

Teachers' Attitude towards the Gifted Students in Inclusive Settings

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Abstract Gifted children have naturally possessed extraordinary intellectual abilities. Identifying and developing them is a challenging task for the teachers. Teachers' role is crucial in the learning and education of gifted children. Besides training, skills, experience and expertise, teachers need to have certain attitudes towards gifted children, understanding their unique needs in the context of other students performing at an average aptitude. The present research aims at finding and analyzing the perceptions of teachers towards gifted students. The study aims to identify gaps in the training and understanding of educators in congruence with how they can better assist gifted students. The study surveyed private and government schools in the Kingdom of Bahrain utilizing a quantitative methodology. Four hundred and ten teachers took part in the survey, however only 400 returned all necessary documentation to be included. The study's findings stated that teachers' positive approach, competence, and ways of perceiving gifted children impact the students' overall growth, potentially even inhibiting their educational advancement. Educators approaching gifted students positively can aid in this, but overall, it was asserted that in many cases, educators simply do not possess the appropriate training and may approach students incorrectly. For example, they may view a gifted student as troublesome. The student is not necessarily a problem student, but rather has become bored with simplified curriculum and has begun acting out, indicating many educators do not know how to identify a gifted student. They may be equally poor at teaching one as well. Research limitations included the number of respondents, which was low for the vastness of this topic. Practically speaking, Implications of the research ensure more

specialized training is necessary for educators to identify, view, and educate gifted students appropriately. Social implications suggest the more gifted students an educator cannot accommodate, the more we deprive future generations of their potential genius.

Keywords Differentiation, Gifted Education, Inclusive Classrooms, Teacher Attitude and Perception

1. Introduction

Gifted children are those who have naturally possessed extraordinary intellectual abilities. The general IQ score of gifted children is 130 or above. Educators can use IQ tests and similar assessments to identify exceptional students in the class. They may also begin watching for certain behavior types and their characteristics. Manning [1] defines gifted children as those with high intellectual or academic abilities. However, according to the author [1], it is hard to define the term gifted students. Not every gifted child has similar characteristics, for example, Manning [1] defined the word gifted as, "endowed with a special aptitude or ability." Russell et al. [2] called giftedness the "precious endowment of potentially outstanding abilities that allow a person to interact with the environment with remarkably high achievement and creativity levels" (pp. 2). Gardner [3,4] highlighted the idea of multiple intelligences when he challenged the singular idea of general intelligence, suggesting multifaceted strength best represented giftedness in students. Renzulli [5,6] added that elevated levels of task commitment and creativity must

be considered when defining giftedness, as well.

Every student is unique and different. The curricula, teaching pedagogy, and other teaching techniques are developed as per the needs and capacity of the average student, leaving little room to address a gifted student. However, the coping ability of every student is different and depends upon his/her IQ level. The students of average intellect may be comfortable in such an educational system because it suits their capabilities and learning style. However, two types of students face a challenge while dealing with the mentioned teaching strategies. The first group includes students with below-average IQ levels, and the second concerns gifted students. Present research indicates children with lower IQs are not included in most curriculum development, rather focusing on gifted students. Due to the average educational system and pedagogy, gifted students face several challenges. They are socially matured, therefore facing problems when interacting with peers, and even educators who lack training and experience in managing their curriculum. The coursework is too easy for them to generate interest, often leaving them unable to focus on their studies. As a result, they are often left behind their peers, or even considered troublesome despite their exceptional talents. Sometimes, they are even bullied by their peers, or begin acting out due to boredom. It is essential to explore the special talents of the gifted children, striving to develop them to be the nation's asset. Special attention is needed to overcome the barriers that resist them from utilizing their exceptional talents.

Parents and teachers play a crucial role in educating and shaping children in initial stages of their life. Positivity and support from parents, caregivers, and educators is paramount during this time. An unsupportive approach from any party may inhibit the child's development. As such, parents and educators must work to better understand the needs of gifted children, remaining competent of these approaches and infusing creativity into their interactions with the children. The methodological and pedagogical innovations determine the academic success of gifted students.

Instructing gifted students is challenging. Educators must develop a certain competence when instructing gifted students. Personal attitude and cognition are paramount to the student's success. Even the educator's personality can have an impact on the student. For example, educators are expected to identify the special needs of each child, planning a modified curriculum when necessary. There are admittedly several barriers when differentiating gifted students from average students, as well as developing the flexible teaching strategies necessary to ensure their success. Educators then must essentially advance curriculum, supplying the gifted student with a separate set of learning goals and outcomes specified by their accelerated or otherwise more challenging coursework. An educator's attitude is also important to the development and success of gifted students. Daily instruction, content selection and development, delivery methods, interaction

styles, and evaluation techniques are each impacted. Long accepted pedagogical beliefs can shape an educator's attitude on working with gifted students, as well. Along with the pedagogical attitude, the attitude towards technology integration is also important while instructing gifted students, noted by Shaunessy [7]. The present research aims at discussing teachers' overall attitude towards the education of gifted students.

Educators of gifted students are required to maintain a curiosity to explore the student's needs, as the process of providing flexible instruction will benefit both the teacher and student as noted by Rinn et al. [8]. Instructional approach and material are essential to maximize children's learning experience, and must remain a priority for the educator, making attitude toward instructional approach that is much more important. Several previous studies indicate that teachers lack confidence while identifying the needs of gifted and talented students, making it difficult for them to provide an optimum learning experience for the students [9]. Troxclair's [9] study also derived similar findings regarding teachers' confidence, indicating several strategies which can be used while managing the education needs of gifted students, such as educational acceleration, curriculum compacting, grouping of students, identification, pull-out, and other specialized programs, classes, and teaching techniques or strategies [10-14].

Teachers have different perceptions about gifted students, as well, which may make it difficult to define a universal technique or set of strategies when educating a gifted student. Teachers construct their perceptions via a personal process, including students' past and present experiences and memories, suggested by Ultanir [15]. There are differences in perceptions between educators who have received formal training and those who have not received it, noted by Berman et al. [16]. Therefore, the present study evaluates (a) teachers' attitude towards various instructional approaches for differentiating curriculum and instruction for gifted students in mixed ability classrooms, (b) the confidence level of educators concerning identifying the needs of gifted students in academically diverse classrooms, (c) preferences of instructional strategies teachers use to meet the needs of gifted students in academically diverse classrooms, and (d) the perceptual differences regarding gifted education between teachers.

As a result of these conclusions and the aforementioned goals for the study's evaluation, it can be assumed that the purpose of the study is important. Every day, gifted students are left behind in their classes for no reason. They maintain the intellect and talent to pursue ambitious educational goals, but if their educator is unable to identify their needs or understand what requirements a gifted child may have, they may grow bored in class and become a disruption. As stated, they may also be left behind due to boredom, only having what would be considered remedial schoolwork for their aptitude. Addressing the factors that potentially invariably supply educators with the capacity to

provide a gifted student with optimum learning outcomes is imperative to the future of each student, and the future of education systems across the country.

2. Literature Review

The proper utilization and actualization of the gifted students' talents are of utmost importance. Doing so, however, has been enigmatic for parents and educators regarding the gifted students' underachievement and disengagement. There are different perceptions regarding student disengagement, with Ronksley et al. [17] highlighting the disengagement as a specific problem. The authors [17] referred to the statistics in which it was observed that 60% of gifted students could not actualize their potential when no or unsatisfactory help was offered, leaving the student and society at a disadvantage. Gifted students' disengagement is caused by a diverse range of cultural, social, economic, and family backgrounds, but still remains such a complex issue that no single cause can be identified. When students are engaged, they learn more effectively [18]. Gibbs et al. [19] and Neumann et al. [20] have developed the following cyclical model with four interrelated dimensions of student engagement: behavioral, affective, social, and cognitive.

Issues with disengagement can be solved through various instructional approaches, one being an inquiry-based instructional approach. The approach helps

students develop a higher cognitive skill level, noted by Cairns [21]. It also allows applying their deeper understanding of the academic principles to everyday phenomena, according to Constantinou et al. [22]. Gifted students naturally possess a greater understanding of complex ideas and enhance comprehension skills for addressing and completing difficult tasks, making the inquiry-based instructional approach effective. Evidence of its effectiveness is also found in the study of Constantinou, et al. [22]. The approach contextualizes students learning, and is related to high achievement. Though sufficient alone, it is suggested that this instructional approach be integrated [21].

Yang [23] reported the effectiveness of instrumental approaches and strategies, separating from instructional inquiry. The instructional approaches such as case studies, video demonstration, instructors' notes, mini-projects, and discussion forums were the most effective instrumental approaches. Yang [23] observed the importance of case studies, stating that the approach helps the student conceptualize learning, understanding, and applying. Though the study is not conducted in the context of gifted students, it undoubtedly indicates the complexities and multiple dimensions of the instructional approach that are necessary for teaching gifted students [23]. Myers et al. [24] also confirmed that the instructional strategies enhanced students' learning experiences and overall satisfaction levels.

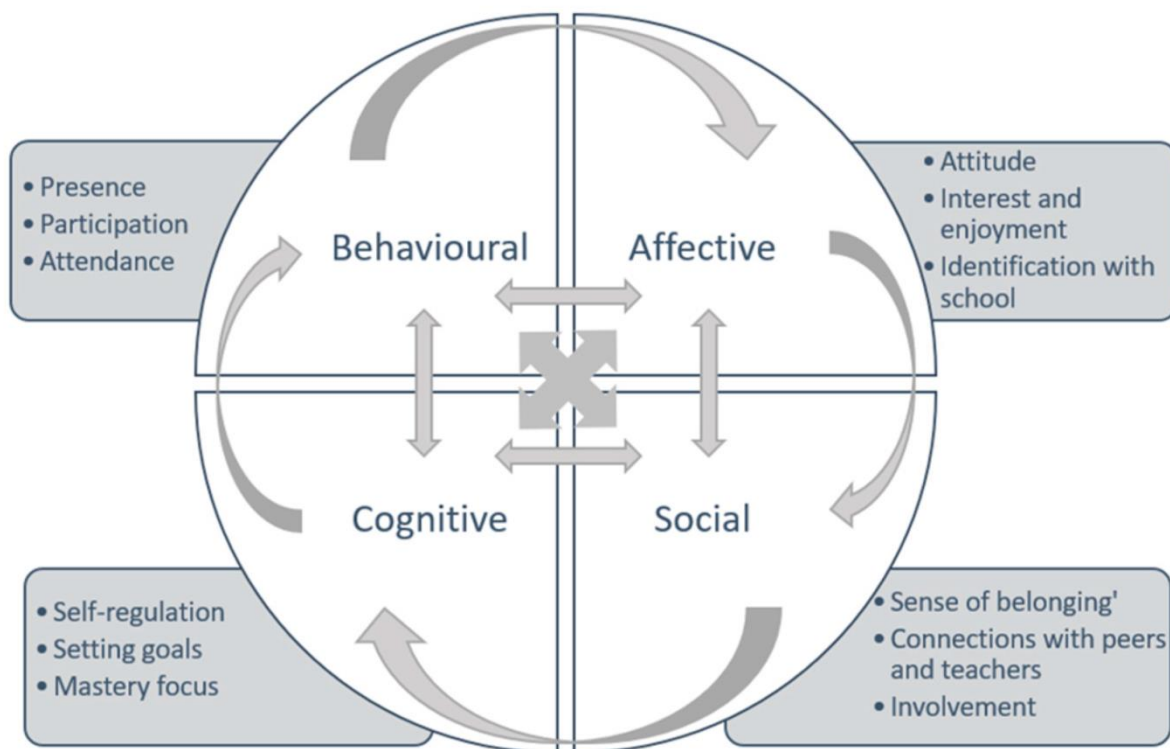


Figure 1. Cyclical model of four dimensions of students' engagement

Gruyter [25] cited Jones and Carter regarding instructional approaches highly influenced by the teachers' beliefs and attitudes. Teachers' beliefs towards instructional approaches have become prominent in educational research for several decades [25]. The author [25] states a teacher's beliefs and attitudes have a significant impact on their classroom practice. The author studied teachers' attitudes regarding Inquiry-based learning, or IBL. After analyzing the data and researching the topic, Gruyter [25] observed teachers have positively changed their beliefs and attitude about IBL from previous misconceptions which had deemed it not useful. Still some educators rebuke the idea. According to them, the rigor of curriculum is the primary challenge in implementing IBL in the classroom. Teachers also feel they do not have enough instruction to properly implement IBL [25].

Collie et al. [26] studied the teacher's ability to adapt in the classroom. The authors [26] stated that the more confident the teacher is in adapting themselves, the better they are to respond to the nature of teaching and navigating complexities such as integrating a new teaching strategy to appease a gifted student's intellect. However, sometimes confidence level and ability to adapt to the teaching environment decreases, increasing the rate of educator turnover. Collie et al. [26], who's study took place in Australia, found confidence of adaptability assists educators in meeting needs for gifted students. They investigate current, developing understandings, a critical part of educating any student, to better assist gifted students. Addressing new material may increase their confidence in teaching a gifted child, increasing their commitment to the job [26]. Commitment is necessary in educating gifted students as educators must remain resourceful and adept at independent learning.

According to Umugiraneza et al., [27] educator confidence and beliefs about their educational expertise play a crucial role in teaching practices. The authors [27] reported their results from the study of a group of 75 mathematics teachers. The study was conducted in KwaZulu-Natal in South Africa, addressing the level of confidence in local educators regarding educating gifted students in math and statistics. Often the confidence was high, though not in all areas of these subjects. The educators lacked confidence in engaging in critical debate on important mathematics and statistics-related concepts. Though this study does not directly address the gifted students, it provided insight into the teacher's confidence that was one of the research's objectives [27].

Barbier et al. [28] used the Achievement Orientation Model (AOM) proposed by Siegle et al. [29] to explore the pathways for gifted student academic achievement. According to the model and the respondents' perspectives, gifted students are equipped with adequate skills to perform tasks requiring higher intellect for their age. However, other environmental factors are also important, including goal valuation and self-efficacy, suggesting it is not just intellect that is required. These factors depend

upon the perceptions and approach of the teachers, peers and families. The teachers should set realistic goals, for example. Parents should have realistic expectations too. Peer influence is also profound in determining the achievement level of gifted students. Participant responses regarding the underachievement of gifted students is consistent with Barbier et al.'s [28] model and findings.

Lockhart [30] suggested four models' strategies, in contrast to the aforementioned one, for gifted education. Among them is the parallel curriculum model (PCM), which is a basic model for serving gifted students. The model suggests the importance of differentiating gifted students from general education classrooms but differentiating can be challenging. Lockhart [30] goes on to refer to information from Tomlinson [31], including flexible and open approaches to the content, different pedagogical strategies or processes, customized student products, and the targeted skills or standards. According to Lockhart [30], gifted students learning in a differentiated classroom will be able to interact with a specific learning standard fit to their cognitive level. In such a specified environment, teachers should work as facilitators who are responsible for maintaining ongoing student instruction as gifted students excel.

Management strategies for gifted students can be categorized into two types of accelerations; subject or content-based acceleration and grade-based acceleration, stated by Plucker et al. [32]. In subject-based acceleration, various components are incorporated, such as studying one discipline with students in a more advanced grade. They may also undergo curriculum compacting which allows students to take a single college course or distance learning course. They may also be encouraged to seek out alternative, third-party programs to increase their educational prowess. In grade-based acceleration, gifted students may be mixed by age; this may include skipping grades, multi-age classrooms, and even accelerated graduation [32].

Problem-solving is one of the strategies used by teachers when teaching gifted students, as well. Wang et al. [33] researched teaching techniques for developing creative, solution-oriented thinking. Gifted students make fast progress in reading, for example, indicating immense competency without any formal and explicit teaching. The technique of creative, solution-oriented activities fantasizes and recreates visual experiences, indicating a marked increase in comprehension. Wang et al. [33] concluded that expert teachers could apply solution-oriented techniques and strategies in class when educating gifted children.

Palmer et al. [34] stated that cooperative learning increases student engagement, encouraging them to work together to complete collaborative goals. A sense of interdependence is established in cooperative learning as they help one another, lead, and take direction. However, the authors [34] suggest forming groups and telling them to work together is not enough to achieve their goals; the

groups also require structure. The major benefit of this strategy is that the talented or gifted students help the struggling students [34]. However, there are some challenges. For example, students may become alienated based on their abilities, especially if some students experience an accelerated rate of learning.

Positive impacts from curriculum compacting have been highlighted, as well. Sharp et al. [35] confirmed curriculum compacting provides ample time to differentiate instructions, allowing students to personalize a learning experience suitable for their needs. The authors [35] focused on developing the reading abilities of Academically Gifted and Talented Learners (AGTL). Gifted students require advanced reading material, which suggests digital texts should be expanded [35]. An Instructional Pacing Strategy (IPS) was also suggested to differentiate from AGTL and gifted students [35]. Tomlinson [31] went on to argue that the instructional pace must be embedded “in the context of high-quality curriculum and instruction,” as it will aid student enjoyment of rapid learning and skill acquisition. Conversely the author [31] stresses the importance of ensuring that gifted students understand and enhance their ability to apply knowledge. The author [31] also addressed the importance of the strategy of developing critical literacy among gifted students. Critical literacy is more than critical thinking. It is associated with the social action based upon the deeper understanding [35].

Several myths are associated with talented and gifted students. One of the most popular implies gifted children are always bright academically, and they do not need any assistance from teachers, stated by Gomez-Ariza et al. [36]. These students learn faster and do not like repetition. If the curriculum is easy they become bored and the learning process stagnates, which can be circumvented by increasing the curriculum’s complexity [36].

Educator influence is paramount to all students, including the gifted ones. Influence can boost student creativity and improve educational outcomes. With the use of appropriate educational strategies, the educator can enhance said influence, offering adequate instruction and complexity to curriculum. There is also a confidence in knowing how to tutor a gifted child, which may enhance educators’ attitudes, further increasing positive influence. Dissimilar to previous studies, gifted students demonstrate less social adjustment than average students, and that acceleration bias may impact this, as stated by Rogers [37]. Educators may even believe gifted students should not be educated in the same facility, noted by Troxclair [9]. Other educators also perceive designing special programs for gifted students as an act of selfishness, creating an elitist environment as observed by Sánchez-Escobedo et al. [38]. Teachers assume that gifted students are always motivated and perform well and receive good grades simply because they are gifted, despite the proven necessity for instruction. It was also suggested by Southern et al. [39] that proper training for teaching gifted students will help the teachers

to identify their needs precisely. To determine whether teachers’ views and perceptions towards gifted students are consistent, a quantitative analysis was performed on current research. The subsequent sections will analyze the data from some teachers to know their perceptions, confidence, and techniques to deal with gifted students.

3. Method

The literature review revealed gaps in literature. Though some similar studies were found, the goal of the study was not cemented. Previous research did not mention a connection between educators’ confidence and identifying student needs. For example, instructional strategy preference was also ignored. To fill this gap, a survey with 410 participants was conducted, with ten participants neglecting to complete the study, bringing the total to 400. A quantitative methodology was conducted via surveys and questionnaires, two of the most popular instruments for quantitative assessment. The tools included demographic questions dependable in this form of research [39].

The questionnaire utilized the following research questions:

1. What are the teacher attitudes toward various instructional approaches for differentiating curriculum and instruction for gifted students in mixed ability classrooms?
2. How confident are the teachers toward identifying and addressing the needs of gifted students in academically diverse classrooms?
3. What are the preferences of instructional strategies teachers use to meet the needs of gifted students in academically diverse classrooms?
4. What are the perceptual differences regarding gifted Education between teachers?

3.1. Site and Context

The present research was conducted in the Kingdom of Bahrain, one of the Gulf region countries. Though recent data could not be procured, the latest available statistics presented by the Ministry of Education [40] showed 206 government schools and 74 private schools collectively offer education to 189,244 students between the ages of 6 and 18. Education is divided into cycle 1 (grades 1–3), cycle 2 (grades 4–6), cycle 3 (grades 7–9), and cycle 4 (grades 10–12). The teachers from cycle 1 teach all subjects prescribed in the school curriculum with the exception of English as a Second Language Studies. Educational program divisions take place in cycle 2, wherein students study a variety of specializations, including mathematics and science education, Arabic and Islamic education, and English language education. Unlike cycle 1, in cycle 2 the teachers are considered experts in their subjects. They are expected to have thorough pedagogical and subject knowledge and experience, which they could apply in their

educational context.

3.2. Participants and Sample Size

The survey was conducted by including a total of 410 participants from both private and public schools, only 400 of whom participated. Male and female respondents were included. The number of female participants was higher than the male participants at a rate of 130 (31.71%) males to 280 (68.29%) females. The response rate was 100% regarding gender-related questions.

Responses were derived from all four cycles. Among 410 participants, 10 skipped the question. In cycle 1, a total of 80 participants (20%) responded to this answer choice. One hundred (25%) participants from cycle 2, and 110 (27.5%) from cycle 3 and 4 responded to this question (see Table 1).

The respondents were from 8 different teaching areas. 170 (41.46%) were from cycle 1, i.e., primary education teaching all subjects. The second-largest number of respondents were English teachers with a total of 120 (29.27%). 50 were from other subjects such as French language, Social Studies, French – MFL teacher, economics and business. The number of science teachers was 30, and 10 respondents were experts in Islamic Studies, Math, physics, and music. Out of 410 respondents, 400 respondents were from mixed schools, and 2.44% were from girls' schools. No single respondent was from a boys-only schools.

Two hundred and thirty (57.50%) respondents between 25 and 34, followed by 90 (22.50%) from the age group 35-44 and 60 (15%) from 45-54 were included. Among 410, 400 respondents answered the question, while 10 skipped it (see Table 2). One hundred and thirty respondents had between four and six years of experience. Ninety (22.50%) of them had more than 24 years' experience, followed by 20 who had been teaching between 2- and 24 years (see Table 3).

Table 1. Number and Percentage of Respondents from Four Cycles

Cycles	n	%
Cycle 1	80	20
Cycle 2	100	25
Cycle 3	110	27.5
Cycle 4	110	27.5

Note. N=400. 10 respondents skipped the piece of inquiry.

Table 2. The Age Group of the Respondents

Age Group	n	%
25-34	220	57
35-44	90	22.50
45-54	60	15

Note. N = 400. Ten respondents skipped the question.

Table 3. Years of Experience of the Respondents

Experience	n	%
1-3	40	10
4-6	130	32.5
7-9	90	22.5
10-13 years	40	10
14-16 years	30	7.5
17-19 years	30	7.5
20-23 years	20	5
24+	20	5

Note. N = 400. Ten respondents skipped the piece of inquiry.

Among 410 teachers, only 30 (7.32%) were local or Bahraini while 380 (92.68%) were expatriates, indicating schools are primarily occupied by expatriates with few locals are in the education field. Data was primarily obtained from private schools. The number of respondents from the private schools was 400, while ten respondents were from public or government-aided schools. 180 respondents had completed the associate degree, while 170 had earned a bachelor's degree. Only 20 participants had earned a master's degree.

3.3. Data Collection

The present research was based on identifying teachers' perceptions and attitudes towards gifted students; thus, respondents were educators only. They were chosen via non-probability sampling. Participants were sent structured surveys and questionnaires. All participants maintained at least four years of experience.

3.4. Instrument

The Survey of Practice (SOP) was used for data collection. Instrumentation was assisted by The National Research Center on the Gifted and Talented to design the SOP, incorporating four different sections. The first section was developed to receive respondent demographic information. The instrument was found appropriate in demonstrating feasibility, applicability and effectiveness of the research instrument based on the successful pilot study which helped increase the likelihood of a successful data collection, observed by Teijlingen et al. [41]. The pilot study indicated necessary changes to demographic information request, but other sections were appropriate.

Part I of the questionnaire included girls' boys,' and co-ed facilities located in Bahrain The maximum response was 400 participants at 97% from co-education facilities, and only 10 participants, or 2.44%, from girls' schools. No respondents were from boys' exclusive facilities. The section regarded demographic information concerning gender, age group they are instructing, their teaching expertise based on subject and language, and what type of

facility they taught at. They were also asked of their teaching experience with that age group. Nationality was also surmised in this section. There were 290 out of 400 respondents who taught the British curriculum. American curriculum was the second dominant curriculum at 100 respondents. As compared to British and American curricula, the Bahrain Ministry of Education [40] has a share of only 20 respondents, or 4.88%, teaching local curriculum.

The second part of the questionnaire was contained a Likert-style survey rating from one as strongly agree, four a strongly disagree, and five indicating the participant does not know if they agree or not. Typically, this would be seen as a three, which would indicated neutrality, but here it is different.

Part III requested participants to answer about their level of confidence in three different activities; (1) Confidence in adapting lessons to meet the needs of the gifted children, (2) Individualizing the instruction to meet the needs of gifted learners, and (3) identifying gifted students. Part IV

concerned which activities educators used for gifted student learning, enabling them to choose from fourteen different prechosen activities.

4. Results

The items on the SOP were analyzed quantitatively. Attitudes towards the issues of gifted students are analyzed in Table 4. Respondent confidence levels were measured based on their ability to adapt lessons, provided individual instructions to meet the student’s gifted needs, and the process of successfully identifying gifted students. Responses were measured based on the above-described Likert-style questionnaire, in which a total of 390 out of 400 respondents answered. The mean value for the ability to adapt the lesson was 4.256. It was 3.871 for the capacity of individualized instructions and 3.820 for identifying gifted students. It indicates an elevated level of confidence in all these three activities, depicted in Table 5.

Table 4. Attitudes toward Issues of Gifted Education

No.	Item	Mean	SD	%	
				A-SA*	D-SD**
3	Gifted students can make it on their own without the teacher's direction.	0.7	1.0	14.64	80.49
7	Gifted students will take their regular assignments and make more challenging on their own.	0.8	1.3	25	70
10	An effective way to identify gifted students is to look for students with the highest grades.	0.8	1.3	17.5	77.5
13	Allowing gifted students to work on assignments that are different from the rest of the students is playing favorites and fostering elitism.	1	1.1	17.5	80
16	Gifted students need longer assignments because they work faster.	0.7	1.1	12.50	82.5
18	Working too hard in school leads to burnout in gifted students.	1.6	1.9	45	50
20	Learning gifted and disabled students will need to concentrate on their studies to remediate their weaknesses, so they can go on to use their areas of strength.	1.0	1.1	55	30
21	Gifted students are easy to be identified in the classroom.	1.6	1.9	47.5	47.5
24	Gifted students should be encouraged to direct their own learning.	0.5	0.9	87.5	10
27	Some underachievers are actually gifted children.	2.7	2.5	85	5
30	If a gifted student is doing poorly in spelling, it is necessary to deal with the weakness in spelling before presenting more advanced content in other areas.	1.6	1.9	22.5	72.5
33	In teaching gifted students, teachers should modify the content only because they need to use the same processes and generate the same projects.	1.2	1.5	32.5	62.5
34	Having gifted students work on individual projects or assignments isolates them from the rest of the class.	1.7	1.8	35	62

*A-SA: Combined percentage for agree (A) and strongly agree (SA).

**D-SD: Combined percentage for disagree (D) and strongly disagree (SD).

Table 5. Mean Ratings of Teachers' Confidence with Classroom Differentiation for Gifted Students

Skill/group	Mean*	SD	%
Adapting my lessons to meet the needs of gifted learners	4.256	3.545	85
Individualizing instruction to meet the needs of gifted learners	3.871	3.449	77.5
Identifying gifted students	3.820	3.472	76.5

Note. $N = 390$.

* The responses are measured using 1 to 5 scale in which 1 = "no confidence" and 5 = "very confident."

Table 6. Response Ratings of Student Confidence with Classroom Differentiation for Gifted Students

Statements	Response (%)					Mean (%)
	5	4	3	2	1	
Adapting my lessons to meet the needs of gifted learners	30.77	46.15	17.95	2.56	2.56	4.256
Individualizing instruction to meet the needs of gifted learners	23.08	48.72	23.08	2.56	2.56	3.871
Identifying gifted students	33.33	33.33	20.51	7.69	5.13	3.824

Table 7. Techniques, Activities and Instructional Strategies of Teachers for the Gifted Students

#	Strategies	%	N
1	Ability grouping	70.27	260
2	Activities to enhance creativity	78.95	300
3	Cooperative learning	86.84	330
4	Curriculum compacting	42.86	90
5	Drill and practice	38.71	120
6	Higher level thinking activities	97.44	380
7	Independent study	100	360
8	Individual instruction	62.16	230
9	Interdisciplinary activities	84.00	210
10	Learning centers	73.33	220
11	Problem-solving activities	94.74	360
12	Projects	92.11	350
13	Values training	83.33	200
14	Workbook exercises	72	180

Note. $N = 390$.

The response rating of student confidence with classroom differentiation is indicated in Table 6. A total of 14 strategies were provided. Educators indicated their preferences, with 390, or 95.12%, participants responded to this set of inquiries. Their responses are provided in Table 7.

5. Discussion

5.1. Perception of Gifted Education

Discussions regarding perception was based on agreement and disagreement; the differences are noticeable.

Disagreement levels were significantly higher regarding the perception that gifted students do not require educational support or guidance, at a rate of 80.49% in comparison to agreement levels. The results indicate educators feel they are required to allow the students' success, as they still require help to reach their goals. Disagreements were also indicated regarding parameters 7, 10, 13, 16, 30, 33, and 34.

Perception that gifted students would be unable to create more challenging assignments out of average coursework was a disagreement at a rate of 70%, further supporting the assumption educators know what they are needed for. Respondents also disagreed with the assumption that gifted students could be identified by their grades alone at a rate

of 77.2%. With just over 17% believing grades alone are enough to identify a gifted child more parameters are necessary. There were 80% of respondents who felt assigning different tasks to gifted students indicated favoritism, while 17.5% disagreed.

Sahin [42] supported another parameter: differentiation. The author [42] observed gifted students maintain a higher level of cognition when compared to average peers, effecting their learning speed and style. Typical curriculum is not satisfactory, which may lead to disengagement, boredom, or a lack of motivation. The finding is consistent with preceding research. Though they do require more, it is rather unethical to provide *more* work for the gifted student. What they require is more challenging working. 82.50% of teachers disagreed with providing longer assignments to gifted students, while 12.5% found it acceptable. This was a gap in literature, however, as no previous studies mentioned this parameter. As such, challenging curriculum will be necessary over longer assignments.

No significant differences were observed regarding the statement that gifted students are predisposed to burnout based on educational pressure. Here 48% of respondents agreed while 50% disagreed. Respondents mean score was 1.625, suggesting strongly opposing opinions. The notion that both gifted and disabled students should concentrate on strengths over weaknesses was more agreeable than suggesting students endure concentrating on weaknesses to become stronger. The mean score for this statement was significantly higher (1.7). Twenty percent of the respondents' disagreement level is far below the agreement level.

No significant difference was observed between the agreement and disagreement levels concerning whether gifted students are easy to identify in the classroom. It was deduced that 48.50% of respondents could identify these students, while an equal percentage could not. As such, there is no consensus. Pediatrician Marianne Kuzujanakis' [43] research on gifted students is significant for the present research topic. She views that a gifted student is hard to identify, and it is a great challenge not just for the teachers but also for the psychiatrists, as cited in Frances [43]. Due to the inability to recognize their exceptional talents, they may be thought to have a learning or attention issue. Educators must be thoroughly trained to know the difference.

A rate of 87.5% of respondents felt gifted students required encouragement and guidance when learning. These respondents focused on a mentorship attitude, guiding gifted students appropriately, but additional training on how to appropriately direct these students will be necessary. The majority of respondents felt underachieving students could not be gifted, with 85% of respondents agreeing achievement level must be high for the child to be gifted.

The respondents disagreed that mere content modification is enough for gifted students at 62%, while 32.5% agreed. There was also a mixed response

concerning whether working on individual projects or assignments isolates them from the rest of the class.

To summarize, there was a significant difference in opinions and perceptions among the respondents on several parameters included in Part II of the SOP.

5.2. Teacher's Confidence Level

Out of three parameters, (1) adapting lesson (2) individualizing instructions (3) identifying gifted students, the respondents were pretty confident. 390 responded to this set of inquiries. It was observed that they were more confident with a mean of 4.256 in adapting their lessons to meet the needs of gifted learners. Their confidence level is slightly lower in individualizing instructions with a mean of 3.871 and identifying gifted students with a mean of 3.820. Previous studies indicated an equal number of teachers lacking in identifying gifted students. It could be that gifted children are misunderstood, but educator confidence was paramount, mattering in all areas.

5.3. Teacher's Strategies to Teach Gifted Students

More than 70% of respondents stated they would adopt strategies such as ability grouping, creativity to enhance creativity, cooperative learning, critical thinking activities, independent studies, interdisciplinary activities, problem-solving activities, assigning projects, value training, and workbook exercise. Techniques such as drill and practice, and curriculum compacting were used by less than 50% of the teachers.

Interestingly, independent study was the only strategy used by all teachers, followed by higher-level thinking activities. Educators perceive gifted students as possessing an elevated level of critical thinking, and therefore, such activities are assigned to them. It is also the perception of most of the teachers that gifted students have excellent problem-solving abilities. Various assignments and projects were assigned to them to make learning a challenging process.

5.4. Limitations

The main limitation is the number of respondents, which was moderate but still not high enough for astute results. Moreover, the study was conducted in the Kingdom of Bahrain, and though foreign teachers were included, the area is still exceedingly small for such a large comparison. Moreover, the findings and results derived from the study may not be applied to other regions due to its geographical, cultural, and social disparities. Therefore, instead of applying the same findings, it is recommended to conduct a separate study in other geographical regions.

Lastly, validity is one of the common research limitations. Every study has some validity. Its validity is expired in the future due to contemporary trends and changing circumstances. Hence, consistent and ongoing

research should be conducted in this specific research area.

5.5. Implications

Educators' perceptions regarding gifted education indicate educators require additional training in some areas, such as identifying gifted students and differentiating them by assigning advanced assignments and projects. The schools in Bahrain are equipped with expat students and teachers along with the local teachers. It is important to take into consideration the multiculturalism of the country. Accordingly, the teachers should be imparted training in cross-cultural communication, which is at the heart of changing several misconceptions. The teachers' training and orientation will make them skilled and enable them to appropriately recognize the gifted students' needs and deal with the challenges of managing an academically diverse classroom.

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REFERENCES

- [1] Manning S., "Recognizing gifted students: A practical guide for teachers," *Kappa Delta Pi Record*, vol. 42, no. 2, pp. 64-68, 2006. <https://www.tandfonline.com/doi/abs/10.1080/00228958.2006.10516435>
- [2] Russell D.W., Hayes D.G., Dockery L.B., "My child is gifted: Now what do I do," 2nd ed, North Carolina Association for the Gifted and Talented, 1988.
- [3] Gardner, H., "Multiple intelligences after twenty years," *METU Edu*, 2003. https://ocw.metu.edu.tr/pluginfile.php/9274/mod_resource/content/1/Gardner_multiple_intelligent.pdf [accessed June 8, 2022].
- [4] Gardner, H., "Frames of mind: The theory of multiple intelligences," 3rd ed, Basic Books, 2011.
- [5] Renzulli J. A., "Conception of giftedness and its relationship to the development of social capital," in *Handbook of Gifted Education*, Allyn & Bacon, 2003, pp. 75-87.
- [6] Renzulli J., "What makes giftedness: Re-examining a definition," *Phi Delta Kappa*, vol. 90, no. 8, pp. 81-88, 2011.
- [7] Shaunessy E., "Assessing and addressing teachers' attitude towards information technology in the gifted classroom," *Gifted Child Today*, vol. 28, no. 3, pp. 43-53, 2005.
- [8] Rinn A., Plucker J., Stocking V., "Fostering gifted students' affective development: A look at the impact of academic self-concept," *Teaching Exceptional Children Plus*, vol. 6, no. 4, pp. 2-13, 2010.
- [9] Troxclair D.A., "Preservice teacher attitudes towards giftedness," *Roeper Review*, vol. 35, no. 1, pp. 58-64, 2013. <https://doi.org/10.1080/02783193.2013.740603>
- [10] National Association for Gifted Children, "Ability grouping and acceleration can help teachers and school leaders," NAGC, 2017. <https://www.nagc.org/blog/ability-grouping-and-acceleration-can-help-teachers-and-school-leaders> [accessed June 8, 2022].
- [11] National Association for Gifted Children, "Curriculum Compacting," NAGC; <https://www.nagc.org/resources-publications/gifted-education-practices/curriculum-compacting> [accessed June 8, 2022].
- [12] National Association for Gifted Children, "Gifted Education Strategies," NAGC, <https://www.nagc.org/resources-publications/gifted-education-practices> [accessed June 8, 2022].
- [13] National Association for Gifted Children, "Identification," NAGC, <https://www.nagc.org/resources-publications/gifted-education-practices/identification> [accessed June 8, 2022].
- [14] National Association for Gifted Children, "Pull-out programs/specialized classes," NAGC, <https://www.nagc.org/resources-publications/gifted-education-practices/pull-out-programsspecialized-classes> [accessed June 8, 2022].
- [15] Ultanir E., "An epistemological glance at the constructivist approach: Constructivist learning in Dewy, Piaget, and Montessori," *International Journal of Instruction*, vol. 5, no. 2, pp. 195-212, 2012.
- [16] Berman K, Schultz R., Weber C., "A lack of awareness and emphasis in preservice teacher training," *Gifted Child Today*, vol. 35, no. 1, pp. 18-26, 2012. https://www.researchgate.net/publication/241648114_A_Lack_of_Awareness_and_Emphasis_in_Preservice_Teacher_Training
- [17] Ronksley-Pavia M., Neumann M.M., "Conceptualizing gifted student (dis)engagement through the lens of learner (re)engagement," *Education Sciences*, vol.10, no. 10, 2020. <https://www.mdpi.com/2227-7102/10/10/274>
- [18] Goss, P., Sonnemann, J., Griffiths, K., "Engaging students: Creating classrooms that improve learning," Grattan Institute, 2017. <https://grattan.edu.au/report/engaging-students-creating-classrooms-that-improve-learning/> [accessed June 8, 2022].
- [19] Gibbs, R., Poskitt, J., "Student engagement in the middle years of schooling (Years 7-10): A literature review," Report to the Ministry of Education, 2020. <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.475.5394> [accessed June 8, 2022].
- [20] Neumann M., Ronksley-Pavia M., "Leveraging digital technologies for (re)engaging gifted students in the middle years," *Australian Journal of Middle Schooling*, vol. 20, no. 1, 2021. <https://research-repository.griffith.edu.au/handle/10072/401135>

- [21] Cairns D., "Investigating the relationship between instructional practices and science achievement in an inquiry-based learning environment," *International Journal of Science Education*, vol. 41, no. 5, pp. 2113-2135, 2019. <https://www.tandfonline.com/doi/full/10.1080/09500693.2019.1660927>
- [22] Constantinou, C. P., Tsivitanidou, O. E., Rybska, E., "What is inquiry-based science teaching and learning," in *Professional development for inquiry-based science teaching and learning*, Springer International Publishing, 2018, pp. 1-23.
- [23] Yang D., "Instructional strategies and course design for teaching statistics online: perspectives from online students," *International Journal of STEM Education*, vol.4, no. 34, pp. 1-15, 2017.
- [24] Myers M., Schiltz P., "Use of elluminate in online teaching of statistics in the health sciences," *Journal of Research in Innovative Teaching*, vol. 5, pp. 53-62, 2012. <https://research.phoenix.edu/michael-myers/publication/use-illuminate-online-teaching-statistics-health-sciences>
- [25] Gruyter, D., "Putting inquiry-based learning into practice: How teachers changed their beliefs and attitudes through a professional development program," *Chemistry Teacher International*, vol. 1, no. 2, pp. 2018-2030, 2019.
- [26] Collie R., Martin A., Granziera H., "Being able to adapt in the classroom improves teachers' well-being," *UNSW Newsroom*, 2018. <https://newsroom.unsw.edu.au/news/social-affairs/being-able-adapt-classroom-improves-teachers-well-being> [accessed June 8, 2022].
- [27] Umugiraneza O, Bansilal S, North D., "Exploring teachers' practices in teaching mathematics and statistics in KwaZulu-Natal schools," *South African Journal of Education*, vol. 37, no. 2, pp. 1-13, 2016.
- [28] Barbier K, Donche V, Verschueren K., "Academic (under)achievement of intellectually gifted students in the transition between primary and secondary education: An individual learner perspective," *Frontiers in Psychology*, vol. 10, no. 2355, 2019. DOI: 10.3389/fpsyg.2019.02533
- [29] Siegle D., McCoach D.B., "Motivating gifted students," Prufrock Press, 2005.
- [30] Lockhart K., "What to expect when you're expected to teach gifted students: A guide to the celebrations, surprises, quirks, and questions in your first year teaching gifted learners," Routledge, 2019.
- [31] Tomlinson C.A., "Differentiated instruction," *Theory into practice*, 2005, vol. 44, no. 3, pp.185-273.
- [32] Plucker J., Callahan C., "Research on giftedness and gifted education: Status of the field and considerations for the future," *Exceptional Children*, vol. 80, no. 4, pp. 390-406, 2004.
- [33] Wang Y., Kuo C., Wu S., "Creative and problem-solving thinking of gifted and talented young children observed through classroom dialogues," *Universal Journal of Educational Research*, vol. 7, no. 12, pp.2677-92, 2019.
- [34] Palmer G., Peters T., Streetman R., "Cooperative learning," in *Instructional methods, strategies, math and technology to meet the needs of all learners*, Libretexts, 2018, pp.121-146. <https://granite.pressbooks.pub/teachingdiverselearners/>
- [35] Sharp L.A., Clemmer P., "The neglected readers: Differentiating instruction for academically gifted and talented learners," *The Journal of Balanced Literacy Research and Instruction*, vol.3, no. 1, pp.16-21, 2015.
- [36] Gomez-Arizaga M., Valdivia-Lefort M., Castillo-Hermosilla H., Høbert T., Conejeros-Solar M., "Tales from within: gifted students' lived experiences with teaching practices in regular classrooms," *Education Sciences*, vol. 10, no. 5, pp.137, 2020. https://www.researchgate.net/publication/341326414_Tales_from_Within_Gifted_Students%27_Lived_Experiences_with_Teaching_Practices_in_Regular_Classrooms
- [37] Rogers K.B., "The academic, socialization, and psychological effects of acceleration: Research synthesis," in *A nation empowered*, University of Iowa; 2015, pp. 19-30.
- [38] Sánchez-Escobedo P., Valdés-Cuervo A., Contreras-Olivera G., García-Vázquez F., Durán-Ramos M., "Mexican teachers' knowledge about gifted children: Relation to teacher teaching experience and training," *Sustainability*, vol. 12, no. 11, 2020. <https://www.mdpi.com/2071-1050/12/11/4474>
- [39] Southern W.T., Jones E.D., "Types of acceleration: Dimensions and issues," in *A nation empowered: Evidence trumps the excuses holding back America's brightest students*, University of Iowa, 2015. pp. 9-18.
- [40] Ministry of Education, "Statistics reports," Kingdom of Bahrain Ministry of Education, 2018. <https://www.moe.gov.bh/statistics.aspx?lan=en> [accessed May 23, 2022].
- [41] Teijlingen E., Hundley V., "The importance of pilot studies," *Nursing standard: The Official Newspaper of the Royal College of Nursing*, vol. 16, no. 40, pp. 33-6, 2002.
- [42] Sahin F., Lee J., "General intelligence, emotional intelligence and academic knowledge as predictors of creativity domains: A study of gifted students," *Cogent Education*, vol. 3, no. 1, 2016. <https://www.tandfonline.com/doi/full/10.1080/2331186X.2016.1218315>
- [43] Frances A.J., "Giftedness should not be confused with mental disorder," *Psychology Today*, 2013. <https://www.psychologytoday.com/us/blog/saving-normal/201303/giftedness-should-not-be-confused-mental-disorder>