

The Journey of Gifted and Talented Student In Dubai private Schools (Exploratory Study)

رحلة الطلاب الموهوبين في مدارس دبي الخاصة (دراسة استكشافية)

by

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at

The British University in Dubai

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Abstract

The purpose of this study is to explore the current journey of the Gifted and Talented students in Dubai private Schools. The study looked at what is offered to such students and offered recommendations on best ways to support them. Such recommendations were based on proposing the best up-to-date international best practice that can be considered as a guide to be applied in Dubai. The researcher relied on mixed methods (quantitative and qualitative). The work involved surveying 51 participants, from 15 private schools in Dubai; to examine gifted education provided starting from gifted education policy, definition, identifications, strategic plans, financial budget, teacher training, support programs and finally evaluation of such programs within the school systems. Moreover, the survey is testing the agreement or disagreement of the participants about two new procedures for gifted education. The first is accelerating gifted students, and the second is suggestion to give all students from early learning stage the gifted and talent support programs and consequently increase the number of gifted and talented students in Dubai. The collected answers showed that the majority of respondents agree that offering the right gifted education enrichment program to average students can help them on various levels. There were other recommendations such introduction of modern evaluation tools and procedures in and out of the schools. This is an exploratory study looked at the important factors of gifted and talented education in Dubai private schools. In term of further research, each factor can be taken as an area of research to dig deeply. For instance, the gifted education enrichment programs and support tools such as Renzulli learning portal. This portal can be tested to check if it is effective enrichment program or if it used in some schools in Dubai. Moreover, the research have been done on the administrative level. A further research could be between high school gifted students. It will worth well to make a research from inside-out to explore what gifted education programs satisfy the gifted and talented students.

ملخص

تهدف هذه الدراسة لاستكشاف وعرض رحلة الطلبة الموهوبين والمتفوقين في مدارس دبي الخاصة حالياً. وكما ستقترح أفضل ما يمكن تطبيقه في دبي من ممار سات دولية في هذا الشأن. وقد قام الباحث باستطلاع شارك فيه 51 شخصاً من 15 مدرسة خاصة بدبي، وذلك لقياس مستوى التعليم المقدم للطلبة الموهوبين في دبي بدءاً من سياسة تعليم الطلبة الموهوبين، ومفهوما، وطرق التشخيص، والخطط الاستراتيجية الموضوعة، والميزانية المالية المخصصة، وتدريب المعلمين، وبرامج الدعم والتقييم النهائي. علاوةً على ذلك، فإن الاستطلاع يعرض مدى اتفاق أو عدم موافقة المشاركين على اجراءين جديد لتعليم الطلاب الموهوبين الاوهو ترفيع الطلبة الموهوبين، أما الثاني فهو يقترح منح جميع الطلبة من مرحلة التعليم المبكر برامج دعم الموهوبين والمتفوقين، مما يعني زيادة عدد الطلبة الموهوبين والمتفوقين في دبي. يحتاج التعليم الموهوب في دبي إلى قسم خاص لتابية احتياجات الطلبة الموهوبين، وسياسات تقديم محددة، وأدوات تحديد واضحة، وأكثر من 20 ساعة تدريب للمدرسين، وبرامج إثراء جيدة، وأخيراً أدوات وإجراءات تقييم داخل وخارج المدارس.

Dedication

To my father, the greatest father in the world who taught me that the learning journey never ends.

To my mother, the kindest heart ever.

To my lovely children Ibrahim, Zahraa, and Hala who filled my life with love and peace.

To my best friends who are very near to my heart.

Shifaa, Sawsan, Samia, Shadia

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List of Abbreviations

Abbreviations	Description
UAE	UAE United Arab Emirates
SEND	SEND Special Educational Needs and Disabilities
SEN	SEN Special Educational Needs
MOE	MOE Ministry of Education
STEM	Science Technology and Math
KHDA	KHDA KHDA
SEM	School wide Enrichment Model
SENCO	SENCO Special Educational Needs Coordinator
CAT 4	Cognitive Abilities Test
NAGC	National Association of Gifted Children
DSIB	Dubai School Inspection Bureau
NRC/GT	National Research Centre on the Gifted and Talented of the United States.
UConn	University of Connecticut
UVA	University of Virginia
Bright IDEA	Interest Development Early Abilities
NBT	Nurturing for a Bright Tomorrow

CHAPTER ONE

INTRODUCTION

H.H. Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai included the knowledge economy as an essential factor in the UAE Vision 2021 ("Competitive Knowledge Economy | UAE Vision 2021"). On 16th October 2018, he said: "Building a better future for our region starts in the classrooms and e-learning can bridge the knowledge gap in the Arab world" ("Home - His Highness Sheikh Mohammed bin Rashid Al Maktoum" 2018), while launching the 'Madrasa', the largest free e-learning platform in the Arab world and a revolutionary new project under the umbrella of the Mohammed Bin Rashid Al Maktoum Global Initiatives (MBRGI).

Future begins from the classrooms where every child matters as his Highness cited. Especially if a little child has a bright idea, which will open the doors of new opportunities for his country or even for the entire humanity. Hence, Gifted and Talented education is one of the key realms of emphasis which requires much development in the 21 century.

Countries are preparing students with diverse skills including innovation, creativity, and technical capability to contend in the twenty first Century world economy and in the race to the future. Many governments paid extensive efforts to support Gifted and Talented Education by building organizations, attracting researchers, implementing various education policies and programs, and allocating funds in order to invest in the golden thoughts of gifted and talented students. The term Giftedness is defined by the KHDA (KHDA), the regulator Authority of Dubai private schools as "a student who is in possession of untrained and spontaneously-expressed exceptional natural ability in one or more domains of human ability" (KHDA 2018).

These provinces include intellectual, creative, social and physical abilities. In the case of a gifted student, whilst exceptional potential will be present, they may actually underachieve. The term "Talented" refers to "student who has been able to transform his 'giftedness' into exceptional

performance. Talented students will always demonstrate exceptional levels of competence in the specific domains of human ability" (KHDA 2018).

In this chapter, the researcher is trying to cover the Gifted and Talented Students journey in Dubai private schools. The study is an exploratory study that takes the Gifted and Talented education from every possible angle. The coming sections are presenting a Background study about Gifted and Talented education in UAE. The significance and rational the of study, purpose and research questions, context of the study, and finally the dissertation chapters.

1.1. Background of Gifted and Talented Education in UAE

The education system in the United Arab Emirates (UAE) consists of two sectors: the public schools which are mainly regulated by MoE and the private schools. In the emirate of Dubai, the KHDA is the regulator authority for private schools. Mariam AlGhawi sated in her recent research that "The findings of this study show that there has been positive progression in the field of gifted education in the twenty-first century" (AlGhawi 2017). Despite of the Scientific Renaissance in the private education still the inclusion sector needs a lot of improvements.

The UAE School Inspection Framework published in 2015-2016 stated that "the UAE is determined to become an inclusive, barrier-free, rights-based society that promotes, protects, and ensures the success of all groups of students. The impact of inclusion should be seen through the learning experiences of all children in the UAE schools" (KHDA 2018). The education ministers and educational authorities have accountability to assist and grow inclusive approaches and practices. Developing inclusive education ethos is not an individual work. "Schools and inspectors will be able to evaluate the quality of provisions allocated for these students in the process of considering selected performance standards and indicators" (KHDA 2018). It will need students, specialists, parents, and goes broader.

(Gaad 2010) stated that "It is certain that Dubai development attracted expertise from all over the world causing a huge mixture of cultures and nationalities in the state. As a result, many private schools were permitted in last decade to fulfil the needs of the new communities. Dubai private school population consists of 186 different nationalities ranging from Asia, Arica, and Europe". The prompt evolution in Dubai was impacted in a great progress in the Private Education System. The expatriates who arrived to Dubai from everywhere around the world brought their

curriculums, languages, and cultures. Consequently, 194 private schools in 2017-2018 with 17 educational systems (KHDA 2018). The local people of the UAE are about 20% of the total population (Gaad, 2011).

The (KHDA) was established by the Government of Dubai in 2007 "to regulate and improve the quality of private education (Khda.gov.ae, 2015). Simultaneously Dubai School Inspection Bureau (DSIB) of KHDA was established by Decision 38 of The Executive Council of the Government of Dubai in 2007" (KHDA 2018). The main role of DSIB department at KHDA is to inspect Private schools in Dubai and provide comprehensive information on the required standards of education in private schools in Dubai. Moreover, publishing policies and frameworks to guide the school's leadership in different educational challenges. "This is attained over some of approaches, including annual school inspections, open publications, surveys, and meetings with focus groups from parents, teachers, and students" (KHDA 2015).

1.2. Research Problem

As any student at the school, Gifted and Talented students have the right to learn in the proper educational atmosphere to achieve their potential and meet their needs. The often hidden problem in the gifted education is the non-fulfilment needs of the gifted and talented student visible in most of the schools. Even though this problem is touching the individuals themselves and their communities (Gallagher, 1988, Renzulli, 2001), still several educators consider that the gifted and talented children are smart enough to be successful without intervention. Regrettably, the majority of these gifted and talented individuals may not succeed without correct intended support (Davis & Rimm, 2004).

The gap between the standard delivered curriculum and the gifted and talented student needs is still big despite the massive transition in the quality of education in private schools in Dubai during the last ten years. In the preceding years, the KHDA was focusing on the education superiority without stressing on the inclusion or gifted and talented education. The problem starts when parents of gifted students request to promote their children according to the IQ results or school nomination. Due to the absence of policy statements related to gifted education, some parents are requesting schools to promote their children one grade higher as they think that this is a good chance for their children instead of the gifted and talented programs. There is no

government service that allows a gifted student to be accelerated at the KHDA. The research is presenting the current situation of gifted and talented, study the best practices internationally and provide a series of recommendations that drives the gifted and talented individuals' journey starting from the government procedures to schools, teachers and students themselves.

KHDA has made a noteworthy transformation in the quality of private schools in Dubai in comparison to other UAE emirates. However, there are many actions related to the Gifted Education still did not see the light. During 2008 to 2018, hundreds of school visits and reports had been issued and published on KHDA website to evaluate the schools giving one of the six rating categories (Weak, Unacceptable, Acceptable, Good, Very Good, and Outstanding). Annually the DSIB inspection criteria is reviewed to benchmark the international standards of education.

Nowadays, the knowledge Economy is one of the essential financial revenues in the state of Dubai. In the past three years, ten new private schools opened in the emirate of Dubai. Some of them are branches from the mother schools abroad from the famous education groups from all around the world. In a total of thirty new schools in a short period. For the current schools, the financial revenues are linked to the quality of education or the school rating. For instance, the "fee Increment Permit" requested by current schools became conditional to the inspection rate given to school. The schools are allowed to increase the tuition fees only if they had been rated as good or above.

In fact, there are 194 privates school with 17 different curricula in Dubai, permitted by ranging from the most common ones such as UK, US, Indian, Pakistani, Russian, Canadian, Chinese, and Japanese. Throughout the new admixture in Dubai, the foundation stage admission age in the UK curriculum schools is 3 years old in a 13 years education system. On the other hand, the US curriculum schools admission age is four years old in a 12 years education system. Dubai private schools invested a huge budges, efforts, and human resources to achieve the outstanding or even the good rates. This competition creates several and complex internal admission policies for each school. For example, to register a child in any private school in Dubai he must show up for the school entrance test. The test could be a paper test or international complex test in the expensive schools which gives the school all the details about the students' cognitive and literacy

abilities. These entrance tests are enabling the schools to choose smart and good students and exclude the weak students which finally end up in the weak schools. Instead of admitting mixed abilities of students per school; the weak students are accepted only by Acceptable or weak schools. The Gifted and Talented students are chosen in the outstanding schools. They started registering readymade good students to raise academic achievement rate of the school without spending a lot of efforts in improving the academic level of mixed ability groups. This is might be an advantage for some Gifted and Talented students and may not for some others. Generally, the policy is enacted in ways that, on the surface, may align with the original intent of the law, but it can be argued that the spirit of the law remains elusive [sic] and unrealized. (Armstrong, Armstrong and Barton, 2000)

1.3. Significance and Rational of the Study

When the gifted students get the right gifted education they can innovate new solutions for various problems locally and internationally. The more the clarity and awareness of the World economic conflict the more motivation and persistence paid by the gifted students to find alternative solutions for multiple human kind challenges.

The researcher has chosen the Gifted and Talented Education subject for multiple reasons. By virtue of my work in the government entity, responsible for regulating private schools in Dubai for more than 11 years. I spent 4 years of my experience working in the special education and Inclusion department. I have served thousands of parents during the four years in the department. The majority of the parents I have met have Special Education Needs children. Few of these parents were having Gifted and Talented children. They are always coming to request grade promotion, skipping a grade, or acceleration all are one face of the same coin. Although KHDA has no service called student promotion or student acceleration, schools were trying to collect evidence documents and try to find the area of giftedness to reply to the parent that there is no such policy where your child get approval to skip a grade or to go to a higher level in any of the subjects. Creating a policy to support gifted and talented students is strongly needed in Dubai private schools. Gifted education is rarely mentioned in the DSIB inspection reports or no enough details about gifted and talented students. Although the gifted and Talented student is a unique category in Dubai as it's separated from Special Education Needs, there is no specific category in the

inspection report speaks about gifted education. Going through the inspection reports on the KHDA website of all schools involved in the inspection rounds, you will find that the gifted education is mentioned under the heading "Care and Support" with just one sentence about gifted education rating in the school. The provided sentence is very general to specify the level of gifted and talented support and procedures in the school. Moreover, the sentence is too general to specify exactly where the gap in the gifted education within the school is. For example, the rating sentence for the care and support in the school is not showing if the problem in gifted education in the school is due to improper identification, support, curriculum, or evaluation factor.

1.4. Purpose and Study Questions

As part of my role as Project Manager in the Knowledge and Development Authority (KHDA) for the past eleven years till date, I have met many parents of Gifted and Talented children approaching KHDA requesting to accelerate their children due to the high level of IQ or performance (Acceleration types will be discussed later in chapter 2). The two main acceleration requests were: early admission to kindergarten and the high level of intelligence quotient (IQ) tests. Although I'm a government agent I don't have the authority to accelerate the student. The first answer to the customer is "we do not have any acceleration policy in Dubai. In case of the parents and school together insisting for accelerating the student and provided the needed documents to prove the case, the case might be submitted to the educational panel in KHDA that consists of the multiple education experts and KHDA board members to decide about the approval request and most probably reject it. I have experienced the acceleration approval of only three students during the eleven years' service in KHDA. However, currently, it is less restricted, but still not opened.

The purpose of this research was to explore the proper ways of provision gifted and talented students in order to find strategies to fulfill their potentials and invest in gifted education. The objective of the study experimented the most important aspects of gifted and talented students in Dubai private school throughout three main research questions:

- 1. What are the services offered currently for the Gifted and Talented students?
- 2. What are the international best practices that are related to supporting Gifted and Talented students?

3. What should be offered to support Gifted and Talented students?

By the first research question, the researcher is exploring the current situation of gifted and talented students in Dubai private schools. Many factors to be checked here such as Giftedness and Talented definition, Gifted and Talented students are the responsibility of whom (SEND department) or Specialized department for gifted education, identification process, Support Programs, Teacher Training in gifted and Talented models, Strategic Plans for gifted education, Current Policy "Dubai Inclusive Education Policy Framework", Budgets for gifted and Talented support, Evaluation, Rahal project and Dubai future accelerators (DFA).

In the second research question, the best practices that are related to supporting Gifted and Talented students are examined through different gifted education methods. The research is studying the following factors: The Renzulli identification "Three Ring" Model, Schoolwide Enrichment Model (SEM), Model-Based Curricula in Mathematics and Reading/Language Arts curricula, Definition of Gifted and Talented. Best practices in Gifted and Talented Education, The NRC/GT STEM high school database, Bright Idea Project as an example for gifted and finally the Acceleration Policy (Renzulli Learning 2018).

The third question is examining the following aspects and providing recommendations according to the results of mixed research methods, quantitative and qualitative measurements. What should be done for Gifted and Talented students in Dubai Private Schools? How we can best support the journey of a gifted and talented student. Although there are few gifted and talented students around Dubai private schools the impact of motivating and investing in their minds is very huge for them and for their surrounding community. Searching for and improving the gifted education sector will reflect the level of Dubai students internationally in TIMSS and PISA exams. After enabling the gifted and talented students they can solve great challenges that might appear in the community and they will raise the country level in economic inventions and world space race.

There are 16 outstanding schools in Dubai. Check the gifted and talented policy mentioned on their websites and make a comparison between them. Focus on the 4 schools who are the best in the gifted and talented policy. The KHDA support for gifted students is limited only for the gifted student who apply for promotion or any other support but no other support is given to

unknown students who are unidentified. If they follow the approach of support for all students according to their needs without categories and non-focus on this category of students will reduce the speed to the better future.

1.5. The context of the study

A number of studies on giftedness and Talented have reflected on the role of early identification and the understanding of the definition of giftedness in the designated culture or community. For instance, Kelemen has stated that "giftedness does not have one common definition across the globe. It differs from one community to another. In another meaning, there is gifted children in each culture, both sexes and of different age groups. This underlines the importance of creating a specific definition of giftedness as per each culture's perspective and needs. The same notion goes with both Passow and Tannenbaum (1979) who believes that the early identification is important if the definition of giftedness is clearly stated which will also help in paving the platform for accessing the suitable tools for screening the gifted and Talented (cited in McBride, 1992). The importance of early identification and screening for gifted and talented does not only help in building up a healthy gifted individual. But as Fatourous states (1984), it is also helping in expanding the child's intellectual and personal abilities (cited in McBride, 1992). In another perspective, Both Kaufman and Sternberg believe labelling a child as "gifted" is based on a set of changeable criteria (2007). They claim diagnosing a child as gifted is a matter of personal opinion, which can be applicable to a specific domain of giftedness or broader (2007).

A very few number of private schools in Dubai have proper knowledge about the gifted education. Many of the schools who are supporting gifted students are aware of gifted and talented education, but a lack for some factors of the proper gifted education. For example, some schools do the proper gifted and talented identification but they don't have the proper programs to support them. On the other hand, some of the schools have both: the proper identification and support, but they don't have a proper policy or evaluation system to measure their practices.

There are 16 outstanding schools in Dubai. Going throw the inspection reports of the 16 outstanding, none of the schools has the complete support for the gifted and talented students. After asking the inspection team in the DSIB, four schools only were nominated for the best support in gifted and talented education. The KHDA support for gifted students is limited only for

the gifted student who apply for promotion or any other support but no any kind of support is given specifically for gifted and talented students. The low-income students who are unidentified as they are in a weak or acceptable schools. They are not having any opportunity to thrive and fulfil their potential. The KHDA nowadays is focusing on the approach of supporting all students through a differentiated system that fulfil every child's needs. However, the continued non-focus on this category of students will reduce the speed to the better future.

This study aims to investigate the gifted education policy in Dubai private schools in United Arab Emirates (UAE) in order to give the appropriate recommendations to implement the required improvements to the gifted and talented education sector. The study was conducted by using a number of methods including a questionnaire survey, interviews, observation and documents review. The research will study how the current the educational policy is helping the gifted and Talented students in Dubai private schools and how could be improved to promote the Gifted and Talented students. The study concludes that accelerating gifted and Talented students are subjected to study of the students who applied for acceleration case by case according to multiple identification methods that combine all the evidence for giftedness such as IQ test for cognitive abilities, Identification report by an Educational psychologist, school assessment, CAT4 test and the complications of giftedness case.

1.6. Structure of dissertation

The following research consists of five chapter. The first chapter is the introduction chapter contains the background about gifted and talented education in UAE, research problem, significance, purpose and study questions, and context of the study and the structure of the dissertation. The second chapter consists of two parts. The theoretical framework and literature review. The theoretical framework describes three models. The "three ring" model, school-wide enrichment model (SEM), and model-based curricula in mathematics and reading/language arts curricula. The section of the literature review is presenting the definition of gifted and Talented, Best practices that are related to supporting gifted and talented students the NRC/GT STEM high school database, project bright idea, and acceleration policy of gifted and Talented. Explaining the research design, study population and sampling, procedure, questionnaire and interview protocol, and the students' questionnaire, the semi-structured interviews, validity and reliability of the open-

ended questionnaire and the semi-structured interviews, and ethical considerations. Chapter four is showing the data analysis, quantitative data analysis – questionnaire, qualitative data analysis, interviews. Chapter five consists of discussion, conclusion, limitations and recommendations.

CHAPTER TWO: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

The literature review is essential as it reflects the international best practices in improving and empowering gifted and talented education. Hicks stated that "with globalization on the rise, there is a need for educational institutions to meet the demands of the global age" (Hicks 2007a). In this chapter there are two sections, the first is the theoretical framework and the other section is the literature review. In the first section, the researcher is exploring the gifted and talented theories and various models implemented by Renzulli and some other researchers. Two models will be discussed, The Renzulli Three Ring Model and School Enrichment Model (SEM). These models are applied in the United States of America and some other places in the world and have proven its effectiveness. Moreover, the models have been reviewed and edited over the years to be enhanced and presented as it is today (Reis 2018).

In the second section, the literature review presents the history starting with the gifted education from the early beginnings until the current best practices in the gifted education sector. There are five subjects to be discussed here: (1) Definition of Gifted and Talented. (2) Identification of Gifted and Talented Individual. (3) Best practices in Gifted and Talented Education. (4) STEM Schools of Excellence as an example for gifted. (5) Bright Idea Project as an example for gifted. (6) Acceleration Policy.

1.7. Theoretical Framework

The theoretical framework deals with the main Models of the researcher, Renzulli. The first model is (1) The Renzulli Three Ring Model. (2) School Wide Enrichment Model (SEM), and (3) Model-Based Curricula in Mathematics and Reading/Language Arts curricula.

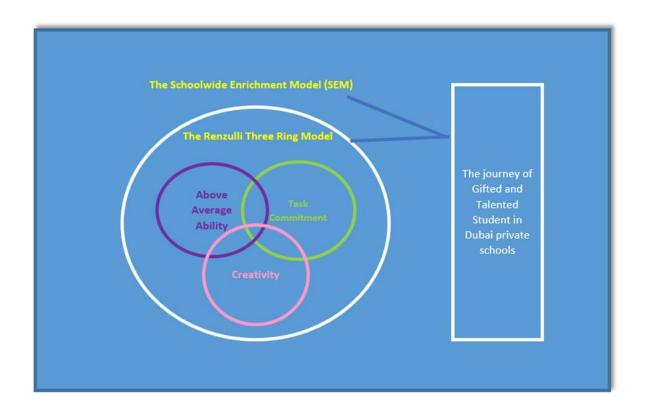


Figure 1: School Wide Enrichment Model (SEM).

1.7.1. The Three Ring Model

Gifted and Talented Individuals Identification is a key factor in the Gifted Education Sector. Identification is increasingly recognized as a serious, worldwide concern because it is the starting point of the gifted individual support. Which specifies the success or the failure of the rest journey or even it stops the journey before it starts. In case of wrong identification of a gifted child, he will lose the eligibility of the gifted education support all along his/her schooling education years. Coleman stated that "The identification process is like searching for "hints and clues" of giftedness in all of the learners" (CEC, 2001 as cited in Coleman, 2003). The authors set out the different ways of Identifying gifted and Talented children, drawing on an extensive range of identification sources that can be used to examine giftedness. "Many identification programs take a multidimensional approach." As a common, but minor, modification of the strict IQ/ academic ability criterion, teachers may review the IQ scores, achievement test scores, and grades to

nominate a student for the gifted and Talented program" (Davis, Rimm & Siegle 2011). As stated in the Hand Book of Gifted Education (Sternberg, 2003), "Gifted characteristics cannot possibly be captured by a single number". As definite in the School Enrichment Model book, (Renzolli learning 2018) identification plans are written by state regulators and consist of different criteria derived from the test and non-test data sources.

Terman espoused the Stanford-Binet IQ test in his studies on gifted education (Pfeiffer, 2008, p.2). However, the argument on relying exclusively on the assessment results of intelligence had raised diverse views. Sternberg, for example, has faith that giftedness is not a one-dimensional field, it is not only an accumulative result of IQ test, but it also drives beyond these test (cited in Tomlinson and Reis, 2004, p.xii). Other different theories argue that IQ test is not necessarily defining intelligence of children. These kinds of assessments may nose dive to obtain the right results for those who may have learning difficulties and emotional and behavioural disorders (Sternberg &Davidson, 1986, 383). Renzulli stated that relying on scores of cognitive challenging tests will only determine one area of intelligence of the student (2004). Therefore, the reliability of IQ test scores to measure the level of giftedness and intelligence is debatable.

Scandinavia is one of the various countries who stay far from identifying the gifted and talented children. In its place, educational objectives is used to help each child to reach his potential by individualized and child-centred. Through in-school and out-of-school enrichment, the gifted education is totally avoided in these regions. Freeman argued that "Neither psychologists' reports nor IQ scores are typically used as the basis of identification for gifted education" (Freeman, 2005). Many professors have advocated for using multiple criteria in the identification of students to increase effectiveness in identifying students. The multiple identification criteria summarized by (Frasier 1997) has been taken forward by Renzulli when he helped eight schools in the state of Georgia to explore the use of multiple criteria to obtain "a rich profile of student strengths and interests" and especially to identify gifted minority students which added it to the law later by Georgia legislators. The law stated that eligibility is meeting standards in any three of four areas: mental ability, achievement, creativity, and motivation (Davis, Rimm & Siegle 2011, P 56). The multiple criteria identification is still used until now in the identification process of gifted children as per the Georgia Department of Education website (2018).

According to the National Association of Gifted Children NAGC, "Giftedness may manifest in one or more domains: intellectual, creative, artistic, leadership, or in a specific academic field such as language arts, mathematics or science. Children are gifted when their ability is significantly above the norm for their age. Giftedness exists in every demographic group and personality type. It is important that adults look hard to discover the potential and support gifted children as they reach for their personal best" (NAGC 2018). Over the years, giftedness was given multiple definitions in different places across the globe by various researchers according to different theories. Defining the Gifted and Talented student is essential to make the right decisions in providing the appropriate educational services for students who fall under this category. The Research on creative or productive people has constantly shown that although no single criterion can be used to get to determine giftedness, persons who have achieved recognition because of their unique accomplishments and creative contributions passes relatively well defined set of three interlocking clusters of traits. These clusters consist of above average ability, task commitment, and creativity (Renzulli 2018) as shown in the above Figure (1).

1.7.1.1. Above average ability

The first cluster described is the above average ability in two segments first is general ability and the second is specific ability. Abstract thinking, verbal and numerical reasoning, spatial relations, memory and word fluency considered as general ability. On the other hand, the specific ability comprise of the capacity to knowledge acquirement and skill or the ability to perform in one or more areas of a specialized knowledge or areas of human performance (Renzulli & Reis 1997), (Renzulli Learning 2018).

1.7.1.2. Task commitment

The second cluster is described as the task commitment that reliably seen in creative persons who have a concentrated form of motivation. It is the volume for high levels of interest, enthusiasm, fascination and involvement in a particular problem area of study or form of human expression. It also includes the capacity for perseverance, endurance, determination, hard work and devoted practice. It also come with self-confidence, a strong ego, and a belief in one's own capability to carry out important work, freedom from inferiority feelings and drive to achieve the

ability to identify significant problems within specialized areas (Renzulli & Reis 1997), (Renzulli Learning 2018).

1.7.1.3. Creativity

The third cluster of behaviours that characterizes gifted individual includes some elements such as fluency, flexibility and originality of thought. It also engage openness to experience, receptive to that which is new and different thoughts, actions and products of oneself and others. It also deals with curiosity, speculative, adventurous and mentally playful willingness to take a risk in thought and action.

1.7.2. Schoolwide Enrichment Model (SEM)

The SEM is extracted from the Three-Ring Conception of Giftedness, which labels gifted behaviours instead of gifted children. The three behaviours of the conception was explained above which are above-average ability, high levels of task commitment and high levels of creativity. The SEM model consist of three service delivery components: firstly, student academic file. Secondly, curriculum compacting, modifying and differentiating, and the third is enrichment learning and teaching programs. Nowadays, version of the SEM has been created online to be used in any place in the world. The main features are assessing children's interests, producing learning styles and combine hem to one, individualized database of enrichment activities. Moreover, various continuum of services concepts used as organizational approaches including the special classes, pull-out programs, grade skipping, and differentiation in the regular classroom (Reis 2018).

1.7.3. Model-Based Curricula in Mathematics and Reading/Language Arts Curricula

The National Research Center for Gifted and Talented (NRC/GT) effectively contested for a series of federally funded grants (1990-2013) under the Jacob K. Javits Gifted and Talented Education Act. Their final researches focused on 'What Works' in Gifted Education with the mathematics study at the University of Connecticut and the reading/language arts study at the University of Virginia.

In the National Research Centre on the Gifted and Talented of the United States, (The NRC, 2018) developed the model-based curricula in mathematics and reading/language arts curricula for Grade 3 students. In general education classrooms, the mathematics curricula were used and in gifted and talented programs, reading/language arts curricula were used. Later on, they impacted the following curricular/instructional models: firstly, Differentiation of Instruction Model. Secondly, Depth and Complexity Model, and the Schoolwide Enrichment Model (University of Connecticut 2018).

1.8. Literature Review

The literature review of this study is pertinent to the following subheadings: Definition of gifted and Talented, best practices in gifted and Talented education, STEM schools of excellence as an example for gifted education, and bright Idea Project as an example for gifted.

Different educational databases were used to search online and read a various number of articles in Gifted and Talented Education (TAG), particularly, the British University in Dubai (BUID) library database were broadly used. Moreover, literature and E-books were accessed throughout the OCLC WorldCat.org web site. The search focused on books as well as journals that offered full-text coverage. Publications, from 1978 were reviewed, but more relevance was given to the latest sources. The research was conducted by using specific keywords such as Gifted and Talented Education, Giftedness, Gifted education, NAGC, identification, CAT4, SEN, Education, Inclusion, Exclusion, Mainstream, School practice, Support Programs, Provisions, Enrichment programs, policy, framework Dubai and UAE and many other local sources such as the KHDA (KHDA) publications and UAE Ministry of Education website were used. Moreover, Most of the accessed literature deals with the context of United States perspective of the history of the Gifted and Talented Individuals Education.

1.8.1. Definition of Gifted and Talented.

There are vast numbers of researches complemented to describe gifted and talented children through the decades-old. The concept has gone through stages that have had formed its relevance considering each period's conditions and belief. For example, in Greece giftedness is described as

the individual who presents a phenomenal power, as mentioned in Galton's studies of historical roots of understanding of Romans and Greeks ancient era. They refer individuals with the extraordinary power to be touched by divinity (cited in Pfeiffer, 2008, p.14). Other studies in the early 1900s claimed that giftedness could be inherited through it is inherited (Hersi 2016).

Identifying and educating gifted individuals has intrigued virtually all societies in recorded history (Colangelo & Davis 2003). Although several nations invested in Gifted Education research in the purpose of getting a clear definition of giftedness, still the concept of gifted education and gifted child is vague. As a result, many additional studies and researches by other educational psychologists were initiated in order to build on their studies in this field. This has led to suggesting different theories and identification tools to measure gifted and talented youth.

Sir Francis Galton (1822-1911) created an Anthropometric Laboratory to measure physical, sensory, and motor capabilities. He believed that intelligence was tied to neural efficiency and sensory ability. Further, he developed the concept of intelligence in his publications. He claimed that intelligence is a mainly inherited single entity and that intelligence determines the level of civilization. He studied the number of geniuses compared to the size of their populations and reached the conclusion that there is a difference in average-intelligence among races; the Greeks being the most intelligent while the Australian Aborigines being lowest (Galton, 1869) (Colangelo & Davis 2003). Early nineteenth century in 1905, two Researchers Binet and Simon conducted tests to identify and distinct students of "inferior intelligence" from average children. The concept of mental age was significant for psychological testing to determine intelligence. (Colangelo & Davis 2003). In early America, during 1868, William Torrey Harris as the superintendent of public schools, had started applying for gifted programs. This promoted learning opportunities within schools for gifted students (Allen 2018). In 1901, A school for gifted children launched in Worchester, Massachusetts. This was the first school specifically educating gifted students. This engaged the idea that gifted individuals could get the advantage of standardized learning classes, due to their exclusive abilities and needs.

During that century, a few years later in 1916, Lewis Terman, the "father of gifted education" created the Stanford-Binet, which significantly influenced education through intelligence testing. This was particularly important for both educators and psychologists. In 1918, Lulu Stedman

initiated the "opportunity room" for gifted individuals at the University of California. This presented gifted individuals need diverse experiences and opportunities. This initiated the idea of tody's resource rooms in the schools. (Colangelo & Davis 2003).

In the same year the "The National Association of Gifted Children", emphasized the needs and attention of gifted individuals to be served through educational services and programs in conjunction with the National Association of Gifted Children (NAGC) the "Gifted Child Quarterly" journal. This organization included educators, parents, and other advocates of gifted and talented students. Isaacs particularly was passionate for advocating on behalf of creative students. Without an organization such as this, gifted and talented children and their families would not have been advocated for. This organization continues to advocate for gifted and talented individuals, provide resources and programs, and encourage research" (Allen 2018).

Sputnik was launched by the Soviet Union in 1957. Consequently, the United States did not want to be behind in the space race, for that reason the quality of American education, particularly in science and mathematics education impacted. Therefore, there was an increased funding for research and programs for gifted and talented students who could excel in science, mathematics, and technology (Allen 2018).

The definition of giftedness is stated for the first time in 1972 in the Marland Report as: "Gifted and Talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and services beyond those normally provided by the regular school program in order to realize their contribution to self and society." From this statement of giftedness definition, researchers started to stimulate giftedness definitions in a wider range, allowing for a diversity of talents and abilities such as creativity, leadership qualities, and psychomotor ability. One of the highest contributions of the Marland Report was founding a federal definition of gifted and Talented. This report not only defined who could be gifted and Talented but also comprehensively pronounced the state of gifted education, precisely joting programs and funding that is essential to occur at the federal level.

In 1974 an official status is given to "Office of the Gifted and Talented" accommodated within the United States, U.S Office of Education ("A Brief History of Gifted and Talented Education | National Association for Gifted Children" 2018).

Just after six years after the Marland Report in 1978, the Three-Ring definition of giftedness was published by Renzulli. "This definition recognized that while giftedness must reflect some extraordinary ability, it also put into perspective and the manner in which individual outcome could be affected by varying degrees of creative abilities interwoven with specific gifted potential, and through varying degrees of the personal drive or commitment that it takes to develop one's extraordinary potential" as Haensley (1999) stated.

In the nineteen-eighties, Garner determined the seven intelligences in 1983 proposed as the Multiple Intelligences Theory. This theory claimed that a Gifted or Talented student may show several inelegancies, but not all. The seven bits of intelligence are linguistic, logical-mathematical, spatial intelligence, musical, bodily-kinesthetic, interpersonal, and intrapersonal. Gardner debated that any classroom should maintain all of the intelligence needs to build students' strengths and allow all classmates to reach their full potential. In the same year, "A Nation at Risk" had been published showing data indicating many of American students with the highest potential are not able to compete internationally. This book advocated for higher expectations and standards and the development of a curriculum fit for challenging and equipping gifted learners. (National Education Association of the United States, National Education Association of the United States. Division of Instruction and Professional Development 1983). In 1986 Sternberg published his Triarchic Theory in which he identified three types of intelligence: analytic giftedness, synthetic giftedness, and practical giftedness. This shows an IQ test is not a sufficient measure for all types of intelligence.

In 1990, The National Research Center on the Gifted and Talented was formed at the University of Connecticut and involved researchers from three universities: The University of Georgia, University of Virginia, and Yale University. Through this research Centre, many valuable and significant studies within the field of gifted education have been conducted, including grants funded by the Jacob Javits Gifted and Talented Students Education Act. Also, It was determined that the "...mission was to evaluate current methods of identifying gifted students, examine

classroom practices, evaluate different teacher preparation programs, and study the progress of gifted students who were not served by special programs" (Haensley, 1999, p.36). This established reliable, valid, research-based instruction for gifted students that was not solely based on experience. In the United States, the history of gifted and talented education is very rich to be discussed in one report. There are tens of academic researchers, theories, models and federal actions that improved the Gifted and Talented Education in the country. Some of the impressive years such as 1993, where The Department of Education released National Excellence: The Case for Developing America's Talent.

In addition, in 2002 The "No Child Left behind Act" was passed, which now includes the Javits program. This program was added to include statewide grants. The definition of individuals who are gifted and Talented was updated. The definition reads, "Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities." Many people believed due to the emphasis NCLB placed on grade-level student performance, many schools focused on underachieving students and did not fully support high-ability or gifted students. (Duncombe, Lukemeyer & Yinger 2008) Moreover, in 2004, A Nation deceived report was published by the University of Lowa which argued "How Schools Hold Back America's Brightest Students". This report documented accelerated strategies for gifted learners. (Shaughnessy 2005)

Furthermore, the National Gifted Education Standards for teacher preparation programs were released by the NAGC. These reports provided foundational standards and expectations for teachers of gifted and Talented students. Many people articulate that for the reason of not having a unified definition for the 'giftedness' several models occurred to respond to each particular definition. Several models appeal to several school settings – rural, urban, suburban, region of the country. Each model's perspective may represent several preferences – intellectual, social-emotional, neurological. ("Models in Gifted Education" 2018).

1.8.2. Best practices that are related to supporting Gifted and Talented students

Numerous policy statements were developed including until a set of procedures or guidelines created by (Institute for Research and Policy on Acceleration [IRPA], NAGC, & CSDPG, 2009) that proposed essential need to initiate acceleration practices.

Frequently, educationalists defines acceleration as grade promotion; actually come of the practices is developed to cover the content acceleration, accomplished through advanced courses and programs predominantly at the secondary level and grade-based acceleration that may involve telescoping two grades into one or skipping a grade or attending a school that admits students at an advanced level although they are younger in age. Even individualized options like mentoring and tutoring may be seen as accelerative in their emphasis on assessing where the learner is and advancing them to the next level in their talent area. The report caused some states and local districts to develop policies, allowing specifically for several forms of acceleration to be used. Most frequently developed were policies that allowed for grade and content acceleration.

1.8.3. The NRC/GT STEM high school database

Gifted and Talented students support is even more challenging when students are at high schools. One of the best methodologies to support high school gifted students is STEM education stands for Science, Technology, Engineering, and Math. For this reason, The University of Connecticut (UConn) and the University of Virginia (UVA) conducted a study on STEM schools through the state by searching the web, studying journals, contacting departments of education, and getting a list of schools belonging to the National Consortium of STEM. By searching in 916 STEM high schools, they categorised schools according and created a database, which they refer to as the NRC/GT (The National Research Centre on the Gifted and Talented) STEM high school database. Data about several variables delivers the present status of U.S. STEM high school. The University of Connecticut started a collaborative matrix of STEM high schools around the town. From this matrix, 12 schools demonstrating several service delivery models were selected for onsite observations, administrator interviews, teacher focus groups, and student focus groups. This matrix is mainly targeting for encouraging gifted and talented students to the participation in high quality STEM research projects, some schools provide single or multiple classes or courses to

guide the development of research projects that might qualify for state or national competitions (e.g., Invention Convention, FIRST Robotics, Team America Rocketry Challenge, Google Science Fair, Siemens Competition, Intel Competition, or the DuPont Challenge: Science Essay Contest) (Gubbins et al. 2013).

1.8.4. Project Bright Idea

Project Bright IDEA curriculum. IDEA stands for (Interest Development Early Abilities). Started in the United States, Originally established by the North Carolina Department of Public Instruction and Duke University in 2001 for two purposes: first, to fill the achievement gap and second to increase the number of gifted by introducing the Project Bright IDEA give emphasis to critical and metacognitive thinking in Kindergarten, grade 1 and grade 2 classrooms. The intervention is foundation, improving students' cognitive abilities before the district's universal screening in grade 3. The intervention, Nurturing for a Bright Tomorrow (NBT), is currently being managed as an experiment with 16 treatment and 16 control schools across the region. The project moved

Bright IDEA 2 starts in kindergarten and adapts gifted methodologies for standered classroom teachers to use with all students. Bright IDEA 2 is constructed on the high level research and best practices and concentrate on encouraging the standard classroom teachers, principals and curriculum specialists, through training and mentoring, to become curriculum architects for the future. Participants are trained to design interdisciplinary, concept-based curriculum units consistent with state standards, infused with building thinking skills and gifted intelligent behaviours, and to change their dispositions and classroom surroundings to meet the learning styles and needs of all students.

Bright IDEA 3: Nurturing for a Bright Tomorrow in Wake County Public Schools, 2014-2019, has started the first year of the study in 32 elementary schools in Wake County by a Javits Research. Teachers and Principals in Grades K-2 will receive training on a nurturing model that includes gifted and regular education methodologies and curriculum units, based on state standards, and taught to all students. The aims of Bright IDEA 3 are as follows:

To rise the cognitive abilities of the students who is identified as gifted and Talented from underrepresented populations and grow the results of the state assessments, (1) To advance the superiority of these children's cognitive abilities and use of gifted behaviours, (2) improve

teachers' acceptance to use gifted methodologies and approaches to all students. (3) To achieve these objectives, investigators will work on experimental design and use rigorous analytic approaches with a result to provide trustworthy information regarding how Bright IDEA can serve as a model that can be generalized and replicated in another place. (Bright IDEA 2018)

1.8.5. Acceleration Policy of gifted and talented

There are several types of Gifted and Talented acceleration such as the following types:

- 1. Early admission to the kindergarten or grade 1.
- 2. Skipping of kindergarten or accelerating a child from kindergarten to grade 1 directly.
- 3. One grade-level higher than the appropriate grade for the child chronological age.
- 4. Continuous Progress acceleration: The learner is provided by higher level content whenever he/she finished and understood the content.
- 5. Self-selected pace acceleration: With this choice, the leaner continues by learning and instructional activities. This is a sub-type of continuous progress acceleration.
- 6. Subject-Matter Acceleration/Partial Acceleration: This option permits learner to attend classes with older learners partially another way for this option is giving the learner higher level curriculum in the same class.
- 7. Curriculum Compacting: The learners can study the subject by deeply practising and skipping intermediate activities. (Colangelo, Gross & Assouline n.d.).

The issue of acceleration is a kind of program development where the gifted education policy has been experimented in the United States is acceleration. (Colangelo, Assouline, & Gross, 2004) in the article "A Nation Deceived" declared the necessity of higher consideration to the acceleration of students to guarantee that bright students are not staying back for the educational advancement. Consequent to that article, numerous policy statements were issued including a policy statement by the NAGC (2006) and a set of guidelines for policy development (Institute for Research and Policy on Acceleration [IRPA], NAGC, & CSDPG, 2009) that recommended zones of significance in making acceleration practices.

CHAPTER THREE METHODOLOGY

The mixed research method is selected to conduct the study through merging the qualitative and quantitative methodologies. The data is collected quantitatively through questionnaires that is implemented online using google forms application. Semi-structured interviews and document analysis is collected as quantitative method. "The multiple databases collected through the mixed approach are expected to draw on the advantages of both the qualitative and quantitative" (Lichtman 2010). Reliability and validity of the research findings will be enhanced through this method.

Despite the fact the quantitative research permits for data collection from a broader sample size with superior oversimplify results, the qualitative study provides a chance to collect in-depth data about individuals, settings or phenomena. (Creswell 2008). Highlighting the tight connection between qualitative and quantitative methods, long (2000). Illustrates that most of the quantitative research include qualitative decisions while qualitative methods also frequently end with quantitative analysis. So a mixture of both methods that materialises from such research is expected to improve the decisions of supporting gifted and talented students.

Looking to the literature review, there is an essential need for examining how schools are dealing with gifted and talented education, starting from the level of understanding for the concept of Gifted and Talented Education, to the identifications, support programs, policy or procedures, and finally financial budgets provided for gifted education.

Several kinds of instruments were used to collect data such as an open ended questionnaire, interviews, and Documentation Analysis for the inspection reports published on the official website of KHDA. The open ended questionnaire was filled by 52 educationist people around Dubai Private Schools. Four interviews were conducted with Special Education Needs Department (SEN) or Inclusion departments who are in charge of gifted and talented education in the schools. Various number of educationists categories have filled the survey such as Education Decision Maker (regulator entity), Education Expert (Consultant/Academic/University Professor), Principal

Head of Department/ Administrators, Psychologist, Social Worker, Special Education, Needs Teacher, Teacher/ Teacher Assistant, Parent, Student, Other.

The highest number of Dubai Private Schools students is attending these three main curriculums. A semi-structured one to one interviews to these four schools have been done in this research to clarify more about the school procedures and policies toward gifted education. The study was carried on Head Of Department (HOD) level and particularly Inclusion Department or Special Education Needs (SEN) Department. The Documentation Analysis is used to compere and discuss findings about the mean phrases written about Gifted and Talented Education level in the school inspection report. The methodology will explain the use of the mentioned instruments, as well as the key points of the research approach used in this study. Also the reason behind using this methodology and its consistency with the goals of the study will be discussed below.

2.1. Research Design

In this section the procedures used in carrying out the study will be displayed. Since the purpose of the study is to explore the Gifted and Talented Education in Dubai Private schools and specifically measuring the level of understanding the concept of Gifted and Talented education, identification process, Policy, and many other factors. Therefore, there is a necessity for using a mixed methods of qualitative and quantitative method in such a study (Maxwell, 2005). And, as mentioned by (Creswell, 2014), in the qualitative interpretive design, researchers might study individuals narrative, processes exploration, case studies, or ethnography. The rationale of using a qualitative method is based on the idea that such research techniques target achieving in depth understanding of an exploratory topic, such as exploring the Gifted and Talented Education in Dubai Private Schools, especially through collecting the educational society opinions on the same subject.

2.2. Study Population and Sampling

The population study is meant to investigate a subgroup taken from a general population and share analogous characteristics on the topic that is related to the standard of sampling (Mertens, 2010). In this study the researcher aimed to explore the Gifted and Talented Education in Dubai Private Schools. In the city of Dubai there are 194 private schools delivering 17 different

curriculums. The Dubai Schools Inspection Bureau (DSIB) inspected 166 schools in 2017-2018. Fourteen schools only have been rated as "Outstanding". Only four schools out these fourteen schools is chosen as sub group for the research because it is expected that they are providing proper support for the Gifted and Talented students according to the reports of Dubai Inspection Bureau (DSIB) and inspector's recommendation. Also these four private schools have been selected for the interview in this research according to the delivered curriculum. The curriculum of the four schools were as following (UK, US, Indian).

2.3. Procedure, Questionnaire and interview Protocol

Several methods were used in this study. In a process of triangulation, a questionnaire survey, interviews, observations and documents review were conducted to ensure the reliability of the study and support the findings. Using a variety of data sources or methods in triangulation to examine a specific status is presumably helpful in producing more accurate account of the status or phenomenon under investigation (Research Methods Glossary, 2000). A more detailed discussion of the methods conducted follows later in this chapter. A presentation of the findings will follow later in chapter4.

2.3.1. The students' questionnaire

This research proposal to apply the open-ended survey to examine selected factors regarding gifted and talented students promotion. "These surveys inspire participants to deliver a brief answer for the present response options thus proving valuable while comparing answers" (Creswell 2008). These surveys will be conducted within the researcher's neighbouring community and essential reviews made to preserve clarity and effectiveness of the research phenomena under study. Along with the survey directed to the school Special Educational Needs SEN head of departments (HOD), teachers, learners, decision makers, inspectors as well as parents.

Interviews will also be attended as it produce rich and in-depth data and can often put flesh on the bones of questionnaire response (Bell 1999, p.134). A striking advantage of conducting a semi-structured interview is its flexibility to probe deeper into the responses and examine motives and feelings (Bell 1999). Unlike in survey, the answers in the interview can be further explained and deliberated upon during follow-up interview sessions.

2.3.2. The semi-structured interviews

The Triangulation design of mixed approaches has been implemented in this research. Triangulation of data means to, "simultaneously collect both quantitative and qualitative data, merge the data, and use the results to understand a research problem." (Creswell 2008, p.557). The rationale for this design is that it enhances the research findings by capitalizing on the strength of one form of data collection while easing the weakness of the other (McMillan & Schumacher 2010). The triangulation design does enhance the credibility of the study, but it also often poses difficulty in merging and comparing multiple databases (Creswell 2008). Unreliable results can lead to additional data collection or the collated databases might need to be retreated so as to arrive at a consensus of results. Therefore, the actions for all forms of data collection need to be standardized. The more standardized the data form, the easier to aggregate and quantify the data. The study investigate which way is better in promote the gifted and Talented student, according to his abilities or accoutring to the chronological age which influence on successful support for the gifted and Talented students. To examine this relationship, the mixed method of research has been selected. The triangulation design of mixed methods will include the qualitative approach of the semi-structured interview and observational study along with the quantitative approach of openended questionnaires. This research study intends to be conducted in four private schools out of 166 schools in Dubai rated as outstanding schools in the academic year 2017-2018.

While interviewing the "H" from KHDA, she said that we are trying to go away from labeling any student in any segment. We are trying to fulfill the needs of every student according to his/her abilities. Here the researcher interrupts that Gifted and Talented Individuals should be known and supported in the right way to help them to fulfill their passion and help their society and humanity as whole. When administrations move on the way to equity then the support of gifted education becomes is more difficult. Gallagher (2005) suggested that the two predominant social values reflected in American education are equity and excellence: "The dual and desirable educational procedures of student equity and student excellence have often been in a severe struggle for scarce resources. Student equity confirms all students a reasonable education. Student excellence assurances every child the right to attain as far and as high as he or she is capable.

Because the challenges of equity have larger immediacy than does the long-term improvement of excellence, this struggle has often been won by equity." (Gallagher, 2005, p. 32) (F. Brown 2018)

2.3.3. Validity and Reliability of the open- ended questionnaire and the semi- structured interviews

Regardless the procedures chosen for data collection, the data must be critically assessed to measure its reliability and validity (Bell 1999). Reliability refers to the, "consistency of the test results" while validity determines the, "degree to which a test measures what it is intended to measure" (Orlich 1999, p. 354). Remarkably, an item that is unreliable lacks validity but an item that is reliable need not necessarily be valid (Bell 1999). Any lack of validity will be deliberated upon follow-up interview sessions. In Fact, interviews come with several disadvantages. Firstly, it is time consuming process. Secondly there is always a danger of bias creeping into the study as it is a highly subjective technique (Bell 1999). Analysing the answers of the interviews can be daunting and phrasing the questions correctly can be as challenging as in Surveys. The semi-structured interview has been selected to encourage participants to speak about themselves without restrictions, at simultaneously, allowing the researcher to reflect upon the knowledge to understand the subject more (Gaad & Khan 2007).

Observation studies have been included in this research to, "discover whether people do what they say they do or behave in the way they claim to behave" (Bell 1999, p. 156). Class observations might also take a place to examine the academic level of the student in relation to his age and academic curriculum. As a non-participant observer, efforts to "remain unobtrusive" during the period of the observation is essential (Creswell 2008, p.225). An out sourcing agent (someone unrelated to the research in any way) can be sent for observation, along with the researcher, in order to check and compare interpretation of events (Bell 1999). Wragg (1999) recommends observations to be done in as impartial way as possible for reliable interpretation of the collected data.

2.4. Document Analysis

The study uses different qualitative methods to reinforce the findings of the study. Questioners, Interviews, observation, document analysis on a nationwide is conducted to examine the status of Gifted and Talented Education in Dubai private schools. In addition to investigating educators' beliefs and attitudes towards educating the Gifted and Talented children, and inspect the current provisions in the field. Results and data are analyzed and studied and related recommendations are given in the different areas concerning Gifted and Talented Education.

Mertens & Mclaughlin (2004) stated that documents and records give the researcher access to information that would otherwise be unavailable; as all organizations leave trails of composed documents and records that trace their history and current status. They also indicated that the researcher must turn to these documents and records in order to get the necessary background of the situation and insights into the dynamics of their functioning. Thus, in order to get a proper picture of the status of Gifted and Talented Education in Dubai private schools, documentation analysis has been done for a number of (00) the inspection reports of (16) schools. The analysis has been done only for the "Care and Support" part of the inspection report where a specific phrase has been written about the SEN support and the Gifted and Talented Education level in the school. The document analysis shows the level of support given to the Gifted and Talented Students – in case any services is offered in the school- or it gives the recommendations to improve or initiate the Gifted and Talented Education services in the school.

A variety of inspection reports has been studied in addition to the published documents on the official KHDA. Also statistics, decrees, regulations, were reviewed and analysed to complete and support the data collected from the observation, questionnaire, and interviews.

2.5. Ethical Considerations

Ethical concerns will be taken seriously during this study. The study will be expanded due to the participants respect and the location of the research study as well as guarantee that the entire research is accompanied in a fair and credible manner (Creswell 2008). An informed consent from the parents, management, teachers, KHDA (KHDA), and everyone involved was obtained before starting the, surveys and observations. Moreover, the consent must guarantee that the participation

is voluntary with provision for the participants to withdraw from the study if they feel the need to do so (Phye 2001).

The research purpose will be clarified to the participants and a consensus regarding the reporting and distribution of the analysis will be arrived at (Bell 1999). Only those who are keen to participate and share their experiences in the gifted and Talented students promotion will be nominated to participate in the research. Participants will be encouraged to complete member checks of the transcribed data to ensure accuracy of the findings. In addition to this, participants' privacy will be certain and confidentiality of the information preserved. The feasibility of the triangulation design of mixed methods depends, to an extent, on the researcher's competency and knowledge-base to skilfully utilize the qualitative and quantitative methods collectively. Moreover, multiple data collection and analysis can also confirm to be an exacting task and equally time-consuming (Creswell 2008). The research will include the outstanding schools in Dubai. Naturally, gaining access to schools and arranging appointments with principals, teachers and other staff will require more effort and time. For the same reason, the researcher might be at a risk where teachers or other staff refusing to share certain documents or information. This can result in limited comprehensions into the Gifted and Talented students' promotion according to their academic level or professional diagnosing.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

This research is determining level of validity of local policy allowing the acceleration of the Gifted and Talented students in several ways according to their needs and abilities. Moreover, the student attainment level in the school must take part as will and many other measurements. The parents of Gifted and Talented children reaction my take two different directions. Some parents will appreciate this government initiative to support their children. On the other hand, some other parents will be scared from this change. They might be worried about their children social growth life experience, Exam Grades, segregation or any other reasons. The same situation might happen within some schools when they take the advantage of student promotion because the Gifted and Talented student may not need curriculum enhancing activities after promotion. While some other schools will think of it as financial loss in the budget because students will graduate quickly and whenever they promote a child they will lose one year academic fees.

The mixed method of research design used by the researcher will explore the society understanding for the gifted education concept. Who is the gifted and Talented student, how to support them in the proper way, and many other factors. Further recommendations will study possibility of promoting the gifted and talented students one academic year ahead every tree or five academic years in case the student is still finding the curriculum unchallenging for him/her.

3.1. Quantitative Data Analysis – Questionnaire

Quantitative research methods are one of the research methods dealing with numbers and anything that is measurable in a systematic way of investigation of phenomena and their relationships. It is used to answer questions on relationships within measurable variables with an intention to explain, predict and control a phenomena (Leedy 1993). An entire quantitative study usually ends with confirmation or disconfirmation of the hypothesis tested. Researchers using the quantitative method identify one or a few variables that they intend to use in their research work and proceed with data collection related to those variables. This quantitative method of research is used here to confirm multiple hypothesis related to the gifted and talented education such as:

- 1. The policy applied for gifted and talented students.
- 2. Department
- 3. Definition of gifted and Talented

- 4. Gifted and talented Identification Process
- 5. Financial budgets for gifted and talented Education
- 6. Training for (Principles, HOD's, and Teachers)
- 7. Enrichment tools and support programs
- 8. The Evaluation criteria of the rules and procedures.
- 9. Availability of any Strategic plans in the school
- 10. The enablers of gifted education
- 11. The Barriers of gifted education
- 12. And the recommendations.

Moreover, the quantitative method used here is also exploring the educational society agreement or disagreement of the hypothesis of teaching all students in the same way of teaching gifted education. In this part of the research, we will discuss the distribution of the sample size that participated in answering the questionnaire. All respondents were from private schools in the Emirate of Dubai. The data can be classified as by degree as following: 10% have high school graduated, 24% have bachelor degree, 19% of them have Master degree and 2% of them are PhD holders. This is shown in the table number 1 below. On the age side most of responded are between 20 to 50 years old. This is presented in the table number 2.

1.1 Sample distribution as per school curriculum:

The survey in this study includes parent, students and educational staff. The total sample is 51, from fifteen different private schools in Dubai. The graph shows the distribution of those schools by the international curriculum. As per to the data collected in the survey, there are 86 gifted and Talented students out of 24,280 total students in the schools sample, this represents 0.37% gifted and Talented students.

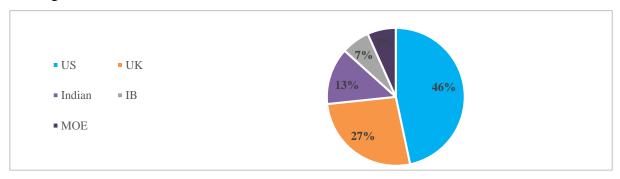


Figure 2: Sample distribution as per school curriculum

1.2 Sample distribution as per participants designation:

This survey collected data from different individuals and educators in the community including parents, students, teachers, education expert, school principals, head of

departments and education decision makers. The highest percentage was the educational leadership followed by parent, Teacher/Teacher Assistant and Students.

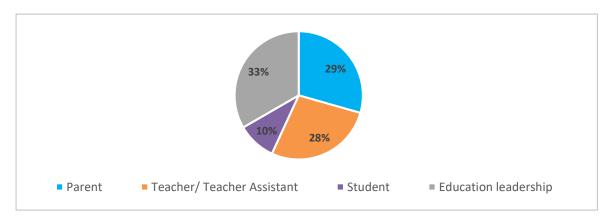


Figure 3: Sample distribution as per participant's designation

1.3 Sample distribution as per highest educational Qualification:

1.4

The below graph shows the distribution of survey sample based on their highest educational Qualification.

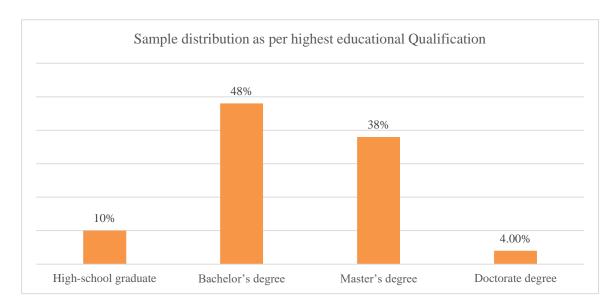


Figure 4: Sample distribution as per highest educational Qualification

1.5 Sample distribution by age group:

The below graph shows the distribution of survey sample based by age group. Most individuals contributed in the survey are between 20 and 50 years old. Only 8% are under 20 years old. And 6% are above 50 years old.

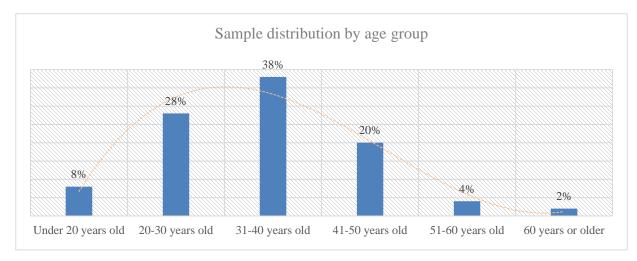


Figure 5: Sample distribution by age group

1.6 Sample distribution by the years of experience:

The survey includes individuals and educators with different years of experience. 33% have less than five years of experience. 22% have an experience of six to ten years. Quarter of the sample have an experience between 11- 15 years. 20% have more than 15 years of experience.

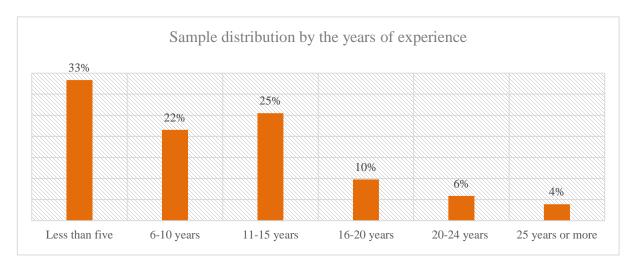


Figure 6: Sample distribution by the years of experience

1.7 Sample distribution by teachers who worked with gifted students:

The survey collected information of who worked with gifted students. 65% of the sample have experience with gifted students.

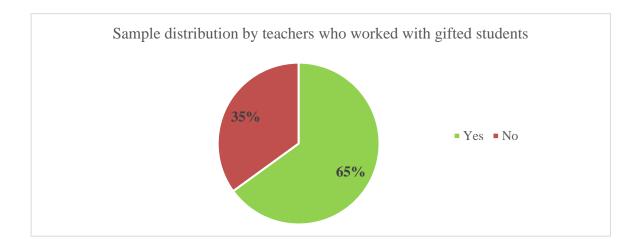


Figure 7: Sample distribution by teachers who worked with gifted students

1.8 Sample distribution by who received training sessions about gifted education:

One of the elements included in the survey is training received about gifted education. As shown in the graph below, 43% of the sample received training sessions about gifted education.

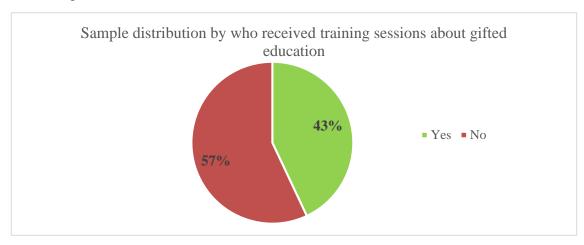


Figure 8: Sample distribution by who received training sessions about gifted education



Figure 9: Percentage of teachers who received training about gifted education by the number of training hours

The graph below showes the number of training hours teachers receive about gifted education. More than half of teachers in the sample revive less than five hours of training per year. 32% receive from five to nine training hours a year. 16% receive ten hours of training or more per year.

1.9 Sample distribution by who have positive attitude toward gifted students:

The data collected shows that 82% of the sample in the survey have a positive attitude toward gifted students.

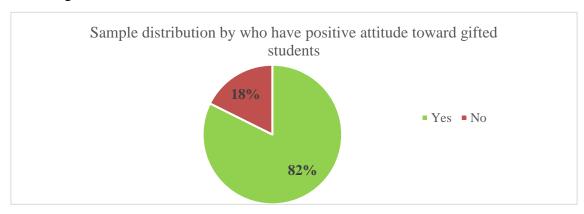


Figure 10: Sample distribution by who have positive attitude toward gifted students

1.10 Sample distribution by schools that have identified gifted Emirati students?

The focus on Emirati students became one of the national priorities in the UAE ("First-Rate Education System" 2018). The surveys shows that 53% of schools have Emirati students identified as gifted students. 44% had no Emirati students identified as gifted students.

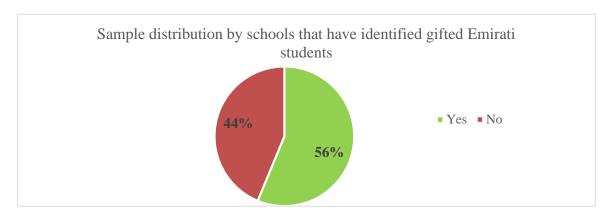


Figure 11: Sample distribution by schools that have identified gifted Emirati students

1.11 Sample distribution by who agreed on accelerating gifted students as per age?

One of the focus areas in the survey conducted for this study is gifted students acceleration. Analysis shows that 64% agree on accelerating gifted students as per age. 25% neither agree nor disagree. And 10% disagree on accelerating gifted students as per age.

Do you agree or disagree on accelerating gifted students as per age?

Answers	Percentage
Strongly disagree	2%
Disagree	8%
Neither agree nor disagree	25%
Agree	31%
Strongly agree	33%

Table 1: Sample distribution by who agreed on accelerating gifted students as per age

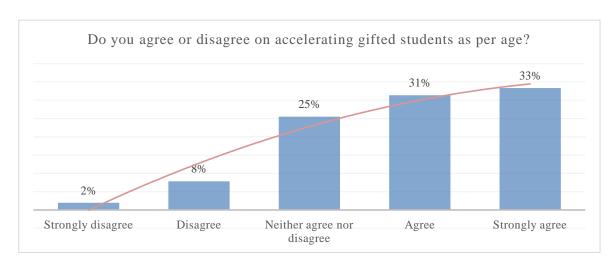


Figure 12: Do you agree or disagree on accelerating gifted students as per age?

1.12 If an average student is offered the right gifted education enrichment program. Do you agree he can be a gifted student?

One of the survey questions collected views about the idea of offering the proper gifted education enrichment program to an average students, can this help them being gifted students?

Answers show that majority of responses agree that offering the right gifted education enrichment program to average students can help them being gifted students. Large minority thought that this will not help average students being gifted. This results showed that the participants does not know what is giftedness because if the average student have taken proper enrichment program he might have the giftedness behaviour or the characteristics of giftedness but the student will never be gifted. For instance, teaching students how to be taller, will not make them taller but they can act like tall person.

Answers	Percentage
Yes	56%
Maybe	2%
No	42%

Table 2: If an average student is offered the right gifted education enrichment program. Do you agree he can be a gifted student

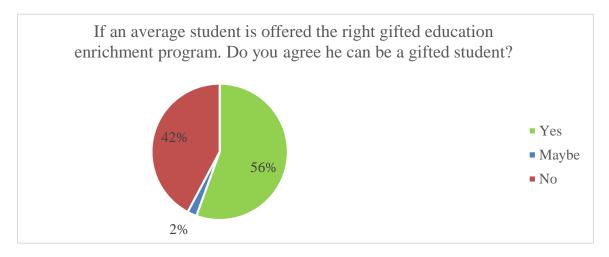


Figure 13: If an average student is offered the right gifted education enrichment program. Do you agree he can be a gifted student?

1.13 Sample distribution who thinks that CAT 4 assessment in accelerating gifted students procedure is extremely important procedure?

The graph below shows that more than half of the sample surveyed realize the importance of CAT 4 assessment in accelerating gifted students procedure that it is extremely important procedure. 43% thinks it is moderately 4% thinks it is less important. What should be done for Gifted and Talented students in Dubai Private Schools?

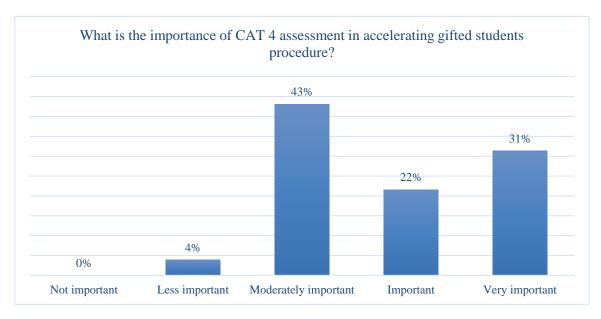


Figure 14: What is the importance of CAT 4 assessment in accelerating gifted students procedure?

2.1 Responsibility

The below graph shows the importance level of having a specialized department to cater for gifted education. Answers are segmented based on the awareness of a national policy for gifted education in the UAE. Both groups whether they are aware of a national policy for gifted education or not, found it important to have specialized department to cater for gifted education.

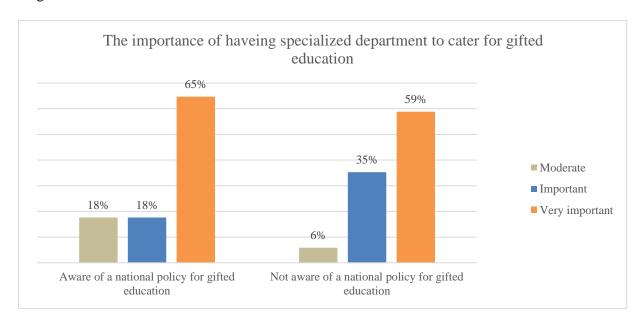


Figure 15: The importance of having specialized department to cater for gifted education

2.2 Challenges to identification

The analysis of the survey conducted in this study shows that more than half of schools identify gifted students using the same identification tools as students with special educational needs. However, only 46% of schools use different tools for gifted students identification.

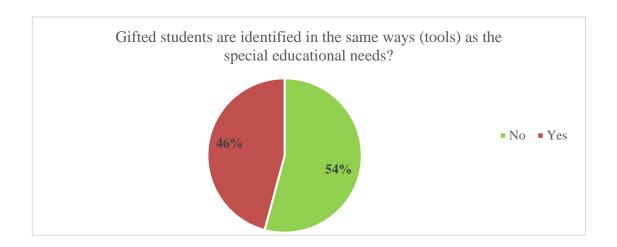


Figure 16: Gifted students are identified in the same ways (tools) as the special educational needs?

Gifted students are identified in the same ways (tools) as the special educational needs?	
Answers	Percentage
No	54%
Yes	46%

Table 3: Gifted students are identified in the same ways (tools) as the special educational needs?

The analysis of the survey shows that schools that have a specific screening and identifying procedures for identifying gifted students consider the importance of CAT 4 assessment in accelerating gifted students procedure more than schools that have no specific screening and identifying procedures for identifying gifted students. The graph below shows the percentage of importance level of CAT 4 assessment in accelerating gifted students

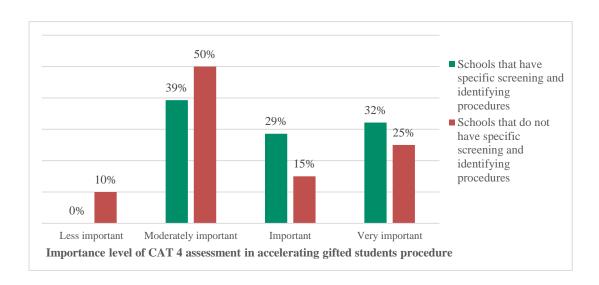


Figure 17: Importance level of CAT 4 assessment in accelerating gifted students procedure

procedure between schools that have specific screening and identifying procedures and schools that don't.

2.3 What is the definition of "Gifted Child"

• Is there a specific definition of 'gifted' learners within your school?

The analysis of the survey shows that 37% of private schools in Dubai have a specific definition of gifted learners, while 63% have no specific definition.

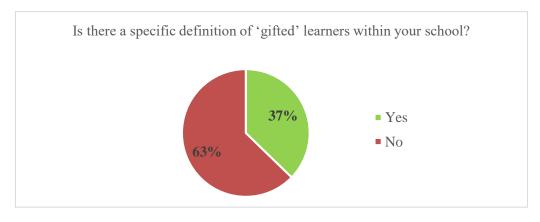


Figure 18: Is there a specific definition of 'gifted' learners within your school?

• What is the definition of gifted students at your school?

The below list shows some definitions of gifted students considered in Dubai private schools:

- Advanced students
- o Children with high levels of ability
- o Children with inherent potential.
- Fast learners and students who are skilled and can solve critical and higher level questions
- Gifted refers to a pupils who are capable of working/functioning academically at a level several years beyond their peers. This means a minimum of two years ahead of curriculum levels and scores of 130+ on Standardised tests such as CATs.
- O Gifted students are those with academic ability or potential which places them significantly above the average for their year group in one or more areas of academic achievement. These students would demonstrate performance that is distinct from their peers.
- o highly academic Achievers
- Lesson plans for gifted students
- Student with strength or talent.
- o students with an inherent potential to excel in their field of expertise
- The students identified as Gifted and Talented have an exceptionally high level of capability in one or more subjects, or in areas of personal interests such as electronics or play writing. Dubai American Academy recognizes the following areas of giftedness: Intellectually Gifted Academic Talented in Reading and/or Math Psychomotor and Visual/Performing Arts

2.4 Strategic Plans for gifted education

• Do you have strategic gifted education plans?

The below graph shows the distribution of schools that have strategic education plans based on the designation of the individual completed the survey.

Answers	Percentage
No	44%
Yes	56%

Table 4: Do you have strategic gifted education plans

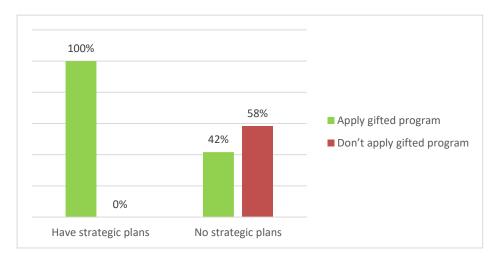


Figure 19: Do you have strategic gifted education plans

2.5 Support Programs

• Do you apply any gifted program at your school?

The survey data shows that only 22% of schools apply gifted program, while 78% don't apply program for gifted education.

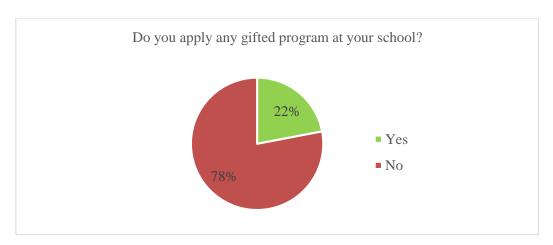


Figure 20: Do you apply any gifted program at your school?

Analysis shows that all schools that have strategic gifted education plans, apply gifted program. On the other hand, only 42% of schools that have no strategic gifted education plans are applying program for gifted students.

Answers	Percentage
No	44%
Yes	56%

Table 5: you apply any gifted program at your school

2.6 Current Policy "Dubai Inclusive Education Policy Framework"

• Are you aware of a national policy for gifted education in the UAE?

Data shows that 33% of individuals surveyed are aware of a national policy for gifted education in the UAE, while 67% are not aware about any national policy for gifted education.

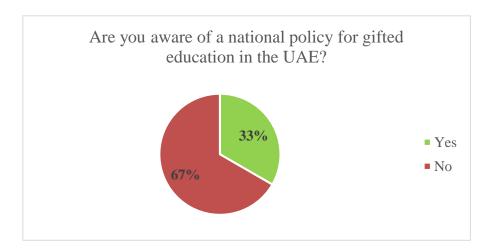


Table 6: Are you aware of a national policy for gifted education in the UAE?

Answers	Percentage
Yes	33%
No	67%

Table 7: Are you aware of a national policy for gifted education in the UAE?

2.7 Budget

Is there a financial fund for gifted programs?

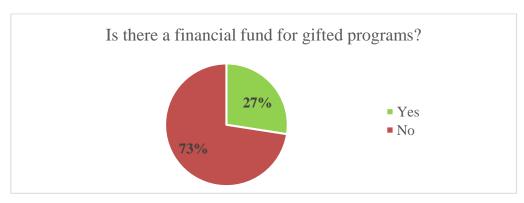


Figure 21: Is there a financial fund for gifted programs

Answers	Percentage
Yes	27%
No	73%

Table 8: Is there a financial fund for gifted programs

2.8 Evaluation

• Do you have an internal Evaluation tool for the gifted education program?

Among schools that have gifted education program, only 40% of schools have an internal evaluation tool for the gifted education program as shown in the below graph.

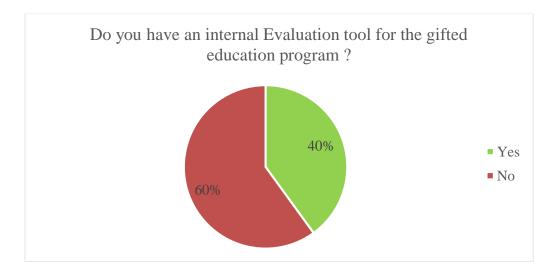


Figure 22: Do you have an internal Evaluation tool for the gifted education program?

Answers	Percentage
Yes	40%
No	60%

Table 9: How often do you evaluate the current gifted education programs?

o How often do you evaluate the current gifted education programs?

Answers	Percentage	
Every Week		24%
Every Month		14%
Every Term		38%
Every Year		24%

Table 10: How often do your school evaluate the current gifted education programs

• If yes, how often do you evaluate the current gifted education programs?

The below chart shows how often schools evaluate the current gifted education programs at their schools.

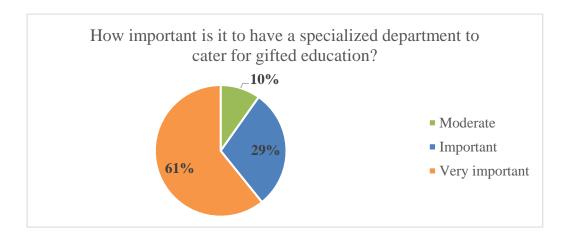


Figure 23: How important is it to have a specialized department to cater for gifted education?

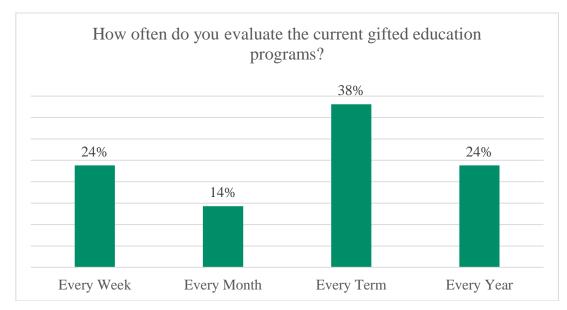


Figure 24: How often do you evaluate the current gifted education programs?

• How important is it to have a specialized department to cater for gifted education?

The data of the survey conducted in this study shows that 90% realize the importance of having specialized department to cater for gifted education in private schools in Dubai. There were zero responses saying that there is no importance or less importance to have a specialized department to cater for gifted education.

Answers	Percentage
Moderate	10%
Important	29%
Very important	61%

Table 11: How important is it to have a specialized department to cater for gifted education?

Gifted students considered as part of SEN (Special Educational Needs)?

The data shows that 41% of gifted students in Dubai private schools are considered as part of students with special educational needs. While 41% consider them as separate students groups.

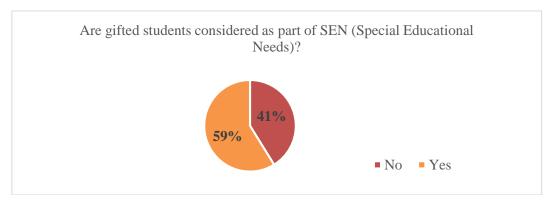


Figure 25: Are gifted students considered as part of SEN (Special Educational Needs)?

• Who is responsible for gifted programs at your school?

As a result of analysing the question in the surveys about the responsibility for gifted programs at private schools in Dubai, subject teachers are gifted programs in 46% of schools surveyed. 24% of schools give the responsibility for gifted programs to special needs\ resource room teacher. Data showed that 19% and 11% of schools' gifted programs are handled by activity teachers and principals respectively.

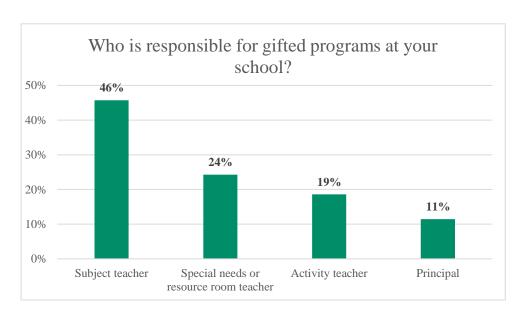


Figure 26: Who is responsible for gifted programs at your school?

RQ3: What should be done for Gifted and Talented students in Dubai Private Schools?

What is the most appropriate way to support gifted students?

The graph below shows the percentage of answers collected in the survey about the most appropriate way to support gifted students.

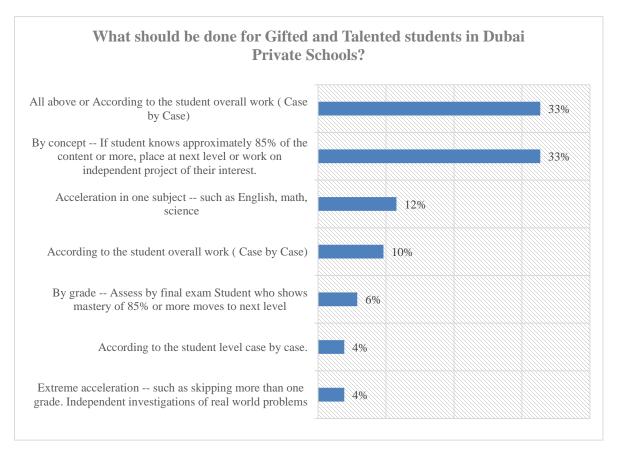


Figure 27: What should be done for Gifted and Talented students in Dubai Private Schools?

• What are the enablers (advantages) of gifted education in your school and in the country?

Row Labels	Count of Timestamp
Awareness, access to programs, recognition of additional learning, education framework that can accommodate	1
Boredom Prevention, Post-Secondary Success, Productivity	1
Competitions	1
Educated teachers, high standard schools	1
enhance education field in general	1

Explore many talents	1
Genius people who can think in a different way and provide solutions creatively	1
Given promotion to their ability grade level	1
Good encouragement from staff	1
Help them cope with their talent	1
Helps gifted students to show more talents and experience more challenging subjects.	1
Improve their ability	1
Improve their level	2
Improve their skills	1
introduce challenging problems & learning opportunities so that gifted students can utilize their abilities and not feel bored or frustrated from beaning in an unchallenging system	1
It brings education to a higher level	1
It helps in developing the students skills	2
matching students needs	1
motivation	1
My student support team at DAA, along with many classroom teachers, are passionate about doing what is RIGHT for children. They are the key enablers.	1
Openness	1
Private schools support	1
Promotes innovative thinking	1
Prosperous future / boosting innovation	1
Social media	1
Student engagement	1
Tailored learning	1
They are real assets if used properly	2
They can take a big role in the society	1
They improve the overall performance of the class and school, and motivate their classmates.	1
Win national competitions and help students to advance more	1

Table 12: Responses for "what are the enablers (advantages) of gifted education in your school and in the country"?

• What are the Barriers (limitations) of gifted education in your school and in the country?

As part of the survey conducted in this study, views were collected about barriers and limitations of gifted education in your school and in the country. Answers were diverse and fall into the below areas:

- o Lack of resources and teachers training
- o Lack of plans and programs for gifted education
- o Limited funding
- o No policies supporting gifted education

The graph below shows the percentage of views on the barriers and limitations of gifted education:

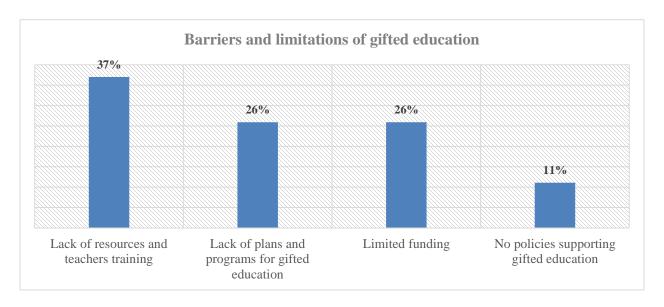


Figure 28: Barriers and limitations of gifted education

Barriers and limitations of gifted education	%
Lack of resources and teachers training	10
Lack of plans and programs for gifted education	7
Limited funding	7
No policies supporting gifted education	3

Table 13: Barriers and limitations of gifted education

• What are your recommendations to improve provision of gifted education?

The list shows the main suggested recommendations to improve provision of gifted education as collected from the survey conducted in this study:

- Arranging overseas trips
- o Broaden the curriculum and promote scholarships.
- o Care about their level more
- o Focusing on them as well as the low level students
- High quality programs offered at reasonable prices to encourage the gifted students' participation
- Make sure that the teachers prepare extra and critical thinking activities for them and give them the chance to be creative.
- More opportunities provided

- More program more awareness
- Reducing the school years and make it more technical. We need to study what is needed in the future work
- Should have a special school for them
- Special classes
- o Spread awareness and training for school management and staff first
- Stop the madness with using only data. The whole human being needs to be catered for.
- o Planning for them
- o Time- staff- resources motivations for the staff and the students
- We need a Dubai gifted and talented network that provides access to all the enrichment opportunities available in Dubai.

3.1.1. Interviews

Local interview were conducted with Mariam Al Ghawi during this research on the 12th of May 2018 at the BUID. The director in the Hamdan Award ("Home - HA | Hamdan Foundation" 2018).

3.1.2. Interview with Mariam Al Ghawi:

- 1. Considering the federal law for the rights of disabled persons. Does it mention the gifted education? **No**
- 2. Have you gone through the UAE framework 2015-2016? **No**
- 3. Can you explain its impact on the gifted children of Dubai private's schools? N/A
- 4. How does your organization cater for gifted students? What is the expected impact on gifted education from these projects? There was no projects for private schools, from the next academic year 2018-2019 they will start including private schools.
- 5. In your opinion, what does successful gifted education needs? Search what is the needs of the gifted and talented students and meet it. Parents must be involved in supporting gifted students.
- 6. What are the challenges facing gifted education? No specific department for gifted education to provide data base for gifted individuals details around all the emirates of the UAE.
- 7. Any categories is there for gifted education students? No categories

- 8. How do you see the parent role in educating gifted children? the parent role is limited to collecting excellence documents
- 9. Do you like to add anything more? I would like to suggest implementing a research project to search about gifted and talented students and the best ways to support them.

CHAPTER FIVE

DISCUSSION, CONCLUSION, RECOMMENDATIONS, AND LIMITATIONS

In this chapter, the researcher discussed the main stations in the Gifted and Talented student journey in Dubai private schools who participated in the study sample. Starting from the definition of Giftedness, to the identification instruments used to verify the gifted and Talented students, the supporting gifted education programs, the attentiveness to the policy of "Dubai Inclusive Education Policy Framework", strategic plans in the schools, how many training hours the teachers receive about gifted education specifically, and finally evaluation. This will be highlighted by analyzing and discussing the collected information the researcher has gathered through the survey, local and international interviews, observations and other data collection, and document analysis.

4.1. Discussion

Reflecting on the survey results, which showed many facts related to the current situation of policy, definition, identifications, support programs, and teachers training of gifted education in Dubai Private Schools, the researcher grouped the discussion of the reflected data into a model that explains the gifted and Talented student journey in Dubai. The discussion is presented from the journey model in the below Figure.



Reflecting on the survey results which showed that all most all the participants have a clear realization about the *importance of having a specialized department to cater to gifted education* needs in private schools in Dubai. Similarly, stated in the Dubai inspection framework 2014-15 "Special educational needs are needs that are different from those of the majority of students and which arise from the impact of a disability or recognised disorder. In line with this definition, students with gifts and talents are now identified as a separate and distinct group" (Dubai Inspection Handbook 2014-2015). A minority of schools does not have a department or an expert responsible for gifted and talented students because of the limited resources provided or the low quality of education level in the school. Gaad stressed that one of the responsibilities of the special education department is to "issue general policy for special education needs and gifted and Talented students' sector" (Gaad 2010). The results showed that a minority of individuals surveyed are aware of a national policy for gifted education in the UAE. Also, Minority of participants were unaware of any national policy. Unlike the Dubai inclusive education policy framework, 2017 stated nothing about gifted and talented education. Which is in line with separating gifted and Talented from the inclusion sector. However, there is no policy for gifted and talented student in Dubai private schools. Mariam AlGhawi, 2017 stated that there are several discrepancies between the existence of official policies prescribed by the MOE and the definition of giftedness, the methods used to identify gifted students, and the perceptions of the parents and some of the teachers. There seems to be a deficiency in the planning, dissemination and implementation of official policies". To improve the Gifted and Talented Education there is a huge need to implement a universal Gifted and Talented Policy consists of a group of procedures for each element: government, Schools, Teachers, Parents, and Students, in gifted and talented education.

Although there are many definitions for gifted and talented students, as discussed in the literature review, Renzulli's "Three Rings" model was one of the most famous models that explained the gifted and talented individuals. Reflecting on the survey results which showed that the majority of private schools in Dubai *have a specific definition of gifted learners*, while fewer private schools have no specific definition as the majority had. Similarly, the UAE inspection framework 2015-2016 defined the Gifted and Talented definition from the country's point of view (Khda.gov.ae, 2018). The below list shows some definitions of gifted students considered in Dubai private schools:

- Advanced students
- o Children with high levels of ability
- o Children with inherent potential.
- Fast learners and students who are skilled and can solve critical and higher level questions
- O Gifted refers to pupils who are capable of working/functioning academically at a level several years beyond their peers. This means a minimum of two years ahead of curriculum levels and scores of 130+ on standardised tests such as CAT4.
- Gifted students are those with academic ability or potential which places them significantly above the average for their year group in one or more areas of academic achievement. These students would demonstrate performance that is distinct from their peers.
- o highly academic Achievers
- o Students with strength or talent.
- o students with an inherent potential to excel in their field of expertise
- o The students identified as Gifted and Talented have an exceptionally high level of capability in one or more subjects, or in areas of personal interests such as electronics or playwriting. Dubai American Academy recognizes the following areas of giftedness: Intellectually Gifted Academic Talented in Reading and/or Math Psychomotor and Visual/Performing Arts.

The current situation of Gifted and Talented students in Dubai Private Schools is relatively complicated as Dubai is a multicultural society comprising hundreds of nationalities, the need for private schools appeared and came to have 16 different curriculums in Dubai Private Schools. The various curriculums on board created a sophisticated challenge to Knowledge and Humans Development Authority (KHDA), who is regulating private schools in Dubai. The United Arab Emirates inspection framework 2015-2016 identified the Gifted and Talented Definition from the country's point of view. However, still, the majority of private schools in Dubai neither have Special Education Needs Services nor inclusion department or even gifted and talented department. Despite separating Gifted and Talented education from the Special education needs still, most of the schools are considering the Gifted and Talented education under the Inclusion or Special Education Needs department. This is an evidence for lack of communication between KHDA and Private schools in Dubai. Urgent awareness is needed to bridge the gap between KHDA and Dubai Private Schools. The government required to save the future of gifted and talented students by setting the proper policy for Gifted and Talented Education, as the first step and ensure that schools are implementing those policies.

The concept of mental age was significant for psychological testing to determine intelligence. (Colangelo & Davis 2003). Similarly, the survey results showed that more than half of the schools identify gifted students using the same identification tools used for the SEN students. Which is usually counting the gifted students' mental age. The analysis of the survey conducted in this study shows that more than half of schools identify gifted students using the same identification tools as students with special educational needs. However, the part of schools uses different tools for gifted student's identification. The CAT4 and Progress Tests, supplied by GL Education, are some of the variety of assessments recommended to assist schools to fulfil these requirements.GL assessments or CAT 4 (Cognitive Abilities Test) is a clear example for an instrument to measure the Cognitive Abilities for SEN student and gifted students. The analysis of the survey shows that schools that have a specific screening and identifying procedures for identifying gifted students consider the importance of CAT 4 assessment in accelerating gifted students procedure more than schools that have no specific screening and identifying procedures for identifying gifted students. The graph below shows the percentage of the importance level of CAT 4 assessment in accelerating gifted students procedure between schools that have specific screening and identifying procedures and schools that don't.

Looking at the status of budgets specified for the gifted education, the survey results showed interesting results related to the question "Is there a financial fund for gifted programs". All most all the participants said that they do not have any budget for gifted education. The budget is an essential factor in the education. Without a budget the school cannot provide a good education for the gifted and talented student. As many of the identification instruments and support programs are very expensive, teachers training in gifted education is expensive as well. Regarding the teachers training, the results showed that only minority from the participants had received teacher training about gifted education. Many local researches such as (Amna Al Obaidly 2006) and (Mariam Alghawi 2017) discussed the problem of teachers training. Similarly from 2006 up to 2017 and 2018, still, there are no training hours for teachers or it is very low. Teachers are the source guidance for the Gifted and Talented Students. What will happen when the guidance itself is lost! The new government policy of teachers licensing states that all teachers must have Special Education Needs training to be able to apply as a class teacher in Dubai private schools. The teacher licensing did not mention anything about Gifted and Talented Education. Davis & Rimm,

(2004) stated that "still several educators consider that the gifted and talented children are smart enough to be successful without any support". Unfortunately, most of these gifted and talented individuals may not succeed without appropriate intended support (Davis & Rimm, 2004). The survey data showed that only a minority of schools apply gifted support program, while the majority do not apply any support program for gifted education. It is well known that gifted and talented students have exceptional abilities toward challenges. Thus, these abilities should not be wasted without investments. There is a clear need from governments to set policy and list a plenty of opportunities for the gifted and talented students in economic and energy fields. At the same time, Gifted and Talented should be protected from the knowledge and efforts exploitation by some entities in the country. Finally, Gifted and Talented students must invest in themselves in the area of their interest without any intention on the subject and with any emotional and social pressure. The KHDA announced about the school-parent contract. As a parent signing this contract, I saw that, it is signed by four parties: school, parents, KHDA and Dubai Courts. The school – parent contract contains all the details of the student in the school in addition to the rights and duties of both sides. When any problem occurs between the school and the parent; KHDA is resolving the complaint according to the rules and policies mentioned in the contract. Parent of Gifted and Talented children can use the contract to reserve their children's rights to receive good quality gifted education support programs. Moreover, sometimes the Gifted and Talented students need extra supporting hours with the social worker or in some for some emotional issues. In this case, the amount of payment for these sessions is stated per hour parent contract to avoid misunderstanding and protect the rights of all parties.

One of the essential results of the research is that out of a majority of the Dubai private schools participated in the survey, only a minority of the schools have an internal evaluation tool for the gifted education. While the majority are not applying any evaluation criteria. To enhance quality in education, specific policies, practices and procedures have often been designed and implemented in the forms of schools' inspection and evaluation tools (Eurydice 2004). Also, Eurydice (2004) added that internal and external evaluation systems have gained the predominance in being applied as a process of quality assurance, even though the two have remained different. The external evaluation (outside of school) is usually done by KHDA. The care and support section under the (UAE inspection framework 2015-2016 which is still -used up to date) are categorizing

the evaluation of gifted education into four categories: outstanding, very good, good, acceptable, week, very weak. The internal evaluation term is very important and nowadays tied up with benchmarking. The education support provided to the gifted education should be evaluated and enhanced annually as this is one of the sectors that is gaining momentum with the advancements in science and technologies.

Bright IDEA 3 researchers in USA ("Bright IDEA 3 | American Association For Gifted Children" 2018) promised to accomplish the goals of the project (explained earlier in the literature review chapter) that they will employ an experimental design and use rigorous analytical methods with an outcome to provide trustworthy information regarding how Bright IDEA can serve as a model that can be generalized and reproduced elsewhere. Similarly, the project can be implanted locally in Dubai. Such a model is extremely important. Not for gifted education growth but for ahead step for future. Gifted education is to give every child in the school the chance to thrive through a series of four years of teaching along with gifted education support services.

One of the focus areas in the survey conducted for this study is gifted students' acceleration. In 2004, Colangelo, N., Assouline, (Colangelo, N., Assouline, S.G. and Gross, M.U., 2004. A Nation Deceived: How Schools Hold Back America's Brightest Students) stated that "a review of 380 studies revealed that almost all forms of acceleration result is in growth and achievement". Results showed that the majority of participants agree on accelerating gifted students as per age and minority neither agree nor disagree. A few participants of 10% disagree on accelerating gifted students as per age. Similarly, Pressey(1949) stated that "acceleration is an educational intervention based on progress through an educational program at rates faster or at ages younger than typical". Also said, acceleration practices provide the appropriate level of challenge and reduce the time necessary for students to complete traditional schooling (NAGC, Position, Paper, 1992). Gifted and Talented students should have the opportunity to reach their full potential during their education years in the school. But, what does this model mean in practical? And what about the governance role in this model?.

In a nutshell there are many provisions ready to implement for gifted and talented students. However, the clear and specific goals should be set by the governors to achieve all the four phases' model in the Gifted and Talented individual journey in Dubai Private Schools.

4.2. Conclusion

One of the great challenges in gifted education is that there is no up-to-date specific database for gifted and talented student in Dubai private schools. Hopefully, this database could be provided next year as the Hamdan Award has opened the registration for the non-local students in the "Hamdan Award" program. The study concludes that accelerating gifted and Talented students are subjected to study of the students who applied for acceleration case by case according to multiple identification methods that combine all the evidences for giftedness such as IQ test for cognitive abilities, Identification report by an Educational psychologist, school assessment, CAT4 test and the complications of giftedness case.

4.3. Limitations

The study took place during the busiest days of the academic year, where students and teachers were preparing for the annual exams in June 2018. Most of the teachers and students would like to go into the summer vacation and they postponed answering the survey questions. Which results in a less number of survey answers. The survey was directed to many designations of people where some people especially the parents stopped answering the survey when they found some vague question. Literature has very limited publications and studies related to gifted education and talented students in the Arab World or even in UAE, which made it difficult for the researcher to compare or analyse other identification tools implemented in other Arab countries. Due to the time limitations, before the schools closed, the researcher has taken a ready survey and added some more questions into it in order to avoid going through the pilot phase. The biggest limitation faced in the research is the lack of updated research journals or books. Most of the updated data were found in the association, authorities, or university websites. As a government agent in the KHDA where the research was conducted in the private schools in Dubai fields, the researcher was confronted it both as an advantage and a challenge. The advantage was having good contacts and communication with schools. The disadvantage was very critical, the researcher supposed to explain to schools that these survey questions are conducted by herself not by KHDA research department. Moreover, a permission should be taken from the research department to do such a study.

4.4. Recommendations

To solve the issue of the gifted education budgets the KHDA should announce the school owners to provide resources for their schools. Consequently, every private school in Dubai must set a budget for the Gifted and Talented support programs and teachers training. The budget should be specified for the instruments to support gifted education. For example, a private school in Dubai needs to purchase the identification assessments, supporting tools, and resources for the gifted and talented student's experiments. Teachers training is an essential factor in the development of gifted education. The training should be high-quality training, not less than 20 hours per year to build on the government visions toward gifted education. To provide proper support for Gifted and Talented students. Teachers should get at least annual training by the recent updates about gifted and Talented Education. While saying, teachers, we are not considering the gifted and talented teachers but we mean each and every teacher dealing with gifted and talented students

The list shows the main suggested recommendations to improve the provision of gifted education as collected from the survey conducted in this study:

- o arranging overseas trips
- o Broaden the Curriculum and promote scholarships.
- More care as their level.
- o Focusing on them as well as the low-level students.
- High-quality programs offered at reasonable prices to encourage the gifted students' participation.
- o Make sure that the teachers prepare extra and critical thinking activities for them and give them the chance to be creative.
- o Ensure more opportunities provided
- More awareness programs to be conducted.
- Reducing the school years and make it more technical. We need to study what is needed in the future work.
- o Should have a special school for them.
- Special classes for them
- o Spread awareness and training among school management and staff.
- Stop the madness with using only data. The whole human being needs to be catered for.
- o There should be separate planning for them.
- o Time, Staff, Resources, Motivations for the staff and the students.
- We need a Dubai G&T network that provides access to all the enrichment opportunities available in Dubai

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Appendix 1: Survey Questions

A Survey testing the journey of gifted and talented students in Dubai's Private Schools

The following survey enquires about acceleration of gifted students in Dubai schools. Your answers will provide insights for a study on this subject and help towards building a more inclusive education ecosystem in Dubai that supports the needs of gifted students. And yes - there are no right or wrong answers – so choose the most appropriate response according to you. We want to assure you that your responses are completely anonymous. Responses to anonymous surveys cannot be traced back to the respondent.

Thank you	for your cont	tributions
-----------	---------------	------------

•
school:
ubject do you teach:
your nationality:
the highest degree or level of school you have completed?
ligh-school graduate achelor's degree laster's degree rofessional degree octorate degree other
your age?
Under 20 years old 20-30 years old 31-40 years old 41-50 years old 51-60 years old 50 years or older
currently ?
Principal Administrator / Department Head Social Worker Psychologist Subject teacher Special needs teacher Other (please specify)

Yes

No

7- Do you have strategic gifted education plans at your school?

	8- Years of experience: Less than five years 6-10 years' experience 11-15 years' experience 16-20 years old 20-24 years old 25 years or more 	
	10- Have you ever worked with gifted s	students? Yes No
No	11- Have you ever been trained on prov	viding programmes for gifted students? Yes
	12- How often do you receive training	in gifted education:
	 Once a year Twice a year Three times a year Others (please specify) 	
No	13- The staff in your school have pos	sitive attitude towards gifted students? Yes
	14- Is there a specific definition of 'gifte	ed' learners within your school? Yes No
	15- If yes, please give the definition be	elow:
No	16- Is this definition is considered as pa	art of SEN (Special Educational Needs)? Yes
17- educ	cational needs of all other pupils? Yes	entified in the same ways as the special No identifying procedures for identifying gifted
	lents in your school? Yes No	
	•	n the lists below to show how gifted students re for each one chosen tool if applicable (you
	 IQ test Cognitive Abilities Test (CAT4) Teachers' nomination Parents' nomination tools Characteristics test Creativity test 	7. Standardized tests 8. Students' portfolio 9. Psychologist or Social test 10.Students' product 11.Other (specify)

20-Which	provision	is provided	for gifted	l students	at your	school?	(you can	choose i	more
than one)									

 Separate units or classes within mainstream setting Mainstream class rooms Separate units or school hours Other (specify) Summer camp 8. Weekends programs after out) Summer camp 8. Weekends programs after school
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21- Which gifted programmes are used at your school? (You can choose more than one option)

 2. Advance Placement 3. Enrichment 5. Curricular adaptation/modification 6. Differentiated curriculum 7. Weekend programs 9. Competitions or Olympics 10. Gifted club 11. Counselling services 12. Other () 	S

- 22- Who is responsible for gifted programs at your school?
- 1. Subject teacher
- 2. Special needs or resource room teacher
- 3. Principal
- 4. Activity teacher
- 5. Other
 - 23- Is there a financial fund for gifted programs? **Yes No**24-Do you have internal evaluation for your gifted program students? **Yes No**25- If *yes, what is it, and how often* -----26-How many gifted students are currently enrolled at your school?
 27-What is the percentage of gifted students in the school?
 - 28- Which are the top three student nationalities identity at your school?

- 29-What are the top three student nationalities of gifted students at your school?
- 30- Does your school currently have any identified gifted Emirati students?
- 31- Are you aware of a national policy for gifted education in the UAE? **Yes** No
- 32-Is it important to have a specialized department to center for gifted education?
 - 1. Very important
 - 2. Important
 - 3. Not very important
- 33- Do you agree or disagree on accelerating gifted students as per age?

For example: Student A studies in Year 1 but he is 6 or 7 years above his chronological age in his ability.

- o Strongly Agree
- Agree
- o Disagree
- o Strongly Disagree
- Neutral
- 34 What is the importance of CAT 4 assessment in accelerating gifted students procedure?
 - o Not at all important
 - Low importance
 - Slightly important
 - Neutral
 - Moderately important
 - Very important
 - Extremely important
- 35 In your opinion, what is the most appropriate way to support gifted students?
 - o **Acceleration in one subject** -- such as English, math, science
 - By concept -- If student knows approximately 85% of the content or more, place at next level or work on independent project of their interest.
 - By grade -- Assess by final exam Student who shows mastery of 85% or more moves to next level
 - Extreme acceleration -- such as skipping more than one grade.
 Independent investigations of real world problems
 - According to the student level case by case.

0	Other/More ways
	specify

- 36- In your opinion Year/Grade acceleration impacts gifted students?
 - o No affect
 - Minor affect
 - Neutral
 - Moderate affect
 - Major affect
- 37- If you are decision maker in charge of accelerating gifted students what is the proper way, procedure, tool, assessment to help you take right decisions
- 38 Please give a reason for your choice on last question?
- 39- What are the **enablers of gifted education** in your school and in the country?
- 40- What are the **Barriers (limitations)** of gifted education in your school and in the country?
- 41- What are your **recommendations** to improve provision of gifted education?

Appendix 2: Row labels of barriers and limitations of gifted education

Row Labels of Barriers and limitations of gifted education	Count	of
	Timesta	mp
Being part of a rigid education system. As gifted students would want to explore the rules		1
and underlying science behind the nature of things, therefore they need to be given to the		
opportunity to express their education needs and also be challenged.		
Cost		2
differentiating types of gifted		1
Fund		1
Funding		1
If the teachers didn't take into account their abilities and didn't enhance their skills, they might not make a noticeable and greater improvement.		1
Lack of admin support		1
Lack of estimates for hidden abilities.		1
Lack of experts to deal with such category		1
Lack of funds in that direction and trained personnel.		1
Lack of pathways, lack of funding		1
lack of resources		1
Limited		2
No help		1
No proper programme across the country I am aware of		1
No specific training and tools to identify and cater for gifted students		1
Old policies		1
Parents inability to afford		1
Policies		1
Resources and staff to support and follow up with them.		1
schools do not provide special programs for them		1
Separate lesson plans have to introduce them		1
Stereotyping		2
Teacher training		1
The time and the less of planning		1
They are less focused		1
they might not adjust		1
Weak economic sponsorship, and frustration by their friends.		1
عدم توفر المرافق اللازمة للموهوبين من اجهزة وامكانيات		1