	21	7.5%
		agree	142	50.7%
		strongly agree	108	38.6%
	selection system of gifted q2	Strongly Disagree	1	.4%
		disagree	16	5.7%
		undecided	30	10.7%
		agree	118	42.1%
		strongly agree	115	41.1%
	selection system of gifted q3	Strongly Disagree	13	4.6%
		disagree	20	7.1%
		undecided	70	25.0%
		agree	112	40.0%
		Strongly agree	65	23.2%
	selection system of gifted q4	Strongly Disagree	9	3.2%
		disagree	37	13.2%
		undecided	99	35.4%
		agree	95	33.9%

	strongly agree	40	14.3%
selection system of gifted q5	Strongly Disagree	5	1.8%
	disagree	18	6.4%
	undecided	91	32.5%
	agree	129	46.1%
	strongly agree	37	13.2%
selection system of gifted q6	Strongly Disagree	1	.4%
	disagree	17	6.1%
	undecided	38	13.6%
	agree	141	50.4%
	strongly agree	83	29.6%
selection system of gifted q7	strongly disagree	16	5.7%
	disagree	38	13.6%
	undecided	89	31.8%
	agree	101	36.1%
	Strongly agree	36	12.9%
selection system of gifted q8	Strongly Disagree	9	3.2%
	disagree	54	19.3%
	undecided	60	21.4%
	agree	107	38.2%
	strongly agree	50	17.9%
selection system of gifted q9	strongly disagree	8	2.9%
	disagree	38	13.6%
	undecided	39	13.9%
	agree	136	48.6%
	strongly agree	59	21.1%
selection system of gifted q10	Strongly Disagree	23	8.2%
	disagree	63	22.5%
	undecided	57	20.4%
	agree	100	35.7%
	strongly agree	37	13.2%
selection system of gifted q11	strongly disagree	22	7.9%
	disagree	67	23.9%
	undecided	92	32.9%
	agree	77	27.5%
	strongly agree	22	7.9%

	selection system of gifted q12	Strongly Disagree	3	1.1%
		disagree	12	4.3%
		undecided	39	13.9%
		agree	123	43.9%
		Strongly agree	103	36.8%
	selection system of gifted q13	Strongly Disagree	10	3.6%
		disagree	23	8.2%
		undecided	84	30.0%
		agree	114	40.7%
		Strongly agree	49	17.5%
	selection system of gifted q14	Strongly Disagree	5	1.8%
		disagree	15	5.4%
		undecided	25	8.9%
		agree	111	39.6%
		Strongly agree	124	44.3%
	selection system of gifted q15	Strongly Disagree	6	2.1%
		disagree	10	3.6%
		undecided	49	17.5%
		agree	107	38.2%
		Strongly agree	108	38.6%
Q29	appropriate selection system	yes	137	48.9%
		no	73	26.1%
		not sure	70	25.0%
Q30	identify gifted by IQ test	yes	226	80.7%
		no	54	19.3%
	identify gifted by achievement test	yes	122	43.6%
		no	158	56.4%
	identify gifted by creative test	yes	71	25.4%
		no	209	74.6%
	identify gifted by teaching rating scales	yes	169	60.4%
		no	111	39.6%
	identify gifted by students products portfolios	yes	110	39.3%
		no	170	60.7%
	identify gifted by students interview	yes	35	12.5%
		no	245	87.5%
	identify gifted by teachers nomination	yes	217	77.5%
		no	63	22.5%
	identify gifted by parents nomination	yes	80	28.6%

		no	200	71.4%
	identify gifted by peer nomination	yes	32	11.4%
		no	248	88.6%
	identify gifted by students self-nomination	yes	37	13.2%
		no	243	86.8%
	identify gifted by not sure	yes	2	.7%
		no	278	99.3%
	identify gifted by other	yes	21	7.5%
		no	259	92.5%

Table Caption

Appendix 16 Students questionnaire analysis results

Table of students questionnaire

		Count	Table Total N %
gender	boy	77	51.7%
	girl	72	48.3%
age	6-12	84	56.4%
	13-15	63	42.3%
	16-18	2	1.3%
education stage	elementary	87	58.4%
	middle	61	40.9%
	secondary	1	.7%
discovered giftedness	parents	41	27.5%
	classmate	5	3.4%
	teacher in class	21	14.1%
	gifted program supervisor	74	49.7%
	other	8	5.4%
time of discovered giftedness	befor elementary school	13	8.7%
	first three years of elementary school	29	19.5%
	last three years of elementary school	103	69.1%
	middle school	4	2.7%
	secondary school	0	.0%
calligraphy and drawing	yes	72	48.3%
	no	77	51.7%
computer	yes	83	55.7%
	no	66	44.3%
mathematics	yes	46	30.9%
	no	103	69.1%
elctronics	yes	40	26.8%
	no	109	73.2%
scientific inventions	yes	36	24.2%
	no	113	75.8%
oration	yes	26	17.4%
	no	123	82.6%
school acting group	yes	29	19.5%
	no	120	80.5%
literary writing	yes	20	13.4%
	no	129	86.6%
other	yes	31	20.8%
	no	118	79.2%
have joined gifted program	yes	146	98.0%
	no	3	2.0%
where joined gifted program	At the school I go to	121	81.2%
	At the Gifted Students Center in our neighborhood	21	14.1%
	Through summer programs arranged by the Ministry	1	.7%
	Through summer programs arranged by private or other governm	2	1.3%
	other	1	.7%
by which criteria nominated for gifted	yes	96	64.4%
	no	53	35.6%

		Count	Table Total N %
by which criteria nominated for gifted	yes	95	63.8%
	no	54	36.2%
by which criteria nominated for gifted	yes	55	36.9%
	no	94	63.1%
by which criteria nominated for gifted	yes	20	13.4%
	no	129	86.6%
by which criteria nominated for gifted	yes	75	50.3%
	no	74	49.7%
by which criteria nominated for gifted	yes	30	20.1%
	no	119	79.9%
by which criteria nominated for gifted	yes	10	6.7%
	no	139	93.3%
by which criteria nominated for gifted	yes	9	6.0%
	no	140	94.0%
by which criteria nominated for gifted	yes	51	34.2%
	no	98	65.8%
by which criteria nominated for gifted	yes	5	3.4%
	no	144	96.6%
Curricula offered	Specially curricula for gifted students	88	59.1%
	Developed from regular curriculum	3	2.0%
	Various activities practiced during free time at school	34	22.8%
	Various activities practiced on weekends or during the summe	7	4.7%
	No special course or activity for gifted students	17	11.4%
which transportation do you use to go to Gifted Program	a center bus	12	8.1%
	a school bus	2	1.3%
	private vehicle	135	90.6%
difficult to make new friends among gifted	yes	10	6.7%
	no	139	93.3%
informed identification measures before taking	yes	46	30.9%
	no	103	69.1%
nominated for the Gifted program first by school or center	I was first nominated by school	122	81.9%
	I was first nominated by the Center	20	13.4%
	There is no Gifted Students Program at school	7	4.7%
the measures adopted by school to nominate you for the Gifted Program	teacher's nomination	81	54.4%
	outstanding grades in school	49	32.9%
	school nomination	14	9.4%
	The nomination of a relation of mine who works at school	1	.7%
	The nomination of one of my classmates, who joined the progr	1	.7%
	A personal desire and self-nomination	3	2.0%

		Count	Table Total N %
disagreement between participating activities at school or center	yes	15	10.1%
	no	72	48.3%
	not sure	62	41.6%
classmates who believe they are gifted, but they are not identified by the school or center	yes	88	59.1%
	no	14	9.4%
	not sure	47	31.5%
parents support you upon joined to Gifted Students Program	yes	136	91.3%
	no	13	8.7%
parents received guidance of recognizing and developing your giftedness	yes	84	56.4%
	no	38	25.5%
	not sure	27	18.1%
discrepancy of supported the gifted between school and center	yes	66	44.3%
	no	25	16.8%
	not sure	58	38.9%
Center building is better than the school building	yes	31	20.8%
	no	35	23.5%
Teachers at the Center are specialists and trained	yes	56	37.6%
	no	10	6.7%
Center has sufficient resources	yes	44	29.5%
	no	22	14.8%
Center boasts laboratories in every field	yes	24	16.1%
	no	42	28.2%
curriculum offered at the Center is different	yes	39	26.2%
	no	27	18.1%
Teacher at school encourage giving feedback about the school	yes	7	4.7%
	no	59	39.6%
Making new friendships at the Center is more difficult than at school	yes	18	12.1%
	no	48	32.2%
Other	yes	3	2.0%
	no	63	42.3%

Appendix 17 Parents questionnaire analysis results

Table of parents questionnaire

		Count	Table Total N %
gender	male	60	53.6%
	female	52	46.4%
number of boys	no	5	4.5%
	1	17	15.2%
	2	26	23.2%
	3	35	31.3%
	4	16	14.3%
	5	7	6.3%
	6	4	3.6%
	7	2	1.8%
number of girls	no	11	9.8%
	1	25	22.3%
	2	33	29.5%
	3	19	17.0%
	4	13	11.6%
	5	5	4.5%
	6	5	4.5%
	7	1	.9%
number of gifted child	no	1	.9%
	1	43	38.4%
	2	25	22.3%
	3	7	6.3%
	4	3	2.7%
	8	1	.9%
	9	1	.9%
total of gifted child	no	2	1.8%
	1	68	60.7%
	2	29	25.9%
	3	6	5.4%
	4	4	3.6%
	5	2	1.8%
	8	1	.9%
number of gifted boys	no	35	31.3%
	1	63	56.3%
	2	11	9.8%
	3	3	2.7%
number of gifte girls	no	48	42.9%
	1	50	44.6%
	2	10	8.9%
	3	3	2.7%
	5	1	.9%
order of gifted boys	no	35	31.3%
	1	30	26.8%
	2	19	17.0%
	3	7	6.3%
	4	6	5.4%
	5	6	5.4%
	6	6	5.4%
	7	3	2.7%

		Count	Table Total N %
order of gifted girls	no	50	44.6%
	1	18	16.1%
	2	13	11.6%
	3	15	13.4%
	4	7	6.3%
	5	6	5.4%
	7	2	1.8%
	9	1	.9%
level of parents education	Illiterate	2	1.8%
	literate	4	3.6%
	below University	30	26.8%
	bachelor	60	53.6%
	master	7	6.3%
	PhD	9	8.0%
employment	home maker	14	12.5%
	Civil servant	71	63.4%
	private sector	16	14.3%
	retired	11	9.8%
child current education/ elementary	no	44	39.3%
	yes	68	60.7%
child current education/ middle	no	66	58.9%
	yes	46	41.1%
child current education/ secondary	no	105	93.8%
	yes	7	6.3%
child current education/ in more than stage	no	0	.0%
	elementary	62	55.4%
	middle	41	36.6%
	secondary	2	1.8%
	more than one stage	7	6.3%
	in all stage	0	.0%
the first time discovered your child as gifted	kindergarten	17	15.2%
	in the first three years of elementary	32	28.6%
	in the last three years of elementary	60	53.6%
	in middle school	2	1.8%
	in secondary school	1	.9%
encourage your child to join the gifted program	yes	102	91.1%
	no	10	8.9%
who is discovered your child	parents	32	28.6%
	one of parents	11	9.8%
	a teacher in elementray school	18	16.1%
	the gifted teacher in the school	32	28.6%
	a committe in the gifted center	12	10.7%
	my child infoemed me	3	2.7%
	other	4	3.6%
tayp of giftedness/ Calligraphy and drawing	yes	45	40.2%
	no	67	59.8%
tayp of giftedness/ computer	yes	61	54.5%
	no	51	45.5%

		Count	Table Total N %
tayp of giftedness/ mathematics	yes	37	33.0%
	no	75	67.0%
tayp of giftedness/ electronic	yes	24	21.4%
	no	88	78.6%
tayp of giftedness/ scientific inventions	yes	25	22.3%
	no	87	77.7%
tayp of giftedness/ oration	yes	29	25.9%
	no	83	74.1%
tayp of giftedness/ school acting group	yes	23	20.5%
	no	89	79.5%
tayp of giftedness/ literary writing	yes	14	12.5%
	no	98	87.5%
tayp of giftedness/ other	yes	26	23.2%
	no	86	76.8%
is the child signed up for any gifted program	yes	100	89.3%
	no	12	10.7%
name of program that child participated	none	0	.0%
	school program	67	59.8%
	gifted center program	26	23.2%
	Ministry of Education	4	3.6%
	the private or other governmental summer program	3	2.7%
	private instituation program	0	.0%
	other	0	.0%
parents satisfaction about there child's program	completely unsatisfied	23	20.5%
	unsatisfied	23	20.5%
	somehow satisfied	56	50.0%
	satisfied	8	7.1%
	very satisfied	2	1.8%
parents detected an improvement of the child level after they joined the program	no improvement	21	18.8%
	little improvement	31	27.7%
	medium improvement	34	30.4%
	improvement	19	17.0%
	great improvement	7	6.3%
program impact on the child	not specified	0	.0%
	no impact	62	55.4%
	a negative impact	5	4.5%
	a positive impact	44	39.3%
transport kind	a center bus	11	9.8%
	a school bus	5	4.5%
	a private vehicle	52	46.4%
	with classmates	2	1.8%
	my own car	40	35.7%
	other	2	1.8%
Background about how the center deal with your	yes	65	58.0%
	no	47	42.0%

		Count	Table Total N %
your knowledge Explanation in the talent field	personal reading about giftedness	28	25.0%
	an orientation given by my child school	15	13.4%
	an orientation given by gifted center	6	5.4%
	mass media	11	9.8%
	I have a dgree in the field of gifted development	5	4.5%
the level of parents education impacted the early Education of gifted	yes	96	85.7%
	no	5	4.5%
	not sure	11	9.8%
family/The high-ranking on development of gifted	undecided	27	24.1%
	1	32	28.6%
	2	22	19.6%
	3	12	10.7%
	4	9	8.0%
	5	10	8.9%
school /The high-ranking on development of gifted	undecided	26	23.2%
	1	7	6.3%
	2	23	20.5%
	3	28	25.0%
	4	21	18.8%
	5	7	6.3%
famil and school/The high-ranking on development of gifted	undecided	29	25.9%
	1	20	17.9%
	2	20	17.9%
	3	24	21.4%
	4	13	11.6%
	5	6	5.4%
center of gifted/The high-ranking on development of gifted	undecided	30	26.8%
	1	12	10.7%
	2	18	16.1%
	3	17	15.2%
	4	26	23.2%
	5	9	8.0%
all of the above/The high-ranking on development of gifted	undecided	21	18.8%
	1	51	45.5%
	2	1	.9%
	4	4	3.6%
	5	35	31.3%
parents offer resources and home educational to develop their child giftedness	yes	94	83.9%
	no	8	7.1%
	not sure	10	8.9%
special curriculum for gifted different from the ordinary	yes	43	38.4%
	no	27	24.1%
	not sure	42	37.5%
educate Family and society help to success	yes	112	100.0%
	no	0	.0%

		Count	Table Total N %
the responsible for this orientation:	Çministry of education and others	72	64.3%
	mass media	22	19.6%
	universities and faculties	4	3.6%
	community service centers	9	8.0%
	other	5	4.5%
enrolled the gifted in special full-time schools is better to success their program	yes	65	58.0%
	no	33	29.5%
	not sure	14	12.5%
the appropriate approach to develop gifted	Enrolling them in special full-time schools	39	34.8%
	Establishing special centers	39	34.8%
	Placing them in special classes in their regular schools	20	17.9%
	develop them in their regular schools	14	12.5%
Positive emotional and social impact of the programme	yes	70	62.5%
	no	19	17.0%
	not sure	23	20.5%
Was the impact positive or negative	yes	68	60.7%
	no	2	1.8%
	not sure	42	37.5%
orientation helps the gifted in emotional and social stability	yes	101	90.2%
	no	0	.0%
	not sure	0	.0%
who is responsible for orienting the gifted	students school	40	35.7%
	the advisors of gifted center	38	33.9%
	the family of student	13	11.6%
	other	10	8.9%
faced difficulty in making new friends	yes	10	8.9%
	no	82	73.2%
	not sure	20	17.9%

Appendix 18 T-Test analysis of enrichment curriculum of gifted students

T-Test of enrichment curriculum

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
enrichment curriculum q1	male	166	3.37	1.146	.089
	female	114	3.02	1.276	.120
enrichment curriculum q2	male	166	4.10	.760	.059
	female	114	4.07	.900	.084
enrichment curriculum q3	male	166	4.17	.770	.060
	female	114	4.09	.815	.076
enrichment curriculum q4	male	166	4.07	.787	.061
	female	114	4.08	.718	.067
enrichment curriculum q5	male	166	3.70	.986	.077
	female	114	4.00	.959	.090
enrichment curriculum q6	male	166	3.67	.861	.067
	female	114	3.90	.678	.063
enrichment curriculum q7	male	166	3.96	.880	.068
	female	114	4.13	.685	.064
enrichment curriculum q8	male	166	3.62	.891	.069
	female	114	3.59	.860	.081
enrichment curriculum q9	male	166	3.75	.797	.062
	female	114	3.73	.790	.074
enrichment curriculum q10	male	166	3.63	.766	.059
	female	114	3.69	.811	.076
enrichment curriculum q11	male	166	3.77	.768	.060
	female	114	3.83	.808	.076
enrichment curriculum q12	male	166	3.58	.948	.074
	female	114	3.58	.851	.080
enrichment curriculum q13	male	166	3.48	.899	.070
	female	114	3.65	.862	.081
enrichment curriculum q14	male	166	3.41	1.096	.085
	female	114	3.97	.803	.075
enrichment curriculum q15	male	166	3.87	.857	.066
	female	114	3.90	.809	.076

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
enrichment curriculum q1	Equal variances assumed	1.783	.183	2.437	278	.015	.356	.146	.068	.643
	Equal variances not assumed			2.389	225.545	.018	.356	.149	.062	.650
enrichment curriculum q2	Equal variances assumed	1.248	.265	.323	278	.747	.032	.100	-.164	.228
	Equal variances not assumed			.313	215.440	.754	.032	.103	-.170	.235
enrichment curriculum q3	Equal variances assumed	.005	.944	.906	278	.366	.087	.096	-.102	.276
	Equal variances not assumed			.897	233.843	.371	.087	.097	-.104	.278
enrichment curriculum q4	Equal variances assumed	.800	.372	-.137	278	.891	-.013	.092	-.195	.169
	Equal variances not assumed			-.140	256.720	.889	-.013	.091	-.192	.166
enrichment curriculum q5	Equal variances assumed	.638	.425	-2.488	278	.013	-.295	.119	-.529	-.062
	Equal variances not assumed			-2.501	247.349	.013	-.295	.118	-.528	-.063
enrichment curriculum q6	Equal variances assumed	11.799	.001	-2.375	278	.018	-.229	.096	-.418	-.039
	Equal variances not assumed			-2.482	272.808	.014	-.229	.092	-.410	-.047
enrichment curriculum q7	Equal variances assumed	1.854	.174	-1.710	278	.088	-.168	.098	-.361	.025
	Equal variances not assumed			-1.790	273.603	.075	-.168	.094	-.352	.017

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
enrichment curriculum q8	Equal variances assumed	.068	.795	.306	278	.759	.033	.107	-.178	.243
	Equal variances not assumed			.309	248.530	.758	.033	.106	-.176	.242
enrichment curriculum q9	Equal variances assumed	.149	.700	.258	278	.797	.025	.097	-.165	.215
	Equal variances not assumed			.259	244.397	.796	.025	.096	-.165	.215
enrichment curriculum q10	Equal variances assumed	.329	.567	-.697	278	.487	-.066	.095	-.254	.121
	Equal variances not assumed			-.689	233.879	.491	-.066	.096	-.256	.124
enrichment curriculum q11	Equal variances assumed	.005	.942	-.652	278	.515	-.062	.095	-.250	.126
	Equal variances not assumed			-.646	234.731	.519	-.062	.096	-.252	.128
enrichment curriculum q12	Equal variances assumed	.898	.344	.049	278	.961	.005	.111	-.212	.223
	Equal variances not assumed			.050	258.950	.960	.005	.108	-.208	.219
enrichment curriculum q13	Equal variances assumed	.593	.442	-1.610	278	.108	-.173	.108	-.385	.039
	Equal variances not assumed			-1.623	249.546	.106	-.173	.107	-.383	.037
enrichment curriculum q14	Equal variances assumed	34.335	.000	-4.696	278	.000	-.564	.120	-.800	-.328
	Equal variances not assumed			-4.967	276.787	.000	-.564	.114	-.788	-.341
enrichment curriculum q15	Equal variances assumed	1.872	.172	-.354	278	.724	-.036	.102	-.237	.165
	Equal variances not assumed			-.358	251.802	.721	-.036	.101	-.235	.162

Appendix 19 T-Test analysis of selecting of gifted students

T-Test of selecting gifted students

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
selection system of gifted q1	male	166	4.32	.714	.055
	female	114	4.13	.770	.072
selection system of gifted q2	male	166	4.29	.787	.061
	female	114	4.02	.950	.089
selection system of gifted q3	male	166	3.73	1.029	.080
	female	114	3.66	1.079	.101
selection system of gifted q4	male	166	3.51	1.025	.080
	female	114	3.31	.942	.088
selection system of gifted q5	male	166	3.70	.820	.064
	female	114	3.52	.905	.085
selection system of gifted q6	male	166	3.94	.844	.065
	female	114	4.16	.826	.077
selection system of gifted q7	male	166	3.41	1.051	.082
	female	114	3.31	1.057	.099
selection system of gifted q8	male	166	3.54	1.121	.087
	female	114	3.40	1.045	.098
selection system of gifted q9	male	166	3.79	1.043	.081
	female	114	3.61	1.019	.095
selection system of gifted q10	male	166	3.22	1.162	.090
	female	114	3.25	1.209	.113
selection system of gifted q11	male	166	3.06	1.143	.089
	female	114	3.00	.959	.090
selection system of gifted q12	male	166	4.17	.932	.072
	female	114	4.03	.781	.073
selection system of gifted q13	male	166	3.51	1.055	.082
	female	114	3.75	.860	.081
selection system of gifted q14	male	166	4.16	.997	.077
	female	114	4.25	.837	.078
selection system of gifted q15	male	166	3.98	1.030	.080
	female	114	4.21	.792	.074

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
selection system of gifted q1	Equal variances assumed	.111	.739	2.093	278	.037	.188	.090	.011	.364
	Equal variances not assumed			2.064	230.678	.040	.188	.091	.008	.367
selection system of gifted q2	Equal variances assumed	.104	.748	2.606	278	.010	.272	.104	.066	.477
	Equal variances not assumed			2.517	212.271	.013	.272	.108	.059	.484
selection system of gifted q3	Equal variances assumed	.234	.629	.556	278	.579	.071	.128	-.180	.322
	Equal variances not assumed			.551	235.340	.582	.071	.129	-.183	.325
selection system of gifted q4	Equal variances assumed	4.329	.038	1.699	278	.091	.205	.121	-.033	.443
	Equal variances not assumed			1.726	255.757	.086	.205	.119	-.029	.439
selection system of gifted q5	Equal variances assumed	1.574	.211	1.742	278	.083	.181	.104	-.024	.386
	Equal variances not assumed			1.711	227.007	.089	.181	.106	-.028	.390
selection system of gifted q6	Equal variances assumed	.014	.907	-2.144	278	.033	-.218	.102	-.418	-.018
	Equal variances not assumed			-2.152	246.236	.032	-.218	.101	-.418	-.018
selection system of gifted q7	Equal variances assumed	.024	.876	.801	278	.424	.103	.128	-.150	.355
	Equal variances not assumed			.800	242.051	.424	.103	.128	-.150	.355

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
selection system of gifted q8	Equal variances assumed	1.562	.212	1.000	278	.318	.133	.133	-.129	.394
	Equal variances not assumed			1.013	253.629	.312	.133	.131	-.125	.391
selection system of gifted q9	Equal variances assumed	1.561	.213	1.463	278	.145	.184	.126	-.064	.431
	Equal variances not assumed			1.470	246.773	.143	.184	.125	-.063	.430
selection system of gifted q10	Equal variances assumed	.328	.567	-.158	278	.874	-.023	.144	-.306	.260
	Equal variances not assumed			-.157	236.639	.875	-.023	.145	-.308	.262
selection system of gifted q11	Equal variances assumed	6.222	.013	.462	278	.644	.060	.130	-.196	.317
	Equal variances not assumed			.477	266.917	.634	.060	.126	-.188	.309
selection system of gifted q12	Equal variances assumed	5.398	.021	1.340	278	.181	.142	.106	-.067	.352
	Equal variances not assumed			1.384	267.114	.168	.142	.103	-.060	.345
selection system of gifted q13	Equal variances assumed	7.341	.007	-2.009	278	.045	-.240	.119	-.474	-.005
	Equal variances not assumed			-2.086	269.797	.038	-.240	.115	-.466	-.013
selection system of gifted q14	Equal variances assumed	2.456	.118	-.782	278	.435	-.089	.114	-.313	.135
	Equal variances not assumed			-.808	266.934	.420	-.089	.110	-.306	.128
selection system of gifted q15	Equal variances assumed	1.324	.251	-1.998	278	.047	-.229	.114	-.454	-.003
	Equal variances not assumed			-2.096	274.364	.037	-.229	.109	-.443	-.014

Appendix 20 T-Test analysis of selecting and training of gifted teachers

T-Test of selecting teachers

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
selecting teachers q15-1	male	166	4.04	.968	.075
	female	114	3.93	1.095	.103
selecting teachers q15-2	male	166	3.68	1.085	.084
	female	114	3.51	1.214	.114
selecting teachers q15-3	male	166	2.45	1.243	.096
	female	114	2.14	1.136	.106
selecting teachers q15-4	male	166	4.02	.950	.074
	female	114	4.16	.955	.089
selecting teachers q15-5	male	166	4.14	.788	.061
	female	114	4.18	.833	.078
selecting teachers q15-6	male	166	4.08	1.053	.082
	female	114	4.47	.755	.071
selecting teachers q15-7	male	166	2.95	1.237	.096
	female	114	2.52	1.131	.106
selecting teachers q15-8	male	166	3.94	.879	.068
	female	114	4.16	.816	.076
selecting teachers q15-9	male	166	3.73	.950	.074
	female	114	3.89	1.011	.095
selecting teachers q15-10	male	166	3.65	.965	.075
	female	114	3.61	.992	.093
selecting teachers q15-11	male	166	3.48	.995	.077
	female	114	3.25	1.104	.103
selecting teachers q15-12	male	166	3.67	.981	.076
	female	114	3.75	.829	.078
selecting teachers q15-13	male	166	3.49	.995	.077
	female	114	3.64	.821	.077
selecting teachers q15-14	male	166	4.15	.783	.061
	female	114	4.35	.665	.062

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
selecting teachers q15-1	Equal variances assumed	2.197	.139	.904	278	.367	.112	.124	-.132	.357
	Equal variances not assumed			.884	222.957	.378	.112	.127	-.138	.363
selecting teachers q15-2	Equal variances assumed	3.960	.048	1.241	278	.216	.172	.139	-.101	.445
	Equal variances not assumed			1.216	224.629	.225	.172	.141	-.107	.451
selecting teachers q15-3	Equal variances assumed	5.787	.017	2.091	278	.037	.305	.146	.018	.593
	Equal variances not assumed			2.127	256.526	.034	.305	.144	.023	.588
selecting teachers q15-4	Equal variances assumed	.543	.462	-1.207	278	.228	-.140	.116	-.368	.088
	Equal variances not assumed			-1.206	242.116	.229	-.140	.116	-.368	.089
selecting teachers q15-5	Equal variances assumed	.093	.761	-.314	278	.753	-.031	.098	-.224	.162
	Equal variances not assumed			-.311	234.007	.756	-.031	.099	-.226	.165
selecting teachers q15-6	Equal variances assumed	8.437	.004	-3.394	278	.001	-.389	.115	-.615	-.164
	Equal variances not assumed			-3.603	277.451	.000	-.389	.108	-.602	-.177
selecting teachers q15-7	Equal variances assumed	.229	.632	2.946	278	.003	.428	.145	.142	.714
	Equal variances not assumed			2.996	256.459	.003	.428	.143	.147	.710

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
selecting teachers q15-8	Equal variances assumed	.474	.492	-2.101	278	.037	-.218	.104	-.423	-.014
	Equal variances not assumed			-2.130	254.302	.034	-.218	.102	-.420	-.016
selecting teachers q15-9	Equal variances assumed	.154	.695	-1.324	278	.187	-.157	.119	-.391	.076
	Equal variances not assumed			-1.309	232.860	.192	-.157	.120	-.393	.079
selecting teachers q15-10	Equal variances assumed	.382	.537	.382	278	.703	.045	.119	-.188	.279
	Equal variances not assumed			.380	238.603	.704	.045	.119	-.190	.280
selecting teachers q15-11	Equal variances assumed	1.438	.232	1.750	278	.081	.222	.127	-.028	.471
	Equal variances not assumed			1.717	226.145	.087	.222	.129	-.033	.476
selecting teachers q15-12	Equal variances assumed	2.809	.095	-.686	278	.493	-.077	.112	-.298	.144
	Equal variances not assumed			-.708	266.246	.480	-.077	.109	-.291	.137
selecting teachers q15-13	Equal variances assumed	6.901	.009	-1.349	278	.178	-.152	.113	-.375	.070
	Equal variances not assumed			-1.398	268.683	.163	-.152	.109	-.367	.062
selecting teachers q15-14	Equal variances assumed	.050	.823	-2.233	278	.026	-.200	.090	-.377	-.024
	Equal variances not assumed			-2.301	265.723	.022	-.200	.087	-.372	-.029

Appendix 21 Teacher's observation analysis result

Custom Tables
Gifted teacher observation results

		Count	Table Total N %
withholds Ideas	Very poor	10	41.7%
	poor	5	20.8%
	Fair	3	12.5%
	Good	4	16.7%
	Excellent	2	8.3%
encourages participation in discussions	Very poor	0	.0%
	poor	1	4.2%
	fair	1	4.2%
	good	8	33.3%
	Excellent	14	58.3%
poses interpretive questions	Very poor	0	.0%
	poor	2	8.3%
	Fair	1	4.2%
	Good	13	54.2%
	Excellent	8	33.3%
students evaluate situations	Very poor	0	.0%
	poor	0	.0%
	Fair	6	25.0%
	Good	8	33.3%
	Excellent	10	41.7%
analytic questions	Very poor	0	.0%
	poor	0	.0%
	Fair	5	20.8%
	Good	13	54.2%
	Excellent	6	25.0%
generalize from concrete to abstract	Very poor	0	.0%
	poor	2	8.3%
	Fair	5	20.8%
	Good	13	54.2%
	Excellent	4	16.7%
sensitive to students' responses	Very poor	0	.0%
	poor	1	4.2%
	Fair	1	4.2%
	Good	5	20.8%
	Excellent	17	70.8%
maintains a balance between active and passive activities	Very poor	0	.0%
	poor	2	8.3%
	Fair	1	4.2%
	Good	6	25.0%
	Excellent	15	62.5%
deliberately shifts teaching strategies with students	Very poor	0	.0%
	poor	4	16.7%
	Fair	0	.0%
	Good	4	16.7%
	Excellent	16	66.7%
apply techniques in classroom	Very poor	0	.0%
	poor	2	8.3%
	Fair	2	8.3%
	Good	3	12.5%
	Excellent	17	70.8%

		Count	Table Total N %
encourages students development argument skills	Very poor	0	.0%
	poor	1	4.2%
	Fair	1	4.2%
	Good	6	25.0%
	Excellent	16	66.7%
encourages analogical thinking	Very poor	0	.0%
	poor	1	4.2%
	Fair	2	8.3%
	Good	5	20.8%
	Excellent	16	66.7%
students compare different issues	Very poor	0	.0%
	poor	1	4.2%
	Fair	3	12.5%
	Good	11	45.8%
	Excellent	9	37.5%
students engage in lively debate of controversial issues	Very poor	0	.0%
	poor	0	.0%
	Fair	4	16.7%
	Good	12	50.0%
	Excellent	8	33.3%
S + T reflect an open/challenging attitude toward knowledge	Very poor	0	.0%
	poor	1	4.2%
	Fair	3	12.5%
	Good	5	20.8%
	Excellent	15	62.5%
encourages students to try new approaches	Very poor	0	.0%
	poor	0	.0%
	Fair	3	12.5%
	Good	6	25.0%
	Excellent	15	62.5%
find solutions to problems	Very poor	0	.0%
	poor	0	.0%
	Fair	2	8.3%
	Good	5	20.8%
	Excellent	17	70.8%
encourages guessess by students	Very poor	0	.0%
	poor	1	4.2%
	Fair	0	.0%
	Good	8	33.3%
	Excellent	15	62.5%
helps to realize that research involves trial and error	Very poor	0	.0%
	poor	0	.0%
	Fair	1	4.2%
	Good	8	33.3%
	Excellent	15	62.5%
uses implications of characteristics	Very poor	0	.0%
	poor	2	8.3%
	Fair	1	4.2%
	Good	8	33.3%
	Excellent	13	54.2%
uses management procedures in learning process	Very poor	2	8.3%
	poor	4	16.7%
	Fair	1	4.2%
	Good	8	33.3%
	Excellent	9	37.5%

		Count	Table Total N %
uses advanced organizers in curriculum	Very poor	0	.0%
	poor	3	12.5%
	Fair	1	4.2%
	Good	8	33.3%
	Excellent	12	50.0%

Appendix 22 The Ministry of Education approval Letter (Girls section)

بسم الله الرحمن الرحيم

المملكة العربية السعودية
وزارة التربية والتعليم

Ministry of Education

الرقم: ٣٤١
التاريخ: ٣/٦/١٤٢٨هـ
المشفوعات: .....

تعليم البنات
وكالة التعليم
الإدارة العامة للموهوبات

(عاجل جداً)

الموضوع : بشأن تسهيل مهمة الباحث الأستاذ / محمد القرني لإتمام متطلبات الدراسة .

سعادة / مدير عام إدارة التربية والتعليم بمنطقة حفظه الله

سعادة / مدير إدارة التربية والتعليم بمحافظة حفظه الله

السلام عليكم ورحمة الله وبركاته :

بناء على إحالة وكيل التعليم للبنات رقم ٤٢٢١ بتاريخ ١٤٢٨/٥/٢٥هـ بشأن طلب الباحث محمد بن عبد الخالق القرني .

نفيد سعادتكم بان الباحث طالب في جامعة wollongong باستراليا في مجال رعاية الموهوبات وتتطلب دراسته إجراءات بعض المقابلات وعمل الملاحظات وجمع الموضوعات والإحصاءات ذات العلاقة ، لذا نأمل من سعادتكم التكرم بتوجيه إدارات وأقسام الموهوبات لديكم بتسهيل مهمة الباحث لإتمام متطلبات الدراسة .

وتقبلوا تحياتي ،،،

مديرة الإدارة العامة للموهوبات

منى بنت سلطان باهبري

Appendix 23 The Ministry of Education approval Letter (Boys section)

بسم الله الرحمن الرحيم

المملكة العربية السعودية
وزارة التربية والتعليم

وزارة التربية والتعليم
MINISTRY OF EDUCATION

الرقم: ٣٤٠٠٥١
التاريخ: ٢٣/٨/١٤٣٩هـ
المشفوعات: استبانات

وكالة التطوير التربوي

الإدارة العامة للبحوث

سعادة مدير التربية والتعليم بمحافظة الطائف (بنين) **وفقه الله**

السلام عليكم ورحمة الله وبركاته

تجدون سعادتكم برفقه عشر استبانات بعنوان " تقييم مشاريع طلاب رعاية الموهوبين والمتفوقين في المملكة العربية السعودية " للباحث / محمد بن عبد الخالق القرني وذلك لجمع بيانات لدراسة علمية لنيل درجة الدكتوراه من جامعة Wollongong _ استراليا.

آمل من سعادتكم التوجيه بتعبئة الاستبانات العشر المرفقة من قبل :

١_ مدير مركز رعاية الموهوبين

٢_ معلمي ومشرفي المركز.

ومن ثم إعادتها إلى الإدارة العامة للبحوث.

وتقبلوا وافر التحية

مدير عام البحوث

د. علي بن صالح الخبتي

إدارة التربية والتعليم بمحافظة الطائف
تعليم البنين
مركز الاتصالات الإدارية - الوارد العام
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