The Reality of Learning Motivation among Gifted Students in Light of Active Learning Strategies

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The Reality of Learning Motivation among Gifted Students in Light of Active Learning Strategies

Worod Maarouf Mohammad Al-Ta'ani, Munes Adeeb Hamadneh

Abstract

The study describes the reality of learning motivation among students of the Faculty of Educational Sciences at Irbid National University in light of Active Learning Strategies. The study used the descriptive-analytical approach. The study sample was chosen using a simple random sampling method. The results showed that the reality of Active Learning Strategies (effective learning) received a high degree with a mean of 4.22. Also, there was no statistically significant difference due to the gender variable in all domains and the total degree except for learning strategies. The differences came in favor of females. In light of the current results, the study recommended using Active Learning Strategies in teaching students due to their importance in increasing students' motivation, as well as directing faculty members to increase and excite students' motivation to learn.

Keywords

Motivation
Faculty of educational sciences
Irbid Private University
Active learning strategies

Introduction

embrace and invest in this category because of their energies and capabilities. Educators advocate for the importance of caring for gifted students to direct them to serve the community and its development. Since the beginning of the second half of the twentieth century, there has been an increasing interest in them. Efforts should be directed to study their characteristics and provide educational programs for them, as well as changes to curricula and teaching methods in proportion to their abilities and preparations. Because of the gifted student’s special, educational abilities leaving them to learn in the usual traditional ways is a waste of their talents.

Therefore, the justification for offering curricula and programs for them is due to the insufficiency of the general curricula for these students as well as their inability to meet their needs and challenge their abilities. There is a need for such programs and curricula to differentiate and go beyond the limits of what the general program offers to their peers to satisfy their educational needs and tendencies and to ensure their balanced growth. Embodying the principle of equal opportunities for all groups of society, it was necessary to provide these programs to raise their level and develop their talents (Jarwan, 2015, Vu et al., 2019).

Although gifted students are a group of exceptional learners who are not usually considered to be at risk of academic or educational failure, the apparent lack of motivation of many of them is a source of anxiety and
frustration for many teachers, parents, and counselors. Many studies in the field of motivation have shown that the level of academic achievement the student reaches does not depend on the level of his luck in terms of mental ability only, but is affected by multiple variables, including motivational, emotional, and social variables. All these variables contribute to differences between students in the levels of academic achievement (Abdul Hamid, 2020).

**Literature Review**

Active Learning Strategies, known as active learning, include varied methods and strategies, within which the student has become the focus of the educational process rather than the subject matter. These methods depend on the learning process being active and occurring through interaction, discussion, and cooperation with other peers (Al-Sumairi, Al-Shammari, & Ashour, 2019). The researcher defines active learning as that learning that makes the learner an active member and participant in the learning process, responsible for his learning and achieving the goals of education. He learns by doing and through research and discovery. He participates in making decisions related to his learning, as well as participates in the follow-up of his academic progress and evaluates his achievements. In addition, the active learner is an influential learner who can identify his strengths and weaknesses, contribute to evaluating the work of others, and receive their evaluation by providing feedback and cooperating with evaluators constructively, without underestimating the achievements of others.

Literature and educational research in this field have mentioned many strategies and methods that fall under the umbrella of active learning. They have highlighted that the use of these diverse, interesting, and attention-grabbing teaching methods throughout the lesson has an effective and positive impact on many aspects, such as achievement and motivation. Also, there have some Active Learning Strategies, such as cooperative learning, peer learning (teaching) strategy, self-learning strategy, inductive and deductive methods, practical presentations, exercises, discussion and dialogue, group work, problem-solving methods, investigation methods, learning by research and discovery, role-distribution and simulation, brainstorming, etc.

Learning Motivation refers to the set of internal and external circumstances that motivate the individual to reach goals. Motivation to learn is an internal state of the learner that moves his behavior and performance and works on the continuation of behavior. It is a desire that urges him to learn and directs his actions and behavior toward achieving learning and asking for more. It is characterized by the ambition to enjoy competitive situations and the unbridled desire for excellence and superiority (Ayasra, 2006).

Researchers in the field of learning motivation talk about different types of motivation, namely, intrinsic motivation and extrinsic motivation. Intrinsic Motivation is the strength within the educated individual and the internal motivation without external reinforcement, such as interests, determination to reach the goal, curiosity, and enjoyment. Extrinsic motivation is reflected in the external motives and incentives that motivate the individual to do something and is represented by external reinforcements, rewards, and punishment (Clinkenbeard, 2012).

The researcher defines learning motivation as everything that motivates individuals to carry out various behavioral
and cognitive activities and works to direct those activities toward a specific destination. It also means that the individual conducts a specific behavior to produce results or consequences that satisfy some of his needs and desires. It is a relatively stable readiness that determines the extent of the individual's pursuit and perseverance to achieve success resulting in satisfaction. Learning motivation is represented in this study by the degree that the student obtains on the scale prepared for this purpose.

One of the most interesting and simultaneously frustrating issues for researchers studying this category of highly intellectual and creative individuals is that some gifted students often fail to reach the level of success expected, knowing that they are capable, and have the potential to reach it. Here, many questions arise, such as why do some high-potential students who are capable of outstanding performance fail? And why do some of them fail to realize their potential? More than half a century ago, the researcher, David McClelland and his colleagues studied this issue and concluded that the solution to this puzzle lies in the presence of several factors that explain this phenomenon. The most important of which is the motivation factor for learning and achievement (Akhteh et al., 2022; Massarwe, 2023; Mustakim et al., 2021; Noroozi et al., 2022; Parvaneh Akhteh Khaneh et al., 2022; Siegle & McCoach, 2005; Smith et al., 2021; Zaid & Shehada, 2022).

Motivation is defined as the process by which continuous and goal-oriented activities are activated and stimulated. It includes the individual's selection of specific goals that he can reach and achieve with continuous perseverance and diligence. Motivation for learning and achievement is a physical and psychological state that constitutes a driving force that provokes behavior to achieve a goal. Motivation in learning refers to the student's general desire to persevere toward success and to choose purposeful activities that result in success or failure. The gifted student acquires this through the process of education and the social environment factors that he is exposed to in school and society (Shamakova, 2021).

The motivation for learning in the academic process is a basic pillar that must be available in the educational process because it includes stimulating students' skills and forming their social and functional personalities and their academic future. The subject of motivation has witnessed great interest on the part of governmental institutions and educators. They have presented plans and programs that include plans to develop curricula, conduct training courses, and involve teachers to increase the level of motivation learning for all elements of the educational process (curriculum, teacher, student) to obtain high-quality educational outcomes (Abu Latifa, 2016).

The highly motivated student is characterized by his development of high internal levels of sensitivity to problems, independence, and high performance. They help him challenge difficulties and overcome obstacles and are linked to the concept of himself and the goals he has set for himself. The highly motivated student does not wait for external support or social praise to achieve high achievement and creativity. He continues to carry out school and life activities continuously, and failure in any task does not affect him, but rather it is an incentive to persevere and reach his goal. He cannot achieve his goal unless he has a force that motivates him to accomplish those activities, and this driving force for activity or behavior is practical “motivation in learning” (Abu Latifa, 2016).

Educators have realized the importance of motivation among students in general and gifted students in particular.
They have realized the importance of providing educational environments that stimulate their motivation. Motivation in learning has led to changes in the educational system and the teaching process. The Ministry of Education in Jordan has developed curricula, prepared teachers, and qualified them to employ a variety of teaching methods that suit this type of student. Accordingly, this matter required the preparation of unusual teaching methods not based on memorization and recitation by the teacher and listening to the teacher and memorization. Rather, they must be presented in modern methods characterized by flexibility and activating the learner’s thought and developing his independence in teaching instead of dependence on the teacher (Al-Qamsh, 2017).

One of the teaching strategies that can contribute to arousing students’ tendencies and motivation to learn (the focus of the current study) is those that rely primarily on active learning methods and strategies. These strategies consider the student as the center of the educational process. The learner is self-reliant through work, research, and experimentation. These methods varied and included many strategies, including the research learning strategy, the cooperative learning strategy based on teamwork, the brainstorming strategy, problem-based teaching, and the peer teaching strategy. They are carried out through the idea of teaching one student to another to assist him in acquiring a new skill or mastering a subject in which he is considered weak. They allow the teacher to monitor the students at the same time, make the ablest students interact in their work actively and effectively, and allocate time for the less able learners to master the basic skills (Khawaldeh & Abdel Aziz, 2012).

Based on the review and examination of various sources and previous studies on this subject, the researchers noticed a clear lack of studies, especially in the Arab context. Very little research examined the issue of motivation among gifted students in light of learning strategies in general and active learning in particular. Learning strategies that develop and raise student motivation spark their curiosity and interest to address this relatively new topic. Especially, we are talking about a special class of students (gifted students), who always strive to find ways and methods that arouse their curiosity and motivation. Hence, this study came to fill this research gap.

One of the educational issues that raise the interest and concern of researchers in the field of teaching gifted students is the presence of a good group of gifted students who are at risk of academic failure. It has been noted that some of them have a low level of performance despite their capabilities. It should be noted, here, that there are researchers who study this particular category of gifted people. Their research attributed this issue to their lack of motivation for learning and achievement. This was confirmed by Khalifa’s (2017) study on the gifted and indicated poor performance if the level of motivation decreased. Therefore, one of the most prominent challenges faced by faculty members with the category of gifted students is how to develop their motivation to learn. It lies in their ability to draw their attention to the subject of learning, make them focus on educational tasks, and enhance their responses to be a motivator for them in achievement and performance.

Studies that have examined the motivation of gifted students have shown that traditional teaching strategies that depend on face-to-face learning and memorization where the teacher is the first and last source of information, do not provoke their motivation. Rather, they are a special group that interacts more with active learning methods (Brian & Housand, 2012). Hence, given the importance of investing in this category, there should be studies on using different teaching strategies that will motivate them and verify the role of these strategies. Especially, the
gifted are individuals with high abilities and a willingness to learn.

Through the nature of the researchers' academic work, they have noticed that gifted students who lack motivation often feel bored and listless, except for increasing their frustration. It is not easy to arouse their interest in some subjects and some faculty members. Also, there is difficulty dealing with them and finding methods and tasks that raise their interest and motivation. This problem prompted the researchers to study this group and to question, in particular, about the teaching strategies that would sharpen their enthusiasm and increase their achievement motivation. Therefore, this study came to identify the reality of motivation for learning among students of the Faculty of Educational Sciences at Irbid National University in light of Active Learning Strategies, the gifted, and the relationship between these strategies and their motivation to learn.

The importance of the current study lies in focusing on one of the categories of special education, the gifted category, and identifying the methods and strategies used to develop their motivation. It is hoped that this study will provide a theoretical framework and previous studies that can be consulted by interested researchers about the concept of the study. This will make it easier for researchers interested in the concept of the study to refer to and rely on it.

The gifted student subject still receives continuous research interest. Limited Arabic studies dealt with the relationship between learning methods and strategies and the motivation to learn among gifted people according to the researcher's knowledge. The researchers will draw the attention of those in charge of the educational process, including officials, administrators, and teacher cadres, and motivate them to use active learning methods that suit gifted students. In turn, they will contribute to raising their motivation, improving their performance, increasing their achievement, and pushing and developing the educational process for the better.

Also, it is hoped that the results of this study will benefit the following parties by identifying the role of Active Learning Strategies and various methods that help develop their motivation. This study will be a basis for researchers to conduct new research in this field through the literature it contains by applying similar studies to other samples and societies. In addition, this study will contribute new knowledge to the Arabian library.

Through the researcher’s tracking of previous studies, they have found that the Arabian studies that dealt with the role of the “peer teaching” strategy in developing the motivation of gifted students in primary schools from the point of view of their teachers are rare. Foreign studies dealt with the topic of gifted peer teaching mostly. These studies focus on teachers identifying the strategy of peer teaching in developing gifted students’ motivation.

In terms of the study tool, the current study used the questionnaire as a tool that was developed based on previous studies (Awad, 2004; Al-Qabbali 2011; Hussein & Moeen 2010; Duke et al., 2009). What distinguishes this study from previous studies is that it came up with a new topic (to the knowledge of the researcher). It identified the reality of learning motivation among students of the Faculty of Educational Sciences at Irbid Private University using Active Learning Strategies.
Method

The descriptive analytical approach with a correlational relationship was used, due to its relevance to the objectives and nature of the study. The study population consisted of all gifted students in the Faculty of Gifted Educational Sciences at Irbid Private University. The study sample was chosen by the simple random sampling method. The study sample consisted of (86) gifted students of the Faculty of Educational Sciences at Irbid Private University.

The questionnaire was used as a tool to measure the reality of motivation to learn among students of the Faculty of Educational Sciences at Irbid National University in light of Active Learning Strategies. The researchers developed it by reviewing the research and studies related to the subject of the study (Awad, 2004; Al-Qabbali 2011; Hussein & Maeen 2010; Duchess et al. 2009). The main domains and their items in the questionnaire were identified.

The questionnaire was prepared in its final version, which included two parts:

- The first part included the initial information expressing the characteristics of the study sample (gender).
- The second part consisted of 50 items and five domains about the reality of Active Learning Strategies:
  - Domain one described the learner’s awareness of his abilities and consisted of 14 items.
  - Domain two was about realizing the value of learning and consisted of 10 items.
  - The third domain included information about realizing the teacher’s treatment and consisted of 6 items.
  - The fourth domain was about the perception of the treatment of parents and consisted of 6 items.
  - The last domain described awareness of effective learning strategies (motivational environments.) and consisted of 14 items.

The validity of the content of the questionnaire was verified by presenting it to (10) experts who hold a doctorate in educational administration, curricula, teaching methods, measurement, evaluation, and educational psychology from faculty members in universities. The experts maintained that the items belonged to their domains. They also added, deleted, or modified any items they deem appropriate. Based on the experts’ comments, the questionnaire was modified by adopting the degree of agreement (80%).

To extract the indications of the construct validity of the scale, the researchers extracted the correlation coefficients of the scale items with the total score by applying it to a survey sample (30 male and female students) from outside the study community. The scale items were analyzed, and the correlation coefficient of each of the items was calculated. The correlation coefficient represents an indication of validity for each item and the total score on the one hand, items and their domains, and each field, and the total score on the other hand (0.86). The results showed all correlation coefficients were of acceptable degrees and statistically significant, which indicates an appropriate
degree of construct validity.

The researchers ensured the reliability of the study tool using the test-retest method by applying and reapplying the scale in two weeks on a group (30 male and female students) from outside the deconstruction community. Then, the Pearson correlation coefficient was calculated between their responses at both times. The reliability coefficient was also calculated using the internal consistency method according to Cronbach's alpha equation and the repeatability of the domains and the total score. These values were considered appropriate for the study.

**Results**

**The Reality of the Motivation to learn among the Gifted Students of the Faculty of Educational Sciences at Irbid Private University in Light of Active Learning Strategies**

The researchers answered this question by extracting the mean and standard deviations of the reality of motivation to learn among gifted students of the Faculty of Educational Sciences at Irbid Private University in light of Active Learning Strategies. Table 1 shows the results.

<table>
<thead>
<tr>
<th>Number</th>
<th>Rank</th>
<th>Domain</th>
<th>Mean</th>
<th>SD</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>The learner's awareness of his abilities</td>
<td>4.51</td>
<td>0.553</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>Understanding the treatment of parents</td>
<td>4.44</td>
<td>0.649</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Realizing the value of learning</td>
<td>4.20</td>
<td>0.630</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>Realizing Active Learning Strategies</td>
<td>4.10</td>
<td>0.624</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Understanding the teacher's treatment</td>
<td>3.87</td>
<td>0.976</td>
<td>High</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>4.22</td>
<td>0.489</td>
<td>High</td>
</tr>
</tbody>
</table>

Table 1 shows that the means ranged between 3.87 and 4.51. The learner's perception of his abilities came in first place with the highest mean (4.51). The perception of the teacher's treatment came in the last rank with a mean of 3.87. The total mean of the reality of motivation to learn among gifted students of the Faculty of Educational Sciences at Irbid National University in light of Active Learning Strategies scored 4.22.

**Gender**

The researchers answered this question by extracting the means and the significant standard deviations (α = 0.05) from the reality of the motivation to learn among the gifted students of the Faculty of Educational Sciences at
Irbid Private University in light of Active Learning Strategies due to the variable (Gender). t-test independent sample was used for the effect of gender to indicate the statistical differences between the means, as depicted in Table 2.

Table 2. Means, Standard Deviations, and t-test Independent Sample for the Significant Gender Variable

<table>
<thead>
<tr>
<th>Domain</th>
<th>Type</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>DF</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learner's awareness of his or her abilities</td>
<td>Male</td>
<td>44</td>
<td>4.56</td>
<td>.480</td>
<td>84</td>
<td>.856</td>
<td>.193</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>42</td>
<td>4.45</td>
<td>.622</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding the treatment of parents</td>
<td>Male</td>
<td>44</td>
<td>4.02</td>
<td>.654</td>
<td>84</td>
<td>-2.851</td>
<td>.664</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>42</td>
<td>4.39</td>
<td>.549</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realizing the value of learning</td>
<td>Male</td>
<td>44</td>
<td>3.94</td>
<td>.950</td>
<td>84</td>
<td>.688</td>
<td>.336</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>42</td>
<td>3.86</td>
<td>1.008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realizing Active Learning Strategies</td>
<td>Male</td>
<td>44</td>
<td>4.45</td>
<td>.564</td>
<td>84</td>
<td>.128</td>
<td>.034</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>42</td>
<td>4.43</td>
<td>.735</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding the teacher's treatment</td>
<td>Male</td>
<td>44</td>
<td>3.90</td>
<td>.742</td>
<td>84</td>
<td>-3.065</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>42</td>
<td>4.30</td>
<td>.385</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Male</td>
<td>44</td>
<td>4.17</td>
<td>.499</td>
<td>84</td>
<td>-.948</td>
<td>.564</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>42</td>
<td>4.27</td>
<td>.478</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows no statistically significant differences (a = 0.05) due to the gender variable in all domains and the total degree, except for realizing effective learning strategies. The differences came in favor of females.

**Discussion and Conclusion**

Active Learning Strategies enhance the importance of the learner being more than a listener. He must read, write, solve problems, and think at higher levels, such as analyzing, composing, and evaluating. As a result, he becomes the focus of the educational process instead of the teacher. This happens when he interacts with the scientific material and receives encouragement for discussion, discovery, solving problems, and thinking critically.

Also, using Active Learning Strategies based on learners’ effectiveness and positivity helps them acquire knowledge or skill and pushes them to learn with understanding as they work, observe, research, and elicit facts, laws, and generalizations from different topics under the supervision and guidance of teachers. This result agrees with that of Al-Sumairi et al.’s (2019) study, which showed that teachers of gifted students are highly aware of the characteristics of this group of students. The result is also in line with that of Abbas’ (2014) study, which revealed that gifted students prefer private teaching methods to face-to-face learning because it raises their motivation to learn. They prefer to learn at a fast pace, especially in the subject of mathematics.

Active Learning Strategies make the student self-reliant in learning. They focus on the student being the center of the learning process, which is reflected in his performance on exams. Also, Active Learning Strategies in the classroom increase positive activities and reduce negative activities. They depend on listening, recording, writing
notes, and sharing them with peers, which is reflected in the external community. The student works with the community in developing and finding solutions to problems.

In addition, Active Learning Strategies focus on students and work to make them the focus of the learning and teaching processes. Moreover, the teacher's focus on students is among the advantages of this strategy. Parents’ keenness to follow up on their children’s affairs and the progress of the teaching process increase students’ motivation toward learning and their awareness of the importance of learning. Furthermore, active and effective teaching is provided through learning environments that serve as thought development by using a variety of interactions and participations that arouse enthusiasm and motivate students to participate actively.

Finally, students’ awareness of effective learning strategies is what makes them learn better, be more oriented toward the educational process, more stable, and increase their ability to self-learn. This result is consistent with that of Al-Hamidi’s (2019) study, which indicated that the degree of motivation among gifted students in Jeddah was average on the overall scale and all sub-dimensions. Also, there were statistically significant differences in the averages after the orientation towards learning and the scale as a whole among the gifted due to the gender variable in favor of females. However, this result differs from the result of Al-Sumairi et al.’s (2019) study, which revealed that teachers of gifted students were highly aware of the characteristics of this group of students. Also, the results indicated statistically significant differences in the characteristics of gifted students in the primary stage, according to the teacher’s specialization, attributed to the special education teachers.

**Recommendations**

In light of the results of the current study, the researchers recommend adopting Active Learning Strategies in teaching the gifted because of their importance in motivating students. Also, there is a need to direct faculty members to raise, provoke, and stimulate the motivation of gifted students towards learning. In addition, researchers are expected to make some innovation in the teaching of the gifted or in another subject that may be appropriate to motivate them.

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