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Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia

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Teacher Knowledge and Beliefs in Relation to Classroom Practices for Gifted Students in Saudi Arabia

Maher Aljuwaiber

This thesis is presented as part of the requirements for the award of the Degree of Doctor of Philosophy of the University of Wollongong

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ABSTRACT

After 17 years of providing gifted education, the Saudi Government and private institutions in Saudi Arabia began to look closely at services and programs for gifted students. A considerable body of literature in gifted education considered the quality of teachers’ classroom practices in regular classrooms. The purpose of this mixed methods study was to investigate the knowledge, beliefs, and competencies that characterise teachers’ classroom practices with gifted students in regular classrooms in Saudi Arabia.

The study used multiple data sources, including quantitative data collected via the Classroom Practices Questionnaire (CPQ) (Archambault, Dobyans, Slavin, & Westberg, 1993) from 351 male and female teachers of gifted students in Saudi school, follow up qualitative data collected via semi-structured interviews with ten of the teacher supervisors and two exemplary teachers of gifted students. Quantitative results showed that development of writing skills, acceleration, modifying the curriculum, developing reading skills and grouping were less frequently used with gifted and average students, while the use of discussion and questioning was used frequently with gifted and average students. For all six categories included in the questionnaire, the means of the application of classroom practices were higher for gifted students than for average students.

The results of demographic data showed no statistically significant differences between the responses of the teachers regarding their classroom practices with gifted students according to their years of teaching, highest degree earned, employment status, or grade level currently teaching. The demographic data also showed that female teachers and teachers who participated in a workshop or seminar on
questioning and discussion were more likely to implement this classroom practice with their gifted students compare to male teachers and teachers without training.

The qualitative results revealed that the majority of the teachers in Saudi regular classrooms are not applying adequate, effective classroom practices for gifted students. The results indicated a lack of special planning for the gifted, unavailability of enrichment, inconsistent and irregular grouping practices, complete lack of acceleration strategies, inability of teachers to modify the regular curriculum and use advanced methods and instruction strategies.

The interviews with exemplary teachers showed they had made some successful attempts to instruct their gifted students in the regular classroom, especially by adding specific tasks and activities for gifted students in their weekly plan, providing home enrichment activities, and using computers and scientific films. These teachers also indicated that they have used individualised teaching and asked gifted students about their interests.

In conclusion, the quantitative and qualitative findings of current study give a general impression that the knowledge, beliefs, and classroom practices of teachers of gifted students in Saudi classrooms are not particularly effective and successful in meeting the needs of gifted students in regular classrooms. Moreover, the results of the current study and previous studies reaffirms the importance of reconsidering the training programs for in-service and pre-service teachers of gifted students as well as re-evaluating and reformulating selection criteria of teachers of gifted students in Saudi schools.
DEDICATION

This study is dedicated to three most important people who have touched my life and made me the man I am today…

*My mother Aisha*

*My father Abdulaziz*

*My wife Doha.*

The sacrifices you have made taught me the meaning of unconditional love. I love you all and thank you. This is for you.
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First and foremost, I thank Allah [God] for everything He has given me.

This dissertation was developed and completed through the assistance and cooperation of many individuals. A very special thank you goes to my supervisor, Professor. Wilma Vialle, for her invaluable support and the great learning opportunities she provided me through this educational journey, She has been an example of the professional educator I desire to become. A special debt of gratitude is owed Dr.Stuart Woodcock and Dr.Steven Howard and Maree Howard for their support.

I would like to thank my wife, Doha for the patience, love and support she has given to me, and especially thanks to my loving sons, Emad ,Raed , Majd and Raghad of whom I am very proud ,for their love and support.

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1 INTRODUCTION

1.1 Background of the study

Modern educational thought emphasises the importance of educating gifted students, by creating the educational climate and opportunities that lead to the development of their talents, and to direct their potential to the maximum benefit in all areas. Gifted students often study in regular classes but they are not the majority in regular classes; and they study the regular curriculum, taught by regular teachers. In all cases, the normal learning environment must cater for gifted students’ needs, which are different from regular students’ needs. Teachers of gifted students are essential in providing educational care to fit the needs of gifted students, both in regular classes and in special classes for gifted students. Given the responsibilities of teachers of gifted students, and the importance of their roles, there is a constant quest in all educational systems to understand and evaluate the performance, knowledge and attitudes of teachers, to make sure that they are providing appropriate practices to meet the needs of gifted students in regular classes while also teaching regular students.

Teachers in Saudi Arabia have the responsibility to identify and nominate gifted students (Ministry of Education, 2010) as well as for the planning, implementation and evaluation of educational services in the gifted programs of the public education schools (Al-Juhani, 2008). New regulations on gifted education in Saudi Arabia, which occurred during the years 1997-2010, have seen the expansion of gifted education in regular schools. There are more than 612 teachers specialising in gifted education and a large number of regular teachers who teach gifted students in regular classes, most of whom are not qualified or adequately trained to deal with gifted students (Maajeeny, 2008). Previous studies have indicated that there is a lack
of understanding of the level of knowledge and beliefs of teachers of gifted students in Saudi Arabia, which affect their classroom practices in regular classes (Al-Manqoor, 2000; Maajeeny, 2008). Other research has demonstrated low use of effective classroom practices such as modifying the curriculum and diversification of teaching methods to suit the gifted students in regular classes (AlFahaid, 2002; Al-Kasi, 2004; Al-Juhani, 2008; Banjar, 2002). Given this situation in Saudi Arabia, the researcher aimed to address the problem by providing information about the knowledge and beliefs of teachers of gifted students associated with their classroom practices in Saudi Arabia.

1.2 Research problem

Teachers of gifted students in regular classes needs positive beliefs, knowledge and appropriate skills, special experience, qualifications and appropriate training in order to provide successful teaching for both gifted and regular students in one learning environment. Results of several studies showed that many teachers do not provide sufficient differentiated instruction for gifted students in regular teaching environments (Archambault et al., 1993; Johnsen, Haensly, Ryser, & Ford, 2002; Manning, 2005; McClure, 1992; Robinson, 1998; Whitton, 1997). These researchers have focused on the beliefs, knowledge and skills of teachers. Knowing the beliefs and knowledge of teachers of gifted students is an important indicator for determining their efficacy level and suitability for teaching gifted students and, thereby, determining the teacher needs for training and development.

Current educational policy in Saudi Arabia specifies that gifted students are fully integrated in regular classes. However, research evaluating gifted education in Saudi Arabia pointed out that teachers lack teaching competence, skills of identification (AlFahaid, 1993), appropriate training (AlFahaid, 2002; Al-Juhani,
2008), and knowledge concerning gifted curriculum approaches (Al-Juhani, 2008). Other studies indicated that teachers do not receive specialised university courses in giftedness prior to service. Further, the professional development programs for teachers’ in-service are few and inadequate (AlFahaid, 2002; Aljughaiman, 2008). In contrast, the study of Al-Ballwai (2007) indicated that teachers of gifted students in Saudi Arabia had sufficient skills and capacity to carry out their roles. This discrepancy suggests that further research is warranted.

As part of the ongoing review of educational policies on gifted education, educational decision-makers need information on the skills, knowledge and attitudes required by teachers in order to be effective for gifted students. Currently there is insufficient data about teachers’ beliefs and knowledge to overcome the shortcomings found in some previous research (Abu-Nawas, 2006; Alanzi, 2005; Al-Ballwai, 2007; Al-Manqoor, 2000). These included inconsistencies in the results of the studies, limited samples, outdated studies, over-reliance on quantitative data and the lack of qualitative data (Abu-Nawas, 2006; Alanzi, 2005; Al-Ballwai, 2007; Al-Juhani, 2008). Additionally, to the knowledge of the researcher, there are no studies in Saudi Arabia that have specifically addressed the beliefs and knowledge of teachers in relation to classroom practices for gifted students in regular classrooms. Hence, this research will fill the knowledge gap by answering two questions: (1) What are the knowledge and competencies that characterise teachers’ classroom practices for gifted students in regular classrooms in Saudi Arabia? (2) What types of practices are used by teachers for gifted students in regular classrooms in Saudi Arabia?
1.3 Purpose of the study
The study aimed to identify the knowledge and beliefs of teachers of gifted students in relation to their classroom practices in regular classrooms. While gifted students may spend some time in gifted programs, they also spend a significant portion of their time in heterogeneous classrooms where their teachers may or may not have any training or experience in gifted education. As such, the study aimed to complement previous research in Saudi Arabia, which focused largely on identification (see, for example, AlFahaid, 1993, 2002; Alkhadidi, 2008). Therefore the aim was to go beyond just the identification of gifted students and focus on the teaching and other educational services that are provided for gifted students in regular classes. The study also aimed to explore possible differences among teachers associated with their gender, teaching experience, degree earned, training, and employment status.

1.4 Significance of the study
The study is significant for the following reasons:

1. The study is consistent with the current trend in gifted education in Saudi Arabia, which is focusing on assessing the level of educational services and the performance of teachers in regular classes.

2. The study targets teacher beliefs, which play an important role in shaping the behaviour of teachers in regular classes.

3. The study will provide data on the level of knowledge of teachers of gifted students associated with classroom practices and evaluation. It focuses on teaching methods, which have not been covered adequately by previous research.
4. There are many gifted students who do not receive separate educational services as
they are integrated in regular classrooms. Thus there is need to understand the
quality of teaching for gifted students in regular classes.

5. There are approximately more than 800 teachers specialising in gifted education
but the quality of their teaching has not been evaluated.

6. There is a correlation between success in meeting the needs of gifted students and
possessing a high level of teaching skills. This study aimed to assess the skill level
of teachers of gifted students in Saudi Arabia.

7. The results of the study will provide important information for educational
decision makers in Saudi Arabia when building programs to prepare pre-service
teachers and in-service teachers for their roles with gifted students.

8. The study addressed some of the shortcomings in previous studies on gifted
education in Saudi Arabia, such as limited sampling and research methods. The
current study has a much larger sample (n = 351) than other studies on gifted
education in Saudi Arabia (see, for example, Al-juhani, 2008; Al-khadidi, 2008;
Al-Qahtani, 2004; Al-qefari, 2010; Musairi, 2008). Further, the study drew on a
diverse research sample including regular teachers, specialist teachers,
coordinators in gifted education, exemplary teachers in gifted education, and
supervisors, as well as both males and females. It also utilised both quantitative
methods (questionnaire) and qualitative methods (semi-structured interviews)
while the majority of studies on gifted education in Saudi Arabia utilised
quantitative methodologies only (Alfahaid, 1993; Alfahaid, 2002; Al-juhani,
2008; AlKasi, 2009; Al-khadidi, 2008; Al-Nowaiser, 2008; Bin juma, 2006;
Musairi, 2008).
1.5 Research questions

The study was guided by one central research question: What are the knowledge and competencies that characterise teachers’ classroom practices for gifted students in regular classrooms in Saudi Arabia?

The following sub-questions were utilised:

1. What classroom practices are currently used with gifted and regular students in the regular classroom in Saudi Arabia?
2. In what ways do teachers believe that they modify classroom practices and curriculum to meet the needs of gifted students?
3. To what extent do specialist and non-specialist teachers differ from each other in their classroom practices for gifted students?
4. To what extent do male and female teachers differ from each other in their classroom practices for gifted students?
5. To what extent do teachers apply recommended classroom practices for gifted students in regular classrooms in Saudi Arabia from the viewpoint of supervisors and exemplary teachers?

1.6 Definition of terms

*Classroom practices*: techniques, processes, instructional strategies and activities that are used by the teachers in regular classrooms to assist all students to achieve acceptable or optimal performance.

*Specialist teachers*: full time teachers who had previously taught students in regular classrooms and were trained to provide specially designed services for gifted students in the school enrichment programs.

*Non-specialist teachers*: this term denotes two types of teachers, regular teachers who are untrained in gifted education, and coordinators who are also untrained in gifted education but have some administrative work related to gifted students in regular schools.
1.7 Arrangement of the study

Chapter 1 presented an introduction to the study, which included the background of the study, research problem, purpose of the study, significance of the study, research questions and definitions of terms.

Chapter 2, the literature review, synthesises the research on public, special education and gifted education in Saudi Arabia. It examines topics relevant to teachers of gifted students in Saudi Arabia, gifted students’ education in regular classrooms, and classroom practices recommended for gifted students. The literature is examined to justify the focus of the current study.

Chapter 3 describes the methods undertaken for the study. It includes the context and design of the study, participants, instrumentation, translation process, data collection and data analysis.

Chapter 4 presents the results from both the quantitative and qualitative data analyses.

Finally, in Chapter 5, the researcher discusses these findings and their implications for both theory and practice, and makes recommendations for action and further research.
2 LITERATURE REVIEW

2.1 Introduction

The study aimed to identify the knowledge and beliefs of teachers of gifted students associated with their classroom practices in regular classes. The literature for this topic was diverse and covered research and studies from Saudi Arabia as well as Western literature that discussed issues related to teaching the gifted in regular classrooms. It was essential to look at all available literature related to classroom practices in Saudi Arabia to find the focus of earlier studies and what was missing from the literature and also it was important to have an awareness of other Western research in this area. The review of the literature is presented in two sections. The first section of this review focuses on literature related to gifted education in Saudi Arabia. The second section of this review focuses on Western literature.

2.2 Public education in Saudi Arabia

The educational system in Saudi Arabia relies on the educational policy document, adopted in 1970, which stresses that the purpose of education is to meet the social, economic, and religious needs of the people (Alhogail, 2003; Al-Salloom, 1995). There are four important dates in relation to the development of education in Saudi Arabia: (1) in 1926, the Directorate of Education was established. Its role was to regulate the functions of education, but its scope was minor and limited; (2) in 1953, the Ministry of Education was established. Its role focused on research and development of the educational system and the administration of schools and teachers; (3) in 1960, the Presidency of Girls’ Education was established, and its role was to regulate the education of girls in general and the development of plans for and supervision of schools, teachers, and curriculum design for girls; and (4) in 1975,
higher education was removed from the Ministry of Education to become a separate ministry, named the Ministry of Higher Education. Its purpose was to oversee the development of plans for higher education and supervision of the universities (Al-Salloom, 1995).

The education system in Saudi Arabia is a centralised system. There is a heavy reliance on textbooks, which contain the basic principles that the government seeks to instil in its citizens. The stages of public education in Saudi Arabia are: kindergarten (which is not compulsory); 6 years in primary school beginning at age 6; 3 years at the intermediate stage; and, 3 years at the secondary stage.

The curriculum in Saudi Arabia falls under several topics. First, at the primary stage, there are Arabic studies, Islamic studies, science, mathematics, art education, physical education, social studies (fourth, fifth, and sixth grades), and morals and discipline (first grade). Students at the intermediate stage study these same subjects with the addition of English studies. At the secondary stage, they also study these subjects along with management studies, computer science, and library and research activities. The number of hours per week spent by students at the primary level is between 28 and 31; at the intermediate stage is 34 hours; and, at the secondary stage is between 34 and 36 hours (General Directory for Curriculum Development, 1996; UNESCO, 2011).

Training of teachers follows one of two different systems. First, there is the teacher college system in which the individual is prepared to teach at elementary and post-elementary schools. There were 17 teacher colleges for this purpose. Although this system no longer exists, many teachers in the current study may have been trained in this manner. Second, is the college of education and it functions under the authority of the universities (Al-Salloom, 1995).
2.3 Special education system in Saudi Arabia

In 1962, the Saudi Directorate of Special Education was established to take care of students with special needs. The policy of separation between general and special education was a long-term policy. In 1994, upon the advice of the United Nations (UNESCO), Saudi Arabia chose to integrate students with special needs into the general education schools. This resulted in an increase in interest in special education, which was an initial step towards the education of gifted students. There are several challenges facing workers in special education in Saudi Arabia. For example, there is a large number of students with special needs who do not receive special education in regular schools due to the lack of experience of teachers, lack of a coherent plan to train teachers in special education, and, finally, many of the curricula are outdated (UNESCO, 2011). Interest in the education of gifted students has come relatively late. In 1997 Saudi Arabia began establishing programs to identify gifted students, which will be described in detail later (Aljughaiman, 2008).

2.4 Background of gifted education in Saudi Arabia

The history of gifted education in Saudi Arabia is linked to that of special education since both focus on groups of students who are considered to be outside the norm. The early focus and attention was on special groups such as deaf, mute, or blind students. The Saudi Directorate of Special Education, founded in 1962, includes various departments, each responsible for a different category of special education (Al-Salloom, 1995). In 1994, based on the recommendation of the United Nations (UNESCO), the government adopted a policy requiring that special education students be integrated into regular schools. The item (57) in the policy document regulating education in Saudi Arabia emphasised the importance of discovering and nurturing gifted students; however, the integration of gifted students
into regular schools was not formally introduced until 1997. The gifted education program in Saudi Arabia followed a series of steps. In 1997, the Ministry of Education and King Abdul Aziz’s City for Science and Technology adopted a national project that included a method of identifying gifted students and an enrichment program for those with an aptitude for mathematics and science. The identification program has contributed to the codification of measures of creativity and intelligence to be used in the Saudi environment. The Ministry of Education has utilised this program to locate gifted students in boys’ schools.

Second, when those in the private sector took an interest in gifted students (e.g., King Abdul Aziz and his Companions’ Foundation for Giftedness and Creativity), a charitable institution was established in 1999 to support gifted students. Its main mission is to build and develop the environment and community of creativity in Saudi Arabia to enable gifted students to serve their country (Mahwiba, 2007). King Abdul Aziz and his Companions’ Foundation for Giftedness and Creativity established a strategic plan providing a long-term vision for the future care of gifted students in order to foster their creativity and innovation. Education officials are also learning from international experience about providing services for the gifted. One of the most important achievements of the institution is its implementation of more than 138 enrichment programs, benefiting more than 5,338 gifted male and female students in various parts of Saudi Arabia. Diversity is a characteristic feature of the programs and activities of King Abdul Aziz and his Companions’ Foundation for Giftedness and Creativity. In addition to the Foundation’s interest in gifted students, special programs nurture innovation and creativity, make use of substantial financial allocations from the private sector, and
establish a partnership between these institutions and the government’s investment in the education of the gifted (Maajeeny, 2008).

The third major event in the history of gifted education was the founding of General Administration of Gifted Education in the Ministry of Education in 2001. Its function is to achieve the objectives of identifying and providing services for gifted students in Saudi Arabia. It contributes to the preparation of an appropriate educational environment that would identify gifted students and the provision of educational opportunities for them so they can develop their abilities through participation in various programs offered by the Ministry of Education (General Administration of Gifted Education, 2007).

The following are the major achievements of the public administration for the care of gifted students: (1) the identification of more than 28,000 gifted students; (2) the provision of services for about 15,000 gifted students in all regions of the kingdom; (3) the training of 612 teachers specialising in gifted education; (4) the placement of 538 full-time teachers specialising in gifted education as of 2008; and (5) the opening of 37 full-fledged for boys and 45 for girls, and independent centres for gifted students in all regions of the kingdom, 10 of them affiliated with schools but housed in separate, fully-equipped buildings (General Administration of Gifted Education, 2007).

The General Administration of Gifted provides the following options for working with gifted students: (1) grouping; (2) enrichment; (3) acceleration; and (4) matching a gifted student or students with a distinguished expert in an area that appeals to the gifted students. The following entities can be assigned responsibility for the implementation of the educational methods used with gifted students: (1) a teacher in charge of the education of gifted students in each school; (2) a coordinator
of gifted education in schools where there is no full-time teacher of gifted students; and (3) an education centre that provides programming for gifted students in the schools where there is no special teacher for them (Maajeeny, 2008).

The public administration for the education of gifted females was established in 2002, and most of the administrative structures and educational policies are similar to those applied to the education of gifted males (Maajeeny, 2008). In this review of the three institutions mentioned above, it is noteworthy to point out that the programs and policies of King Abdul Aziz and his Companions’ Foundation for Giftedness and Creativity do not utilise their efforts to help the teachers of gifted students, whether in development, preparation, training, or performance evaluation. However, over the years 2006-2008, the public administration for the education of gifted males and the public administration for the education of gifted females developed short training courses for teachers of gifted students. Nevertheless, there is still a lack of knowledge regarding effective teaching practices among full-time (Al-juhani, 2008; Al-qahtani, 2004), and part-time teachers of gifted students (Alqefari, 2001; Musairi, 2008). Educators need to know more about identifying gifted students and using both quantitative and qualitative measures for identification.

It is clear that there is a diversity of sources of support for gifted education in Saudi Arabia. The government has accepted the bulk of responsibility. Additional support is available from the private sector and the educational institutions. Saudi Arabia seems to be moving towards establishing academies for the gifted (Ministry of Education, 2001), conducting intensive studies on the role of the general education institutions for gifted and the higher education institutions, and improving the methods used in identifying gifted students (Maajeeny, 2008).
Previous studies have identified a number of challenges facing gifted education in Saudi Arabia, including the following: lack of existing programs (Al-Sharafi, 2003), lack of specialised researchers in gifted education, inadequate material resources (Al-Juhani, 2008; Banjar, 2002), the prevalence of central administration in gifted education (Musairi, 2008), a lack of preparation and training for those who work in the gifted education sector (Abu-Nawas, 2006; Al-Juhani, 2008), duplicate services among the institutions working in the gifted education sector (Musairi, 2008; Thubaiti, 2009), and lack of comprehensive evaluations of gifted programs and curricula (Al-Khadidi, 2008; Derendari, 2006). Although many programs have been introduced in recent years, recent research suggests that the educational provision for gifted students seems to be patchy, and curriculum modification and advanced teaching strategies are still somewhat inadequate (Al-qefari, 2010).

Researchers have indicated that there is an urgent need to determine the levels of knowledge of teachers of gifted students concerning particular methods they employ, classroom management and practices, and evaluation approaches (Abu-Nawas, 2006; Al-Khadidi, 2008; Musairi, 2008; Thubaiti, 2009). The aim of this is to ensure that teachers of gifted students are capable of engaging in positive interaction with the qualitative changes that have occurred in gifted education in Saudi Arabia over the past ten years. The current study addresses this need.

2.5 Components of the learning environment in Saudi schools and gifted programs

Only few studies have focused exclusively on analysing the components of the environments in which gifted students learn in Saudi Arabia (Majeeny, 2008). The following summarises the most important results of studies found in a review of the literature.
2.5.1 Gifted students in Saudi Arabia

Many aspects associated with the characteristics and qualities of gifted students in Saudi Arabia have not been discovered or adequately defined yet. Maajeeny’s (2008) study showed that the apparent performance of cognitive productions, and academic achievement are the most important characteristics that distinguish gifted students. A group of gifted education specialists claimed that the most important qualities that gifted students possess are high intelligence, outstanding performance, skills in and outside the classroom, personal leadership, and high grades (Abu-Nawas, 2006) while the most important social qualities that characterise gifted females are the number of family members ranging from seven to nine individuals, and being the middle child in the family; fathers or mothers receiving a high level of education (university degree and above); fathers being civilians and mothers housewives (Al-Otaibi, 2007). Further, the study of Al-Otaibi (2007) focused on identifying the social characteristics of gifted female students and the social problems they face in family and school. The study results showed that these students reported a number of social problems, such as lack of friends, inability to communicate with teachers and other students, a sense of social exclusion, and rebellion against the orders of teachers and family authorities. Alindegeani (2009) used three scales, Learning and Thinking Style Scale, Problem Solving Scale, and Academic Adjustment Scale, to identify the difference between the gifted and regular students in using either or both hemispheres of brain in problem solving and academic adjustment. The comparison between 146 gifted and 199 non-gifted students in some mental qualities indicate that gifted students used both sides of the brain more often than regular students, according to the researcher. Regular students used the left side more often compared to gifted students (Alindegeani, 2009).
2.5.2 Curriculum

Studies on gifted curriculum in Saudi Arabia are few and in the early stages regarding the evolution of the concepts of the curriculum for the gifted. For example, a study by Abu-Nawas, (2006) showed that a group of gifted education specialists believes that inventions, scientific research, science, and mathematics should be included in the curricula for gifted students. In this study, a sample of gifted females preferred more courses and asked that languages and literature be included in the gifted curricula (Abu-Nawas, 2006). It is rare that gifted children are sufficiently challenged; however, modifying the curriculum for gifted in Saudi Arabia shows encouraging trends, for instance, Ismail’s (2009) study sought to investigate the impact of the implementation of an enrichment unit in light of Gardner’s theory on the development of talent domains of 37 Saudi gifted children. The study utilised an Observation technique and three Rating Scales. The results showed that modifying the curriculum using Gardner’s theory led gifted children to higher performance in the cognitive, emotional, and skill domains. No statistically significant difference between the control and experimental group was found on the performance variable due to gender (Ismail, 2009).

2.5.3 Methods and strategies of teaching

Saudi teachers often enter a classroom with a single lesson to deliver at a single pace and through a single instructional approach (Alhedan, 2008; Alnefei, 2010; Algamdi, 2008). Responses from samples of teachers on strategies and teaching methods used with gifted students refer to the widespread use and preference for traditional strategies more than modern strategies (Al-Kasi, 2004; Al-Khadidi, 2008). For example, Al-Kasi (2004) and Al-Khadidi (2008) conducted studies to determine the current situation of gifted programs according to teachers’
and supervisors’ views in Saudi gifted education centres. The results from both studies showed that brainstorming, lecture, discussion, and problem solving are strategies and teaching methods most often used in programs for gifted at education centres (Al-Kasi, 2004; Al-Khadidi, 2008). Student-centred learning, inquiry methods, and field trips are strategies used less often in gifted programs at gifted education centres in Makkah (Al-Khadidi, 2008) while extra-curricular activities is the most common approach used to teach gifted students in Saudi Arabia (Abu-Nawas, 2006).

2.5.4 Means and instructional aides used

According to the research, Saudi teachers of gifted students realise that plentiful and appropriate resources, means, and instructional aides are necessary to facilitate student success (Alsaleh, 2007; Abu-Nawas, 2006). For instance, the sample in Abu Nawas’s (2006) study believed that computers, educational films, language and science labs, field trips, and workshops should be used in gifted programs in education centres in Saudi Arabia as the instructional aides.

2.5.5 Methods of evaluation used

The studies of Al-Kasi (2004) and Al-Khadidi (2008) showed that traditional methods of evaluation that rely on observation of teachers and parents are common. Supervisors of gifted education centres found that comments of teachers and parents are the most common methods used to evaluate students in gifted education programs in Saudi Arabia (Al-Kasi, 2004). These results are similar to the results of Al-Khadidi’s (2008) study, which indicated that the output of the students and observations of teachers and parents were used to evaluate gifted students in art classes in Makkah education centres. Surveys, standardised tests, and student records
were the least often used evaluation methods applied to gifted art students. On the other hand, programs that have adopted the evaluation of gifted students in Saudi Arabia reported a positive effect of evaluation on the physical and human component of gifted programs. The qualitative and quantitative methods used to evaluate classroom enrichment programs had a positive effect on the level of administrative determinations, the means and tools used, and the development and training of teachers implementing the programs (Derendari, 2006).

2.6 Teachers of gifted students in Saudi Arabia

Most teachers of gifted students in Saudi Arabia are regular teachers who trained for their careers in teaching using an integrated system implemented in most universities and teacher preparation colleges in Saudi Arabia (Aljughaiman, 2008; Majeeny, 2008). Very few of them have undertaken in-service training courses or short courses in any area related to gifted education. Even now, most teachers teach either gifted students in the regular classroom with special alternatives or gifted students in regular classroom with no special alternatives because of the absence of full special classes to prepare instructors to teach gifted students in the education system in Saudi Arabia (Aljughaiman, 2008; Majeeny, 2008).

Teachers who were surveyed in studies related to gifted education in Saudi Arabia held bachelor’s degrees and few held masters or doctoral degrees (AlFahaid, 1993; AlFahaid, 2002; Al-Kasi, 2009). Very few teachers held a teaching diploma from a 2-year teachers college from which they had graduated when the old system of teacher preparation was in effect. Researchers studying teachers of gifted students in Saudi Arabia used quantitative rather than qualitative methods (AlFahaid, 2002; Al-Kasi, 2004; Al-Kasi, 2009; Al-Khadidi, 2008; Alsaleh, 2007; Maajeeny, 1990). A synthesis of the literature provides some insights into issues and practices of teachers
of gifted students in Saudi Arabia, including criteria for their selection and nomination, their roles in teaching, the level of their competencies, their attitudes, and needs that will help them develop their performance.

2.6.1 Selection criteria of teachers of gifted students in Saudi Arabia

A-Thobaiti (2009) proposed several requirements for the nomination of teachers of gifted students in Saudi Arabia, including being selected by a committee of educators and experts, being observed while teaching in schools, being evaluated on their academic, professional, and personal characteristics. According to the study of Alanzi (2005), educators in programs for gifted education should be subject to the following criteria: (1) having a bachelor's degree in any field of education; (2) practising teaching in general education schools or gifted centres; (3) having high skills in teaching; and (4) passing the retraining program for the preparation of teachers of gifted students. The study also emphasised that the admissions conditions of the teacher in gifted education programs should require: (1) a copy of bachelor's degree; (2) a report of their functionality 3 years later; (3) praise of effectiveness from the educational supervisor; (4) receiving 80% or higher score in the nomination form; and (5) passing a personal interview.

2.6.2 The roles and functions of a full-time teacher of gifted students

The General Administration of Gifted (2007) identified two types of teacher roles, one in school, and the other in gifted programs outside the school. In school, the roles of teachers of gifted students include implementing gifted education programs in schools by providing a variety of experiences to develop the capacity of students, implementing effective enrichment models, creating a general framework for various educational experiences in three stages, discovering, perfection, and
excellence, as well as by providing enrichment, which involves the integration of thinking skills in enrichment content.

The other roles of the teacher in gifted programs outside the schools include implementing gifted education programs in gifted education centres for students who attend schools without gifted programs (General Administration of Gifted, 2007). In general schools, teachers spend most of their time planning, implementing, and evaluating curriculum materials in gifted programs. They are trying to solve problems in creative ways, using a knowledge tree in planning the enrichment program as well as a variety of sources before preparing the enrichment curriculum. Teachers spend less time identifying the needs or tendencies of gifted students in enrichment programs and more time helping students focus on their production outside the school, involving parents and the enrichment team in assessing the enrichment program (Al-Juhani, 2008).

2.6.3 Trends and attitudes

The results of studies that attempted to identify the attitude of Saudi teachers towards the education of gifted students showed that the new generation of Saudi teachers and teachers who have knowledge about giftedness hold more positive attitudes toward gifted students compared to those who have more teaching experience and know less about giftedness (AlFahaid, 2002; Al-Manqoor, 2000). AlFahaid’s study (2002) showed that Saudi teachers with less experience in gifted education have more positive attitudes than their colleagues who have experience, while Al-Manqoor’s (2000) study reported that female teachers have positive attitudes about using contemporary educational methods to educate gifted females at the primary stage of schooling. These female teachers also have positive attitudes about accelerating, enrichment, and grouping. Female teachers who have knowledge
and information about giftedness have more positive attitudes about contemporary methods used in gifted education compared to teachers who do not have enough knowledge about giftedness.

2.6.4 The competency levels of teachers of gifted students

Relatively few studies have been conducted to investigate the competencies of teachers of gifted students in Saudi Arabia. It seems that the results of the studies of Al-Ballwai (2007), AlFahaid (1993), and Al-Khadidi (2008) are contradictory. The results of Al-Ballwai’s (2007) study indicated that teachers of gifted students in Saudi Arabia have the educational competencies due to the availability of skills and capabilities in gifted education, and they have the ability to prepare programs and provide human and material resources for the gifted program (Al-Ballwai, 2007). On the other hand, the study of Al-Khadidi (2008) showed that teachers of gifted art students in Makkah gifted centres used less effective teaching methods. The study of AlFahaid (1993) reported similar results, showing that male and female teachers have not been effective in identifying gifted female and male students’ intelligence or creativity (AlFahaid, 1993).

2.6.5 The need for teachers to develop their performance

Previous studies revealed that teachers in Saudi Arabia have multiple needs in order to perform their role adequately (Abu-Nawas, 2006; Al-Juhani, 2008). For example, teachers of gifted students in Saudi Arabia strongly agree that they need training to help gifted students develop personal characteristics as well as develop and identify appropriate scientific content (Al-Juhani, 2008). All the participants in one study agreed that there is a need to train teachers who specialise in giftedness and gifted education (Abu-Nawas, 2006). Teachers need support from the school
administration or other teachers (Al-Juhani, 2008). Teachers of gifted students in Saudi Arabia agree that they need to convince other teachers at their schools not to resist the implementation of the curriculum compacting strategy (Al-Juhani, 2008).

Teachers need resources, means, tools (Alsaleh, 2007), and models (Al-Kasi 2009). Teachers of gifted students in Saudi Arabia agreed on the need for special models when preparing individual educational plans tailored to gifted students as well as the need for in-depth knowledge of available learning resources (Al-Juhani, 2008).

Teachers need to increase their knowledge, according to Al-Juhani’s (2008) study. He reported that teachers of gifted students in Saudi Arabia agreed on the need to increase their knowledge and understanding of curriculum concepts and theories to help them plan the enrichment curriculum (Al-Juhani, 2008).

### 2.7 Obstacles facing gifted education in Saudi general schools

The literature in gifted education in Saudi Arabia indicated that gifted students in general education schools face a number of problems that prevent their access to appropriate education (Maajeeny, 1990; Al-Sharafi, 2003). Staff in gifted education have reported that educational polices in gifted education are not sufficient as they currently stand (Abu-naser & Aljughaiman, 2012). Researchers’ efforts are short-lived because Saudi Arabia has little experience in gifted education (Abu-Nawas, 2006). In addition, researchers have been reluctant to conduct extensive evaluations of the environment experienced by gifted students in the general education schools.

Al-Sharafi (2003) determined that at primary schools, the most important obstacles are linked to the school environment, such as, lack of advanced teaching aids and inadequate instructional alternatives for gifted students. Studies by Al-Saif (1998) and Banjar (2002) indicated that school administrators were over-burdened.
Moreover, obstacles associated with the curriculum and teachers’ commitment to classroom curriculum were connected to large amount of curriculum content and were not contributing to the school curriculum for meeting the needs of gifted females (Banjar, 2002). Furthermore, these obstacles were not associated with lack of classroom and non-classroom activities associated with the needs of gifted females (Banjar, 2002). The biggest obstacles included deficiencies in school buildings and lack of equipment (Al-Saif, 1998). There were not enough trained teachers to identify gifted females (Banjar, 2002), and there were too few teachers to meet the needs of gifted through enrichment. Other obstacles included lack of experts in the field of curriculum planning and the difficulty in finding funding for gifted programs (Al-Saif, 1998).

2.8 Gifted students’ education in regular classrooms

Researchers distinguish among three different learning environments, namely regular classes without special alternatives for gifted, regular classes with special alternatives, and special classes for gifted. In most educational systems that provide special services for the gifted, the majority of gifted students continue to study in regular classes (Archambault et al., 1993; Reis et al., 2004; Taylor & Milton, 2006).

Sousa (2009) argued that every gifted student in public education have access to different forms of educational services. Mildly gifted students, who often fail to get the minimum scores needed for selection for gifted programs, generally stay in regular classrooms. Moderately gifted students (usually get IQ scores of around 130) represent the majority of students in gifted and talented programs. Profoundly gifted students (with IQ scores of 160 or above) are probably not challenged or educated to their full potential until they reach university. Regular classes that do not offer differentiated services are not considered suitable for the education of gifted
students. Research studies show that gifted students who study in full-time gifted classes do achieve significantly more than gifted students who stay in regular classrooms without special alternatives. They also perform better than students in part-time pull-out programs (Rogers, 2007; Sousa, 2009). Nevertheless, regular classes with special alternatives such as pull-out programs for the gifted, are of modest benefit (Sousa, 2009). Studies show that gifted students in pull-out programs are more positive about school, about their talent and about their programs than are gifted students who study in regular classes without special alternatives (Rogers, 2007). In previous studies, criticism covered almost all elements of the learning environment in regular classes without special alternatives. For example, the content of many textbooks has been criticised for being too easy, not being challenging enough, providing insufficient and superficial information not suited to the gifted students’ needs, and not taking into account the diversity of capabilities and interest of gifted (Tomlinson, 1995). Gifted students in regular classes know approximately 40 to 60% of the subjects before they are provided to them during the school year (Peine, 1999); however, they receive only about 11% of teaching time from the teacher (Mendoza, 2006). In addition, 84% of activities and instructional efforts they receive are at the same level as those of their regular peers (Westberg, Archambault, Dobyns, & Slavin, 1993). They often feel bored while waiting for their regular peers to complete their tasks (Peine, 1999). These gifted students are often taught by one method of teaching (Westberg & Archambault, 1997), their emotional needs are often not met (Winebrenner & Devlin, 2001), and their capability is not sufficiently challenged (Rowley, 2008). Gifted students in regular classes without services or appropriate practices often have poor achievement (Dewittie, 2007), as this type of environment fails to meet their learning needs (Taylor & Milton, 2006).
These findings suggest that the most important principle when designing any educational services or programs for gifted students is to provide differentiated curriculum (Vialle & Rogers, 2009). Many educational systems that are trying to attend to gifted education favour the second type of gifted learning environments, that is, regular classes with special alternatives. There is controversy about the legality of providing special education to a special category of students, such as gifted students. This debate has been about a supposed conflict between pursuing the equity that provides a unified education for all students and providing excellent and different teaching for gifted students in regular classes. In fact, it has been demonstrated that the use of alternative and differentiated practices for gifted students in regular classes does not harm regular students but benefits all students in the classroom (Winebrenner, 1992). It is surely not equitable to overlook the suffering that gifted students in regular classes without services or special practices face on the pretext of equity.

The approach to differentiated learning for gifted students followed two phases. In the first phase, differentiated learning was linked to the characteristic of exceptional intellectual ability; therefore, the concept of differentiated learning was developed to refer to both teachers’ roles and evaluation methods. In the second phase, the differentiated learning tended to focus on developing giftedness; therefore, differentiated learning models were developed to focus on revising the content, process, and product of the curriculum (Dinnocenti, 1998; Jun, 2004; Worley, 2006).

It has been argued that most studies related to differentiated learning for gifted students are not empirical and therefore more research is needed that utilises a qualitative approach to determine the teaching practices that will successfully address the needs of gifted students (Linn-Chohen & Hertzog, 2007). Studies have
shown the importance and benefits of utilising differentiated learning, as it provides an ideal solution to meet the needs and diverse interests of gifted and regular students in one learning environment (Grant, 2003). Ruf (2005) addressed the educational issues of gifted students resulting from differences in the learning speed and learning style of gifted and regular students. She states, “Because children differ so greatly in their abilities, it makes sense that educational programs would allow for the diversity of learning styles and speed” (p. 26). Experimental studies showed that the use of multiple types of differentiated learning applications influences, for example, the academic growth of gifted students (Feng, Baska, Quek, Bai, & O’Neill, 2005), and increases the level of challenge and excitement for them (VanTassel-Baska & Little, 2003). In addition, differentiation helps identify the strength in gifted students, helps them develop various types of abilities and talents, raises the levels of learning for all gifted and regular students (Oakes, 1985; Winebrenner, 1992), and maintains the principle of taking into account choices of gifted students regarding appropriate methods and learning strategies (Renzulli, 1985; Tomlinson, 1999; VanTassel-Baska & Stambaugh, 2006).

Differentiation also provides multiple opportunities for developing talent, which would reduce the feeling of harmful competition between them and the rest of regular students (McAdamis, 2000). On the other hand, the application of differentiated learning in regular classes helps teachers develop their practices to include various modern teaching methods and strategies. It can also liberate teachers from the shackles of the textbooks and help them develop observational skills to identify multiple types and levels of talents and abilities. Moreover, this type of learning helps increase the capacity of classes to reach the levels of impressive and saturated learning appropriate for all students as well as the capacity of teachers to
change the educational situation for gifted students (Graffam, 2006; Page, 2000; Tomlinson, 1999; Tomlinson & McTighe, 2006).

Despite the positive effects of differentiated learning to the gifted student, curriculum, teachers, and the entire educational environment in the regular classes, previous studies showed a discouraging level of support for the application of differentiated learning in regular classes (Archambault et al., 1993; Johnsen, Haensly, Ryser, & Ford, 2002; Manning, 2005; McClure, 1992; Robinson, 1998; Whitton, 1997). Numerous obstacles, some linked to the administrative and classroom environment and some to teachers, can explain the limited use of differentiated learning. The existence of administrative support is a strong motive to make changes or adopt new educational strategies. The application of differentiated learning will change the environment in regular classes because it might change the curriculum content, cause the shift from the individual to the group instructional strategies or vice versa, re-distribute teaching time, or apply new tools and means. All of these changes are difficult to implement in the classroom environment for gifted students without the need to become consciously aware of the nature and requirements of gifted education (Brighton, Hertberg, Moon, Tomlinson, & Callahan, 2005; Hertberg-Davis & Brighton, 2006; Wideman, 1991; Willard-Holt, 1994; Winebrenner, 2001).

Studies have suggested that the most important obstacles in a classroom environment that prevent the application of differentiated learning in regular classes are the classroom sizes (Bates & Munday, 2005; Fahey, 2000). The quality of teaching is typically lower in large classes (Fahey, 2000), because of the large number of students per teacher (Bates & Munday, 2005), as well as the small number of gifted students in the regular classroom. Fewer than five gifted students in the
regular classroom would reduce the chance of utilising differentiated learning (Westberg & Daoust, 2003). Other barriers to utilising differentiated learning include lack of physical resources that facilitate the transition and integration of gifted students into various activities (Gregory & Chapman, 2002; Smutny, 2003; Stepanek, 1999), the beliefs, attitudes, and knowledge of teachers, and teacher practices. Teachers’ misconceptions, such as that gifted students do not need help from the teacher, make differentiation for gifted students incompatible with educational equity (Goree, 1996; Winebrenner, 1992). Some teachers also believe that differentiation would require overwhelming changes to all components of the regular classroom environment and teaching (Jun, 2004). Other obstacles are associated with teachers’ practices, such as teachers not understanding the meaning of differentiation and its application, using one curriculum for teaching all students (Tomlinson, 1995), using one method and strategy of teaching (Archambault et al., 1993), being unable to deal appropriately with the creative behaviours of creative students (Torrance, 1987), and refusing to change their teaching practices. According to Brighton et al. (2005), some of the factors that could potentially change teachers’ beliefs and practices are: changing teachers’ beliefs and practices by increasing their knowledge of differentiated learning; developing trust in supporting the educational community; increasing their awareness of the presuppositions about education and learning; providing consistent and continuous training; feedback on their efforts; a healthy school environment; and underlying motivation for change.

2.9 Classroom practices recommended for gifted students

Classes in the present era cover various skills, cultures, and languages. This is due to the ease of transferring the knowledge between communities, which characterises the present age. Various sources outside the school setting allow gifted
students to demonstrate their knowledge and ideas in accordance with their desired pace of learning and their social, emotional, and cognitive needs. However, inside the school, the prevailing trend both globally and locally is to provide gifted education within the normal curriculum and normal teaching methods (Rogers, 2002b; Vialle & Rogers, 2009). Researchers have made many efforts to understand the nature of gifted education in the regular environment as well as its suitability for and influence on the gifted students (Archambault et al., 1993; Johnsen et al., 2002). Other studies have focused on teachers’ teaching practices in regular classes (Tomlinson, 2004), attempted to discover the factors in teaching practices that affect change (Maxfield, 2000), or investigated the ways to modify the curriculum in regular classes (Latham, 1998; McClure, 1992).

Training teachers to alter the regular educational environment to meet the needs of gifted students is one solution for overcoming the inadequacy of the practices in ordinary classrooms for gifted students (Johnsen et al., 2002). However, altering the regular learning environment to suit the capabilities of gifted students is not an easy process. It may require modification of the content of the curriculum, teaching methods, and/or classroom management style to provide a variety of teaching tools and means. Although some amendments to the regular classroom environment may not require major efforts, such as the addition of a library corner in the classroom, the most impactful amendments require organised efforts in both the planning and implementation stages (Winebrenner, 1992).

2.9.1 In-classroom practices associated with curriculum.

Most classroom practices that appeared in gifted education research have received strong support (Drain, 2008; Sousa, 2009). These include acceleration (Rogers, 2007), advanced level content, curriculum compacting, curriculum
modification, and special enriched curricula. Several studies have been conducted on the effectiveness of the modified curriculum, as one of the practices to be enacted by teachers of gifted students in regular classes in order to meet the needs of gifted students (Feng et al., 2005; Leung, 2005; Reis & Renzulli, 1992; Southern & Jones, 1991; Xue & Meisels, 2004). Curriculum compacting is one of the classroom practices that is supported by the research; as a result, it has been developed to improve the education of gifted students (Reis & Renzulli, 2005). It entails allowing the gifted students to bypass certain content of the curriculum if they have already mastered it and to learn only what is useful and appropriate to their abilities. Curriculum compacting is suitable to the nature and characteristics of gifted students who have the capacity to learn at a fast rate (Colangelo, Assouline, & Gross, 2004). Repeating knowledge and skills that a gifted student has already learned is a waste of the student’s time, which could be spent on acquiring new knowledge and skills that would challenge his or her capabilities. This is an important issue, especially when one considers that lack of challenge is one of the major problems of gifted students in regular classes (Archambault et al., 1993; Sousa 2009). The curriculum compacting strategy was introduced in 1981 as an aid to the education of gifted students in regular classes (Reis & Renzulli, 2005). A study by Reis et al. (1992) indicated that the use of curriculum compacting has achieved positive results in the fields of mathematics, language arts, science, and social studies. Reis and Renzulli (1992; as cited in Reis and Renzulli, 2005) conducted a study on the use of curriculum compacting by teachers with students in different regions of the United States. The participants were 465 teachers who taught at different levels of second through sixth grades. The researcher divided the teachers to four groups, three of which comprised experimental groups (compacting practices), and one of which was a control group
(normal teaching practices). The results of the study showed that the curriculum compacting used by teachers was an effective strategy to speed up the learning of subjects in regular classes. The students who participated in the curriculum compacting lessons also received better grades on standardised tests compared to those who did not participate in the lessons of curriculum compacting. The strategy of curriculum compacting is a good investment of gifted students’ time and according to appropriate standards, curriculum compacting does not cause any academic harm to gifted students (Winebrenner, 1992).

Curriculum modification is another in-class strategy that can be introduced to accommodate gifted students. Feng et al. (2005) conducted a study to discover the effect of curriculum modification on gifted students in the language arts and science. The sample consisted of 973 students in third, fourth, and fifth grades. The results indicated that this in-class practice increased the scientific research design skills and academic achievement of gifted students. In terms of teachers, the results indicated that they had to teach a unit for three consecutive years to achieve the best outcomes. The results of the study also indicated the importance of curriculum modification as a tool to meet the needs of gifted students in regular classrooms. However, several other studies show a wide gap in the curriculum in regular classes concerning the learning needs of gifted and talented students (Aldred, 2005). In addition, many teachers do not modify the curriculum in their regular classes to meet the needs of gifted students (Archambault et al., 1993; Latham, 1998; Robinson, 1998; Whitton, 1997).

Latham (1998) conducted a study, which aimed to examine the practice of modifying the curriculum by teachers of gifted students. The sample consisted of 600 randomly selected teachers and the tool utilised in the study was a classroom
practices questionnaire. The questionnaire was distributed to 300 teachers engaged in gifted education and 300 teachers not engaged in gifted education. The results indicated major differences between the practices of teachers engaged in gifted education and those not engaged, in that the engaged teachers chose different, more effective classroom practices than those who were not engaged. In addition, their classroom practices were applied more consistently as opposed to the practices of the teachers who were not engaged.

A study by Robinson (1998) showed similar results. This study aimed to determine the classroom practices used by teachers with gifted students. The sample consisted of a group of seventh grade teachers located in different regions. The researcher used a 25-item questionnaire to examine the classroom practices. Major findings indicated that changes in classroom practices to suit the high achieving students were limited and that there was no difference between the curriculum for gifted students and the curriculum for regular students.

Previous studies have repeatedly indicated that teachers do not modify the curriculum for gifted students (see, for example, Archambault et al., 1993; Whitton, 1997). A study by Manning (2005), which aimed to assess whether teachers adjust classroom practices by amending the curriculum, indicated little modification of the curriculum to suit the gifted students. The study recommended that regular classroom teachers undergo training on how to amend the content of the curriculum and select the appropriate teaching methods. This result does not differ from those of the previous findings, confirming the difficulty of the ordinary teacher to handle the content of the curriculum developed for gifted students. A study by VanTassel-Baska and Stambaugh (2006) delineated some of the basic assumptions that must be taken into account in the development of special curricula for the gifted in regular schools.
The authors suggested four basic assumptions: (1) the ordinary school curriculum is not effective, is often not suited for gifted students, and therefore, must be regulated to address the needs of gifted students; (2) the needs of gifted students must be determined through reorganisation rather than through deletions and additions; (3) curriculum development is a long-term process and does not depend on one person’s view at a specific date, but rather on cumulative efforts of researchers over many years; and (4) the curriculum that benefits a large number of gifted students is the best approach for educators. The steps that underlie the process of curriculum development include needs assessment, teamwork scope, curriculum development approach, tryouts, field-testing, implementation, evaluation, and revision (VanTassel-Baska & Stambaugh, 2006, pp. 34-36).

Reviewing the above studies, it is clear that the process of developing special programs for gifted students in regular classes is a complex one that reaches beyond the capabilities of the teacher who is not trained to teach gifted students, especially if one takes into account numerous studies that have confirmed the fallibility of teachers in identifying gifted students (AlFahaid, 1993; Neber, 2004). This is only one of the first steps toward the construction and development of special curricula for gifted students in regular schools.

2.9.2 Classroom practices associated with instruction, activities, and classroom management.

Problem solving, flexible grouping strategies, creative thinking skills, critical thinking skills, active learning experiences, and concept teaching are the most common classroom practices recommended to be used in teaching gifted students in regular classes (Davis & Rimm, 2004; Drain, 2008; Gallagher, 1985; Johnsen & Kendrick, 2005; Renzulli, Gentry, & Reis, 2003; Sousa, 2009).
Problem solving is one of the most enduring teaching strategies both in the general field of education research and in the field of gifted education (Gallagher, 2005; VanTassel-Baska & Stambaugh, 2006). As many gifted students study in regular classes, both regular students and gifted students can benefit from implementing problem-solving strategies. Many problem-solving models have great value when applied in classes of gifted and talented students (VanTassel-Baska & Stambaugh, 2006). In order for problem solving to be effective and influential in the education of gifted students, amendments to the learning environment and knowledge content must be implemented in gifted students’ classrooms. These amendments include the selection of advanced content, which raises the interest of gifted students; the selection of ambiguous and incomplete problems; offering interdisciplinary connections and instruction to link selected problems to other areas of knowledge in order for the student to understand the relations between the problem to be solved and the problems and realities of another cognitive field; using higher order thinking skills, such as critical thinking and metacognition; and, providing opportunities for discussing complex problems (Gallagher, 2005).

Review of previous studies reinforced that the problem-solving strategy is one of the most successful strategies in the education of gifted students. This strategy helps develop children's capacities to solve problems, and it can be used as one indicator of the presence of a talent among students (Chung, 2001) as well as improve the ability to solve future problems (Cameron, 1993). The National Council for the Social Studies (2002) has considered problem solving as one of the most effective practices for students. However, certain conditions must be accounted for and considered scientifically when using the method of problem solving in the education of gifted students. For example, the results of Dhillon and Richardson’s
(2003) study indicated that the use of problem solving did not lead to very useful outcomes. The study recommends that greater efforts be made to organise the learning environment in order to improve the problem solving skills of gifted students. A study by Delcort (1995) indicated that the most important elements of using problem solving in regular classes are a deep understanding of the topic and adequate time to complete the functions of problem solving.

Ability grouping, or grouping students into groups based on their potential, is another successful strategy in the management of regular classes where there are gifted students (Gentry & Keilty, 2004; Mosse, 2003; Rogers, 2002a). It is advisable to use because of the benefits it provides, some of which include meeting the emotional and social needs of all students; transferring creative learning among gifted students as well as among regular students; decreasing the sense of isolation experienced by some gifted students; and saving time, effort, and money due to the reliance on one teacher and one tool in a group of mainstream and gifted students (Mosse, 2003; Teno, 2005; Tieso, 2003). The students are grouped in accordance with their ability levels, the needs of an individual or group of individuals, or instructional purposes in reading or math, among others (Mosse, 2003). The use of grouping by teachers of gifted students has led to encouraging results in several studies (Gentry & Keilty, 2004; Rogers, 2002a; Tieso, 2003). Gentry and Keilty (2004) conducted a study to examine the staff development practices, which aim to help in the long-term application of grouping. The results showed that the use of cluster grouping have led to educational benefits not only for gifted students but also for all other students. The results of Rogers’ (2002a) study showed that most grouping strategies used with gifted students have led to various benefits for gifted students. In spite of the change in classroom management to implement the strategy
of grouping with gifted students in regular classes, there may be concerns about regular students’ situation. However, the application of grouping strategies did not have any negative effects on ordinary students. Instead, the grouping method helped both ordinary and gifted students improve their performance (Winebrenner, 1992). Moreover, many of the teachers who applied the method of grouping have succeeded in the balanced distribution of teaching duties between mainstream students and gifted students (Hendricks, 2007; Winebrenner, 1992). Rogers’ study found a positive correlation between success in addressing the needs of gifted students and teachers’ level of skill in differentiated instruction. This is because some of the needs of gifted students are met only through the application of certain teaching skills (Callahan, Cooper, & Glascock, 2003).

Some studies have been conducted to ascertain the extent of teachers’ use of classroom practices associated with instruction, classroom management, and activities (Johnsen et al., 2002; McClure, 1992; Westberg & Daoust, 2003). In an expanded national study, Archambault et al. (1993) assessed whether classroom teachers modify instructional practices and curricula to meet the needs of gifted students. The researchers distributed a survey on classroom practices to 6,000 third and fourth grade teachers and conducted 46 classroom observations. The results of the study indicated that teachers of gifted students made only minor modifications in their regular instruction to meet the needs of gifted and talented students. The study showed no difference between schools with special programs for gifted students and those with no special programs for gifted students.

Similar results were obtained in a study by Johnsen et al. (2002), which aimed to determine the level of the practices of teachers of gifted students in regular classes and the factors affecting the change in classroom practices to suit the gifted students.
The researchers used two tools to collect the data. They used the classroom instructional practices scale to collect quantitative data, and interviews and observation to collect qualitative data. The researchers selected samples consisting of 18 community representatives, 17 mentor teachers, 74 teachers, and eight principals. The study lasted 2 years. The results showed that teachers made varying degrees of amendments in the regular classroom environment to suit gifted students. However, in general, teachers made very few and inadequate amendments.

A study by McClure (1992) confirmed this finding regarding the low number of amendments used by teachers of gifted students in the regular classroom. This study was more comprehensive than that of Johnsen et al. (2002). McClure provided descriptive information about regular classroom instructional and curricular practices used with gifted students in some schools that have special programs for the gifted and other schools that do not have such programs. The tools of the study were the Classroom Practices Record and systematic observation. The results confirmed that there were few differences in classroom practices, both curricular and instructional, that would be developed specifically for gifted students in each ability grouping. The study also indicated that only 21% of the time was given to practices designed for gifted students, while 84% of the time was devoted to activities and teaching methods that were designed for regular students.

The efforts of researchers to diagnose classroom practices of teachers in regular classes have led to the development of several measures, for instance, the Classroom Instructional Practices scale (Johnsen, 1992) and The Classroom Practices Record measure (McClure, 1992), which is a comprehensive measure assessing the effectiveness of curriculum amendments, teaching methods, and groupings. Finally, the Classroom Practices Questionnaire (CPQ) (Archambault et al., 1993), which was
selected for the purpose of this study and measures assessment practices, instructional practices, and curriculum modification practices.

2.10 Conclusion

Based on the existing literature on the historical background of the education of gifted students in Saudi Arabia, several conclusions can be drawn. Gifted education in Saudi Arabia has been transformed from temporary programs to a more permanent strategy. The studies indicate the presence of a large demand for the education of gifted students in Saudi Arabia (more than 28,000 gifted students). The number of qualified teachers to teach gifted students is not sufficient to meet the demands of schools and programs (about 612 teachers to 28,000 students). In-service teachers do not receive sufficient training; most of them graduate from the integrated system with a BA. Additionally, the teacher-preparation programs in universities and colleges do not uniformly include courses and do not specialise in giftedness and gifted education. Finally, teachers of gifted students in Saudi Arabia often practice and prefer teacher-centred methods (direct methods) to student-centred methods.

Previous studies on teachers of gifted students in Saudi Arabia were mostly quantitative and only a few were qualitative; they were characterised by limited sample sizes and a lack of connection to classroom settings, lacking a connection among teaching behaviours, knowledge, and beliefs and classroom performance. Previous studies on classroom practices indicate several results. The results indicated a failure of many teachers of gifted students to appropriately adjust classroom practices to gifted students in the areas of curriculum and teaching instruction. Acceleration, advanced level of content, curriculum compacting, curriculum modification, and special curriculum are classroom practices that are recommended for use with gifted students. Other classroom practices associated with instruction,
classroom management, and activities are flexible grouping strategies, problem solving, teaching creative thinking skills, teaching critical thinking skills, active learning experiences, and concept teaching.

Literature on the teachers of gifted students indicated additional findings. Previous studies noted a lack of retraining programs for teachers of gifted students. They emphasised the importance of training and the cooperation of school management in helping the teachers of gifted students to modify the curriculum and instruction for gifted students in their regular classes. The existing literature also noted a lack of studies that would measure the levels of training that teachers of gifted students acquire.

The literature results suggest the need to improve classroom practices to support gifted education and to increase teachers’ knowledge, beliefs, and their classroom practices to suit both gifted and regular students in regular classroom in Saudi Arabia. This may improve the effectiveness of gifted education, reduce uncertainties, assist with decision-making, justify decisions, and change policy or procedures. To the knowledge of the researcher, there is a lack of studies dealing with the practices of the teachers of gifted students in Saudi Arabia.
3 METHOD

3.1 Introduction

The current study originated from the need to have sufficient knowledge about the classroom practices of teachers of gifted students in Saudi Arabia; it also tried to determine the teachers’ practices when planning, teaching and evaluating gifted students in the regular classroom. The major aim of this study was to generate new knowledge by investigating the classroom practices of teachers with gifted learners in regular classrooms in Saudi Arabia. The study was guided by one central research question and five sub-questions:

What are the knowledge and competencies that characterise teachers’ classroom practices for gifted students in regular classrooms in Saudi Arabia?

1. What classroom practices are currently used with gifted and regular students in the regular classroom in Saudi Arabia?

2. In what ways do teachers believe that they modify classroom practices and curriculum to meet the needs of gifted students?

3. To what extent do specialist and non-specialist teachers differ from each other in their classroom practices for gifted students?

4. To what extent do male and female teachers differ from each other in their classroom practices for gifted students?

5. To what extent do teachers apply recommended classroom practices for gifted students in regular classrooms in Saudi Arabia from the viewpoint of supervisors and exemplary teachers?

This chapter discusses the research design and methods employed in the conduct of the research.
3.2 Research design

In order to address the research question, a mixed methods design was used in this study. Mixed method research design involves mixing both quantitative and qualitative research in one study to address the research problem (Creswell, 2008). There were several reasons for using a mixed method design for the study. Quantitative data (survey) allowed the researcher to gather data from a large number of participants while qualitative data (semi-structured interview) provided in-depth information from a smaller group of participants. Both quantitative and qualitative data in this study served to complement each other (Creswell, 2008; Gall, Gall, & Borg, 2007).

3.3 Participants

The sample of this study comprised teachers of gifted students, exemplary teachers of gifted students, and teacher supervisors in Saudi Arabia.

3.3.1 Teachers

This study targeted teachers who teach gifted students in regular classrooms in Saudi Arabia. Three types of teachers teach gifted students in Saudi Arabia: full-time teachers, part-time teachers (regular teachers), and part-time teachers ( coordinators). All three types are responsible for teaching gifted and regular students in regular classrooms. Coordinators and full-time teachers who participated in this study were regular teachers and because of their distinctiveness in teaching and administrative work, they had been promoted to provide administrative and instructional services for gifted students in public schools. Thus, full-time teachers were specialists in teaching gifted students in the school program. Meanwhile, coordinators were specialised in administrative functions and coordinated educational services for gifted students (Maajeeny, 2008).
Some full-time teachers (N = 12) did not fully complete their questionnaires. As they did not teach gifted and average students in the regular classroom, they left the average section in the questionnaire blank. Thus, they were excluded from the study sample because they were not regular teachers.

Teachers belonged to three districts: Eastern, Central, and Western district. About 171 teachers were regular teachers representing 48.7% of the sample while 131 (37.3%) were coordinators and 49 (14%) were full-time teachers. Concerning gender, 225 were male teachers (64.1%) and 126 were female teachers (35.9).

### 3.3.2 Teacher supervisors

Teacher supervisors in Saudi Arabia have a responsibility for evaluating teachers, evaluating professional development, improving educational performance, and solving the problems of teachers (Al-Mufaraj, 1998; Al-Otaibi, 1997; Al-Dossary, 1997 Al-Rsheed, 1999).

The researcher used convenience-sampling technique to select ten male teacher supervisors, who had experience with supervision of regular teachers and full-time teachers, from the records of the Ministry of Education. Their years of supervisory experience ranged from 3 years to 14 years. Teacher supervisors were from different regions in Saudi Arabia. Two were from the Western Region, four from the central region, and four from the Eastern region.

### 3.3.3 Exemplary teachers

The researcher of this study asked the ten teacher supervisors to nominate two exemplary male teachers of gifted students in regular classrooms. The researcher then used convenience-sampling technique to select an exemplary teacher randomly from the central region and another one from the Eastern region. As the teacher
supervisors described, the criteria they used to select the exemplary teacher included high evaluations for their teaching performance. They indicated that receiving awards for their exceptional performance from their schools or from the Department of Education was one of the criteria for the exemplary teacher in gifted education. In this study, the sample of teachers of gifted students and their supervisors was selected via convenience-sampling technique from the records of the Ministry of Education in Saudi Arabia. The two exemplary teachers were nominated by their supervisors.

3.4 Instrumentation

The study used two types of research methods and instruments. The quantitative portion of the study used the Classroom Practices Questionnaire (CPQ; Archambault et al., 1993). The qualitative portion of the study used semi-structured interviews.

3.4.1 Teacher questionnaire

The teacher questionnaire consisted of four parts. The first part described the purpose of the questionnaire and the nature of participation, and it provided instructions on how to answer the questionnaire. The second part explained the items contained in the questionnaire. The third part collected information on teachers’ demographics, including gender, years of teaching experience, highest degree earned, training in gifted education, employment status and grade level currently teaching. Part four was the Classroom Practices Questionnaire (CPQ), which included 39 items. The final part of the questionnaire contained a teacher comment section, allowing teachers to add information about their classroom situations.

The researcher used the Classroom Practices Questionnaire (CPQ) (Archambault et al., 1993), which was developed at the National Research Centre on
the Gifted and Talented at the University of Connecticut. The CPQ consists of 39 instructional strategies and classroom practices used with both average and gifted students measured on a 6-point scale ranging from 0 = never responses to 5 = more than once a day. An example is shown in Figure 1.

<table>
<thead>
<tr>
<th>5- Assign reports</th>
<th>Average students</th>
<th>Gifted students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
</tbody>
</table>

*Figure 1* Example from CPQ.

Researchers in the USA have used the CPQ widely and it was also used in Australia as well with samples of teachers of gifted students in regular classes in different grades, from grade 2 to grade 7 (Drain, 2008; Latham, 1998; Manning, 2005; Maxfield, 2000; Robinson, 1998; Whitton, 1997).

The researcher chose the CPQ for several reasons, but primarily because it was compatible with the aim of the study, which was to evaluate a general perception of the level of practices carried out by teachers in regular classes for gifted students. In addition, the CPQ had been used widely in different environments to assess the performance of teachers of gifted students in regular classrooms. Its items cover different aspects of classroom practices related to curriculum in addition to assessing student, teaching, and classroom environment.

3.4.1.1 Factor analysis

Factor analysis involves empirical procedures for gathering important evidence about instruments’ construct validity (Creswell, 2008). Factor analysis of the original instrument (Archambault et al., 1993) indicated six categories. These included: 1- Questioning and thinking (5 items: 22, 35, 36, 37, 38), 2- Challenges and choices (13 items: 18, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34), 3- Reading and writing assignment (6 items: 3, 5, 6, 7, 9, 10), 4- Curricular modifications (5 items: 12, 13, 14, 15, 16), 5- Inclusion and collaboration (9 items: 17, 19, 20, 21, 22, 23, 24, 25, 26), 6- Evaluation and feedback (7 items: 27, 28, 29, 30, 31, 32, 33).
15, 16, 19), 5- Enrichment centres (4 items: 11, 17, 20, 21), and 6- Seatwork (4 items: 1, 2, 4, 8).

For the research reported in this thesis, the researcher conducted exploratory factor analysis (EFA). For consistency with the original study (Archambault et al., 1993), varimax rotation was used "to simplify factors by maximizing the variance of the loadings within factors, across variables" (Tabachnick & Fidell, 1989, p. 628). The number of factors was determined by eigenvalues greater than 1. Results suggested that a 6-factor solution was optimal, accounting for 62.6% of the variance. The items that comprise each factor were identified by their strongest factor loading (all items >.30). The factor analysis results of the original and current study are presented in Tables 1 to 6. Deviations between the current and original studies resulted in some changes to the naming of the factors. These were: 1- Questioning and discussion (5 items: 32, 35, 36, 37, 38), 2- Providing challenge and choices (12 items: 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34), 3- Reading and writing assessments (7 items: 3, 5, 6, 7, 8, 9, 10), 4- Matching curricula to individuals (8 items: 4, 11, 12, 13, 14, 15, 16, 19), 5- Educational environment (5 items: 17, 18, 20, 21, 39), and 6- Worksheets (2 items: 1, 2).

These results differ somewhat from the original factor analysis of the 39-item CPQ questionnaire (Archambault et al., 1993). For one, the current analysis identified seven items as loading on a different factor than its original classification (Archambault et al., 1993). Moreover, in the current analysis all items displayed at least 1 factor loading exceeding .30, which indicates that the items of the study instrument had high factor validity. This contrasts the original study, for which two items were eliminated (items 14 and 39) due to low factor loadings.
The differences in the results of the current study and the original study of the CPQ may be due to the small sample size in the current study ($n = 351$) compared to the original study conducted with 7000 teachers (Archambault et al., 1993). On the other hand, the limited gifted education background of teachers in Saudi Arabia, compared to the diversity of educational backgrounds (e.g., different educational systems, different states) among teachers in the United States, provided increased homogeneity among the responses of the Saudi participants. Thus, in the current study the researcher obtained high factor validity. Tables 1 to 6 show comparisons of the results of the factor analysis between the original study (Archambault et al., 1993) and the current study.

Table 1

*Comparison of original and current EFA for Questioning and Thinking factor*

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>Factor Loading (current)</th>
<th>Factor Loading (Archambault)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Provide questions that encourage reasoning and logical thinking</td>
<td>.76</td>
<td>.74</td>
</tr>
<tr>
<td>36</td>
<td>Ask open-ended questions</td>
<td>.83</td>
<td>.53</td>
</tr>
<tr>
<td>37</td>
<td>Encourage students to ask higher-level questions</td>
<td>.74</td>
<td>.82</td>
</tr>
<tr>
<td>38</td>
<td>Encourage students’ participation in discussions</td>
<td>.52</td>
<td>.79</td>
</tr>
<tr>
<td>32</td>
<td>Consider students’ opinion in allocating time for various subjects within your classroom</td>
<td>-</td>
<td>.56</td>
</tr>
<tr>
<td>22</td>
<td>Teach thinking skills in the regular curriculum</td>
<td>.48</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 2

Comparison of original and current EFA for Providing Challenge and Choices factor

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>Factor Loading (current)</th>
<th>Factor Loading (Archambault)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Allow students to leave the classroom to work in another location, such as the school library or media center</td>
<td>-</td>
<td>.30</td>
</tr>
<tr>
<td>22</td>
<td>Teach thinking skills in the regular curriculum.</td>
<td>.37</td>
<td>-</td>
</tr>
<tr>
<td>23</td>
<td>Teach a unit on a thinking skills, such as critical thinking or creative problem solving.</td>
<td>.55</td>
<td>.37</td>
</tr>
<tr>
<td>24</td>
<td>Participate in a competitive program focusing on thinking skills/ problem solving, such as Future Problem Solving, Odyssey of Mind, etc.</td>
<td>48</td>
<td>.39</td>
</tr>
<tr>
<td>25</td>
<td>Use contracts or management plans to help students organize their independent study projects.</td>
<td>.57</td>
<td>.47</td>
</tr>
<tr>
<td>26</td>
<td>Provide time within the school day for students to work on their independent study projects.</td>
<td>.55</td>
<td>.51</td>
</tr>
<tr>
<td>27</td>
<td>Allow students within your classroom to work from a higher grade level textbook.</td>
<td>.64</td>
<td>.41</td>
</tr>
<tr>
<td>28</td>
<td>Provide a different curricular experience by using a more advanced curriculum unit on a teacher-selected topic.</td>
<td>.68</td>
<td>.46</td>
</tr>
<tr>
<td>29</td>
<td>Group students by ability across classroom at the same grade level.</td>
<td>.71</td>
<td>.20</td>
</tr>
<tr>
<td>30</td>
<td>Send students to a higher grade level for specific subject area instruction.</td>
<td>.69</td>
<td>.25</td>
</tr>
<tr>
<td>31</td>
<td>Establish interest groups which enable students to pursue individual or small group interest.</td>
<td>.63</td>
<td>.48</td>
</tr>
<tr>
<td>32</td>
<td>Consider students’ opinion in allocating time for various subjects within your classroom.</td>
<td>-</td>
<td>.40</td>
</tr>
<tr>
<td>33</td>
<td>Provide opportunities for students to use programmed or self-instructional materials at their own pace.</td>
<td>.57</td>
<td>.41</td>
</tr>
<tr>
<td>34</td>
<td>Give assignments that encourage students to organize their own work schedule to complete a long-range project.</td>
<td>.57</td>
<td>.50</td>
</tr>
</tbody>
</table>

Table 3

Comparison of original and current EFA for Reading and Writing Assignments factor

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>Factor Loading (current)</th>
<th>Factor Loading (Archambault)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Assign reading of more advanced level work.</td>
<td>.53</td>
<td>.42</td>
</tr>
<tr>
<td>5</td>
<td>Assign reports.</td>
<td>.68</td>
<td>.63</td>
</tr>
<tr>
<td>6</td>
<td>Assign projects or other work requiring extended time for students to complete.</td>
<td>.67</td>
<td>.57</td>
</tr>
<tr>
<td>7</td>
<td>Assign book reports.</td>
<td>.71</td>
<td>.52</td>
</tr>
<tr>
<td>8</td>
<td>Use activities such as puzzles or word searches.</td>
<td>.69</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Give creative or expository writing assignments on topics selected by the teacher.</td>
<td>.71</td>
<td>.49</td>
</tr>
<tr>
<td>10</td>
<td>Give creative or expository writing assignments on topics selected by the students.</td>
<td>.72</td>
<td>.51</td>
</tr>
</tbody>
</table>
Table 4

Comparison of original and current EFA for Curriculum Modification factor

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>Factor Loading (current)</th>
<th>Factor Loading (Archambault)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Use self-directed instructional kits such as S.R.A.</td>
<td>.39</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>Make time available for students to pursue self-selected interests.</td>
<td>.34</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>Use pre-tests to determine if students have mastered the material covered in a particular unit or content area.</td>
<td>.57</td>
<td>.29</td>
</tr>
<tr>
<td>13</td>
<td>Eliminate curricular material that students have mastered.</td>
<td>.33</td>
<td>.51</td>
</tr>
<tr>
<td>14</td>
<td>Repeat instruction on the coverage of more difficult concepts for some students.</td>
<td>.72</td>
<td>-</td>
</tr>
<tr>
<td>15</td>
<td>Substitute different assignments for students who have mastered regular classroom work.</td>
<td>.56</td>
<td>.63</td>
</tr>
<tr>
<td>16</td>
<td>Modify the instructional format for students who learn better using an alternative approach.</td>
<td>.62</td>
<td>.47</td>
</tr>
<tr>
<td>19</td>
<td>Assign different homework based on students’ ability.</td>
<td>.46</td>
<td>.42</td>
</tr>
</tbody>
</table>

Table 5

Comparison of original and current EFA for Educational Environment factor

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>Factor Loading (current)</th>
<th>Factor Loading (Archambault)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Make time available for students to pursue self-selected interests.</td>
<td>-</td>
<td>.34</td>
</tr>
<tr>
<td>17</td>
<td>Encourage students to move around the classroom to work in various locations.</td>
<td>.68</td>
<td>.33</td>
</tr>
<tr>
<td>18</td>
<td>Allow students to leave the classroom to work in another location, such as the school library or media center.</td>
<td>.70</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>Use learning centers to reinforce basic skills.</td>
<td>.68</td>
<td>.74</td>
</tr>
<tr>
<td>21</td>
<td>Use enrichment centers.</td>
<td>.58</td>
<td>.74</td>
</tr>
<tr>
<td>39</td>
<td>Use computers.</td>
<td>.65</td>
<td></td>
</tr>
</tbody>
</table>

Table 6

Comparison of original and current EFA for Worksheets factor

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>Factor Loading (current)</th>
<th>Factor Loading (Archambault)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use basic skills worksheets.</td>
<td>.65</td>
<td>.54</td>
</tr>
<tr>
<td>2</td>
<td>Use enrichment worksheet.</td>
<td>.65</td>
<td>.55</td>
</tr>
<tr>
<td>4</td>
<td>Use self-directed instructional kits such as S.R.A.</td>
<td>-</td>
<td>.34</td>
</tr>
<tr>
<td>8</td>
<td>Use activities such as puzzles or word searches</td>
<td>-</td>
<td>.37</td>
</tr>
</tbody>
</table>
3.4.1.2 Instrument validity

The internal validity of CPQ in the study was measured using Pearson’s correlation. Tables 2 through 7 show Pearson’s correlations among items in all factors and the total scores of all factors included in the CPQ.

Table 7

*Correlations between individual item scores and associated factor sum score*

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
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<tbody>
<tr>
<td>Item#</td>
<td>Item#</td>
<td>Item#</td>
<td>Item#</td>
<td>Item#</td>
<td>Item#</td>
</tr>
<tr>
<td>22</td>
<td>.73</td>
<td>.73</td>
<td>.83</td>
<td>.72</td>
<td>.68</td>
</tr>
<tr>
<td>23</td>
<td>.73</td>
<td>.82</td>
<td>.82</td>
<td>.79</td>
<td>11</td>
</tr>
<tr>
<td>24</td>
<td>.75</td>
<td>.82</td>
<td>.82</td>
<td>.75</td>
<td>12</td>
</tr>
<tr>
<td>25</td>
<td>.80</td>
<td>.83</td>
<td>.81</td>
<td>.84</td>
<td>13</td>
</tr>
<tr>
<td>26</td>
<td>.79</td>
<td>.84</td>
<td>.74</td>
<td>.74</td>
<td>14</td>
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<tr>
<td>27</td>
<td>.77</td>
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<td>.71</td>
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<td>.67</td>
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<td>.78</td>
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<tr>
<td>32</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* All correlations statistically significant, $p < 0.01$.

3.4.1.3 Instrument reliability

Cronbach’s alpha was used to evaluate the reliability of the 6 factors included in the CPQ questionnaire. The following reliability estimates were found for each of the subscales identified via factor analysis: Factor 1, Providing Challenge & Choices (12 items) = .93; Factor 2, Reading & Writing Assessment (7 items) = .92; Factor 3, Educational Environment (5 items) = .86; Factor 4, Questioning and Discussion (5 items) = .82; Factor 5, Matching Curricula to Individuals (8 items) = .84; Factor 6, Worksheets (2 items) = .77. The reliability of the full 39-item CPQ questionnaire was .97. This indicates acceptable reliability levels for all subscales and good reliability of the overall scale.
3.4.2 Semi-Structured interviews

Semi-structured interviews were used to gather additional data about teachers’ knowledge related to classroom practices for gifted students in Saudi Arabia. The interview questions derived from research related to effective classroom practices in gifted education. The researcher developed the list of interview questions based on the results of several studies conducted to investigate the knowledge and skills related to planning, implementation, and evaluation when teaching gifted students in regular classrooms. Subsequently, the researcher presented the interview questions to two specialists in the field of gifted education before approving its final form.

The interview questions covered the fundamental aspects of classroom practice when teaching gifted students in regular classes, such as, planning (q. 1), basic strategies (q. 2), classroom environment (q. 3), curriculum (q. 4), method and teaching strategies (q. 5), activities (q. 6), tendencies and interests (q. 7), means and instructional aids (q. 8), development of advanced skills of gifted students (q. 9), and effective teacher of gifted students (q. 10).

Data from the interview with teacher supervisors and exemplary teachers were used to answer the sub-question number five of the study (see Table 8).
Table 8

Research questions and interview questions

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Interview Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5- To what extent do teachers apply recommended classroom practices for gift</td>
<td>1- Do you believe the teachers of gifted students adequately plan their classroom</td>
</tr>
<tr>
<td>ed students in regular classrooms in Saudi Arabia from the viewpoint of supervisors and exemplary teachers?</td>
<td>practices? Can you provide examples of effective practices? Ineffective?</td>
</tr>
<tr>
<td></td>
<td>2- To what extent do you think that teachers of gifted students use the strategies</td>
</tr>
<tr>
<td></td>
<td>of enrichment-grouping-acceleration in regular classroom?</td>
</tr>
<tr>
<td></td>
<td>3- To what extent do you think that teachers of gifted students modify regular</td>
</tr>
<tr>
<td></td>
<td>classroom environment to meet the needs of gifted students?</td>
</tr>
<tr>
<td></td>
<td>4- To what extent do you think that teachers of gifted students modify curriculum</td>
</tr>
<tr>
<td></td>
<td>content to meet the needs of gifted students?</td>
</tr>
<tr>
<td></td>
<td>5- Do you believe that teachers of gifted students apply appropriate methods and</td>
</tr>
<tr>
<td></td>
<td>teaching strategies for gifted students in regular classrooms?</td>
</tr>
<tr>
<td></td>
<td>6- Do you believe that gifted students in regular classroom receive adequate</td>
</tr>
<tr>
<td></td>
<td>activities from their teachers in regular classroom?</td>
</tr>
<tr>
<td></td>
<td>7- To what extent do you think that teachers of gifted students take into account</td>
</tr>
<tr>
<td></td>
<td>the tendencies and interests of gifted students in regular classroom?</td>
</tr>
<tr>
<td></td>
<td>8- To what extent do you think that teachers of gifted students use appropriate</td>
</tr>
<tr>
<td></td>
<td>means and instructional aides when they apply classroom practices in regular</td>
</tr>
<tr>
<td></td>
<td>classroom? Examples.</td>
</tr>
<tr>
<td></td>
<td>9- To what extent do you think that teachers of gifted students contribute to the</td>
</tr>
<tr>
<td></td>
<td>development of gifted advanced skills in regular classroom? Describe the skills</td>
</tr>
<tr>
<td></td>
<td>that are developed.</td>
</tr>
<tr>
<td></td>
<td>10- In your opinion, what are the most important characteristics a teacher should</td>
</tr>
<tr>
<td></td>
<td>possess to be an effective educator of gifted students?</td>
</tr>
</tbody>
</table>

To ensure the validity of the interview data, trustworthiness or credibility of the interview data was ensured through careful attention to the accuracy of interview data as well as through member checking. The researcher asked seven of 12 participants in the interview to check the accuracy of their answers as well as to ensure their views had been properly captured.

The researcher also conduct an external audit, the researcher asked “critical friends” who were outside the project and now PhD students in the education field and fluent in Arabic and English to examine the texts. This examination included:
Are the themes appropriate? Are the findings grounded in the data? and finally, What is the degree of research bias?

The researcher also used triangulation by comparing the data collected from the interviews with teacher supervisors with the data collected from interviews with exemplary teachers. The researcher further compared the interview data collected from teacher supervisors and exemplary teachers, with common documents, regulations, policies, and reports obtained by the researcher from the General Administration for Gifted Students.

3.5 Translation Process

The Classroom Practice Questionnaire (CPQ) and the semi-structured interview schedules were developed in English; thus, they needed to be translated into Arabic. In this study, the researcher used the back translation method. The back translation method is used widely, especially in cross-cultural research, to check the accuracy and the equivalence of the translations of measures in different languages. In this method, two bilingual individuals are involved in the translation process.

One of the translators translated from the original to the target language and then the other bilingual individual translated from the target back to the original language. The two forms (the original version and the back-translation) were compared, checked, and revised (Prieto, 1992). The researcher chose translators who have academic experience with translating educational academic texts into both Arabic and English. Following the back translation method, the translations were judged to be appropriate and accurate.

3.6 Procedures of data collection

Initially, the researcher submitted the research proposal along with the questionnaire and semi-structured interview questions to the Human Research Ethics
Committee at the University of Wollongong to get permission to conduct the study. In addition, since the study was conducted in Saudi Arabia, similar permission was obtained from the Ministry of Education and the General Administration for the education of gifted males and females in Saudi Arabia (see Appendix I).

Data were collected between May and July of the academic year of 2011. To collect quantitative data, questionnaires were distributed to a sample of male and female teachers through formal mail sent to the Ministry of Education (see more details in the results chapter). Most questionnaire packets were returned from several educational directorates to the Ministry of Education while some were returned directly to the researcher’s mailbox.

To collect the qualitative data, the researcher conducted individual semi-structured interview with ten teacher supervisors and two exemplary teachers. Teacher supervisors were selected randomly from the records of the Ministry of Education while exemplary teachers were nominated by teachers' supervisors.

3.7 Data analysis
3.7.1 Quantitative data analysis

The data from the questionnaires were analysed using the statistical package for the social sciences (SPSS). The quantitative methods were used to answer the following research questions:

1- What classroom practices are currently used with gifted and regular students in the regular classroom in Saudi Arabia?

2- In what ways do teachers believe that they modify classroom practices and curriculum to meet the needs of gifted students?

In order to answer these two questions, the researcher calculated factor analysis, means, standard deviation, the frequencies, percentages, and the effect size.
3- To what extent do specialist and non-specialist teachers differ from each other in their classroom practices for gifted students?

To answer this question, five separate analyses of variance (one-way ANOVA) and Post hoc REGWQ were used.

4- To what extent do male and female teachers differ from each other in their classroom practices for gifted students?

To answer this question, the independent sample t-test were used and effect sizes calculated.

3.7.2 Qualitative data analysis

The qualitative question inquired about the extent to which teachers apply recommended classroom practices for gifted students in the regular classroom in Saudi Arabia from the viewpoint of supervisors and exemplary teachers. The researcher used a manual analysis of qualitative data, which included reading the data, identifying common themes, and classifying the themes into colour-coded categories (Creswell, 2008). Table 9 refer to profile of research questions, instrument, sample size and related data analysis procedure.
Table 9

Profile of research questions and instrument, sample size, and related data analysis procedure

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Instrumentation</th>
<th>Sample size</th>
<th>Analysis used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- What classroom practices are currently used with gifted and regular students in the regular classroom in Saudi Arabia?</td>
<td>Questionnaire (CPQ)</td>
<td>351 Teachers</td>
<td>*Frequencies *Mean *Percentage *Standard Deviation *Effect Size</td>
</tr>
<tr>
<td>2- In what ways do teachers believe that they modify classroom practices and curriculum to meet the needs of gifted students?</td>
<td>Questionnaire (CPQ)</td>
<td>351 Teachers</td>
<td>*Frequencies *Mean *Percentage *Standard Deviation *Effect Size</td>
</tr>
<tr>
<td>3- To what extent do specialist and non-specialist teachers differ from each other in their classroom practices for gifted students?</td>
<td>Questionnaire (CPQ)</td>
<td>351 Teachers</td>
<td>*Standard Deviation *One-way ANOVA * Post hoc REGWQ test</td>
</tr>
<tr>
<td>4- To what extent do male and female teachers differ from each other in their classroom practices for gifted students?</td>
<td>Questionnaire (CPQ)</td>
<td>351 Teachers</td>
<td>*The independent sample T-test * Effect size</td>
</tr>
<tr>
<td>5- To what extent do teachers apply recommended classroom practices for gifted students in regular classrooms in Saudi Arabia from the view point of supervisors?</td>
<td>Semi-Structured Interviews</td>
<td>10 Teachers Supervisors &amp; two Exemplary Teachers</td>
<td>*Manual Analysis of Qualitative Data</td>
</tr>
</tbody>
</table>

3.8 Summary

This study investigated classroom practices of teachers of gifted students in regular classrooms in Saudi schools. This chapter described the research design, participants, instrumentation, translation process, data collection, and analysis. Briefly, this research used mixed methods design approach. The participants in the quantitative phase included 171 regular teachers, 131 coordinators and 49 full-time teachers (male and female). The qualitative phase included ten teacher supervisors and two exemplary teachers.

The study used CPQ and ten semi-structured interview questions. The results showed that the CPQ in this study had high factor validity. The total reliability of all
items was also high ($a = 0.96$) and the validity of interview data was ensured through member checking, external audit, and triangulation. The researcher used the back translation method to translate the measurements. The next chapter discusses the results of this study.
4 RESULTS

The purpose of this study was to investigate the knowledge and competencies that characterise teachers’ classroom practices with gifted students in regular classrooms in Saudi Arabia. In the first phase, quantitative data were collected from 374 teachers via the Classroom Practices Questionnaire. During the second phase, qualitative data were collected via semi-structured interviews with ten teacher supervisors and with two exemplary teachers of gifted students in Saudi Arabia (identified as such by supervisor nominations).

This chapter details the demographic information of the participants and presents the results of the planned quantitative and qualitative analyses, organised by type and source of data. This is followed by discussion of the findings in relation to the research questions.

4.1 Survey response rate

Questionnaires were distributed to a sample of 950 teachers through formal mail sent to the Ministry of Education. Most questionnaire packets were returned to the Ministry of Education while some were returned directly to the researcher’s mailbox. Overall, 374 teachers completed and returned their questionnaires (a response rate of 39.4%). Twenty-three incomplete questionnaires were excluded; of these, 12 teachers completed only the gifted students’ section of the questionnaire, eight teachers stated that they did not teach any average students in their classroom, and the other three teachers did not state any reason for not fully completing the survey. The final number of questionnaires analysed, therefore, was 351.
4.2 Demographic information of the sample teachers

Teachers who participated in the study were asked to provide information concerning their gender, years of teaching experience, highest degree earned, training in gifted education, employment status and grade level currently taught.

4.2.1 Participants’ gender

Descriptive statistics showed that 64.1% (N = 225) of the participants were male and 35.9 % (N= 126) were female. Significantly different frequency ratings for gifted students were noted on the basis of gender, t(349) = 4.04, p < .001, $\eta^2 = .04$. In fact, the results of independent sample t-tests showed significant differences for each of the subscales: providing challenge and choices, t(349) = 3.90, p < .001, $\eta^2 = .04$; reading and writing assessment, t(349) = 2.23, p = .026, $\eta^2 = .01$; educational environment, t(349) = 3.04, p = .003, $\eta^2 = .02$; questioning and discussion, t(349) = 4.13, p < .001, $\eta^2 = .04$; matching curricula to individual, t(349) = 3.41, p = .001, $\eta^2 = .03$; and worksheets, t(349) = 3.68, p < .001, $\eta^2 = .03$. In all cases, female teachers reported applying these classroom practices more frequently with their gifted students than did male teachers.

4.2.2 Years of teaching experience

The number of years that teachers had worked in the field of teaching was categorized into five bands (1-5 years, 6-10 years, 11-15 years, 16-20 years and 21+ years). Descriptive statistics indicated that the largest number of teachers had been teaching between 11 and 15 years (n = 110; 31.3%), followed by those who had taught 16 to 20 years (n = 82; 23.4 %), those who had taught 6 to 10 years (n = 75; 12.4%), those who had taught 1 to 5 years (n = 46; 13.1%) and, finally, those who had taught more than 21 years (n = 38; 10.8%). Analyses of variance indicated that there was no statistically significant difference in the overall frequency ratings of
classroom practices with gifted students on the basis of years of teaching, $F(4, 350) = 0.88, p = .476$. This was also true for all subscales ($p < .05$).

4.2.3 Highest degree earned

Teachers were categorised into three groups based on the highest degree earned (Bachelor’s degree, Master’s degree or teaching diploma). Most teachers held a Bachelor’s degree ($n = 317; 90.3\%$), followed by a teaching diploma ($n = 24; 6.8\%$) and a Master’s degree ($n = 10; 2.8\%$). No statistically significant difference was identified in the overall frequency ratings of classroom practices with gifted students on the basis of highest degree earned, $F(2, 350) = 0.44, p = .644$. This was also true for all subscales ($p < .05$).

4.2.4 Training in gifted education

Descriptive statistics of teachers’ training in gifted education indicated that slightly more than half of the teachers ($n = 190; 54.1\%$) had not received any training in gifted education. Seventy-nine teachers ($22.5\%$) indicated that they completed a short-term course, whereas 77 teachers ($21.9\%$) indicated that they had participated in a workshop or seminar in gifted education, five teachers ($1.4\%$) indicated they had received other training activities such as informal individual training. Although there were no significant differences in the overall frequency ratings for gifted students on the basis of type of gifted education training (workshop, seminar, short-term course, none), $F(3, 350) = 0.78, p = .508$, there was nevertheless a significant difference in the use of questioning and discussion, $F(3, 350) = 2.85, p = .037$. Post hoc REGWQ analyses indicated that teachers who attended workshops or seminars were more likely than those without training to implement these practices with their gifted
students. All other subscales showed no significant difference in frequency ratings on the basis of type of gifted education training (p < .05).

4.2.5 Teachers’ employment status

Descriptive statistics indicated that almost half the teachers (n = 171; 48.7%) were regular teachers. The remaining teachers were either coordinators (n = 131; 37.3%) or full-time teachers (n = 49; 14.0%). There was no significant difference in the overall frequency ratings of classroom practices with gifted students on the basis of employment status, F(2, 350) = 0.80, p = .451. This was also true for all subscales (p < .05).

4.2.6 Grade levels taught

Teachers were distributed relatively equally across grade levels. Slightly more teachers taught at primary schools (n = 129; 36.8%) compared to intermediate school (n = 116; 33.0%) or secondary school (n = 106; 30.2%). There was no significant difference in the overall frequency ratings of classroom practices for gifted students on the basis of grade level currently teaching, F(2, 350) = 1.16, p = .314. This was also true for all subscales (p < .05).

Descriptive statistics therefore indicated several common features of teachers in this study. That is, the majority of participating teachers were male, more than half of the teachers had taught for more than 10 years, the vast majority had a Bachelor degree and about half had not received any training in the field of gifted education. Despite this, about 86% of teachers taught gifted students part-time (regular teachers - coordinator).
4.3 **Teacher supervisors**

For qualitative data collection the researcher randomly selected, from the Ministry of Education’s records, ten supervisors who have supervised regular teachers of gifted students and who recently supervised full-time teachers of gifted students. Their experience in supervision ranged from 3 to 14 years. Two were recruited from the western region, four from the central region and four from the eastern region.

4.4 **Exemplary teachers**

Two exemplary teachers were also recruited for qualitative data collection, as nominated by supervisors from each of the eastern and central regions. These teachers received high ratings from supervisors for teaching gifted students as well as awards from the General Administration of the Gifted.

4.5 **Quantitative results**

The first sub-question of this study was ‘What classroom practices are currently used with gifted and average students in the regular classroom in Saudi Arabia?’ The researcher used the Classroom Practices Questionnaire (CPQ; Archambault et al., 1993) to address this question. Teachers were asked to rate the frequency with which they employ each of 39 different classroom practices for gifted and average students in the regular classroom. Participants indicated this frequency on a 6-point Likert scale (0 = never; 1 = once a month or less frequently; 2 = a few times a month; 3 = a few times a week; 4 = daily; or 5 = more than once a day; see Appendix A). Teachers’ responses were coded so that higher ratings indicated more frequent use of the classroom practice.

The scale’s 39 items were clustered into six categories based on the results of an exploratory factor analysis (see Table 1 in the methodology chapter), which
differed slightly from prior analyses of the questionnaire (Archambault et al., 1993). These six categories were: providing challenge and choices (items 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33 and 34); reading and writing assessment (items 3, 5, 6, 7, 8, 9 and 10); educational environment (items 17, 18, 20, 21, and 39); questioning and discussion (items 32, 35, 36, 37 and 38); matching curricula to individuals (items 4, 11, 12, 13, 14, 15, 16 and 19); and worksheets (items 1 and 2). A number of these items cross-loaded on more than one category (factor loadings > .30) and ultimately were categorised based on the highest loading of each item. Summing the ratings for all relevant items generated summary scores for each subscale. Item scores and subscale scores were subsequently analysed.

4.5.1 Classroom practices category

Descriptive statistics of subscale scores (see Table 16) indicated that mean frequency ratings of classroom practices for gifted students ranged from 2.77 (Reading and writing assessment) to 3.84 (Questioning and discussion). In contrast, mean frequency ratings of these practices for average students ranged from 2.15 (Reading and writing assessment) to 3.39 (Questioning and discussion). The three categories rated by teachers as most frequently employed for gifted students were: Questioning and discussion (M = 3.84, SD = 0.93); Educational environment (M = 3.41, SD = 1.22); and Worksheets (M = 3.27, SD = 1.14). This differed slightly for average students, with the following practices rated as occurring most frequently: Questioning and discussion (M = 3.39, SD = 0.98); Educational environment (M = 2.93, SD = 1.24); and Matching curricula to individuals (M = 2.82, SD = 0.94). The two categories that received the lowest mean scores for both student groups were: Reading and writing (gifted: M = 2.77, SD = 1.24; average: M = 2.15, SD = 1.14)
and Providing challenge and choices (gifted: $M = 3.07$, $SD = 1.16$; average: $M = 2.52$, $SD = 1.16$).

Differences in frequency ratings for gifted and average students were investigated using dependent-sample t-tests. Results indicated statistically significant differences in frequency ratings. Results indicated statistically significant differences in frequency ratings for all categories (in order of effect size, see Table 10): Reading and writing assessment, $t(350) = 13.63$, $p < .001$, $\eta^2 = .34$; Providing challenge and choices, $t(350) = 12.79$, $p < .001$, $\eta^2 = .31$; Questioning and discussion, $t(350) = 9.54$, $p < .001$, $\eta^2 = .20$; Matching curricula to individuals, $t(350) = 8.54$, $p < .001$, $\eta^2 = .17$; Educational environment, $t(350) = 9.44$, $p < .001$, $\eta^2 = .20$; and Worksheets, $t(350) = 8.35$, $p < .001$, $\eta^2 = .16$. According to Cohen’s (1988) guidelines for interpreting effect sizes, there were large differences in frequency ratings in reading and writing assessment, providing challenge and choices and questioning and discussion.

Table 10

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Frequency Rating for Gifted Students</th>
<th>Frequency Rating for Average Students</th>
<th>Mean Difference</th>
<th>Eta-Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questioning and discussion</td>
<td>3.84 0.93</td>
<td>3.39 0.98</td>
<td>0.45</td>
<td>0.20</td>
</tr>
<tr>
<td>Educational environment</td>
<td>3.41 1.22</td>
<td>2.93 1.24</td>
<td>0.48</td>
<td>0.20</td>
</tr>
<tr>
<td>Worksheets</td>
<td>3.27 1.14</td>
<td>2.80 1.22</td>
<td>0.47</td>
<td>0.16</td>
</tr>
<tr>
<td>Matching curricula to individuals</td>
<td>3.17 0.96</td>
<td>2.82 0.94</td>
<td>0.35</td>
<td>0.17</td>
</tr>
<tr>
<td>Providing challenge and choices</td>
<td>3.07 1.16</td>
<td>2.52 1.16</td>
<td>0.55</td>
<td>0.31</td>
</tr>
<tr>
<td>Reading and writing assessments</td>
<td>2.77 1.24</td>
<td>2.15 1.14</td>
<td>0.62</td>
<td>0.34</td>
</tr>
</tbody>
</table>

Differences in frequency ratings were evident in matching curricula to individuals. In contrast, small effect sizes were noted for educational environment and worksheets. An examination of means revealed consistent differences in the
application of classroom practices with gifted versus average students, such that each of these practices were utilised more often with gifted students.

4.5.2 Mean frequency of individual classroom practices

As shown in Tables 11 through 16, descriptive statistics indicated that classroom practices with low mean usage rates (defined as practices utilised by teachers an average of a few times per week or less) with gifted and average students were the following: development of writing skills (items 7, 9 and 10); acceleration (items 27 and 30); modifying the curriculum (item 13); alternative curriculum (item 6); developing reading skills (item 8); ability grouping (item 29); and interest grouping (item 31). Classroom practices that received a high mean rate of use with gifted and average students (defined as being applied on average on a daily basis) were: use of discussion in teaching (items 32 and 38); different applications of teaching by questioning (items 35, 36 and 37); provide an opportunity to develop students’ thinking skills (items 22 and 24); diversity and modify instruction (item 16); and use of technology in education (item 39). A discussion of these trends will begin by examining descriptive statistics for each student group separately and then contrasting the mean frequency ratings for gifted and average students.

4.5.2.1 Classroom practices with average students

Mean frequency ratings of classroom practices used by teachers with average students ranged between 1.49 (assign book reports) and 3.86 (encourage students’ participation in discussions). The three most common classroom practices used with average students were: encourage students’ participation in discussion (M = 3.86, SD = 1.14); consider students’ opinion in allocating time for various subject within your classroom (M = 3.50, SD = 1.32); and provide questions that encourage reasoning
and logical thinking (M = 3.49, SD = 1.26). Interestingly, all of these practices were in the Category of Questioning and Discussion. The practices receiving the lowest frequency ratings for use with average students were: assign book reports (M = 1.49, SD = 1.49); send students to higher grade level for specific subject area instruction (M = 1.69, SD = 1.63); and eliminate curricular material that students have mastered (M = 1.93, SD = 1.68).

Five classroom practices teachers used with average students that were in the bottom ten mean scores were in the category of Reading and Writing Assessment (items 5, 6, 7, 8, 9 and 10). Another three of the classroom practices teachers used with average students that were in the bottom ten mean scores were in the category of Providing Challenge and Choice (items 27, 29 and 30; see Table 11).
Table 11

*Descriptive Statistics and Ranks for ‘Providing Challenge and Choices’ Frequency Ratings*

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Description</th>
<th>Gifted Students</th>
<th>Average Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>22</td>
<td>Teach thinking skills in the regular curriculum</td>
<td>3.63</td>
<td>1.31</td>
</tr>
<tr>
<td>23</td>
<td>Teach a unit on a thinking skills, such as critical thinking or creative problem solving</td>
<td>3.37</td>
<td>1.41</td>
</tr>
<tr>
<td>24</td>
<td>Participate in a competitive program focusing on thinking skills/ problem solving, such as Future Problem Solving, Odyssey of Mind, etc</td>
<td>3.54</td>
<td>1.32</td>
</tr>
<tr>
<td>25</td>
<td>Use contracts or management plans to help students organize their independent study projects</td>
<td>3.01</td>
<td>1.56</td>
</tr>
<tr>
<td>26</td>
<td>Provide time within the school day for students to work on their independent study projects</td>
<td>2.89</td>
<td>1.53</td>
</tr>
<tr>
<td>27</td>
<td>Allow students within your classroom to work from a higher grade level textbook</td>
<td>2.74</td>
<td>1.68</td>
</tr>
<tr>
<td>28</td>
<td>Provide a different curricular experience by using a more advanced curriculum unit on a teacher-selected topic</td>
<td>3.21</td>
<td>1.49</td>
</tr>
<tr>
<td>29</td>
<td>Group students by ability across classroom at the same grade level</td>
<td>2.78</td>
<td>1.68</td>
</tr>
<tr>
<td>30</td>
<td>Send students to a higher grade level for specific subject area instruction</td>
<td>2.19</td>
<td>1.82</td>
</tr>
<tr>
<td>31</td>
<td>Establish interest groups which enable students to pursue individual or small group interest</td>
<td>2.92</td>
<td>1.60</td>
</tr>
<tr>
<td>33</td>
<td>Provide opportunities for students to use programmed or self-instruction materials at their own pace</td>
<td>3.29</td>
<td>1.43</td>
</tr>
<tr>
<td>34</td>
<td>Give assignments that encourage students to organize their own work schedule to complete a long range project</td>
<td>3.24</td>
<td>1.51</td>
</tr>
</tbody>
</table>

4.5.2.2 Classroom practices with gifted students

The mean scores of classroom practices with gifted students ranged between 2.18 (assign book reports) and 4.12 (encourage students’ participation in discussions). The three most common classroom practices teachers reported using with gifted students were: encourage students’ participation in discussion (M = 4.12,
SD = 1.04); encourage students to ask higher level questions (M = 3.89, SD = 1.16); and consider students’ opinion in allocating time for various subjects within your classroom (M = 3.85, SD = 1.21). All of these practices were in the category of Questioning and Discussion. The bottom three classroom practices teachers reported using with gifted students were: assign book reports (M = 2.18, SD = 1.65); send students to a higher grade level for special subject area instruction (M = 2.19, SD = 1.82); and, eliminate curricular material that students have mastered (M = 2.27, SD = 1.75). Five of the classroom practices teachers used with gifted students that were in the bottom ten mean scores were in the category of Reading and Writing Assessment (items 6, 7, 8, 9 and 10). Another four of the classroom practices teachers used with gifted students that were in the bottom ten mean scores were in the category of Providing Challenge and Choice (items 27, 29, 30 and 31; see Table 12).

Table 12

Descriptive Statistics and Ranks for ‘Reading and Writing Assessment’ Frequency Ratings

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Description</th>
<th>Gifted Students</th>
<th></th>
<th>Average Students</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>Rank</td>
<td>M</td>
</tr>
<tr>
<td>3</td>
<td>Assign reading of more advanced level work</td>
<td>3.05</td>
<td>1.35</td>
<td>1</td>
<td>2.47</td>
</tr>
<tr>
<td>5</td>
<td>Assign reports</td>
<td>2.75</td>
<td>1.55</td>
<td>5</td>
<td>2.07</td>
</tr>
<tr>
<td>6</td>
<td>Assign projects or other work requiring extended time for students to complete</td>
<td>2.94</td>
<td>1.40</td>
<td>2</td>
<td>2.32</td>
</tr>
<tr>
<td>7</td>
<td>Assign book reports</td>
<td>2.18</td>
<td>1.65</td>
<td>7</td>
<td>1.49</td>
</tr>
<tr>
<td>8</td>
<td>Use activities such as puzzles or word searches</td>
<td>2.89</td>
<td>1.51</td>
<td>3</td>
<td>2.33</td>
</tr>
<tr>
<td>9</td>
<td>Give creative or expository writing assignments on topics selected by the teacher</td>
<td>2.79</td>
<td>1.51</td>
<td>4</td>
<td>2.23</td>
</tr>
<tr>
<td>10</td>
<td>Give creative or expository writing assignments on topics selected by the students</td>
<td>2.75</td>
<td>1.62</td>
<td>6</td>
<td>2.11</td>
</tr>
</tbody>
</table>
### Table 13

**Descriptive Statistics and Ranks for ‘Educational Environment’ Frequency Ratings**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Description</th>
<th>Gifted Students</th>
<th></th>
<th></th>
<th></th>
<th>Average Students</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>Rank</td>
<td>M</td>
<td>SD</td>
<td>Rank</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Encourage students to move around the classroom to work in various locations</td>
<td>3.37</td>
<td>1.49</td>
<td>3</td>
<td></td>
<td>2.89</td>
<td>1.50</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Allow students to leave the classroom to work in another location, such as the school library or media center</td>
<td>3.27</td>
<td>1.57</td>
<td>4</td>
<td></td>
<td>2.82</td>
<td>1.60</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Use learning centers to reinforce basic skills</td>
<td>3.40</td>
<td>1.54</td>
<td>2</td>
<td></td>
<td>2.03</td>
<td>1.59</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Use enrichment centers</td>
<td>3.17</td>
<td>1.62</td>
<td>5</td>
<td></td>
<td>2.53</td>
<td>1.63</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Use computers</td>
<td>3.85</td>
<td>1.35</td>
<td>1</td>
<td></td>
<td>3.37</td>
<td>1.50</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Table 14

**Descriptive Statistics and Ranks for ‘Questioning and Discussion’ Frequency Ratings**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Description</th>
<th>Gifted Students</th>
<th></th>
<th></th>
<th></th>
<th>Average Students</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>Rank</td>
<td>M</td>
<td>SD</td>
<td>Rank</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Consider students’ opinion in allocating time for various subjects within your classroom</td>
<td>3.85</td>
<td>1.21</td>
<td>3</td>
<td></td>
<td>3.50</td>
<td>1.32</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Provide questions that encourage reasoning and logical thinking</td>
<td>3.83</td>
<td>1.17</td>
<td>4</td>
<td></td>
<td>3.49</td>
<td>1.26</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Ask open-ended questions</td>
<td>3.49</td>
<td>1.49</td>
<td>5</td>
<td></td>
<td>2.81</td>
<td>1.46</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Encourage students to ask higher-level questions</td>
<td>3.89</td>
<td>1.16</td>
<td>2</td>
<td></td>
<td>3.32</td>
<td>1.35</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Encourage students participation in discussions</td>
<td>4.12</td>
<td>1.04</td>
<td>1</td>
<td></td>
<td>3.86</td>
<td>1.14</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Table 15

Descriptive Statistics and Ranks for ‘Matching Curricula to Individuals’ Frequency Ratings

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Description</th>
<th>Gifted Students</th>
<th>Average Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>4</td>
<td>Use self-directed instructional kits such as S.R.A</td>
<td>3.22</td>
<td>1.26</td>
</tr>
<tr>
<td>11</td>
<td>Make time available for students to pursue self-selected interests</td>
<td>3.37</td>
<td>1.35</td>
</tr>
<tr>
<td>12</td>
<td>Use pre-tests to determine if students have mastered the material covered in a particular unit or content area</td>
<td>3.12</td>
<td>1.36</td>
</tr>
<tr>
<td>13</td>
<td>Eliminate curricular material that students have mastered</td>
<td>2.27</td>
<td>1.75</td>
</tr>
<tr>
<td>14</td>
<td>Repeat instruction on the coverage of more difficult concepts for some students</td>
<td>3.38</td>
<td>1.29</td>
</tr>
<tr>
<td>15</td>
<td>Substitute different assignments for students who have mastered regular classroom work</td>
<td>3.24</td>
<td>1.34</td>
</tr>
<tr>
<td>16</td>
<td>Modify the instructional format for students who learn better using an alternative approach</td>
<td>3.57</td>
<td>1.29</td>
</tr>
<tr>
<td>19</td>
<td>Assign different homework based on students ability</td>
<td>3.19</td>
<td>1.50</td>
</tr>
</tbody>
</table>

4.5.2.3 Comparison of classroom practices for gifted and average students

As seen in Tables 11 through 16, none of the classroom practices listed on the teachers’ survey was implemented, on average, more than once a day. The practice of encouraging students’ participation in discussions had the highest mean frequency rating for both student groups (gifted: M = 4.12, SD = 1.04; average: M = 3.86, SD = 1.14). This indicates that, on average, teachers employed this particular practice daily. Overall, classroom practices involving questioning and discussion had many of the highest mean scores, suggesting that the teachers frequently used these techniques in the classrooms for both gifted and average students.
Table 16

Descriptive Statistics and Ranks for ‘Worksheets’ Frequency Ratings

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Description</th>
<th>Gifted Students</th>
<th>Average Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1</td>
<td>Use basic skills worksheets</td>
<td>3.31</td>
<td>1.27</td>
</tr>
<tr>
<td>2</td>
<td>Use enrichment worksheet</td>
<td>3.23</td>
<td>1.27</td>
</tr>
</tbody>
</table>

Despite notable similarities in the classroom practices utilised for gifted versus average students, there were nevertheless key differences. For example, whereas teachers identified only two classroom practices that were applied an average of once a day with average students, there were eight classroom practices that they applied with this same regularity for gifted students. Similarly, there were 26 classroom practices that were employed an average of a few times per week with gifted students, but only 22 classroom practices used with this frequency with average students.

The results indicate the reverse for practices that are used with less regularity, such that 13 classroom practices were utilised an average of only a few times a month with average students, compared to only four practices with gifted students at this frequency. Similarly, two classroom practices were applied with average students only once a month or less on average, with no classroom practices used this infrequently with gifted students. This indicates that a broad range of classroom strategies tend to be applied with greater frequency with gifted students than average students.

Overall, the mean frequency ratings for classroom practices with gifted students were typically higher than the frequencies of use with average students. In fact, of the 39 classroom practices listed, only item 14 (repeat instruction on the coverage of more difficult concept for some students) was used more often with average students (M = 3.47, SD = 1.30) than with gifted students (M = 3.38, SD =
1.29). In contrast, the biggest difference in mean frequency ratings for gifted over average students was item 20 (use learning centers to reinforce basic skills; $M_{\text{diff}} = 1.37$). This practice was in the top ten classroom practices applied with gifted students. In contrast, it was in the bottom four practices used by teachers with average students.

4.6 Teachers’ comments

The final part of the CPQ questionnaire contained a teacher comment part, which allowed teachers of gifted students to add their own comments regarding classroom practices and their classroom situations. Most teachers responded with classroom practices and factors that they are able to apply in school and obstacles that prevent the application of classroom practices in school.

4.6.1 Classroom practices and factors applied in school

Additional comments from teachers included a group of classroom practices that teachers found important and effective for gifted students, such as giving students complete freedom to participate and choose tasks and activities, diversifying effective instructional methods, asking advanced questions during teaching, providing content and knowledge from outside the regular curriculum, developing gifted students’ talents, giving gifted students the opportunity to give an idea or explain a subject to a regular student, and providing enrichment activities in the areas in which gifted students are creative.

The teachers’ comments frequently included factors that provided outstanding educational opportunities for gifted students in schools, such as providing material and incentives for gifted students, placing gifted students in special classes, and providing the tools and appropriate teaching aids to teach gifted students effectively.
The researcher noted that the most frequently repeated factor in teachers’ comments was related to administrative issues. Teachers emphasised the importance of administrative support in the efforts of the teacher for gifted learning, such as providing support to the teacher when planning and implementing to teach gifted in the regular classroom. Some of the teachers’ comments addressed the role of parents in developing gifted students’ talents at home and helping the school administration and teachers highlight the achievements of gifted students. Following are some illustrative comments of teachers about classroom practices for gifted applied in schools.

*Gifted females should be taught special program in private schools in separate building and provide special program for them to reach their potential.* (Female regular teacher)

*I think that the most important factors in teaching gifted students are to provide material and moral incentives for them and encourage them to participate in all activities.* (Regular male teacher)

*One of the best practices that we provide to a gifted student is the opportunity to provide an idea or explain a subject or concept to a regular student.* (Regular male teacher).

*The female student should be given the freedom in terms of time and choosing activities that she likes.* (Female coordinator).

*It is important for the teacher and school principal to communicate and for the student's family to understand the needs of the gifted.* (Male coordinator).

*We must take care of linking gifted student with those who have experience and distinguished scholars in various fields.* (Full-time female teacher).
4.6.2 Obstacles that prevent the application of classroom practices in school

Teachers mentioned several obstacles that prevent them from providing distinct classroom practices for gifted students. Most obstacles were administrative, such as the educational systems of the Ministry of Education in Saudi Arabia, and restricted freedom of teachers, which prevents teachers from providing curriculum or activities outside the regular curriculum for the gifted. Furthermore, teachers mentioned the lack of special schools for the gifted, lack of proper educational aids and tools, and obstacles related to teachers’ qualifications. In their responses, teachers emphasised that regular teachers have too many tasks and teaching hours, that coordinators and regular teachers are not specialists in gifted education, that regular teachers do not distinguish between gifted and regular students, and that teachers do not have enough time to connect with gifted students in regular classrooms.

Listed below are some representative comments of teachers about the obstacles that prevent them from applying appropriate classroom practices with gifted students.

_I feel that gifted students are feeling wronged and frustrated and have no idea how to express their talents with a large number of regular students, and I think that if they were separated in special classes that it would be better for them._ (Regular male teacher)

_Systems and policies of the Ministry of Education restrict the freedom of the teacher and make him unable to provide special education for the gifted in regular school._ (Male coordinator).

_COORDINATOR AND TEACHER WHO ARE NOT SPECIALIZING IN GIFTED EDUCATION WILL NOT PROVIDE A TEACHING THAT SUITS GIFTED STUDENT._ (Regular female teacher).

_We have shortened considerably the programs, curriculum, and teaching aids that fit gifted students._ (Full-time female teacher).
4.7 Qualitative results

This section describes the results of the qualitative analyses. The researcher used semi-structured interviews to collect qualitative data. One of the advantages of the interview is that the researcher can build rapport and trust with the participant, which allows researchers to obtain hidden and in-depth information that perhaps cannot be obtained by any other data collection tool. Participants can also add more information in the interview or request clarification of vague statements (Gal; et al., 2007).

Ten teacher supervisors and two exemplary teachers were interviewed individually. The interviews lasted approximately 25 minutes, and some of the interviews were extended to about 40 minutes. The first step in data analysis was the transcription of all audiotaped interviews. The researcher used the manual analysis of qualitative data to read the data, identify common themes, and classify the themes into colour-coded categories (Creswell, 2008).

Re-grouping the data, classifying, and colour coding according to the pertinent categories helped the researcher to categorise the data into separate themes. The researcher took each category of responses and analysed them for differences and similarities. The semi-structured interview was based on ten questions covering several areas of classroom practices, (see Table 17). These questions, derived from the literature review, inquired about the roles of teachers of gifted students.
Table 17

The research themes and their relationship to the interview questions

<table>
<thead>
<tr>
<th>Theme</th>
<th>Interview questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and implementation of strategies</td>
<td>1-Do you believe the teachers of gifted students adequately plan their classroom practices? Can you provide examples of effective practices? Ineffective?</td>
</tr>
<tr>
<td></td>
<td>2-To what extent do you think that teachers of gifted students use the strategies of enrichment-grouping-acceleration in regular classroom?</td>
</tr>
<tr>
<td>Classroom environment, curriculum and instructional aids</td>
<td>3-To what extent do you think that teachers of gifted students modify regular classroom environment to meet the needs of gifted students?</td>
</tr>
<tr>
<td></td>
<td>4-To what extent do you think that teachers of gifted students modify curriculum content to meet the needs of gifted students?</td>
</tr>
<tr>
<td></td>
<td>8-To what extent do you think that teachers of gifted students use appropriate means and instructional aids when they apply classroom practices in regular classroom? Examples.</td>
</tr>
<tr>
<td>Methods, Teaching strategies and activities</td>
<td>5-Do you believe that teachers of gifted students apply appropriate methods and teaching strategies for gifted students in regular classrooms? Examples.</td>
</tr>
<tr>
<td></td>
<td>6-Do you believe that gifted students in regular classroom receive adequate activities from their teachers in regular classroom?</td>
</tr>
<tr>
<td>Tendencies, interests and advanced skills of gifted students.</td>
<td>7-To what extent do you think that teachers of gifted students take into account the tendencies and interests of gifted students in regular classroom?</td>
</tr>
<tr>
<td></td>
<td>9-To what extent do you think that teachers of gifted students contribute to the development of gifted advanced skills in regular classroom? Describe the skills that are developed.</td>
</tr>
<tr>
<td>Effective teacher of gifted students</td>
<td>10-In your opinion what are the most important characteristics a teacher should possess to be an effective educator of gifted students?</td>
</tr>
</tbody>
</table>

4.7.1 Planning and implementation of strategies

The first interview questions asked teacher supervisors and exemplary teachers about how teachers of the gifted plan their classroom practices. They were also asked to provide examples of effective and ineffective practices that are used with gifted students in the regular classroom. The second question required the participants to report the extent to which they think that the teacher of the gifted used enrichment strategies, grouping, and acceleration in the regular classroom.

The responses of teacher supervisors and two exemplary teachers revealed five themes. The first theme related to the planning undertaken by teachers of the gifted;
the second theme reflected effective and ineffective practices for teachers of gifted student; the third theme referred to enrichment in regular classrooms; the fourth theme involved grouping practices in regular classrooms; and, the fifth theme concerned acceleration in regular classrooms.

4.7.1.1 Planning undertaken by teachers of gifted

The majority of supervisors’ responses indicated that regular teachers plan their lessons to follow the regular syllabus and regular activities and therefore they rarely included tasks and activities for gifted students in regular classrooms. One of the supervisors expressed his opinion that the vast majority of regular teachers believed that planning practices and special tasks for gifted in regular schools was not their job and responsibility, but was the full-time teacher’s responsibility in the school enrichment program.

Following are some of the supervisors’ comments, which are typical of the responses received:

Regular teachers do not plan any special practice for gifted students in the regular classroom. (Supervisor 8).

I think that most regular teachers feel that planning lessons and curriculum for gifted in schools are not their responsibility but responsibility of the full-time teacher. (Supervisor 9).

All lesson plans that I review and evaluate were specially planned to implement regular lessons for regular students, and unfortunately, I never briefed any lesson plans specific to gifted in the regular classrooms. (Supervisor 6).

One of the exemplary teachers mentioned that he always tried to include some activities and tasks for the gifted in his class in his weekly plan, but that plan was not followed regularly. The other exemplary teacher confirmed that he did not include in
the written lesson plan what to do with the gifted students in his class. However, he modified some activities and tasks to be more challenging, or he asked gifted students to lead regular students when implementing regular activities.

Some of the exemplary teachers’ comments:

In my weekly plan, I sometimes select activities and tasks for gifted students and write it in the lesson plan, but it does not happen constantly. (Exemplary teacher 2)

I do not write in the lesson plan related to gifted in my class, but I take this into account in the implementation phase when modifying some of the activities and tasks or assign gifted students to lead regular students. (Exemplary teacher 1).

The interviewed teachers and supervisors mentioned several difficulties in planning lessons for gifted students in regular classrooms. Some teachers plan only for regular students and think that it is their main job. There are no ideal plans to teach gifted students in regular classrooms and most regular teachers do not know the effective practices and strategies that could be implemented in the regular class to instruct gifted students. Regular teachers face difficulties in changing the general lesson plan (weekly or monthly plan) to detailed plans that could be easily applied with either gifted or regular students. Three of the supervisors commented on the difficulties of planning lessons for gifted in the regular classroom.

The regular teacher thinks that his job and responsibility is to plan only regular lessons for regular students. (Supervisor 2).

We lack ideal plans that could be provided to our teachers to instruct gifted in regular classes. (Supervisor 4).

Most teachers who I supervised do not have skills to convert the general lesson plan to a detailed plan that would be easier to implement in classes either with gifted or regular students. (Supervisor 6).
4.7.1.2 Effective and ineffective practices with gifted students in classrooms

In the interview, supervisors and exemplary teachers described what they considered to be effective practices with gifted students. The effective practices, which were mentioned most frequently, included problem solving, developing creative thinking skills, combining many different methods and teaching strategies to instruct gifted and regular students in the regular classroom, using brainstorming strategy, and choosing appropriate curriculum content and skills according to the age and abilities of the gifted student. Here are some of typical responses of the study sample about the effective practices with gifted students were:

The good practice is that some teachers use problem solving and involve gifted students in providing solutions. (Supervisor 1).

During my visit of teachers, the most effective practices with gifted in the classrooms included some modifications to the curriculum content and skills to fit the abilities of gifted and their age. (Supervisor 6).

The most frequently mentioned ineffective practices included using the traditional indoctrination teaching methods, such as lecture method with gifted students; lack of providing effective activities for gifted; infrequently engaging gifted students in discussions, problem solving, tasks, and activities of their choice; discouraging gifted students and ignoring their talent in the regular classroom; and finally, adhering strictly to regular lesson plan and not modifying curriculum and teaching methods to meet the needs of gifted students. Some of the important comments of the study sample about the ineffective practices with gifted were:

I've noticed that a large segment of teachers is using lecture method and other traditional indoctrination methods with gifted students, which are not suitable practices for use with gifted. (Supervisor 5).
Some teachers do not encourage gifted students to show their talent and sometimes ignore their participation in the regular classroom. (Supervisor 9).

I think that applying regular curriculum with the gifted without modifying it is the most ineffective practice. (Exemplary teacher 2).

4.7.1.3 Enrichment in regular classrooms

All teacher supervisors indicated that only few or no applications were utilised in regular classrooms to enrich gifted students. One of the supervisors noted that some of their teachers provided some additional information for gifted students outside the regular curriculum, but that it was not up to the level of designing curriculum units or full lessons; rather, it was limited to modifying some parts of the lesson and it did not happen frequently.

Another supervisor added that when comparing the regular teacher with the full-time teacher, the full-time teacher could apply enrichment activities with gifted students in school enrichment programs to a greater extent than could the regular teacher. Following are some citations of supervisors about applying enrichment for gifted students in the regular classroom:

Regular teachers do not apply any type of enrichment with gifted students in regular classrooms. (Supervisor 3).

In regular classes, regular teachers mostly do not provide enrichment for gifted; instead, they depend on the enrichment provided by the full-time teacher in the school enrichment program. (Supervisor 6).

Responses of exemplary teachers were similar to the supervisors’ responses, indicating that they do not apply enrichment in regular classrooms to complement their teaching strategy. However, their responses indicated that they frequently attempted to include some kinds of enrichment activities. Exemplary teacher 2
indicated that from time to time, he tried to provide home activity for his gifted students, such as reading a story and then commenting on it or selecting a reading from a science book. Exemplary teacher 1 mentioned that he had coordinated with the full-time teacher to allow three gifted students to present some of the enrichment activities in a science subject in the regular classroom in which the full-time teacher had applied this experience in the school enrichment program. The exemplary teacher 2 described his attempts to provide enrichment activities for his gifted students in the regular classroom: *Many times, I commissioned my gifted students to read a story and comment on it, and sometimes I print a part of scientific book and ask them to read it at home.*

The supervisors’ and exemplary teachers’ responses indicated several reasons for the lack of provision of enrichment strategies in regular classrooms with gifted students. These reasons included lack of sufficient time with the application of enrichment needing extra effort from regular teachers, the large number of students in regular classes, lack of enrichment training among teachers, lack of coordination between the full-time teacher and the regular teacher in applying enrichment in regular classes, lack of instructional aids and resources available in school or available in the school enrichment program for the gifted, and the lack of knowledge about gifted students’ tendencies and interests in selecting the appropriate enrichment for them. The following comments of the exemplary teachers and supervisors are typical examples of the reasons for not applying enrichment strategy in regular classes:

*I think that the presence of a large number of regular students in the class makes it difficult for the regular teacher to provide enrichment for the gifted.* (Supervisor 6)
Most regular teachers require special training for enrichment and need to know how to apply it in our schools. (Supervisor 9).

Regular and full-time teachers do not collaborate with an aim to take advantage of some of the resources and instructional aides or even enrichment topics that should be available to the gifted in the regular classroom. (Supervisor 5).

4.7.1.4 Grouping in regular classrooms

Seven of the teacher supervisors had indicated that teachers of the gifted do not apply grouping strategies in regular classrooms while three supervisors stated that they applied grouping in some lessons, such as art education, science, and geography, where small group teaching methods were used. In general, supervisors’ responses indicated no permanent application and systematic grouping based on the abilities and interest of gifted students in regular classes in schools supervised by teacher supervisors.

Illustrative comments mentioned by supervisors about grouping gifted students in regular classroom included:

*As far as I know, in the regular classroom, teachers seldom provide special groupings for gifted students.* (Supervisor 4).

*If we consider that teaching small groups and cooperative learning are effective grouping options, then our teachers should apply grouping in the regular classroom.* (Supervisor 9).

Exemplary teachers reported that several applications of grouping are beneficial for gifted and regular students. For example, exemplary teacher 1 stated that he groups gifted and regular students together in the fifth and sixth grade. These groups often comprised four to six students and the gifted student was the leader. He rarely grouped the five gifted students together in the same group. Exemplary teacher
2 stated that he always utilised small groups and cooperative learning. Furthermore, he mentioned that he does not know the differences between grouping and teaching small groups or cooperative learning. He also added that he sorts students into groups based on his personal estimation and choices because he did not have accurate knowledge about the interests and abilities of gifted students in his class.

Some of the exemplary teachers’ comments about grouping in regular classes include:

Exemplary teacher “2”: I do not exactly know the difference between teaching small groups or cooperative learning and grouping as strategies for teaching gifted.... I sort my students into groups according to my personal estimation, and I am not sure of their interests or their ability.

Exemplary teachers and teacher supervisors indicated several factors that led to lack of using grouping options to instruct gifted students in regular classrooms. Some of these factors were the large number of students in regular classes, the small number of gifted students, small size of regular classes, and lack of space in the classes to use grouping approaches to teaching. Many regular teachers did not know how a teacher could apply a grouping strategy with gifted students, and many teachers did not receive training on the use of different types of grouping. Some teachers thought that the school enrichment program, which was based on pull-out, was sufficient, and there was no need to provide other grouping for gifted students in regular classrooms. Supervisor 6 stated an additional reason for not applying grouping in regular classrooms: Due to lack of teaching time and many teachers not believing in the importance of grouping as well as because of a large number of students in regular classrooms, the teachers do not seriously consider applying grouping with gifted students in regular classes.
4.7.1.5 Acceleration

Responses of the sample of the study of teacher supervisors and exemplary teachers about acceleration show that they had minimal knowledge of acceleration. The researcher needed to explain the meaning of acceleration to four participants. All teacher supervisors and exemplary teachers’ responses indicated that they did not utilise strategies to accelerate gifted students to a higher grade. One of the teacher supervisors pointed out that acceleration does not exist in school enrichment programs for gifted students in Saudi school, as currently there are no legislations, policies, or plans to support acceleration in Saudi schools.

Another supervisor pointed out that in 2008, the Ministry of Education in Saudi Arabia asked teacher supervisors and directors of gifted centers to give their opinion about the implementation of acceleration in Saudi schools but until now, no studies addressed this aspect of learning. Some participants commented about the presence of acceleration in Saudi schools as follows:

As far as I know, in our school, we do not apply any type of acceleration. (Supervisor 7).

I think there are no plans or legislations for acceleration at the moment. (Supervisor 10).

The interviewees provided some reasons for the lack of acceleration in Saudi schools, such as the lack of policies or legislation specific for acceleration because of difficulties associated with evaluating the achievement of accelerated gifted students. Currently, the school system in Saudi Arabia does not support the application of acceleration. Parents and school principals do not accept the idea of gifted students’ transition to a higher stage without making sure that they master the knowledge and
skills of the current stage of schooling. Representative comments regarding the reasons for the lack of acceleration in Saudi schools were:

*In my opinion, big obstacle to the application of acceleration concerns student evaluations before being transferred to a higher stage.* (Supervisor 6).

*Our current education system does not support the application of the acceleration.* (Supervisor 3).

4.7.2 Classroom environment, curriculum, and instructional aids

The teacher supervisors and two exemplary teachers’ responses reflected three issues: modification of classroom environment, modification of curriculum, and use of appropriate aids.

4.7.2.1 Modification of classroom environment

Overall, 11 out of 12 participants in the interview pointed out that the regular teacher rarely modifies the classroom environment for gifted students in the regular classroom. They used words such as:

*Regular teacher modifies the classroom environment only about 5%.*

*We cannot call modifying classroom environment in the regular classroom with the word modified because it is rare and limited.* (Supervisor 3).

Participants expressed some of the reasons for not modifying classroom environment, included lack of time available, the lack of space in the regular class, the lack of advanced educational aids and sources, the teacher not having his/her own class, and the classrooms are over-crowded. Some teacher supervisors pointed out that the coordinator better modifies the regular classroom environment for the gifted when compared to the regular teacher. One of the exemplary teachers pointed out that he modifies the classroom environment constantly, by changing the form of the
tables and the distribution of chairs, and by trying to move from the classroom to the library or the resources room. He also mentioned that his modifications receive a positive response from all students.

4.7.2.2 Modifying curriculum content

All 12 participants confirmed that their regular teachers did not modify curriculum content except very slight modifications. Some expressed that modifying the content of the curriculum for gifted occurs rarely in regular classes. Such as:

Regular teachers do not modify the content of the curriculum for gifted students. (Supervisor 4).

Very low levels of content modification occur in regular classes. (Supervisor 7).

Gifted students in regular classes study regular curriculum without any modification. (Supervisor 6).

Some teacher supervisors added a number of reasons for not modifying the regular curriculum content for gifted, such as:

The regular teacher does not have a space or freedom to modify the content of the curriculum. (Supervisor 6).

Rigor in the application of the regular curriculum content, in addition to the intensity and the large amount of information in the regular curriculum, leads to difficulty modify the content to suit the needs of gifted students. (Supervisor 3).

Teachers do not have the skills to help them modify curriculum content for gifted. (Supervisor 8).

One of the exemplary teachers noted, I do not modify the content of the curriculum so I do not oppose the school system regulations, especially when I want to add or delete. (Exemplary teacher 2) Another exemplary teacher also added, The
school principal and students’ parents do not encourage making any modification to
the content. (Exemplary teacher 1)

The assessment and evaluation of teachers depend on the application of the regular
curriculum without modifications. (Exemplary teacher 1)

4.7.2.3 Using appropriate instructional aids

All ten teacher supervisors pointed out that teachers in regular classes did not
use special aids with gifted students but used the same educational aids that were
commonly used with regular students. They further explained:

Teachers use the aids available in the regular classroom with gifted students without
adding or rarely adding new methods. (Supervisor 4). Some mentioned, I do not
remember that I saw an advanced aids specific for gifted students in regular classes.
(Supervisor 3).

Regular teachers are less distinctive in the selection and use of teaching aids
developed for gifted students compared to full-time teachers. (Supervisor 6).

Equipment and tools belonging to gifted are to be delivered to full-time teachers and
the regular teacher does not get nothing from it in regular classes. (Supervisor 7)
80% of teachers that I supervised do not produce nor devise aids that suit gifted
students in regular classes. (Supervisor 5).

On the other hand, exemplary teachers pointed out that they were trying to use
computers and provide sensory and audio-visual aids when explaining the lessons,
trying to benefit from the resource room at the school. One of them mentioned that
he sometimes uses special purpose aids, for example, shows scientific films related
to the lesson and then comments and interacts with gifted and regular students about
the content of these movies.
4.7.3 Methods, teaching strategies and activities

The fifth question of the interview sought the views of teacher supervisors and exemplary teachers on the utilisation of appropriate methods and teaching strategies with gifted students in regular classes. The sixth question aimed to verify whether gifted students received adequate activities in the regular classroom. Two common themes were identified in supervisors’ and exemplary teachers’ answers on the fifth and sixth questions during the interview: methods and teaching strategies, and activities.

4.7.3.1 Methods and teaching strategies

Most supervisors indicated that teaching methods used with gifted students in regular classrooms were not appropriate for students with gifted abilities. Nine supervisors indicated that most teaching methods used in regular classrooms were lecture methods, followed by group discussions, questions and answers, and in some subject matters and science school subjects, other methods such as inquiry and discovery. Appropriate instructional strategies for gifted students, such as problem solving and brainstorming or thinking skills, were only used by a few teachers in some parts of the lesson, according to all of the supervisors.

The supervisors and one of the exemplary teachers indicated that a teacher-led group pedagogy approach was common and that individualised teaching was rarely applied in regular classes. One of the exemplary teachers mentioned that he had a successful experience applying individualised teaching with five of his gifted students in the primary grade and that the content of the syllabus for science and mathematics encouraged him to use advanced teaching strategies more than the rest of the syllabus. He added that his gifted students were waiting for educational opportunities, unlike the rest of the students.
Typical responses of exemplary teachers and supervisors about the strategies and teaching methods used in regular classes with gifted students included the following comments.

The vast majority of our teachers apply traditional strategies and teaching methods, such as lectures, discussions, and questions without any special modification for gifted students. (Supervisor 2).

Teachers who teach religion and Arabic language and social science rarely use modern and advanced teaching methods strategies and always apply teaching methods such as lectures and discussions, while science and mathematics teachers use other methods, such as induction or reasoning; but their teaching is for all students and as I remember there is no special teaching for the gifted. (Supervisor 6).

There is a great lack of individual teaching or self-directed learning for gifted students in the regular classroom. (Supervisor 7).

Unfortunately, regular teachers whom I supervised use teaching methods and strategies that do not allow students enough opportunities for effective participation; instead, teachers consistently apply indoctrination teaching methods. (Supervisor 4).

I think teachers whom I supervised develop traditional methods, such as lectures and opportunities for students to participate in discussions. I believe that our curriculum content, the amount of content, the large number of regular students in classes and the small number of gifted students make the use of teaching methods such as lectures and cooperative learning an acceptable solution. (Supervisor 9).

I always use the problem solving and brainstorming method, especially in science subjects, and leave room for students to participate, often letting gifted students lead groups of students when they take the steps to solve problems. (Exemplary teacher 2)
The responses of the exemplary teachers and supervisors highlighted a group of factors and reasons that led to the absence of appropriate methods and strategies for gifted students in regular classes. In addition, the exemplary teachers’ answers shed light on some of the factors that help in the positive application of teaching methods and strategies for gifted students in a regular classroom. In their responses, the supervisors identified the most important factors that led to the use of traditional teaching methods with gifted students in regular classes. They indicated that teachers did not have enough class time to provide more than the basics of the syllabus in traditional teaching approaches. In addition, many of the syllabi included a lot of content and required great effort from teachers to complete on time. One of the supervisors noted that classes had 40 to 45 students, which did not allow teachers to use individualised teaching approaches. In terms of classroom space, some supervisors suggested that the classroom did not include enough space to isolate gifted students in special spaces for special tasks. Furthermore, a lot of teachers had not received enough university-level academic preparation for teaching and many were not trained well even after entering the teaching profession.

Some supervisors expressed the following ideas: Regular teachers turn to common methods such as lectures and discussions led by the teacher as well as questions and answers because the use of advanced methods and other modern strategies often lead to the end time of class before completing the objectives of the lesson. (Supervisor 1).

Supervisor 4 asked: Do you expect the teacher to present individual teaching for gifted students in a small classroom with 45 and sometimes 49 students?
Most classrooms in our schools are small and do not have enough special spaces to help the teacher isolate gifted students and provide teaching or special strategies for them. (Supervisor 6).

On the other hand, exemplary teachers pointed out a range of factors that helped them deviate from the use of traditional methods in teaching, such as independence and their own professional development, which helped them to develop their teaching skills by reading about effective teaching strategies. They also took advantage of successful and full-time teachers in the school, pre-planning for lessons, their knowledge of their gifted students in the classroom, and their students’ potential. Exemplary teacher 2 pointed out that the school principal always agreed to his requests and supported him in meeting the students’ needs. One teacher indicated:

I benefited greatly from a book about teaching methods, especially in identifying and implementing steps to problem solving in a creative way, and I attended a training course on cooperative learning. I have benefitted a lot from typical lessons that my school principal nominated me to attend in neighbouring schools that were provided by excellent teachers and supervisors, even though they did not cover strategies and methods of teaching specifically related to gifted students. (Exemplary teacher 2)

4.7.3.2 Activities

All supervisors’ responses indicated that gifted students did not receive adequate activities from their teachers in the regular classroom. Activities that were offered were for one or two school periods per week, included regular activities, and were not specialised or appropriate for the gifted. According to the interviewees, the reasons for not providing enough activities for gifted students in regular classrooms varied. Some supervisors emphasised reasons such as the lack of teacher training,
lack of regular teachers’ awareness of the importance of activities for the gifted, the lack of time available for the activity (one or two periods per week), and the lack of physical equipment to produce and design special activities for gifted students in regular classes. Some teachers stated that providing activities for gifted students is a full-time teacher’s responsibility. Other supervisors added that the lack of adequate guidance and legislation to support specifying activities for gifted students in regular classrooms, the length of the curriculum and syllabus, and the large number of students in the class led to difficulty providing appropriate activities for the gifted in the regular classroom.

Several of the supervisors commented on these issues.

In fact, our teachers do not have enough time nor the potential that will help them produce special activities suited for the gifted students in regular classrooms. (Supervisor 6). 

I think a lot of regular teachers feel that the full-time teacher is responsible for providing special activities for the gifted students in schools. (Supervisor 9).

Unfortunately although the activities are the only area that could provide educational opportunities for gifted students in the regular classroom, regular teachers from my point of view do not provide sufficient activities, especially for the gifted students. (Supervisor 3).

In our public school plans, I think that only 5-10% of the activities offered can be considered to provide advanced activities that fit gifted students. (Supervisor 10).

Exemplary teachers explained their attempts to provide special activities for the gifted in the regular classroom. One of the exemplary teachers felt comfortable because his gifted students actively and enthusiastically participated in some of the applied activities offered to them in the science syllabus. Another exemplary teacher
provided some solutions to exploit regular activity periods to provide special activities for the gifted and regular students with high achievement; he also stressed that the school principal agreed to transfer gifted students to classrooms with smaller numbers of students, which would make it easier for the teacher to provide special activities for the gifted students in the regular classroom. Exemplary teacher 2 stated: *I plan and choose the co-curricular activities and especially the syllabus of science so that they are thought provoking and attention grabbing. Activities with difficult levels are provided to three gifted students in my class, while the rest of the activities are provided to regular students.*

4.7.4 Interests and advanced skills of gifted students

The seventh question of the interview asked a sample of teacher supervisors and exemplary teachers about the extent to which teachers of gifted students take into account the interests of gifted students in the regular classroom. The ninth question asked the sample to express their views on the contribution of regular teachers in the development of advanced skills for gifted students in the regular classrooms. Interview responses with supervisors and exemplary teachers focused on the tendencies and interests as well as advanced skills for gifted students.

4.7.4.1 Interests of gifted students in regular classrooms

The responses of the nine supervisors and two exemplary teachers demonstrated a distinct failure to consider gifted students’ tendencies and interests when planning or applying tasks and activities in the regular classroom. Supervisor 9 explained that not enough attention was given to the tendencies and interests of gifted students in regular classrooms, but stated that we should not blame the teacher; rather, those responsible for this failure were the general administration for gifted
students because they have not provided educators with sufficient knowledge about tendencies and interests of each gifted student.

_Unfortunately gifted tendencies in regular classrooms are not being considered._ (Supervisor 2).

_Few teachers ask gifted students about their tendencies and, after knowing, few teachers take into account these tendencies when choosing tasks._ (Supervisor 4).

Exemplary teachers and supervisors also mentioned some of the reasons leading to the non-observance of gifted students’ tendencies and interests in regular classrooms, including the difficulty of determining the tendencies and interests of the students in general and gifted students in particular at the primary stage of schooling, the instability of gifted students’ tendencies and interests as they change constantly, teachers’ capacity and lack of training to identify gifted students’ tendencies and their interests, the lack of standards to evaluate gifted students’ tendencies and interests in Saudi Arabia, and the failure of the identification process for gifted students in Saudi Arabia to include identifying their tendencies and interests.

Several of the interviewees made typical relevant comments.

_At present we do not have special measures to identify gifted students’ tendencies and interests in Saudi Arabia._ (Supervisor 10).

_In Saudi schools, identifying processes include identify that they are gifted, but as far as I know these processes do not include any efforts to identify the students’ tendencies or interests._ (Supervisor 6).

_I rely on my personal estimation to identify gifted students’ tendencies and interests in my classroom, and I do not have any accurate information about their tendencies and interests._ (Exemplary teacher 1).
Exemplary teacher 2 added that he sometimes tried to ask all students, including gifted students, about their tendencies and interests and to record his observations about the types of tasks that gifted students mastered and chose to identify as their tendencies and interests. However, exemplary teacher 2 felt as if he had failed because he did not cooperate with the student-activity advisor in the school or the gifted students’ parents to identify his special tendencies and interests. He stated: *My observation that I sometimes record about the type of tasks and activities chosen and mastered by gifted students in my class do not offer me a complete and real picture about their tendencies and interests. I think I need cooperation from the student-activity advisor in the school or the gifted students’ parents.*

4.7.4.2 Advanced skills of gifted students in the regular classroom

Most supervisors explained that their teachers do not make special efforts to develop the advanced skills of gifted students in the regular classroom. One of the supervisors added that the basic skills associated with the lower levels of Bloom's taxonomy of learning objectives (knowledge, comprehension, and sometimes application) were the most developed skills in Saudi schools, but the higher levels of Bloom's taxonomy of learning took up little space in regular teachers’ efforts.

Supervisors 9 and 7 expressed another opinion, noting that the regular teachers provided some advanced skills for gifted students in the regular classroom, such as thinking skills and problem solving skills included in the regular curriculum. Supervisor 9 added: *We cannot judge the regular teacher for not developing advanced skills for the gifted and regular students in the regular classroom because the development of advanced skills is a cumulative process that occurs over years and is not easily measured directly.*
Advanced skills for the gifted students in the regular classroom are not developed in a satisfactory manner. (Supervisor 6).

Advanced skills are not provided in regular classrooms, but are provided in the school enrichment program. (Supervisor 10).

Our teachers and our regular curriculum focus on the lower level of Bloom's taxonomy of learning, like remembering, understanding, and sometimes application, but neglect advanced skills related to the higher levels of Bloom's taxonomy of learning. (Supervisor 2).

I think that teachers whom I supervised develop advanced skills in their gifted and regular students as well, such as thinking skills and problem solving skills. (Supervisor 9).

I can’t judge our teachers as to whether they develop or do not develop advanced skills for gifted students in regular classrooms because the process of developing advanced skills is a cumulative process that occurs through the years and is not measured directly. (Supervisor 7).

The researcher tried to identify additional factors mentioned by the supervisors and exemplary teachers to determine why advanced skills of gifted students in the regular classroom were not developed. Several factors were identified, including insufficient time in the classroom, the regular curriculum content did not include organised experiences to develop advanced skills, the lack of educational opportunities and special teaching for gifted students in the regular classroom, regular teachers did not modify the regular curriculum to develop advanced skills, and teaching methods provided did not contribute to the development of advanced skills. Supervisors’ comments were as follows:
Advanced skills development needs time, a trained full-time teacher, and organized curriculum content, but these terms are not available in our schools.

Supervisor 8: As our teachers do not provide special teaching for gifted students, do not modify the regular curriculum, and do not apply special activities for the gifted students in the regular classroom, the result is simply that the regular teachers in our schools do not develop gifted students’ advanced skills. (Supervisor 6).

4.7.5 Effective teacher of gifted students

In current study supervisors described 53 characteristics that a teacher must possess to be effective in gifted education. Some of these characteristics were behavioural, some were cognitive, some were professional and others referred to their teaching skills. Five characteristics were mentioned more than others: demonstrate willingness to develop their teaching skills, have scientific capacity, have a deep knowledge of his or her specialisation, respect students' abilities, be patient, and be flexible. These were followed by characteristics such as being enthusiastic, being a good example, and helping students demonstrate their abilities as well as discover their talents. Exemplary teachers mentioned the following characteristics of effective teachers of the gifted: intelligent, talented, patient, able to act fast, friendly, able to modify the curriculum, willing to sacrifice in order to teach students, fun, friendly, good communication skills with students, and capable of developing skills further.

The following quotes are from some of the exemplary teachers and supervisors: …is capable of development, flexible and open to the new educational experiences, and it would be preferred to be specialized in the same area that he teaches. (Supervisor 1).
He must have general interest and have mindfulness and an above average imagination in which he uses his thinking skills, have innovation and creativity, and have a high sensitivity to the problems. (Supervisor 6).

...respect the capabilities and feelings of gifted students and share their thoughts thinking and interests, be able to raise the students’ thinking and accept exotic and diverse and authentic ideas that gifted students provide. (Supervisor 10).

...modifies the curriculum and diversified learning activities and uses effective teaching strategies, is able to sacrifice his effort, time and money and engage in social communication skills with gifted students and parents as well. (Exemplary teacher 1)

4.7.6 Summary

The purpose of this study was to investigate the knowledge and competencies that characterize teachers’ classroom practices with gifted students in regular classrooms in Saudi Arabia. The quantitative results indicated that the highest mean scores were for two classroom practices, ‘Questioning and discussion’ as well as ‘Educational environment’, for both gifted students and average students. The two categories that received the lowest mean scores were ‘Reading and writing assessment’ and providing ‘Challenge and choices’.

In all six categories, the means of the application of classroom practices were higher for gifted students compared to average students. The results of the effect size analysis revealed that four categories had large effect sizes, Reading and writing assessments, Providing challenge and choices, Questioning and discussion, and Worksheets. The remaining categories, Educational environment and Matching curricula to individuals, had medium effect sizes.
The results of the 39 items of classroom practices showed that the majority of the teachers did not implement any of the 39 classroom practices listed on classroom practices questionnaire (CPQ) with gifted and average students more than once a day. The most common classroom practices used with average and gifted students were ‘Encourage students' participation in discussion’, ‘Provide questions that encourage reasoning and logical thinking’, ‘Encourage students to ask high level questions’. The teachers reported that they were the least likely to ‘assign book reports’, ‘send students to a higher grade level for special subject area instruction’, and ‘eliminate curricular material that students have mastered’.

The results demonstrated no statistically significant differences between the responses of the teachers on their classroom practices with gifted students by demographic variables, including years of teaching, highest degree earned, employment status, and grade level currently teaching. Statistically significant differences in teachers’ responses were found by gender and type of training in gifted education. Female teachers reported that they were applying classroom practices more frequently in all six categories with gifted students compared to male teachers. Type of training in gifted education showed significant differences only in category number 4, “Questioning and discussion.” Teachers who received workshops or seminar were more likely to implement the classroom practices with their gifted students compared to teachers without training.

On the open question about the most important practices in the classroom, the teachers indicated the importance of giving students complete freedom to participate and choose tasks, diversifying effective teaching methods, and providing contents and activities from outside the regular curriculum. In their comments, teachers also stressed that the most important factors for providing appropriate education for the
gifted in schools was to provide incentives for gifted students in the classroom, place the gifted in special classes, provide advanced tools and appropriate means, increase administrative support for the teacher of gifted, and activate the role of parents in developing gifted talents. Finally, the greatest obstacles to the effective application of classroom practices were administrative obstacles, such as the regulations of the Ministry of Education, restricted freedom of the teacher, insufficient training of teachers in gifted education, and insufficient time to connect with gifted students, and high workload.

The results of supervisors’ and exemplary teachers’ interviews are summarised in this section. According to the interviewees, planning in regular classes did not include special planning for tasks and special activities for gifted; enrichment was not available, and grouping was not applied consistently and regularly in regular classes. There was a complete lack of acceleration strategy, and it was rare for teachers to modify the classroom environment or the content of the regular curriculum to suit the needs of gifted students. Most teachers used teaching aids available for the regular class without modifications or special designs for gifted students. The most common methods used were lecture and group discussions and questions and answers; it was rare to use advanced methods and strategies. Gifted students in the regular classroom did not receive suitable activities for their ability, and there was a lack of consideration for gifted students’ interests. No special effort was made to develop their advanced skills in the regular classroom.

Some of the most important reasons that led to the absence or weakness of the use of classroom practices that are recommended for gifted students in the regular classroom were mentioned in the interviews. First, there was no proper planning. Enrichment was absent, and there was a lack of systematic application of grouping
and acceleration due to the lack of an ideal plan. In addition, sufficient time was lacking, and regular students were already overcrowded in classrooms. Training for teachers as well as policies and legislation were lacking, as was the acceptance of parents and school principals of the need to apply these practices in regular schools.

Additional issues identified included the failure of teachers to modify the classroom environment or content of the curriculum due to the lack of space in the regular classroom, the lack of material resources, the length of the regular curriculum, and regular teachers’ lack of freedom to modify the content of the curriculum. Furthermore, interviewees noted the absence or weakness of the use of teaching strategies and advanced activities due to the lack of time available. The type of regular curriculum content did not help them apply advanced strategies and activities. In addition, the large number of regular students in classrooms, poor efficiency of teachers, and lack of training, capabilities and equipment contributed to the problem. The reasons for not considering gifted students’ interests and tendencies and not developing their advanced skills in the regular classroom were due to the difficulty of identifying students’ tendencies; there were no available standards to identify gifted students’ tendencies, and the lack of adequate time and regular content did not fit the development of advanced skills.

The interviewees mentioned that more effective practices used with gifted students included solving problems, developing creative thinking skills and brainstorming whereas ineffective practices were the use of teaching methods based on memorisation, the lack of effective activities, the failure to modify the regular content of the curriculum, and lack of recognition of gifted students’ talents. The sample of supervisors and exemplary teachers indicated that the most important characteristics for making the teacher effective were flexibility, scientific capacity,
and deep knowledge of specialisation as well as respect for gifted students' abilities and patience.

On the other hand, the exemplary teachers’ interviews showed they had made some attempts to provide educational services for the gifted students in the regular classroom, such as adding specific tasks and activities for gifted students in the weekly plan and taking advantage of the regular weekly activity period. In terms of enrichment, they provided home enrichment activities, giving students the opportunity to undertake enrichment experiences in the regular classroom. In terms of grouping, they initiated teaching in small groups in which gifted students were leaders. In relation to educational aids, they have used computers and scientific films, allowing gifted students to comment on them. In relation to teaching approaches, they have used individualised teaching with gifted students in classrooms with a few students. In order to take into account gifted students’ interests, they have asked gifted students about their interests.

Exemplary teachers mentioned that the most important factors that helped them provide educational services for gifted students in the regular classroom included professional development through reading and attending training courses, meeting and simulating distinguished teachers, pre-planning for lessons and support from school administration. Finally, exemplary teachers showed that they felt failure and negligence in gifted education in regular classrooms, especially in their inability to modify the content of the regular curriculum, their irregularity in providing grouping and enrichment activities, and the inability to help or provide any kind of acceleration as well as the failure to develop advanced skills for gifted students as well as poor communication with each of the student activity advisors, full-time teachers and gifted students’ parents.
5 DISCUSSION

5.1 Introduction

The purpose of this mixed method study was to identify the knowledge and beliefs of teachers of gifted students in relation to their classroom practices in regular classrooms in Saudi schools. This study was guided by one central question: What are the knowledge and competencies that characterise teachers’ classroom practices for gifted students in regular classrooms in Saudi Arabia?

In order to answer this central question, a mixed methods design (quantitative and qualitative) was used in this study. The quantitative method (survey) enabled the researcher to gather data in order to answer the following four sub-questions.

6. What classroom practices are currently used with gifted and regular students in the regular classroom in Saudi Arabia?
7. In what ways do teachers believe that they modify classroom practices and curriculum to meet the needs of gifted students?
8. To what extent do specialist and non-specialist teachers differ from each other in their classroom practices for gifted students?
9. To what extent do male and female teachers differ from each other in their classroom practices for gifted students?

The qualitative method (semi-structured interview) enabled the researcher to gather in-depth information in order to answer the fifth sub-question:

10. To what extent do teachers apply recommended classroom practices for gifted students in regular classrooms in Saudi Arabia from the viewpoint of supervisors and exemplary teachers?

This chapter discusses the major findings of the current study, followed by recommendations, limitations of the study, and suggestions for future research before drawing conclusions. The discussion is presented and organised according to the research questions. The five research sub-questions formulated this study by
answering the central question. The following sections discuss and explain the results related to each sub-question.

5.2 Research questions

5.2.1 Question 1: What classroom practices are currently used with gifted and regular students in the regular classroom in Saudi Arabia?

The results of the current study indicated that some classroom practices received a high rate of use with gifted and average students in regular classrooms while the others received low rates, according to the teachers’ responses and interviews with supervisors and exemplary teachers.

*Classroom practices that received low ratings*

Classroom practices related to writing and reading received the lowest mean scores in the application with gifted and regular students. These findings reveal that teachers in the current study do not seem to offer sufficient activities, tasks, or adequate strategies for the development of writing or creative writing skills for students in the regular class. Nor do they provide sufficient opportunities to choose writing topics that suit the students’ interests and skill levels. This result agrees with the study of Goertzel, Goertzel and Goertzel (1978) and Asher (1988), where the results indicated that creative writers have fewer opportunities for creativity in classrooms and schools because of time constraints, restrictions of grades and evaluations, limited subjects that do not challenge students, and teachers who value spelling and grammar more than imagination. Albertson and Billingsley (2001) reported that gifted students in writing respond well to special methods of teaching, including advanced writing strategies, but according to the quantitative and qualitative data in the current study, teachers do not provide special efforts for developing creative writing among their gifted and regular students.
The data in the current study also indicated limited application of practices related to acceleration. Supervisors confirmed that educators in Saudi Arabia oppose acceleration in the public schools. These results add further support to studies confirming that acceleration was a less widely used strategy with gifted students and that specialists and teachers prefer to use enrichment rather than acceleration (Al-Shaks, 1990; Plunkett, 2000). The results of the current study are inconsistent with the study of Abdul Kafar (2003), which showed that Egyptian educators prefer acceleration more than enrichment. Further, VanTassel-Baska & Stambaugh, (2006) indicated that most studies on acceleration confirmed its effectiveness and its positive effect, which should remove the fears and negative effects when applied in schools.

The results of the survey in the current study showed a lack of the use of ability grouping in regular classrooms. This contrasts with previous studies in Saudi Arabia, which indicated that the various applications of ability grouping in Saudi schools, especially in school enrichment programs, had a positive impact on the activation of gifted education programs in schools (Alqefari, 2010; Al-Otaibi, 2007; Al-Nowaiser, 2008). In the current study, teachers’ lack of using ability grouping is unfortunate, especially taking into consideration that research in Saudi Arabia (e.g. Al-Otaibi, 2007) showed that female gifted students in regular schools suffer from emotional and social problems when they are not grouped with similar-ability peers. Further, Broughton’s (2004) study confirmed that the emotional side often is neglected in regular classes; therefore, ability grouping helped to meet the social and emotional needs of all students (Mosse, 2003; Rogers, 2002a; Teno, 2005; Tieso, 2003).

Some supervisors and exemplary teachers in the current study differed slightly in their estimates of the presence of ability grouping in Saudi schools. They indicated
that there was some application of small group teaching methods, which grouped four to six gifted and regular students during a specific activity. However, these are cooperative groupings rather than ability grouping and therefore do not meet the need for gifted students to regularly interact with like-minded peers. Despite the degree of variation between the results of the CPQ and the interviews in the current study, there was general agreement that ability grouping is not applied regularly in the regular classroom. In the current study, supervisors and exemplary teachers mentioned that the large number of students in classes and small size of the regular classes prevented them from using ability grouping strategies. This result has been asserted in previous studies (Gregory & Chapman, 2002; Westberg & Daoust, 2003), in which the number of students in classrooms and class size play important roles in the identification, selection, and success of appropriate strategies for gifted and regular students.

**Practices that received high ratings**

Practices in which the results showed high means with gifted and regular students were the use of discussions and questions in teaching. Given the agreement between the quantitative and qualitative results in the current study, it is likely that the use of questions and discussion is a common practice in both the regular classroom environments and school enrichment programs in Saudi Arabia. This result agrees with the study of Al Hedan (2008), whose results showed that Saudi secondary grade teachers’ level of implementation for skills of dealing with students’ answers was high but were inadequate in terms of formulating and directing questions. The results of the current study contrast with research (Alrifai, 2012), which demonstrated that teachers did not welcome gifted students’ questions and concluded that this was one of the challenges faced by gifted students in Saudi
schools. Additional evidence from other studies indicates a clear positive impact of the use of questions and discussion strategies to increase students' achievement and the development of deductive thinking in regular classes (Ayres, Sawyer, & Dinham, 2004; Batten, Marland, & Khamis, 1993).

The results of the study also showed that teachers believe that they provide gifted and regular students with opportunities to develop their thinking skills. It is important to clarify that, in their responses in the current study, teachers did not mean the direct teaching of thinking skills because such a teaching strategy is not widely applied in Saudi schools (Alsheneefi, 2005). It is reasonable to conclude that teachers in the current study were referring to the sum total of the classroom opportunities that provided students with thinking skills. Supervisors’ interviews showed that few teachers of gifted students in regular classrooms explicitly taught some thinking skills in parts of the regular lesson. However, other studies have investigated the application of thinking skills and found results that contrast with the quantitative results in the current study. A group of studies indicated that there are few Saudi teachers in regular classes engaged in the development of thinking skills (e.g. Al Nefei, 2010). Alzahrani’s (2011) study indicated that science teachers had weak skills in the area of developing students’ creative thinking skills. Based on the qualitative results in the current study, it is more likely that the general levels of teachers’ skills to develop students’ thinking skills in the regular classroom are not high. However, research has demonstrated that most successful applications for developing thinking skills were extra-curricular programs or organized activities, which targeted gifted students in Saudi Arabia (Abdul Jalil, 2005; Al Amer, 2004; Alkadr, 2000; Ramel, 2010).
The results of the current study of CPQ showed that, for 38 classroom practices of the 39 included in the CPQ questionnaire, teachers indicated that they would consider using the approach for gifted students only slightly more than using the approach with regular students. This result supports previous studies (e.g. Archambault et al., 1993) that showed that gifted students received only slightly better classroom practices than regular students. Gifted students' abilities and their learning styles as well as their level of using knowledge acquisition strategies may account for this finding through an increase in their participation in regular classes over regular students. This conclusion is supported by studies showing that gifted students are better than regular students in taking advantage of the opportunities available in the classroom (French, Walker, & Shore, 2011); they also differ in the type and quantity of tasks that they are provided (Gagné, 2005).

In Saudi Arabia, specifically the study of Alsubhi (2011) has indicated that the most important differences between a gifted and regular student were the power to focus attention on the subject or the target, benefit from past experience, love of discovery reading, knowledge and willpower, high ambition, and ability to embrace risk and adventure. The researcher believes that these differences might make many teachers focus their efforts on gifted students more than regular students within regular classrooms.

5.2.2 Question 2: In what ways do teachers believe that they modify classroom practices and curriculum to meet the needs of gifted students?

Teachers reported in the CPQ that they modify their teaching for students who learn better; this amendment included diversifying teaching and the use of alternative teaching methods. These findings contrasted with the results of the supervisors’ interviews, which indicated that most instructional methods used in regular
classrooms were the traditional methods in teaching, such as lecture and discussion, and that few teachers modify their instructional methods or use advanced strategies and methods of teaching. The researcher believes that modifications to the teaching mentioned in teachers’ responses in the CPQ may have been over-reported or were minor and thus not fully meeting the needs of gifted students. Such a conclusion is consistent with Saudi studies that revealed the rare use of advanced strategies of teaching or student-centred teaching approaches (Alsalem, 2005; Alzahrani, 2008; Alzahrani, 2011; Makki, 2008).

The results of supervisors’ and exemplary teachers’ interviews in the current study also supported the findings of some of Saudi studies that investigated the obstacles in the Saudi regular classes environment that prevent the use of creative teaching, such as insufficient preparation and training for teaching and the high workloads of teachers. Many teachers preferred traditional teaching methods because of the large number of students in the classroom and the large size of the syllabus (Alrifai, 2012; Alshabi, 2009; AlZahrani, 2008).

In the current study, the category of challenge and choice received one of the two lowest mean scores in terms of their application for gifted students. Teachers’ responses and supervisors’ and exemplary teachers’ interviews clearly indicated the absence of advanced strategies and methods to meet gifted students’ needs for challenge, such as strategies of teaching thinking skills and problem solving. Further, practices that require flexibility with the students in the learning environment and that provide opportunities for self-learning were not applied sufficiently to meet the needs of gifted students in the regular classroom.

The result of the current study are compatible with previous studies (e.g. Archambault et al., 1993) as the results showed that choice and challenge practices
received low mean scores for their application with gifted students. The researcher noted that advanced strategies in teaching gifted students included in the questionnaire of the current study mostly required individual teaching, such as learning contracts, independent study projects, individual acceleration, and the self-learning of the individual. All of these practices and strategies target individual differences, which is consistent with Winebrenner’s (1992) opinion that teachers who were most effective were those who most often take into account individual differences.

Despite the importance of individualised teaching in gifted education, the results of the current study indicate that individual instructional strategies are not widely used with gifted students in Saudi regular classes. These results are in agreement with the results of previous Saudi studies, which have shown that individualised teaching strategies are not popular teaching methods with either specialist teachers of gifted students (Al-Kasi, 2004; Al-Khadidi, 2008) or regular teachers (AlZahrani, 2008; Makki, 2008).

Teachers’ responses to CPQ and supervisors’ and exemplary teachers’ interviews also indicated a lack of the use of practices that require flexibility in adjusting the time or allowing students to choose or change their learning pace. This result suggests a contradiction between teachers’ actions and their comments, in which they had repeated (in the open-ended question) the importance of flexibility in giving gifted students complete freedom to participate and choose their own activities. The result from the interviews and questionnaire is consistent with previous studies (Alrifai, 2012), which concluded that teachers of gifted students in Saudi Arabia rarely allow flexible learning options such as field trips or learning resource rooms.
One of the Saudi studies that investigated individualised teaching effects on students in regular classes in Saudi Arabia asserted its positive role in raising students' achievement and facilitating the acquisition of knowledge and skills (AlzZahrani, 2008). In the current study, teachers’ comments on the open-ended questions and supervisors’ and exemplary teachers’ interviews provide some examples of the reasons that could prevent providing challenge and choice strategies for the gifted in regular classes. They cited educational policies restricting freedom of the teacher, higher load of teaching hours, lack of time, poor efficiency of teachers, and inadequate classroom spaces. These reasons have been confirmed in other research that evaluated gifted education in enrichment programs or in regular classes (Al-Juhani, 2008; Al-Kasi, 2009; Al-Saif, 1998; Al-Sharafi, 2003; Bin juma, 2006).

According to the results of the current study, only a few teachers modified the curriculum in regular classrooms. The quantitative and qualitative results agree that classroom practices related to curriculum modification received low means, although the means of the application of practices with gifted students were higher than the mean of their application with average students. Exemplary teachers expressed an inability to modify gifted curricula within regular classes. The results of the current study support research findings from the United States and Australia confirming that few teachers offer special curricula or modify curriculum for gifted students in regular classes (Archambault et al., 1993; Westberg, & Daoust, 2003; Whitton, 1997).

Results of the interviews in the current study provided a number of reasons for teachers not modifying the curriculum. The supervisors and exemplary teachers pointed out that teachers were not adequately trained to modify the curriculum or
develop specialised curriculum content for gifted students. They also indicated that the constraints of the syllabus and teachers’ loss of freedom to modify the curriculum are significant obstacles that prevent teachers from modifying the regular curriculum for gifted students. These obstacles prevent the teacher from modifying the curriculum, which is one of the most frequently recommended approaches in gifted education. The research literature has emphasised the positive impact of curriculum modification for gifted students (Ismael, 1999; Feng et al., 2005; Leung, 2005; Reis & Renzulli, 1992; Southern & Jones, 1991). Previous studies in Saudi Arabia confirmed the same recommendations regarding the need to provide differentiated curriculum, curriculum extension for the gifted, compression of content, encouragement for teachers to modify curriculum, and teacher training to modify and develop curriculum contents, for gifted students in the regular classroom (Abu-Nawas, 2006; Al-Juhani, 2008; Al-Kasi, 2009; Derendari, 2006).

The results of the current study indicate that teachers of gifted students do not modify reading and writing practices for gifted students in regular classes. Writing practices were discussed in the first question. In terms of the reading practices, the CPQ results indicated that teachers do not apply the reading skills development practices for gifted students in the regular classroom (item 8). Despite the fact that regular classrooms include a wide range of reading abilities, from weak readers to gifted readers, research has shown that leaving the gifted reader in the regular classes without alternatives or additional reading activities might lead them to study reading subjects that the regular students studied or that gifted students depend on independent reading without regular teacher intervention (Wood, 2008). In the current study, teachers’ comments and supervisors’ interviews indicate that
developing reading skills occurs through the independent efforts of gifted students, without teacher intervention.

Research has also shown that gifted readers are characterised by some capabilities that help them develop their reading skills, such as early self-reading, independence from the teacher, and less effort to master and understand abstract texts (Abilock, 1990; Halsted, 1990). Yet research has confirmed that the development of creative reading skills for gifted students should not rely exclusively on the school textbook or only limited books or on a teacher who does not spend enough time with advanced readers (Gallagher, 1975; Kingore, 2002). The results of the current study indicate that both male and female teachers are less likely to spend enough time with advanced readers in regular classes. One previous study (Alsalem, 2005) indicated that female Arabic language teachers responsible for developing students' writing and reading had only medium-level teaching skills.

Teachers in the current study were similar to those in Kingore’s (2002) study, where teachers of gifted readers received poor performance ratings. The study also confirmed that the sample of teachers did not receive appropriate professional development for dealing with the needs of gifted students in reading. This is consistent with the demographic results in the current study, which showed that more than half of the teachers did not receive training in gifted education. Experts in gifted education have confirmed the importance of using the acceleration strategy, homogeneous grouping, and enrichment in promoting reading skills for gifted readers (Cassidy, 1981; Collins & Aiex, 1995; Reis & Renzulli, 1989). They also emphasised that gifted readers differ in practices and capacity from regular readers.

Despite the recommendations in the literature, the researcher found in the current study that the needs of gifted readers have not been met in regular
classrooms. One of the exemplary teachers indicated that he provided some advanced home reading activities to gifted students in his class. Similar results were reported in the research of Archambault et al (1993) and Whitton (1997) who found that the advanced reading of gifted students was more likely to be addressed than other strategies.

5.2.3 Question 3: To what extent do specialist and non-specialist teachers differ from each other in their classroom practices for gifted students?

The aim of the current study was to identify the differences in classroom practices that specialist teachers (full-time teachers) applied for gifted students compared to non-specialist teachers (regular teachers and coordinators). It was expected that full-time teachers would more frequently use classroom practices designed for gifted students, especially as full-time teacher specialists in gifted education were selected because of their performance and completion of training activities in gifted education under the supervision of the general administration of gifted education (Ministry of Education, 2010). However, this was not the case.

The quantitative results demonstrated no statistically significant differences in teachers’ responses about their classroom practices with gifted students by employment status (full-time teachers versus part-time teachers; coordinator versus regular teacher). Based on these findings, there are some possible reasons that could explain the lack of differences between specialized and non-specialized teachers’ responses. The findings of the current study raise questions about the effectiveness and impact of the training received by teachers of gifted students in Saudi Arabia. This conclusion is supported by other studies that indicated that teachers of gifted students in Saudi Arabia were still in need of specialized training in different areas in gifted education, such as the development of creative thinking skills and independent
research techniques (Maajeeny, 1990), skills applying different curricula for gifted students, and gifted identification skills (AlFahaid, 2002; Al-Kasi, 2009). They also largely need training in the field of knowledge and skills of learning techniques (Al-Qahtani, 2004). Similar results were found in Western studies confirming that teachers of gifted students need to be trained in general in the field of gifted education (Archambault et al., 1993) and develop the skills to individualize teaching (Rogers, 1989).

During their interviews in the current study, supervisors confirmed the importance of developing training programs for teachers of gifted students in Saudi Arabia as one of the important solutions to overcome the current level of provision for gifted students in regular classes. However, previous studies that investigated the impact of training programs for teachers of gifted students’ attitudes and practices have provided mixed results. For example, Maajeeny’s (1996) study demonstrated that the training program had a positive impact on improving female teachers’ estimates of the behavioural characteristics of their female gifted students. Positive results of training teachers on giftedness were also evident in the results of the Pierce and Adams (2000) study, where participants who attended a workshop of differentiation showed positive attitudes towards gifted education. Other results have confirmed the positive impact of training programs on the attitudes of teachers toward the gifted (Donerlson, 2008; Morrissey, 2006).

These results, however, contrast with other studies, which confirmed that training teachers of the gifted did not have a positive impact in changing teachers’ attitudes towards gifted students and their education (AlFahaid, 2002; McCoach & Siegle, 2005) and did not contribute to developing teachers’ efficacy, classroom management skills, or teaching strategies (Tyler, 2006). As Alsaleh (2007) also
pointed out, teachers of gifted students who have received training in educational technology were still using traditional learning means.

In the current study, approximately 45% of teachers indicated that they had received some form of training (workshop, seminar, short-term course), while about 54% had not received any training in gifted education. It is likely that not receiving training, the insufficient level of the training provided in gifted education or the short length of the training period provided to teachers contributed to the lack or insufficient career growth opportunities for specialist and non-specialist teachers of gifted students in the current study. This conclusion is supported by research whose results indicated the presence of weaknesses in the training programs (e.g., shortness of training period) for teachers of gifted students in Saudi Arabia (AlFahaid, 2002). AlFahaid noted that the majority of training materials and the prevalence of theoretical lecture methods are translated from Western studies, and trainees do not participate in relevant skills for the Saudi context. Supervisors in the current study criticised the training policy and the content of training programs for teachers of gifted students as well as the staff involved in the training. They indicated their belief that the teachers did not benefit as much from their training activities as is required to fully meet the needs of gifted students.

The results of the current study reaffirm the need for attention to the quality, diversity, and amount of training for teachers of the gifted, in order to assure the success of the training program. This result is consistent with previous research (Drain, 2008), which indicated that the production of teachers of gifted students is affected by the quality and quantity of training they have received. Other researchers (Bjork, Johnston, & Ross, 2007) identified factors that hinder the best students from reaching the teaching profession in the United States, including the rigidity of
training programs and teachers not being satisfied with the content of the training programs. In the current study, the quantitative and qualitative results indicate that training programs lack continuity. Hence, there is the need for long-term plans, multiple years of professional development, including periodically monitoring observations to ensure the quality of teaching (VanTassel-Baska et al., 2008).

The results of the current study raise questions about the selection of full-time teachers and how they come to be considered specialists in gifted education. To the researcher’s knowledge there are no Saudi studies that have evaluated the criteria for the selection of teachers to become full-time teachers of the gifted. One study (Alanzi, 2005) did identify some general criteria, such as the functional performance report of the teacher and experience in the teaching profession in the public schools or gifted centres. However, these were not based on empirical research. A recommendation from the current study, then, is that future research address the selection criteria in an empirical manner.

In the current study, years of experience did not result in increased abilities to meet the needs of gifted students. Approximately 65% of the teachers in the sample had more than ten years of experience while approximately 34% had less than 10 years, but they did not differ in their knowledge and understanding of giftedness. It may be that teachers with more experience may have developed their overall teaching performance, but they have not focused their attention on specific needs of the gifted students in the regular classes. Again this may be a result of the lack of training in gifted education and that gifted education is a relatively new field in Saudi Arabia.

Studies that investigate the effect of the experience variable on the research sample’s views on gifted issues and their education indicated mixed results. For
example, one study (AlFahaid, 2002) showed that Saudi teachers with less experience were more positive in their attitudes toward gifted education than others. By contrast, several Western studies found no relationship between positive attitudes and the number of years of experience (Cramond & Martin, 1987; Lee, Cramond, & Lee, 2004; Smith & Chan, 1996). This suggests that years of experience in teaching are not necessarily linked to teacher effectiveness (Darling-Hammond, 2000; Kaplan, 1999; Nye, Konstantopoulos, 2004).

The current study also showed that there were no differences between specialist and non-specialist teachers in terms of their ability and their knowledge in gifted education. One of the reasons that might have led to the lack of differences in specialist and non-specialist teachers of gifted education practices in the current study is that, in general, all teachers of gifted students in this study might have graduated from the same teacher training courses. AlZahrani (2008) indicated that teacher preparation programs in the University of Umm Al-Qura do not include very much information about gifted students and their educational needs. Kadi (2007) also noted that teacher preparation programs do not provide the concepts and theories that the student teachers all need on graduation.

During the interviews in the current study, when the exemplary teachers were asked about teaching practices that they use with gifted students in regular classes, their responses showed a level of application that was better than many regular and full-time teachers who participated in the questionnaire. Exemplary teachers in the current study were nominated according to their high teaching performance and they received more training activities than other teachers. This is consistent with Westberg and Archambault’s (1997) results that effective teachers are those who have advanced qualifications in several areas of special education, which helped
them identify individual differences and expand their understanding of different teaching strategies. However, the teachers who did not get higher qualifications were also influential and distinguished that they participated in the professional learning and applied the life-long learning in order to improve their efficiency and classroom practices. The results of the current study confirmed these results, where exemplary teachers said they used the self-professional development methods to develop their classroom practices.

5.2.4 Question 4: To what extent do male and female teachers differ from each other in their classroom practices for gifted students?

The results of the current study showed that the female teachers reported that they were applying classroom practices more frequently in all six categories with their gifted students than were male teachers. The current results supported previous research that female teachers’ responses were more positive than male teachers’ responses; for example, female teachers linked creativity with the capabilities of gifted students more than did male teachers (Maajeeny, 1996). Perceptions and attitudes of female teachers toward gifted and gifted education were more positive compared to those of male teachers (Begin & Gagné, 1994; Hansen & Feldhusen, 1994; Michener, 1980; Wagner, 1997), and female teachers’ responses were more likely to support special services for gifted students compared to male teachers’ responses (Wagner, 1997). Another study (Al-Manqoor, 2000) found that female teachers of gifted students held positive attitudes towards the use of strategies and contemporary methods in gifted education. Female teachers also had positive attitudes towards the application of acceleration, grouping, and enrichment (Al-Manqoor, 2000).
However, other research suggested that male teachers of gifted students were better than female teachers in identifying Saudi gifted students (AlFahaid, 1993) and male teachers were less likely than females to believe that regular education programs met the needs of gifted students (Chessman, 2010). One study (Suliman & Hashem, 2005) indicated that male teachers recognise behavioural characteristics among gifted students more than did female teachers.

One explanation why female teachers indicated that they apply teaching practices more frequently than male teachers may be linked to their participation in training. For example, Al-Nowaiser (2008) indicated that 39% of female teachers of gifted students participated in more than 10 training activities courses in gifted education while 26% of the same sample participated in eight to 10 training courses and 11% participated in three to five training courses in gifted education. It seems from the results of previous studies (Al-Nowaiser, 2008) that female teachers took more opportunities for training in gifted education compared to male teachers in the current study.

In the current study, the results of independent sample t-test showed that female teachers reported that they were applying classroom practices more frequently in all six factors with their gifted students than did male teachers. This suggests that the sample of female teachers in current study was more likely better than male teachers in the application of classroom practices. These findings supported the study of Al-Nowaiser which indicated that female teachers participated in several training activities (Al-Nowaiser, 2008). These findings contrast with some of the studies that investigated female teachers’ performance, in which the results showed that female teachers in Saudi Arabia greatly need to train in 17 of the training areas in the field, such as identifying female gifted students linguistically,
and significantly train in 25 training areas in the field of gifted linguistic education (Alhabash, 2011). Indeed, previous results (Al-Otaibi, 2007) indicated that female gifted students in Riyadh province are unable to communicate sufficiently with their teachers, and also the results of Bin Juma’s (2006) study, showed a lack of available trained female teachers of gifted students.

It is difficult to find a clear explanation for the superiority of female teachers in the application of classroom practices, especially considering that policies and legislation of public education and gifted education in the male education sector do not differ from the female education sector. It seems the reliance on the gender variable when explaining the differences in teachers’ beliefs and practices might not provide strong and vital explanations, such as employment status variables, years of teaching experience, and type of training; while in the current study female teachers had more positive attitudes than male teachers, both genders still need more training in gifted education. However, the need exists for future studies to understand the effects of the gender variable in the field of gifted education and giftedness issues.

5.2.5 Question 5: To what extent do teachers apply recommended classroom practices for gifted students in regular classrooms in Saudi Arabia from the viewpoint of supervisors and exemplary teachers?

Supervisors’ responses revealed that teachers do not have specific plans to utilise special tasks and activities that are recommended for gifted students in the regular class. This result agrees with previous studies (Latz, Speirs Neumeister, Adams, & Pierce, 2009) that demonstrated that one of the most important reasons for teachers' resistance to utilising appropriate practices is that they do not have detailed plans to meet the needs of gifted students. Al-Juhani’s (2008) study showed that teachers do not plan to administer gifted programs in school on a regular basis. The
lack of planning by teachers in the current study does not comply with the views of experts and organizations in gifted education, which proposes that the use of appropriate practices for gifted students in the regular class need a high level of planning and organized plans (Clark, 1996; Winebrenner, 2001). Further, Graffam (2006) argued that distinguished teachers in gifted education do not depend on fixed plans all the time and with all students; the study further indicated that modifying plans is one of the requirements for creating exciting and flexible classes for gifted students.

Supervisors reported that teachers’ plans for gifted students were not detailed enough. They indicated that the level of planning for gifted students needed to improve, as recommended by other studies. For example, effective teachers in gifted education create multi-level plans that contain detailed information on all aspects of gifted education (e.g., students, curriculum, teaching) and are related to the syllabus (Graffam, 2006; McCutcheon, 1980).

The results of the study demonstrated that the strategies recommended in gifted education, such as enrichment, grouping, and acceleration, were not being used sufficiently in Saudi regular classrooms. In the interview, supervisors and exemplary teachers indicated that teachers often claimed that they had insufficient time to implement these strategies. This view is supported by what Gallagher (1985) indicated namely, considering the time available is a specific key that affects the decisions of the teacher when providing gifted education strategies.

In the current study, the interviews also indicated that the majority of supervisors and the two exemplary teachers believed that the large number of regular students in the regular class prevents teachers from using the strategies recommended in gifted
education. This finding confirms previous research that the presence of a large number of students per teacher prevents the teacher from using effective methods and strategies that take into account the individual needs of gifted students (Bates & Munday, 2005; Westberg & Daoust, 2003).

In the current study, the qualitative results indicated that one of the issues preventing teachers from providing effective strategies in gifted education is the legislation and policies for organising and facilitating teaching practices for the gifted in regular classrooms is not detailed enough in Saudi Arabia. This conclusion was confirmed by research on educational policy for the gifted in Saudi Arabia, which revealed that gifted education policies and national education development are not closely linked (Wallace & Eriksson, 2006). Further the gifted education policies are not sufficiently clear or detailed even to specialists in gifted education in Saudi Arabia (Abu-Nawas, 2006).

The lack of use of basic strategies such as enrichment, grouping, and acceleration in the Saudi regular learning environments, as indicated in the quantitative and qualitative results of the current study, does not meet the recommended practices in the gifted education literature. Studies and expert opinion consistently confirm the positive impact of the use of such strategies. For example, the use of enrichment strategies with gifted students in Saudi Arabia led to positive results in the acquisition of knowledge and specific skills (Abdul Jalil, 2005; Algamdi, 2011; Al Rajhi, 2005; Ismael, 1999; Ramel, 2010). The use of enrichment strategy with regular students also contributed to positive impacts in the academic and cognitive domain (Al Amer, 2004; Alkadr, 2000), indicating that the positive results from the use of advanced strategies such as enrichment with gifted and regular students provide support to studies that confirmed that the use of such
strategies to positively impact both gifted and regular students alike (Grant, 2003; Oakes, 1985; Tomlinson, 2005).

Modifying the content of the curriculum was discussed in question two. Both supervisors and exemplary teachers provided details about the possible causes that prevent Saudi teachers from modifying the curriculum for gifted students in the regular class. The length of the curriculum is one issue preventing the modification of the curriculum. These findings agree with Al-Saif’s (1998) study, which revealed that the rigorous commitment of teachers with specified regular curriculum and the length of the school curriculum as well as the density of the information contained in the school syllabus are considered the most important obstacles to gifted education at the elementary level.

Some supervisors believe that full-time teachers have the freedom to modify the content of the curriculum more than regular teachers. The researcher believes that the freedom to modify the content of the curriculum and the selection of activities available for full-time teachers likely have not helped in the use of curriculum-compacting practices, design enrichment units, or the provision of projects and contents at the advanced level. This conclusion has been confirmed by previous results (Al-Juhani, 2008; Al-Kasi, 2009).

Exemplary teachers and supervisors noted the difficulty in modifying the regular curricula or altering their contents. This is consistent with other research (Al-Saif, 1998; Al-Sharafi, 2003; Bin juma, 2006), which demonstrated that the contents of the regular curriculum and curriculum of school gifted programs do not contribute to meeting the needs of gifted students’ and are not commensurate with the abilities and characteristics of these students. Although participants in the interviews in the current study emphasized the importance of curriculum quality in improving
classroom practices for the gifted in regular classrooms, it cannot minimize the importance of the role of the teacher in enhancing the curriculum for gifted students even if the curriculum was long or inappropriate for these students. This is consistent with Tomlinson and McTighe (2006) who emphasize that regardless of the quality of the curriculum provided for the gifted students the teacher plays an essential role in creating a link between the basic needs of the students and the curriculum provided.

Supervisors’ and exemplary teachers’ responses revealed that gifted students in regular classes do not receive appropriate activities for their abilities. Rayani’s (2006) study confirmed that gifted students at the secondary level often choose specific activities that include extensive participation, such as computer courses and scientific trips, whereas short and non-intensive activities, such as school radio, received a low degree of gifted students’ choices. However, Al Shamri (2007) indicated that school radio was the most common activity in secondary schools in Saudi Arabia. This may explain the lack of appropriate activities provided for gifted students in Saudi schools. Other explanations for supervisors’ responses in the current study in terms of the lack of appropriate activities provided for gifted students can be verified through studies that investigate the kinds of activities provided in Saudi schools. The majority of activities offered in Saudi schools are activities with a theoretical nature, such as scientific education programmes (e.g., lectures, seminars, reading, and scientific films and library visits (Algamdi, 2008; Al Shamri, 2007; Alshedi, 2008) while activities requiring creative skills, such as scientific creative activities, environmental projects, and scientific skills courses, are not commonly offered (Algamdi, 2008; Alshedi, 2008).

In the current study, supervisors and exemplary teachers confirmed the lack of teachers appropriately trained to utilize effective activities recommended for use with
gifted students. This result is consistent with several Saudi studies that evaluated utilizing activities in Saudi schools and revealed a lack of a number of student activity advisors in schools, a lack of training courses in the field, a high teaching load, and a lack of teacher knowledge of the importance of activity. These reasons contributed to the lack of utilizing effective activities in Saudi schools (Alaheddb, 2002; Albassam, 2008; Alghabaoy, 2006; AlShamri, 2007).

Many supervisors indicated in their interviews that gifted students’ interest in regular classrooms are not considered enough when choosing tasks and activities. Exemplary teachers’ responses show that they face difficulties, especially in identifying gifted students’ interests and the regular students’ interests in general. Both supervisors and exemplary teachers confirmed that the lack of standardized criteria for identifying gifted students’ interests was a major reason for the neglect of such interests and the failure to provide appropriate opportunities to choose tasks and activities. The overall response of supervisors and exemplary teachers, as well as teachers’ responses to the CPQ questionnaire, indicates that it was likely that gifted students in regular classes do not choose the type of their product, method, or strategy that suits their interests or their abilities.

The lack of opportunities for gifted students to choose tasks and activities, as evident in the results of the current study, conflicts with the effective educational applications in gifted education provided by experts of gifted education, which includes providing the opportunity for gifted students to choose their tasks, activities, methods, and strategies according to the level of their interest when participating in various programmes for the gifted (Renzulli, 1985; Tomlinson, 1999; Tomlinson et al., 2002; VanTassel-Baska & Stambaugh, 2006).
Second, certain practices among exemplary teachers are recommended in gifted education. In the current study, exemplary teachers made several attempts to provide successful classroom practices for gifted students in the regular class. Their most successful practices included adding tasks and activities for the gifted in the weekly plan, teaching in small groups, using individualized teaching, and trying to identify gifted students’ interests. The researcher found that exemplary teachers were more able to overcome obstacles in teaching gifted students in regular classrooms. Their responses indicated that their classroom practices were better than most regular teachers’ practices and perhaps better than some full-time teacher practices. Exemplary teachers’ teaching practices, as indicated in this study, suggested that they utilise action skills in the regular classroom environment, taking into account individual differences and students’ interests while using the best aids and available learning tools. Many of these qualities agree with the effective teacher qualities in gifted education (Clark, 1996; Graffam, 2006; Winebrenner, 2001).

Factors that helped exemplary teachers improve their classroom practices for gifted students in the regular classroom, such as self-development, training, and simulations, confirmed the benefit of such opportunities on teachers’ development in research and studies conducted in gifted and general education (Churchill et al., 2011; Rogers, 2002b; Tyler & Miltone, 2006). In the current study, exemplary teachers reported that they felt like failures for neglecting gifted education in regular classrooms due to the fact that they are unable to modify the content of the regular curriculum, irregularity in providing grouping and enrichment activities, and cannot help or provide acceleration and advanced skills. They also noted their poor communication with students’ activities advisors, full-time teachers, and gifted students’ parents. These results reveal that teachers of gifted students in the current
study need administrative support, intensive training, and access to advanced materials and educational aids. The present study substantiates this claim as teachers who have had administrative support and access to effective training in gifted education have demonstrated more effective practices in teaching than teachers who have been unsupported by the administration and untrained (Gubbins et al., 2002; Rowley, 2008; Moon, Tomlinson, & Callahan, 1995; Tomlinson et al., 1995).

5.3 Recommendations

The researcher makes several recommendations for addressing the shortcomings in Saudi teachers’ knowledge, beliefs and classroom practices related to gifted students in regular classes. For example, the researcher recommends developing training programs for in-service teachers working with gifted students. Pre-service teachers need targeted professional development to enhance their knowledge and skills to modify the content of the curriculum, planning and implementation of advanced teaching strategies, providing effective activities for gifted students in regular classes. The research results confirmed the importance of training in-service teachers to identify and apply alternative educational services for gifted students in order to overcome the traditional education disadvantages in regular classes.

The researcher recommends reconsidering the criteria for selecting teachers of gifted students in Saudi Arabia. These criteria include intensive professional tests and interviews that examine cognitive, language, communicative, social and teaching competence of teachers of gifted students, in order to ensure that only successful and effective teachers have the opportunity to work with gifted students. The researcher also recommends increasing postgraduate degree opportunities in research related to gifted education, especially as the current study demonstrated that those who
completed Master’s and doctoral degrees are a minority in the current study sample compared to those with Bachelor’s degrees.

It is recommended that training programs for teachers of gifted students be re-evaluated to enhance their effectiveness. It is important to help teachers of gifted students in Saudi Arabia increase the use of enrichment strategies in regular classes. There is also a need to enact legislation and policies that organise the application of acceleration strategy in Saudi schools, persuading parents and school administrators to accept and encourage the use of acceleration in public schools and change any negative attitudes towards acceleration.

It is recommended that the syllabuses are developed so that they include suggested enrichment content as well as the standard curriculum. That may enable gifted students to broaden their knowledge and skills within the regular class. Such content might help eliminate students’ boredom and waiting and ensure that their needs are met and that they interact in regular classes.

The results of the current study showed the widespread use of methods and traditional teaching strategies lacking differentiation for different ability levels. The researcher recommends providing all supporting factors to change teacher’s beliefs and knowledge about the use of modern methods in regular classes with gifted students, such as providing professional development, providing the appropriate time to apply advanced strategies and facilitate learning resources and self-development, and encouraging regular teachers to simulate successful teachers in gifted education.

5.4 Limitations of the study

The researcher used mixed methods as a research method in order to achieve the goals of the study to identify the knowledge, beliefs and classroom practices used by teachers of gifted students in Saudi Arabia. Despite the fact that the Classroom
Practices Questionnaire (CPQ) is a tool used to determine classroom practices for gifted students in regular classrooms, the questionnaire items were confined to surveying various educational services in regular classrooms. The data collected should be expanded by incorporating additional tools to collect data from students, parents and gifted programme designers in order to provide a complete and extensive picture of school services for gifted students in Saudi Arabia. In addition, the researcher in the current study also used interviews with supervisors and exemplary teachers. Additional qualitative tools, such as observations or case studies, should also be used to enhance the credibility of the data from the interviews.

The current study was limited to teachers, supervisors and exemplary teachers. The researcher recognises the importance of collecting data from a sample of school principals and directors of gifted centres. Such data will help understand more of the type and quantity of learning services provided for gifted students within regular classes and in gifted programmes.

5.5 Suggestions for future research

The present study suggests several directions for future research. The researcher believes that, to expand our understanding of knowledge, beliefs and regular classroom practices for gifted students, it would be beneficial if further areas were investigated. Studies should examined the reasons and factors that constitute the knowledge and beliefs of teachers of gifted students in Saudi Arabia. In addition, future studies should compare the performance of specialist and non-specialist teachers of gifted students. Researchers could also investigate the obstacles that prevent the application of effective classroom practices with gifted students in regular classes and in gifted programmes. Finally, future studies should compare the
performance of teachers of gifted students in heterogeneous classrooms versus homogeneous classrooms.

5.6 Conclusion

The literature review revealed that few effective practices are used in regular classes to meet the needs of gifted students (Archambault et al., 1993). The results of the current study concur with those of Archambault et al (1993) as the current study indicated that effective classroom practices are not occurring sufficiently for gifted student in Saudi schools.

The results indicated that classroom practices that received a high rate of use with gifted and average students and that were applied on a daily basis included the use of discussions and questioning in teaching. Meanwhile, several effective classroom practices received low rates for their use with both gifted and average students, including practices related to writing skills, acceleration, curriculum modification, reading skills and grouping strategies. In this study, most classroom practices were applied more often with gifted students than with average students.

Qualitative results from supervisors’ interviews reaffirmed the weaknesses in knowledge, beliefs and practices of most teachers of gifted students in regular classrooms, particularly in terms of the lack of planning. Basic strategies such as enrichment, acceleration and grouping do not exist or are not applied enough. Few teachers modify the curriculum or use advanced teaching strategies, and no special activities for gifted students were used in regular classes.

Exemplary teachers’ responses indicated ambitious and successful attempts to provide tasks and homework activities using computers and scientific films as well as the use of individual teaching and attempts to identify gifted students’ interest and preferences in regular classrooms. The demographic results showed that female
teachers were better than male teachers in the use of classroom practices as demonstrated by the CPQ questionnaire results. In addition, teachers trained on questioning and discussions in workshops or seminars were more likely to implement the classroom practices with their gifted students compared to teachers without such training.

The results revealed no differences between specialist and non-specialist teachers in terms of their beliefs, knowledge and practices related to gifted education. There were also no statistically significant differences in teachers’ responses regarding their classroom practices with gifted students according to year of teaching, highest degree earned, and current grade level being taught.

Both the qualitative and quantitative results of the current study indicated weaknesses in knowledge, beliefs and practices of specialised and non-specialised teachers in regular classes in Saudi schools. The results of exemplary teachers’ interviews give hope and possibility that teachers might overcome obstacles and provide effective classroom practices for gifted students in regular classrooms. In addition, as no differences in the results emerged between specialised and non-specialised teachers in gifted education and between experienced teachers and teachers with less experience in terms of the lack of a significant impact of training, the results cast doubts on the criteria for selecting teachers of gifted students in Saudi Arabia, the quality of training programs for in-service teachers and the influence of teachers’ preparation programs.
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Teacher information

The researcher aims in this study to identify the nature of classroom practices that are used in the classroom where gifted and regular students study together in Saudi school. You have been selected for being teaching or had taught gifted and regular students together in one classroom. You can help the researcher to understand and identify the kinds of classroom practices and the extent and degree of using it in Saudi schools and that by finishing the attached questionnaire, which consists of three parts.

Please complete the questions below by putting an (X) on the one regarding yourself.

1- Gender □ male □ female

2- Year of teaching experience
□ 1-5 □ 6-10 □ 11-15 □ 16-20 □ 21 – above

3- Highest Degree Earned :
□ Bachelor’s degree
□ Master’s degree
□ A teaching diploma/ certificate
□ Other ……………………………..

4- Training in teaching of gifted students (check all that apply):
□ None
□ Workshop, Seminar
□ Short-term course

5- Employment status:
□ Fulltime teacher of the gifted. □ Regular teacher. □ Coordinator of gifted education.

6- Grade level now teaching:
Classroom Practices

This section is designed to obtain important information for planning, teaching strategies and evaluation you use when teaching average and gifted students in one classroom. It is very important that the answers you provide reflect actual practices.

Please use the following response scale based on the academic year to indicate what actually occurs in your classroom. Circle the most appropriate response. In the first column, respond for average students; in the second column respond for who are formally identified (or you believe) gifted.

0= Never                        3= A few times a week
1= Once a month, or less frequently 4= Daily
2 = A few times a month          5= More than once a day

<table>
<thead>
<tr>
<th>Item</th>
<th>Average Students</th>
<th>Gifted Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Use basic skills worksheets</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>2- Use enrichment worksheet</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>3- Assign reading of more advanced level work</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>4- Use self-directed instructional kits such as S.R.A</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>5- Assign reports</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>6- Assign projects or other work requiring extended time for students to complete</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>7- Assign book reports</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>8- Use activities such as puzzles or word searches</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>9- Give creative or expository writing assignments on topics selected by the teacher</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>10- Give creative or expository writing assignments on topics selected by the students</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>11- Make time available for students to pursue self-selected interests</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>12- Use pre-tests to determine if students have mastered the material covered in a particular unit or content area</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>13- Eliminate curricular material that students have mastered</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>14- Repeat instruction on the coverage of more difficult concepts for some students</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>15- Substitute different assignments for students who have mastered regular classroom work</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>16- Modify the instructional format for students who learn better using an alternative approach</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>17- Encourage students to move around the classroom to work in various locations</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>18- Allow students to leave the classroom to work in another location, such as the school library or media center</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>Item</td>
<td>Average students</td>
<td>Gifted students</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>19- Assign different homework based on students ability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20- Use learning centers to reinforce basic skills</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>21- Use enrichment centers</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>22- Teach thinking skills in the regular curriculum</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>23- Teach a unit on a thinking skills, such as critical thinking or</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>creative problem solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24- Participate in a competitive program focusing on thinking skills/</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>problem solving, such as Future Problem Solving, Odyssey of Mind, etc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25- Use contracts or management plans to help students organize</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>their independent study projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26- Provide time within the school day for students to work on their</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>independent study projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27- Allow students within your classroom to work from a higher</td>
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<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>grade level textbook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28- Provide a different curricular experience by using a more</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>advanced curriculum unit on a teacher-selected topic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29- Group students by ability across classroom at the same</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>grade level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30- Send students to a higher grade level for specific subject</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>area instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31- Establish interest groups which enable students to pursue</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>individual or small group interest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32- Consider students’ opinion in allocating time for various</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>subjects within your classroom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33- Provide opportunities for students to use programmed or self-</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>instructional materials at their own pace</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34- Give assignments that encourage students to organize their own</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
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<tr>
<td>work schedule to complete a long range project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35- Provide questions that encourage reasoning and logical thinking</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>36- Ask open-ended questions</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>37- Encourage students to ask higher -level questions</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>38- Encourage students participation in discussions</td>
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<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>39- Use computers</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
</tr>
</tbody>
</table>

Comments: please provide any comments you believe will help in understanding classroom practices within your school.

…………………………………………………………………………………………
………………………………………………………………………………………….
APPENDIX B TEACHERS QUESTIONNAIRE (ARABIC)
لاول - المعلومات الشخصية:

الرجاء التكرم بالإجابة على البيانات التالية بوضع علامته(ذكرة) في المربع أمام الإجابة المناسبة:

1- الجنس □ ذكر □ أنثى

2- عدد سنوات الخبرة في التدريس □ 0-5 □ 6-10 □ 11-16 □ 17-21 □ أكثر من 21

3- أعلى درجة علمية حصلت عليها بكارديوس □ ماجستير □ دبلوم □ غير ذالك □

4- الدورات التدريبية التي تم الإشارة بها في مجال تعلمي مهني مؤهل □ لاتشي □ ورشة عمل □ دورات قصيرة □

5- مهنة ووظيفتك □ معلم مقرر □ معلم عادي □ مساعد مهني □

6- المرحلة الدراسية التي تقوم بتدريسها □ ابتدائي □ متوسط □ تأسيسي □ أنتوني

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الثاني: الممارسات الصفية:

هذا القسم من الإستمارة صممه من أجل الحصول على معلومات هامة عن التخطيط واستراتيجيات ووسائل التدريس والتقييم الذي تستعمله عند تدريس طلاب موهوبين وعاديين في صف دراسي واحد. من المهم أن تعكس الأجابات التي تقدمها دورة رسمية في درج ممارسات الصفية.

نقداً على طريقة 49 ممارسة صحيحة يتم استخدامها في الفصول الدراسية التي تدرس فيها الطلاب الموهوبين والطلاب العاديين معاً.

أطلوب أن تتمكن مشغولان مشتركون بوضع دائرة على أحد الأرقام الخمسة والذي يحدد درجة و مدى استعمال كل ممارسة من الممارسات الصفية 49 الوردة. القسم الأول: تصفح الممارسة مع الموهوبين وقسم الثاني: تصفح الممارسة مع الطلاب العاديين.

شرح ارقام الاستجابة في المقياس التالي:

(درجة استعمال الممارسة في الصف)

4 = أكثر من مرة في اليوم.
3 = يومياً.
2 = مرة في الشهر او أقل.
1 = مرة كل ثلاثة شهور.
0 = صفر لا تستخدم أبداً.

<table>
<thead>
<tr>
<th>الطلاب الموهوبين</th>
<th>الطلاب العاديين</th>
<th>الممارسة الصفية</th>
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<tr>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>1- استخدم المهارات الأساسية لتحقيق جداول الامام.</td>
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<tr>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>2- استخدم جدول اعمال الآلات.</td>
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<td>3- خصص وقتاً لقراءة اعمال ذات مستوى متقدم.</td>
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<td>0 1 2 3 4 5 6 7 8 9</td>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>4- استخدم طرق تشجيع ذاتية.</td>
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<tr>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>5- كفك الطلاب بعمل طويلاً.</td>
</tr>
<tr>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>6- كفك الطلاب بالشاريع أو أعمال أخرى يطلبوا اكتشافهما عديد الوقت</td>
</tr>
<tr>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>7- كفك الطلاب بطلب تقرير عن الكتب</td>
</tr>
<tr>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>8- استعمل انضباط مثل التركيبات والبحث عن الكلمات.</td>
</tr>
<tr>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>9- قدم الإجابات أو المهام في الكتابة التصويرية من مواضيع مختارة من العلم</td>
</tr>
<tr>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>0 1 2 3 4 5 6 7 8 9</td>
<td>10- اقدم الإجابات أو المهام في الكتابة التصويرية من مواضيع مختارة من الطلاب.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>الجملة</th>
<th>الرمز</th>
<th>الجملة</th>
<th>الرمز</th>
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</thead>
<tbody>
<tr>
<td>1. اجتماع الطلاب والفرقة يقضون يعمل ما يجعلهم.</td>
<td>2 3 4 5 6 7 8 9 0 1 2 3 4 5</td>
<td>1. اجتماع الطلاب والفرقة يقضون يعمل ما يجعلهم.</td>
<td>2 3 4 5 6 7 8 9 0 1 2 3 4 5</td>
</tr>
<tr>
<td>2. تجربة وقفي بيض (القبي) لللدل من مستوى فهم و اتقان اللفظية الوحدة تعليمية أو مستوى معين.</td>
<td>1 2 3 4 5</td>
<td>2. تجربة وقفي بيض (القبي) لللدل من مستوى فهم و اتقان اللفظية الوحدة تعليمية أو مستوى معين.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. بعض النجاح أو التحدي من الهندية التي تبين أن الطلاب ملتزمون لها.</td>
<td>1 2 3 4 5</td>
<td>3. بعض النجاح أو التحدي من الهندية التي تبين أن الطلاب ملتزمون لها.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. اجتياز الدرس بواسطة تدريس الفرضيات أو الهدف الصعب على معظم الطلاب.</td>
<td>1 2 3 4 5</td>
<td>4. اجتياز الدرس بواسطة تدريس الفرضيات أو الهدف الصعب على معظم الطلاب.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. اجتياز المهارات والعمل الفعلي للطلاب الذين يقضون العمل في الميدان.</td>
<td>1 2 3 4 5</td>
<td>5. اجتياز المهارات والعمل الفعلي للطلاب الذين يقضون العمل في الميدان.</td>
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</tr>
<tr>
<td>6. اجتياز الدرس من طلاب الذين يعملون بشكل أفضل حيث استعملوا أساليب فيديو وثائقيتهم.</td>
<td>1 2 3 4 5</td>
<td>6. اجتياز الدرس من طلاب الذين يعملون بشكل أفضل حيث استعملوا أساليب فيديو وثائقيتهم.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. اجتياز الطلاب على التهيئة من قاعة الصف الدراسي للعمل في أماكن وقائيات متنوعة.</td>
<td>1 2 3 4 5</td>
<td>7. اجتياز الطلاب على التهيئة من قاعة الصف الدراسي للعمل في أماكن وقائيات متنوعة.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. تعزز مهارات الطلاب الأساسي.</td>
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<td>8. تعزز مهارات الطلاب الأساسي.</td>
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<td>9. تعزز مهارات الطلاب الأساسي.</td>
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<td>10. تعزز مهارات الطلاب الأساسي.</td>
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<tr>
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- تحديد متوسط مجموع من الطلاب على أساس اهتمامهم بحل
- يمكن الطلاب من محاولة اختراعي أو أكثر مجموعات
- صيغة من الطلاب في ممارسة احتمالية المشتركة

- 1-2-3: ينتمي في بعض الأحيان، وحترم أرا، تلاميذ الصف عندما
- مواقف مزمنة متعددة في الوقت المخصص

- 2-2: تضمن الطلاب لتمكين المواد والمواد
- التعليم الثانوي وفقاً لسرية تعليم

- 2-4: أغلب الطلاب مهتمون في تنظيم جهود اعمالهم
- في المراحل المتقدمة براحة المحيط

- 2-5: أخرج استنتاج على الاستنتاج والتفكير النقدي.

- 2-6: أقسام الطلاب داخل الاستنتاج الاستنتاج والتفكير النقدي.

- 2-7: أحمل الطلاب على خرج استنتاج استنتاج الاستنتاج

- 2-8: أظهر الطلاب على المشاركة في المناقشات

- 2-9: استعمل الكمبيوتر مع طلاب

ملحوظة:
من قسم الفكير الكوري بخصوص أي تعليق إضافي تعتبر أنه سوف يساعد الباحث في فهم ومعرفة الممارسات الصفية
داخل مدرستك.
APPENDIX C INFORMATION AND CONSENT FORMS FOR TEACHERS
Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia

**Information Sheet for Teachers**

The researcher is conducting a study on Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia, which is required for a PhD degree from the Faculty of Education at the University of Wollongong, Australia. You are invited to participate in this study as you are teaching or have taught gifted and regular students together in one classroom.

**What is the purpose of this study?**

The researcher aims to identify classroom practices that are used with gifted and regular students who study in one classroom environment. The researcher aims also to try to monitor the impact of some variables related to teacher knowledge and practices where there are gifted and regular students together in one classroom. The questionnaire contains 39 classroom practices that teachers use in classes where there are gifted and regular students. The chosen practices represent a diverse group that fall under planning skills, strategies and teaching methods, techniques, activities and methods of evaluation.

**Procedures:**

If you agree to participate in this study, it will take about 20 minutes to complete the following questionnaire. Just circle the number that describes your practice from (0 to 5) where the number you have chosen indicates the extent of your real use of each classroom practice. The first section indicates the practices used with the average students, and the second section, indicates the extent of using classroom practices with gifted students.

**Confidentiality:**

All responses to this survey are confidential. Your responses will remain anonymous and no identifying information will be recorded.

**Voluntary Nature of the Study:**

The researcher appreciates your cooperation and your participation and confirms that your participation in answering the questionnaire is voluntary, and you have the right to withdraw from the study prior to data collection without penalty. And it is not possible to withdraw data once the questionnaire is submitted.

**Contacts and Questions:**

If there are any questions about this research survey, I would appreciate them. Do not hesitate to contact me at (note: this phone number will be added when the candidate returns to Saudi Arabia to collect data) or Fax (04) 8340978 or via my email address at: mad215@uow.edu.au or you could contact Professor Wilma.
Vialle. Faculty of Education on (+61+2) 4221 4434 or via email at: wvialle@uow.edu.au

If you have any concerns or complaints about the conduct of this research, you can contact the Ethics Officer. Human Research Ethics Committee. University of Wollongong, Australia, (+61+2) 42214457 or via email at: research_services@uow.edu.au

Sincerely,

Maher Aljuwaiber
Faculty of Education
University of Wollongong,
Australia.
Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia

Consent Form for Teachers

Dear Teacher,
You are invited to participate in a study that focuses on Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia

The attached is a survey, which is aims to investigate Teacher knowledge and beliefs in relation to classroom practices that teachers used when teaching gifted and regular students in one classroom.

The researcher appreciates your cooperation and your contribution on the nature of classroom practices that are used in classes where there are gifted and regular students. Your participation in this questionnaire will take 15 -20 minutes.

By signing the form, you hereby agree to participate in this study, and you may withdraw from this study prior to data collection without penalty. The information you provide will be used in a PhD thesis and journal publication and you consent for it to be used in that way.

Please notice if you have any questions about the research, you can contact the researcher on (note: this phone number will be added when the candidate returns to Saudi Arabia to collect data), or Professor Wilma Vialle. Faculty of Education on (+ 61+2) 4221 4434 or via email at: wvialle@uow.edu.au

If you have any concerns or complaints about the conduct of this research, you can contact the Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong, Australia on (+61+2) 4221 4457 or via email at: research_services@uow.edu.au

Teacher’s Name: ............... 

Signature: ........................  Date: ....../........./........
APPENDIX D INFORMATION AND CONSENT FORMS FOR TEACHERS (ARABIC)
استمارة للمعلم

أخي المعلم، أختني المعلمة
يُجري البحث دراسة عن "معارف ومعتقدات المعلمين المرتبطة بممارسات الصف للمعلمين الموثوقين في السعودية" وهو
منطقة تركز على درجة الدكتوراه من كلية التربية جامعة ولونجونغ أستراليا.

أنت مدعو للمشاركة في الاستمارة المرفقа لكيك ترس أو سبق أن قد شعر المعلمين والمعلموين والمعلمات معًا في
قاعة درسية أو صف دراسي واحد.

الهدف:

يسعى البحث من الناحية إلى تعرف طبيعة ممارسات الصف التي تستخدم مع الطلاب المتقدمين والمعلمين والمعلمات معًا.
الذين يدرسون معاً في بيئة تعليمية واحدة، حيث يهدف البحث بشكل مبكر تأثير بعض التغييرات التي تتعلق
باليوم على ممارسة وآرائهم ذات الصلة بالممارسات الصفية في الصف المختلط بين الطلاب المتقدمين والمعلمين والمعلمات معًا.

الاستمارة:

صممت هذه الاستمارة بحيث تتضمن 39 ممارسة صفية يستخدمها المعلمين في الفصول الدراسية التي تدرس فيها الطلاب المتقدمين والمعلمين والمعلمات معًا. جميع الممارسات التي تم اختيارها مجموعة متوقعة تدرج تحت مهارات تخطيطية، استراتيجيات، وطرق تدريس لتقييم، ونظام تقييم.

الإجراءات والإجراءات الزمنية:

الخطوات التي تتضمن مشروعاً بوضوح دائمًا على أحد الأرقام الواقعة من (5) إلى (5) عام كل ممارسة، حيث
يثير الرموز تشكيلًا بتخصيص إلى درجة استعمال المختلفة لكل ممارسة صيفية في الفترة الأولى. درجة استعمالها مع
طلاب المعلمين، وفي الربع الثاني، درجة استعمال الممارسات الصيفية مع الطلاب المتقدمين، كما يوجد في نهاية
الاستمارة مجال للإجابة على الاستمارات الصيفية في الفصول المعنية في مدرستكم.

إليك على الاستمارة يستغرق من 15-20 دقيقة.

النقاط وأمتى المعلومات:

يجب أن تعرف أننتج وتوضيحًا لها بالأنثى إلى الوظائف المتاحة بالبحث كما يتعين البحث بفاعل
سرية المعلومات الخاصة التي تزود في أجابتك وسوف لا تستخدم الآلات البحث العلمي.

طبيعة المشاركة في الدراسة:

يتم قراءة البحث وشركتك وأنت تعتقد أن مشاركتك في الاستمارة على الاستمارة هي تطبيقية لهذا فهمك.
تودين عدم المشاركة في إجاباتك أو أي وقت.

للإتصال واللاستفسار:

إذا كان لديك أي استفسار أو أي استفسار أو أي استفسار إجازة إجابة الاستمارة فإننا نحتاج إلى
المعلم، إجابة الطلب أو إذا كان لديك أي استفسار أو استفسار إجازة إجابة الاستمارة فإننا نحتاج إلى
The Ethics Officer,
Human Research Ethics Committee,
University of Wollongong, Australia on (+61) 4221 4457

الباحث / ماهر عامر
كلية التربية / جامعة ولونجونغ - أستراليا

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APPENDIX E SUPERVISORS AND EXEMPLARY TEACHERS
INTERVIEW QUESTIONS
Classroom Practices Interview

Please review these questions before the scheduled interview:

The interview will include the following questions in the order listed below.

1- Do you believe that teachers of gifted students adequately plan their classroom practices? Can you provide examples of effective practices? ineffective?

2- a. To what extent do you think that teachers of gifted students use the strategies of enrichment?

   b. To what extent do you think that teachers of gifted students use the strategies of grouping?

   c. To what extent do you think that teachers of gifted students use the strategies of acceleration in regular classroom?

3- To what extent do you think that teachers of gifted students modify regular classroom environment to meet the needs of gifted students?

4- To what extent do you think that teachers of gifted students modify curriculum content to meet the needs of gifted students?

5- Do you believe that teachers of gifted students apply appropriate methods and teaching strategies for gifted students in regular classroom? Examples?

6 - Do you believe that gifted students in regular classroom receive adequate activities from their teachers in regular classroom?

7- To what extent do you think that teachers of gifted students takes into account the tendencies and interests of gifted students in regular classroom?

8- To what extent do you think that teachers of gifted students use appropriate means and instructional aids when they apply classroom practices in regular classroom? Examples?

9- To what extent do you think that teachers of gifted students contribute to the development of gifted advanced skills in regular classroom? Describe the skills that are developed?

10- In your opinion what are the most important characteristics a teacher should possess to be an effective educator of gifted students?
APPENDIX F SUPERVISORS AND EXEMPLARY TEACHERS INTERVIEW QUESTIONS (ARABIC)
استملكة مقابلة حول الممارسات الصفية

من فضلك تعلق على الاستمالة قبل البدء في المقابلة.

نتقدمгласماك على الاستمالة الآتية:

1- هل تعتقد أن معلم الطلاب المهووسين يخطط الممارسات الصفية بكفاءة؟ هل يمكنك أن تقدم أمثلة للممارسات الفعالة والمرشبات غير فعالة التي تستخدم مع المهوسين في الفصول العادية؟

2- إلى أي مدى تعتقد أن معلم الطلاب المهوسين يستخدم استراتيجيات الإثراء في الفصول العادية؟

3- إلى أي مدى تعتقد أن معلم الطلاب المهوسين يستخدم استراتيجيات التجميع في الفصول العادية؟

4- إلى أي مدى تعتقد أن معلم الطلاب المهوسين يتحلى بيئة الصف الصادقة لكلية إجتيازات الطلاب المهوسين؟

5- هل تعتقد أن معلم الطلاب المهوسين يطبق طرق واستراتيجيات تدريس متاسبة للطلاب المهوسين في الفصول العادية؟

6- هل تعتقد أن الطلاب المهوسين في الفصول الدرازية العادية يتلقون إشادة كافية من معلميهم في الفصول العادية؟

7- إلى أي مدى تعتقد أن معلمي الطلاب المهوسين يتكوينون معن الإحترام مولي إهتمامات الطلاب المهوسين في الفصول العادية؟

8- إلى أي مدى تعتقد أن معلم الطلاب المهوسين يستخدم الوسائل والأدوات التعليمية المناسبة عندما يطبقون الممارسات الصفية في الفصول العادية؟

9- إلى أي مدى تعتقد أن معلم الطلاب المهوسين يساهم في تطوير مهارات متقدمة للطلاب المهوسين في الفصول العادية؟

10- في رأيك ما هي أهم خصائص المعلم الذي يجب أن يحتوي بها المعلم ليكون ملماً فعالة في تدريس المهوسين؟
Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia

Information Sheet For Supervisors
The researcher is conducting a study on Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia, which is required for a PhD degree from the Faculty of Education at the University of Wollongong, Australia. You are invited to participate in this study, as you have already supervised teachers who teach gifted and regular students together in one classroom.

What is the purpose of this study?
The researcher aims to identify classroom practices that are used with gifted and regular students who study in one classroom environment. The researcher aims also to try to investigate the impact of some variables related to teacher knowledge and practices where there are gifted and regular students together in one classroom. The interview consists of 10 open ended questions related to classroom practices that teachers use in classes where there are gifted and regular students. The practices that have been selected represent a diverse group and fall under planning skills, strategies and teaching methods, techniques, activities and methods of evaluation.

Procedures:
If you decide to participate, you will be asked to take part in an interview face to face to answer some questions based on your experience in supervising teachers. The interview will take approximately 25 minutes. The interview will be audio taped. An example of questions that you may be asked include: To what extent do you think that teachers of gifted students use the strategies of enrichment? To what extent do you think that teachers of gifted students modify regular classroom environment to meet the needs of gifted students?

Confidentiality:
Audio recordings will be used for the sole purpose of accurate transcription to check for accuracy, after which the audio recordings will be destroyed. Confidentiality is assured and supervisors will not be identified in any part of the research.
Voluntary Nature of the Study:
Your anticipated participation in this study is appreciated and confirms that your participation in answering the questions is voluntary, and you are free to refuse to participate and withdraw from the interview at any time.

Contacts and Questions:
If there are any questions about this study, I would appreciate them. Do not hesitate to contact me at (note: this phone number will be added when the candidate returns to Saudi Arabia to collect data) or Fax (04) 8340978 or via my email address at: mad215@uow.edu.au or you could contact Professor Wilma Vialle. Faculty of Education on (+61+2) 4221 4434 or via email at: wvialle@uow.edu.au
If you have any concerns or complaints about the conduct of this research, you can contact the Ethics Officer. Human Research Ethics Committee. University of Wollongong, Australia, (+61+2) 42214457 or via email at: research_services@uow.edu.au

Yours sincerely,

Maher Aljuwaiber
Faculty of Education
University of Wollongong,
Australia.
Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia

Consent Form for Supervisors

Dear Supervisor,

You are invited to participate in a study that focuses on Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia.

You had been nominated by the Department of Education to take part in this study. The interview will consist of 10 open ended questions related to classroom practices that teachers used in classes where there are gifted and regular students.

Your anticipated participation in this interview is gratefully appreciated and the researcher thanks your cooperation and your contribution of classroom practices that are used in classes where there are gifted and regular students. The interview will take approximately 25 minutes.

By signing the form, you hereby agree to participate in this study, and you may withdraw from this interview prior to data collection without penalty. The information you provide will be used in a PhD thesis and journal publication and you consent for it to be used in that way.

Please notice if you have any questions about the research, you can contact the researcher on (note: this phone number will be added when the candidate returns to Saudi Arabia to collect data), or Professor Wilma Vialle. Faculty of Education on (+61+2) 4221 4434 or via email at: wvialle@uow.edu.au

If you have any concerns or complaints about the conduct of this research, you can contact the Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong, Australia on (+61+2) 4221 4457 or via email at: research_services@uow.edu.au

I have read the statement contained herein, have had the opportunity to fully discuss my concerns and my questions, and fully understand the nature and the character of my involvement in this study as a participant. I hereby agree to have my interview with Mr. Maher Aljuwaiber for the purpose of his research, and I further agree to have my interview audiotape.

Supervisor’s Name: ……………

Signature: …………………….. Date: ……/………/..…..
Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia

**Information Sheet For Exemplary Teachers**

The researcher is conducting a study on Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia, which is required for a PhD degree from the Faculty of Education at the University of Wollongong, Australia. You are invited to participate in this study, as you are one of the exemplary teachers who teach gifted and regular students together in one classroom. You have been nominated by your supervisor to take part in this study, which will benefit from your experience as a teacher of gifted and regular students.

**What is the purpose of this study?**

The researcher aims to identify the nature of classroom practices that are used with gifted and regular students who study in the regular classroom environment. The researcher aims also to try to investigate the impact of some variables related to teacher knowledge and practices where there are gifted and regular students together in one classroom. The interview consists of 10 open ended questions related to classroom practices that teachers use in classes where there are gifted and regular students. The practices that have been selected represent a diverse group and fall under planning skills, strategies and teaching methods, techniques, activities and methods of evaluation.

**Procedures:**

If you decide to participate, you will be asked to take part in an interview face to face to answer some questions based on your experience in teaching gifted and regular students in one classroom. The interview will take approximately 25 minutes. The interview will be audio taped. An example of questions that you may be asked include: To what extent do you think that teachers of gifted students use the strategies of enrichment? To what extent do you think that teachers of gifted students modify regular classroom environment to meet the needs of gifted students?
Confidentiality:
Audio recordings will be used for the sole purpose of accurate transcription to check for accuracy, after which the audio recordings will be destroyed. Confidentiality is assured and teachers will not be identified in any part of the research.

Voluntary Nature of the Study:
The researcher appreciates your cooperation and your participation and confirms that your participation in answering the questions is voluntary, and you are free to refuse to participate and withdraw from the research at any time.

Contacts and Questions:
If there are any questions about this study, I would appreciate them. Do not hesitate to contact me at ( note: this phone number will be added when the candidate returns to Saudi Arabia to collect data) or Fax (04) 8340978 or via my email address at: mad215@uow.edu.au or you could contact Professor Wilma Vialle. Faculty of Education on (+ 61+2) 4221 4434 or via email at: wvialle@uow.edu.au
If you have any concerns or complaints about the conduct of this research, you can contact the :Ethics Officer. Human Research Ethics Committee. University of Wollongong, Australia, (+61+2) 42214457 or via email at: research_services@uow.edu.au

Yours sincerely,

Maher Aljuwaiber
Faculty of Education
University of Wollongong,
Australia.
Consent Form for Exemplary Teachers

Dear Teacher,
You are invited to participate in a study that focuses on Teacher knowledge and beliefs in relation to classroom practices for gifted students in Saudi Arabia.

You had been nominated by your supervisor to take part in this study. The interview will consist of 10 open ended questions related to classroom practices that teachers used in classes where there are gifted and regular students.

Your anticipated participation in this interview is gratefully appreciated and the researcher thanks your cooperation and your contribution of classroom practices that are used in classes where there are gifted and regular students. The interview will take approximately 25 minutes.

By signing the form, you hereby agree to participate in this study, and you may withdraw from this interview prior to data collection without penalty. The information you provide will be used in a PhD thesis and journal publication and you consent for it to be used in that way.

Please notice if you have any questions about the research, you can contact the researcher on (note: this phone number will be added when the candidate returns to Saudi Arabia to collect data), or Professor Wilma Vialle. Faculty of Education on (+61+2) 4221 4434 or via email at: wvialle@uow.edu.au.

If you have any concerns or complaints about the conduct of this research, you can contact the Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong, Australia on (+61+2) 4221 4457 or via email at: research_services@uow.edu.au.

I have read the statement contained herein, have had the opportunity to fully discuss my concerns and my questions, and fully understand the nature and the character of my involvement in this study as a participant. I hereby agree to have my interview with Mr. Maher Aljuwaiber for the purpose of his research, and I further agree to have my interview audiotaped.

Teacher’s Name: ……………
Signature: ……………………… Date: ……/………/..…..
APPENDIX H INFORMATION AND CONSENT FORMS FOR SUPERVISORS & EXEMPLARY TEACHERS (ARABIC)
أخي الشرف التربوي

يرجى الباحث أن يقبل ملاحظات وفقاً للمعترف والمعارف الممثلة بدراسات الصف للطلاب المراهقين في السعودية، وهو مماثل لفترة دراسة لدكتوراة من كلية التربية بجامعة ويلينغتون-نيوزيلندا.

انتماء الباحث له في هذه الدراسة لطموحه لتفوق أو سبق أن أشرف عليه مع تزامن بتدريب الطلاب المراهقين والعاديين معًا في مجال تدريس أو صف دراسي واحد.

هدف الدراسة:

يسعى الباحث إلى تحقق علم ممارسات الصف التي تستخدم مع الطلاب المراهقين والطلاب العاديين الذين يدرسون معًا في صف تعليمي واحد. يهدف الباحث كذلك إلى محاولة رصد تأثير بعض الممارسات التي تتعلق بالعلم على معرفة ومحورالت البالغين الطلاب المراهقين في الصف المختلط بين طلاب مراهقين وعاديين.

القابلية:

صممت هذه الدراسة بحيث تتضمن عشرة أسئلة مفتوحة الإجابة تتناول أسلوب التعلم محور ذات صلة بالممارسات الصفية التي يستخدمها المعلمون في الصف المختلط المراهقون والعاديون معًا. تتمثل الممارسات التي تم اختيارها في مجموعة من متغيرات تدريس متعددة وطرق تدريس تقليدية، أنشطة واساليب تقييم.

الإجراءات والالتزامات:

تطلب استخدام مساعدة الإستماع إلى العشرة أسئلة التي سوف يقوم بطرحها الباحث أو من ينبغ عنه معرفة لهم ثم الإجابة عليها بدآً على إجراءات على المعلمين، سوف تستغرق الدراسة حوالي 25 دقيقة وسوف تكون القابلية عقلية صممتا من أجل تحري الدقة عند تقدير البيانات.

النقطة وأهمية المعلومات:

إن مهمة إجابة ووضعها لها بالثراء في الاستماع إلى النتائج الواقعية المرجوة من البحث، كما يتعهد الباحث بضمان سهولة المعلومات الخاصة التي ترد في إجابة ووضع أسئلة البحث العلمي، كما سيتم التحليل من جميع النتائج الصورية للقابلية بعد ترتيبها وتصنيفها وتحليلها.

طبيعة المشاركة في الدراسة:

يرجى الباحث والمشارك تذكر wielding مشتركت في المشاركة في المقابلية والبحث الشاملة باستماع رسمي، أو في العالم الذي تقدمه، ودائمًا في مجال التربوية.

مجالات الاستخدام المحتملة من البحث:

إعداد البحث سوف تكون في أطرة الدكتوراه للباحث، وربما يتم النشر في المجالات التربوية.

لاستعمال والإستفادة:

إذا كان لديك أي استفسار إرادة البحث فبإمكانك الإتصال على (هذا الرقم سوف يضاف عند رفعة ترشيح إلى السعودية لجمع البيانات) أو إذا كان لديك أي تعليق أو استفسار إرادة إجراء الدراسة في استماعات الإتصال على:

The Ethics Officer,
Human Research Ethics Committee,
University of Wollongong, Australia on (+61+2) 4221 4457

الباحث / ماهر الجيور
كلية التربية / جامعة ويلينغتون - أستراليا

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نموذج إقرار بالموافقة على مشاركة

أخي المشرف التربوي،

يسودني أن تكون أحد المشاركين ضمن عينة بحث الدكتوراه المقدم من الدراسة التي تجري في جامعة ولونغونغ بإستراليا بعنوان "معارف ومعتقدات الطلاب المرتبطة بالممارسات الصفية للطلاب المعرضين في الفصول الدراسية في السعودية "

لقد تم تنفيذ هذا البحث ضمن بيئة التدريس للطلاب المعرضين للإشراف والتعليم، حيث تستخدم التمثيلية الفيزيائية لاتخاذ الفقراء في تحقيق أهداف البحث وتعزيز الممارسة الصفية في السعودية.

عند ترسيم الطلاب المعرضين وطلاب العلوم، ما في صف دراسي واحد.

يقدر الباحث ويشكر معاونتك ومساعدتك في معرفة وتفعيل طبيعة الممارسات الصفية التي تستخدم في الصفوف المختلفة بين الطلاب المعرضين والغيرهم، مما سوف تستغرق مشاركتك في المقابلة مع الباحث أو من بينك عنه حوالي 35 دقيقة. 

أخي المشرف إن توافقك على هذه الوثيقة يعني موافقتك على المشاركة في هذه المقابلة، ويجب أن تضمن حقك في الحفاظ على سرية المعلومات الشخصية والبيانات وعدم استخدامها إلا للغات البحث العلمي، كما أن لك الحق في عدم المشاركة أو الإطاحة، وتوقف عن المشاركة في أي وقت وأخيرا يمكن الإطلاع والتواصل من إجراءات البحث أو من الدراسة من خلال الإتصال بالباحث على الهاتف ( ) أو التواصل مع:

The Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong, Australia on (+61 2) 4221 4457.

... من خلال التوقيع أدناه، فأنا أوافق على الآتي:
1- المشارك في الدراسة.
2- الإطلاع على استخراج المقابلة لحوالي 25 دقيقة.
3- تسجيل المقابلة صوتياً، وإستخدام البيانات من مشاركتي عند النشر في طريقة الدكتوراه أو في المجلات التربوية.

.............................................................

اسم المشرف التربوي:..........................................

.............................................................

التوقيع بالموافقة:...........................................

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التاريخ:.........................................................
أخي العالم المثالي ...

يرجى الباحثة دراسة عبارة "تعارف ومبادئ الاعتقادات المذكورة، بحث ممارسات الصف لطلاب الامور في السعودية"، وتشمل تقييمات، ودراسة الجدوى من كلية التربية بجامعة ولونغونغ، استрукتيرياً. 

لا يمكننا المشاركة في هذه المقالة كونك أحد المعلمين المشاركين الذين يقومون بتدريب الطلاب الاموريين والآخرين بما تحدث عنه في قاعة تدريس أو صف دراسي واحد، ولقد تم ترشيحك من قبل مشاركة التزويدي لكونك مشاركًا في هذه المقالة والبدائل، من خبراتك كمعلم طلاب الاموريين والآخرين في ذلك واحد.

الهدف:

يسعى الباحث من الدراسة أن تعرف طريقة ممارسات الصف التي تستخدم مع طلاب الاموريين والآخرين الذين يدرسون معاً في برنامج تعليمي واحد، بهدف الباحث في ذلك إلى ما هو رصد تأثير بعض المتغيرات التي تتعلق بالتعليم على ممارسات ومتغيرات ذات الصلة بالمسار المهني والصفختلف بين طلاب سودانيين ومغانيين للفئات.

المقدمية:

صحت هذه المقالة حيث تتضمن عبارة "لاستقلالية بحثية" تنال أسلطة المقابلة محاول خطوة ذات صلة بالممارسات الامورية التي يستخدمها المعلمين في الصناع التي يدرس فيها الطلاب المغانيين والمغانيين معًا. تتمثل الممارسات التي تم اختيارها مجموعة متنوعة تدرج تحت مهارات مهنية، استراتيجيات وطرق تدريس تقنيات، "أنشطة واسمه تقييم.

الأغراض والمتطلبات الرمزية:

الطابع، هناك القليل من تدريج مشتركاً بالإسماع الي بعدة أسلوبية أو يقترحها الباحث أو من ينوي عنه، يجب أن يعطيه ثم الإجابة عليها بناءً على خبرتي في تدريس طلاب الاموريين ومغانيين معًا في صف دراسي واحد، سوف تستخدم المقابلة حوالي 25 دقيقة وسوف تكون المقابلة مسجلة صوتياً من أجل تحري الدقة عند تحليل البيانات.

المؤثرات أو الملاحظات:

إذا دفعت إجابة، وأهميتها لها بالآثر في الصناع، في النتائج الواقعية المرجوة من البحث، كما يتعهد الباحث بضمان سهولة البيانات الخاصة التي ترف في إجابة، وسوف لن يستخدم الآلات البحث العلمي، كما سيتم التخلص من جميع التحديات الصوفي المقابلة بعد تكريرها وتصنيفها وتحليلها.

طبيعة المشاركة في الدراسة:

يقدر الباحث بتشكك، ومشاركتك في المقابلة بالإضافة من الإجابة على الأسئلة في تطويره. هذا، فلن تجد الحق في عدم المشاركة ويتطلب النتائج في أي وقت.

ملاحظات الإستقدام المحتلة من البحث:

بإستفسار وإستفسار:

إذا كان لديك أي استفسار أو إستفسار حول إجابة الباحث، أو إذا كان لديك أي تعليق، أو استفسار إجابة الإعلان في مستندات الإتصال على:

The Ethics Oﬃcer,
Human Research Ethics Committee,
University of Wollongong, Australia on (+61+2) 4221 4457

الباحث/ ماهر الجوهر
كلية التربية/ جامعة ولونغونغ - أستراليا
أخي العلم المتألق... 

يسريني أن تكون أحد المشاركين ضمن عينة بحث الدكتوراه المقدم من الباحث الذي جامعة ويلينغتون بإستراليا بعنوان "معارف ومعتقدات المعلمين المرتبطة بالمارسات الصفية للطلاب الموهوبين في الفصول العامة في السعودية". لقد تم ترشيحك من قبل المشرف التربوي الخاص بجامعة تكتك لقيادة تلقيي من عشرة أسئلة تهدف إلى التحقق من معارف ومعتقدات المعلمين والمعلمات ذات الصلة بالمارسات الصفية التي يستخدمها المعلمين في السعودية عند تدريس الطلاب الموهوبين والعاليين معاً في صف دراسي واحد.

يقدر الباحث ويشكر تعاويك وساهمتك في معرفة وتكبب طبيعة الممارسات الصفية التي تستخدم في الصفوف المختلفة بين الطلاب الموهوبين والعاليين معاً وسأперед مشاركك في الدراسة مع الباحث أو من ينوب عنه حوالي 60 دقيقة.

أخي المشارك... إن توقيت مثل هذه الورقة يعني موافتك على المشاركة في هذه الدراسة ويجب أن يكون ذلك ضمن حقل في الحفاظ على سرية المعلومات الشخصية والبيانات وعدم استخدامها إلا للغات البحث العلمي. كما أنك حق في عدم المشاركة أو الإبرام والتوقف عن المشاركة في أي وقت وتأتي بمثابة الاستفسار والتاليد من إجراءات البحث أو عن الدائرة من خلال الإتصال بالباحث على الهاتف ( ) أو التواصل مع

The Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong, Australia on (+61+2) 4221 4457.

...من خلال التوقيع أدناه فإنني أوافق على الآتي:
1- المشاركة في الدراسة.
2- الإفصاح عن أسئلة المقابلة لحوالي 25 دقيقة.
3- تسجيل المقابلة صوتياً، وإستخدام البيانات من مشاركتي عند النشر في طروحة الدكتوراه أو في المجلات التربوية.

اسم المعلم:

..................................................
التوقيع بالموافقة:

..................................................
التاريخ:..............................
APPENDIX I MINISTRY OF EDUCATION APPROVAL LETTERS
المعالي: نائب وزير التربية والتعليم
السلام عليكم ورحمة الله وبركاتكم.
أما بعد:

نفدي سعادته بأن المحاضر/ ماهر بن عبد العزيز الجويري مبتعد من الكلية إلى استراليا لدراسة الدكتوراه في تخصص تعليم الموهوبين والمتفوقين ويجري دراسته بعنوان "ممارسات المعلمين ذات العلاقة بممارسات التدريس للطلاب الموهوبين في السعودية" ورغب في توزيع استبائه دراسته على عينة من معلمي الموهوبين ومعلمات الموهوبات في عدة مناطق ومحافظات في المملكة وإجراء مقابلة مع عينة من المشرفين التربويين.

أمل من سعادته التكرم بالتوجه نحو تسهيل مهمة البحث لتطبيق أدوات الدراسة على عينة الدراسة، وتزويده بخطاب موافقته تطبيق الدراسة.

شكرًا واحترامي.

حفظكم الله والسلام عليكم ورحمة الله وبركاتكم.

عميد الكلية

د. سعود بن عبد العزيز العقيل
الموضوع:

معالي نائب وزير التربية والتعليم لشؤون البنات بالرياض

حفظه الله تعالى

السلام عليكم ورحمة الله وبركاته

أما بعد:

نفيذ سعادتكم بأن المحاضر/ ماهر بن عبدالعزيز الجوير مبتعث من الكلية

إلى استراليا لدراسة الدكتوراه في تخصص تعليم الموهوبين والمتفرد

وجري دراسته بعنوان "معارف ومعتقدات المعلمين ذات العلاقة بممارسات التدريس

للطلاب الموهوبين في السعودية. ويرغب في توزيع استنتاجاته دراسته على عينة

من معلمي الموهوبين ومعلمات الموهوبات في عدة مناطق ومحافظات في

المملكة وإجراء مقابلة مع عينة من المشرفين التربويين.

أمل من سعادتكم التكرم بالتوهيج نحو تسهيل مهمة الباحث لتطبيق أدوات

الدراسة على عينة الدراسة، وتزويده بخطاب موافقة تطبيق الدراسة.

شاكرين ومتقدمين لفضيلتكم اهتمامكم.

حفظكم الله والسلام عليكم ورحمة الله وبركاته.

عميد الكلية

د. سعود بن عبد العزيز العقيل
الجامعة العربية
الناظم: 25/3/7
الموضوع: بحث الباحث/ ماهر عبد العزيز الجويبر

伍ته الله

سعادة مدير عام التربية والتعليم بمحافظة
السلام عليكم ورحمة الله وبركاته، وبعد:

تجدون سعادتك برفقته أدياتي الطلاب/ ماهر بن عبد العزيز الجويبر، أحد
طلاب الدراسات العليا في مرحلة الدكتوراه في استراليا، يسأليكم بحثه بعنوان "معتقدات
ومعارف المعلمين والمعلمات ذات العلاقة بممارسات التدريس للطلاب الموهوبين في
السعودية".

أمل من سعادتك التحكم بالتوية تشهيل مهنته.

والسلام عليكم ورحمة الله وبركاته،

مدير عام البحث

د. محمد بن عبد الله الضويان
المرفق: ٤٠٨٨٩٤١٨
الأخير: ٢٠٠٦/٦/٣٠
المشروعات: ١٤٥٣

حفظه الله
سعادة مدير عام التربية والتعليم بمنطقة / بمحافظة...

السلام عليكم ورحمة الله وبركاته وبعد:

مرفق لسعادة: حسن الحاضر / ماهر بن عبدالعزيز الجوهري
المثبت من وكلية الشريعة والدراسات الإسلامية بالأحساء إلى استراليا
دراسة الدكتوراه في تخصص الموهوبين ويتكي دراسة بعنوان (معتقدات
ومعرفة العلماء والمعارك ذات العلاقة بمارسات التدريس للمعلمين
 الموهوبين بالملكية العربية السعودية).

عليه أمل التحكم بتوجيه من يلزم لتسهيل مهامه لتطبيق الاستبانة
على المستهدفين / أداء البحث.

والسلام عليكم ورحمة الله وبركاته،

مدير عام الموهوبين

نيل بن محمد البدير