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Required training needs for talented student teachers after the coronavirus pandemic

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Abstract

This study aims to identify the training needs of gifted students and the modern education system during the study of the coronavirus pandemic. This research is a combination of observation and in-depth analysis. One hundred eleven valid survey questionnaires were collected from a sample of 150 teachers in the Capital Governorate schools in Jordan and distributed to the study's participants, which included teachers of gifted students. The conclusion was reached that Jordanian teachers of gifted students require far more training than what is now offered. The study also highlights that the most prominent training demands were related to the field of clarifying teaching plans. In light of the findings from the prior studies, the researcher suggests many recommendations such as, it is vital to pay attention to holding training courses periodically to raise the level of teachers of talented students for modern teaching approaches in the areas of teaching plans, teaching process, and assessment methods.

Keywords: Assessment; talented student; teaching plans; teaching process; training

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1. Introduction

Schools worldwide have been forced to close due to the COVID-19 pandemic, affecting 103 million children in the Middle East and North Africa. Jordan was among the first countries in the region to respond to the crisis by ordering the closure of all educational institutions around the country. To keep education functioning during the pandemic, the Ministry of Education has used various distance-learning strategies (Moore & Kearsley, 2011).

The COVID-19 epidemic has altered the educational system, and the restriction of physical and social distance is shifting education from face-to-face or offline to online. This online learning takes place from each student's home, where lecturers have presented a series of materials and tasks organized in different media that students can easily access, one of which is through the Learning Management System better known as e-learning, but this creates conflict for the students because as they transition, they find the need to use more virtual platforms and gadgets which must be available, which makes self-study difficult (Parahoo et al., 2016; Poquet et al., 2021; Karalar et al., 2021; Mulligan & Ayoub 2023). Zweig and Stafford (2016) claim that educators have come to realize that the methods and curriculum they have relied on for decades are no longer thriving and that they cannot keep up with the technological literacy of today's youth.

1.1. Conceptual background

Because the 21st century is a period of rapid scientific and technological progress, and in light of the conditions that the world went through during the coronavirus pandemic, attention has been paid to the application of distance learning to deliver the necessary information to students; which is termed student-centered approach (Kerimbayev et al., 2023; Hong et al., 2021). As a result, it is necessary to hold intensive training courses for their teachers to ensure that distance learning goals are achieved (Çebi & Reisoğlu 2020; Aguilar et al., 2021). Which entails a well organizational climate that understands and supports this upgrade in teachers (Chou et al., 2019).

Schools in Jordan have witnessed significant developments in education methods to confront the effects of the coronavirus pandemic. The study by Issa and Saleh (2019); in response to the corona pandemic and its repercussions on various sectors, including the economy, education, politics, etc., schools in Jordan have witnessed significant developments in the field of education methods to confront the effects. Questions that motivated this study's investigation and analysis are as follows:

1- What is the level of training required for teachers of gifted students in Jordan for modern teaching methods during the coronavirus pandemic in terms of aspects (clarify teaching plans, teaching process, and assessment methods)?

2- Are there differences in the level of training needed for teachers of gifted students for current teaching methods during the coronavirus pandemic in Jordan due to (the teacher's gender, educational experience, and scientific qualification)?

1.2. Purpose of study

As a result, the importance of this study is that it attempts to determine the level of training needed for teachers of talented students for modern education methods during the coronavirus pandemic in Jordan. It will provide a set of recommendations that can be used to improve teachers' performance in the educational process after the coronavirus pandemic. This study aims at achieving the following objectives:

1- Determining the level of training required for teachers of gifted students in Jordan for modern teaching methods during the coronavirus pandemic in terms of aspects (clarify teaching plans, teaching process, and assessment methods).

2- Determining differences in the level of training needed for teachers of gifted students for current teaching methods during the coronavirus pandemic in Jordan due to (the teacher's gender, educational experience, and scientific qualification).

1.3. Theoretical framework

1.3.1. Training

Training, as defined by Gomez-Mejia et al. (2004), 'is the equipping of individuals with specialized skills that aid them in correcting inadequacies in their performance.' White and Mackenzie-Davey (2003) describe training as 'an organized effort focused at strengthening individuals' capacities and modifying their behavior to fulfill previously stated goals.'

We may learn from the definitions of training that:

- Training is a human activity.
- Training is a planned and intentional activity.
- Training tries to change specific aspects of the trainees.
- Training is not an end in itself. Rather, it is a systematic process aiming at strengthening and developing individuals' capabilities and preparedness, with the result of raising the organization's attained goals.

According to AlHarbi (2019), the training process is a necessary administrative function for all organizations with their various activities to keep up with developments in all fields and prepare workers for their various positions and tasks to improve their productivity, and training is not limited to one category of workers without the other.

1.3.2. Identification of training needs

To overcome obstacles that obstruct work and production, hinder the organization's general policy, and prevent the attainment of its objectives, the trainee will require a set of changes or additions to his or her cognitive, skill, emotional, and behavioral elements; this is what we mean by 'training needs.' What is needed in terms of knowledge, skills, or trends can be used to gauge what level of training is necessary.

This is within our current means, and a breakdown of the variations should make it possible to identify the specific training needs and target populations (Al-Ali, 2016).

The term 'training requirements' refers to the discrepancy between the desired level of performance and the actual level of performance achieved by workers. This discrepancy may be thought of as the absence of the requisite skills and knowledge to do the job (Reed & Vakola, 2006).

After establishing the training need gap, the therapy stage begins, which is to determine the amount of training required for the individual to bridge that gap, which is divided into three levels:

1. Appreciative training 'is the first level of training delivered, to raise awareness of the value of a topic or problem among the training process's target audience.'
2. Operational education: It has two kinds of trainers. The first kind is trainees who lack sufficient knowledge, attitudes, and skills regarding a subject. The second type tries to improve the performance of trainees with relevant experience, information, and trends.
3. Applied training: This type of training attempts to develop the trainee's performance skills in an environment that is similar to the conditions demanded by his job obligations. It is specialized training in the trainee's field that may be beneficial in pursuing operational training (Radwan, 2012).

The term 'gifted student' refers to 'a student who possesses an unusual willingness or ability, or distinguished performance from the rest of his peers in one or more areas valued by society, particularly in the

areas of mental excellence, innovative thinking, academic achievement, and special skills and abilities.' (Al-Fraih & Al-Qahtani, 2021)

It is generally agreed that the teacher is one of the essential pillars around which the educational system is built and that they play the most important part in either successfully achieving or falling short of the goals of the educational philosophy. The educational process is the foundation of any society and its objectives in light of the rapid changes, and no growth process is resistant to the teacher's influence (Houssart et al., 2005).

According to Al-Ali (2016), the level of training required for outstanding instructors was around average. The evaluation came in first, followed by teaching and classroom management in second place, and plans to teach in last place. The findings also showed that there were no gender or educational experience disparities in the training needs that were connected to the three dimensions of the study instrument. Additionally, the research discovered statistically significant differences in favor of teachers with bachelor's degrees.

According to Hamad (2019), the degree of training needs for teachers of gifted students in the southern region is determined by the standards of the National Center for Measurement, and there are statistically significant differences in the degree of training needs for gifted teachers that are attributed to an academic qualification. Hamad (2019) also states that the standards of the National Center for Measurement determine the degree of training needed for teachers of gifted students in the northern region. However, there is not a statistically significant difference between male and female instructors in terms of the amount of training that is required for working with gifted kids. This holds regardless of the length of time spent in the classroom. According to Abu Qwider (2019), the process of assessing the training needs of English language instructors did not show any statistically significant changes based on the gender of the teachers or their years of experience.

2. Methods and materials

This is a descriptive and analytical study to identify the level of training needed for instructors of talented students in Jordan for modern educational approaches during the coronavirus pandemic.

2.1. Participants

The study population consisted of teachers of gifted students using modern teaching methods, and an appropriate sample of 150 teachers of gifted students in the Capital Governorate's schools was drawn, where the study questionnaire was distributed to them, and 111 valid questionnaires were retrieved for analysis.

2.2. Data collection tools

The current study collects data from two main sources, which are as follows:

- 1- Secondary sources: these are books, prior studies, and scientific references linked to the study's topic.
- 2- Primary sources: This refers to the study questionnaire that was created and delivered to the study sample members to collect the necessary data for the study.

2.2.1. The questionnaire's reliability and validity

Before sending it to the study sample, the questionnaire was shown to a panel of arbitrators who offered their opinions on it to gauge its validity. When the resolution's stability was checked using Cronbach's alpha test, it was discovered that the alpha value was 0.959, which is an outstanding percentage because it is greater than the required 0.70 (Hair et al., 1998).

Also, the Alpha value for each variable is mentioned in the following Table 1:

Table 1
Reliability Test

	Alpha
Planning	0.898
Teaching	0.918
Assessment	0.891

2.3. Data analysis

The researcher employed the required statistical methods, such as data systems, the mean, SD, and the MANCOVA test.

3. Results

The study sample's characteristics have been described using frequencies and percentages, and the most notable findings are presented below:

Table 2
Sample Characteristics

	Gender			
	Frequency	Percent	Valid percent	Cumulative percent
Male	60	54.1	54.1	54.1
Female	51	45.9	45.9	100.0
Total	111	100.0	100.0	
	Educational level			
	Frequency	Percent	Valid percent	Cumulative percent
Diploma	9	8.1	8.1	8.1
BA	89	80.2	80.2	88.3
High studies	13	11.7	11.7	100.0
Total	111	100.0	100.0	
	Experience			
	Frequency	Percent	Valid percent	Cumulative percent
Less than 5 years	18	16.2	16.2	16.2
5–10 years	24	21.6	21.6	37.8
11–15 years	22	19.8	19.8	57.7
More than 15 years	47	42.3	42.3	100.0
Total	111	100.0	100.0	

According to the data presented in Table 2 above, the majority of the people who participated in the research study were males (54.1%), while only 45.9% of the people who participated in the research study were females. We also note that 80.2% of the people who participated in the study had at least a bachelor's degree, which was followed by the percentage of people who had completed graduate studies. Additionally, we note that the majority of people who participated in the study had more than 15 years of professional experience (42.3%).

3.1. What is the level of training required for teachers of gifted students in Jordan for modern teaching methods during the coronavirus pandemic in terms of aspects (clarify teaching plans, teaching process, and assessment methods)?

In each of the questionnaire's paragraphs, the mean of the responses to the study sample's questions as well as their SDs were determined and recorded. What follows is a presentation of the conclusions that were drawn:

Table 3

Answer of Q1

	N	Minimum	Maximum	Mean	Std. Deviation
Clarify teaching plans	111	2.40	5.00	3.9207	0.69310
Teaching process	111	1.30	5.00	3.3703	0.82170
Assessment methods	111	2.50	5.00	3.8694	0.60012
Grand mean	111	2.33	4.83	3.7201	0.65422

According to the data presented in Table 3 above, the overall mean score of the questionnaire is 3.7201. This suggests that there is a significant gap between the level of training that Jordanian instructors of gifted students require and the level of training that is now available. We also note that the most prominent training needs were related to the field of (clarify teaching plans). In terms of the level of training that was required, the variable that dealt with the teaching process had the smallest impact.

3.2. Are there differences in the level of training needed for teachers of gifted students for current teaching methods during the coronavirus pandemic in Jordan due to (the teacher's gender, educational experience, and scientific qualification)?

MANCOVA test was used to answer the above question, following results were found:

Table 4

Answer of Q2

Source	Dependent variable	Type III sum of squares	df	Mean square	F	Sig.
Corrected model	Clarify teaching plans	3.511 ^a	3	1.170	2.538	0.060
	Teaching process	5.587 ^b	3	1.862	2.901	0.038
	Assessment methods	2.915 ^c	3	0.972	2.833	0.042
	Training	3.816 ^d	3	1.272	3.146	0.028
Intercept	Clarify teaching plans	59.357	1	59.357	128.745	0.000
	Teaching process	49.249	1	49.249	76.722	0.000
	Assessment methods	50.064	1	50.064	145.959	0.000
	Training	52.793	1	52.793	130.567	0.000
Gender	Clarify teaching plans	2.252	1	2.252	4.884	0.029
	Teaching process	2.310	1	2.310	3.599	0.061
	Assessment methods	0.883	1	0.883	2.574	0.112
	Training	1.743	1	1.743	4.310	0.040
Education	Clarify teaching plans	0.058	1	0.058	0.125	0.724
	Teaching process	0.107	1	0.107	0.167	0.683
	Assessment methods	0.432	1	0.432	1.258	0.264
	Training	0.167	1	0.167	0.412	0.522
Experience	Clarify teaching plans	2.180	1	2.180	4.727	0.032
	Teaching process	4.610	1	4.610	7.181	0.009
	Assessment methods	2.428	1	2.428	7.078	0.009
	Training	2.983	1	2.983	7.378	0.008
Error	Clarify teaching plans	49.332	107	0.461		
	Teaching process	68.685	107	0.642		
	Assessment methods	36.701	107	0.343		
	Training	43.264	107	0.404		
Total	Clarify teaching plans	1,759.140	111			
	Teaching process	1,335.090	111			
	Assessment methods	1,701.510	111			
	Training	1,583.242	111			
Corrected total	Clarify teaching plans	52.842	110			
	Teaching process	74.272	110			

Assessment methods	39.616	110
Training	47.081	110

According to the data presented in Table 4 above, the *F* value is significantly different at the 0.05 level of statistical significance for each of the following:

3.2.1. Gender

There are variances in clarifying teaching strategies depending on the gender of the teachers, and the differences tend to favor the male sample with a higher mean than the females, as shown in Table 5 below:

Table 5

Mean and SD According to Gender

Gender		Planning	Teaching	Assessment	Training
Male	Mean	4.0217	3.4567	3.9200	3.7994
	<i>N</i>	60	60	60	60
	Std. Deviation	0.63462	0.80536	0.59541	0.61749
Female	Mean	3.8020	3.2686	3.8098	3.6268
	<i>N</i>	51	51	51	51
	Std. Deviation	0.74498	0.83702	0.60605	0.68938
Total	Mean	3.9207	3.3703	3.8694	3.7201
	<i>N</i>	111	111	111	111
	Std. Deviation	0.69310	0.82170	0.60012	0.65422

3.2.2. Experience

There are variances in (clarified teaching plans, teaching process, and assessment methods) depending on the experience, and the differences tend to favor the category (Less than 5 years) with a higher mean than the rest of the categories, as shown in Table 6 below:

Table 6

Mean and SD According to Experience

Experience		Planning	Teaching	Assessment	Training
Less than 5 years	Mean	4.1556	3.7944	4.1444	4.0315
	<i>N</i>	18	18	18	18
	Std. Deviation	0.43551	0.69322	0.55224	0.45251
5–10 years	Mean	3.9542	3.3167	3.9167	3.7292
	<i>N</i>	24	24	24	24
	Std. Deviation	0.67307	0.81062	0.56620	0.62757
11–15 years	Mean	3.8591	3.4045	3.7682	3.6773
	<i>N</i>	22	22	22	22
	Std. Deviation	0.87704	0.90105	0.54457	0.74737
More than 15 years	Mean	3.8426	3.2191	3.7872	3.6163
	<i>N</i>	47	47	47	47
	Std. Deviation	0.68612	0.80126	0.64052	0.66786
Total	Mean	3.9207	3.3703	3.8694	3.7201
	<i>N</i>	111	111	111	111
	Std. Deviation	0.69310	0.82170	0.60012	0.65422

4. Discussion

After conducting statistical analysis using the Spss program on the answers of the study sample, it was found that there is a significant gap between the level of training that Jordanian instructors of gifted students require and the level of training that is now available. The purpose of the study was to identify the level of training needed for teachers of gifted students for modern teaching methods during the coronavirus pandemic in Jordan. Furthermore, we take note of the fact that the most important training demands were connected to the industry

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of (clarify teaching plans). In terms of the needed degree of training, the variable that dealt with the instructional methodology had the least amount of influence on the outcome.

It was also discovered that there are differences in clarifying teaching strategies depending on the gender of the teachers. The differences tend to favor the male sample with a higher mean than the female sample, and it was discovered that there are variances in clarifying teaching strategies depending on the gender of the teachers. Additionally, there are variations in (clarified teaching plans, teaching processes, and assessment methods) depending on the experience, and the differences tend to favor the category (Less than 5 years) with a higher mean than the rest of the categories. This is because the category 'Less than 5 years' has a higher mean than the other categories.

5. Conclusion

The study was carried out in Jordan amid the coronavirus pandemic in 2009 to discover what kind of instruction is necessary to appropriately instruct teachers of gifted students in the most modern teaching practices. In addition to this, we are aware that the most immediate demands for training were related to the (clarify teaching plans). When factoring in the needed degree of education, the training methodology variable was the one with the least amount of significance.

It was also demonstrated that male and female educators employ distinct strategies for elaborating on concepts in the classroom. When it comes to clarifying instructional strategies, there are differences between the sexes, with the male sample having a higher mean than the female sample. The group (Less than 5 years) that has the highest mean differs from the others in that there are variations in (clarified teaching plans, teaching methods, and evaluation procedures) depending on the amount of experience. This is a result of the fact that the group labeled 'Less than 5' has a mean score that is greater than that of the other groups.

6. Recommendations

In light of the findings from the prior studies, the researcher suggests the following:

- It is vital to pay attention to holding training courses periodically to raise the level of teachers of talented students for modern teaching approaches in the areas of (clarifying teaching plans, teaching processes, and assessment methods)
- An effort should be made to help teachers of gifted students get through the challenges posed by dealing with modern educational practices so that they can improve their pupils' level of performance in these settings.
- The importance of younger educators learning from the more seasoned expertise of their more senior peers through the utilization of collaborative brainstorming sessions between the two groups.
- Keeping a close eye on how the education of academically talented students is progressing at Jordan's educational institutions by carrying out regular research on the topic at hand.

References

- Abu Qwider, S. (2019). *The Training Needs of the English Language Teachers in the Light of Integrating Technology in Teaching at Alqwismah District from their Perspectives*. Published MA thesis. Middle East University. Jordan.
- Aguilar, S. J., Rosenberg, J. M., Greenhalgh, S. P., Fütterer, T., Lishinski, A., & Fischer, C. (2021). A different experience in a different moment? Teachers' social media use before and during the COVID-19 pandemic. *Aera Open*, 7, 23328584211063898. <https://journals.sagepub.com/doi/abs/10.1177/23328584211063898>
- Al-Ali, Y. (2016). Required Training Needs for Gifted Students Teachers in Hashemite Kingdom of Jordan. *Dirasat: Educational Sciences*, 43. <https://archives.ju.edu.jo/index.php/edu/article/view/7390>

- Orabi, M.M.A. (2023). Required training needs for talented student teachers after the coronavirus pandemic. *International Journal of Special Education and Information Technologies*, 9(1), 01-09. <https://doi.org/10.18844/jeset.v9i1.9133>
- Al-Fraih, N., & Al-Qahtani, S. (2021). The reality of gifted students' teachers' use of differentiated education strategies and the obstacles to their application. *The Scientific Journal of the Faculty of Education, Assiut University*, 37(12), 330–378.
- Alharbi, M. A. (2019). Saudi Arabia EFL university students' voice on Challenges and Solutions in Learning Academic Writing. *Indonesian Journal of Applied Linguistics*, 8(3), 576-587. <https://ejournal.upi.edu/index.php/IJAL/article/view/15276>
- Çebi, A., & Reisoğlu, İ. (2020). Digital competence: A study from the perspective of pre-service teachers in Turkey. *Journal of New Approaches in Educational Research (NAER Journal)*, 9(2), 294-308. <https://www.learntechlib.org/p/217619/>
- Chou, C. M., Shen, C. H., Hsiao, H. C., & Shen, T. C. (2019). Factors influencing teachers' innovative teaching behavior with information and communication technology (ICT): The mediator role of organizational innovation climate. *Educational Psychology*, 39(1), 65-85. <https://www.tandfonline.com/doi/abs/10.1080/01443410.2018.1520201>
- Gomez-Mejia, L. R., Balkin, D. B., Cardy, R. L., & Carson, K. P. (2004). Managing human resources. <https://library.perbanas.ac.id/images/book/managing.pdf>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). Multivariate data analysis. Upper Saddle River. *Multivariate Data Analysis (5th ed) Upper Saddle River*, 5(3), 207-219.
- Hamad, H. A. B. (2019). Training Needs of the Gifted Students' Teachers in the Southern Region Based on the Standards of the National Center for Assessment, KSA. *Basic Education College Magazine for Educational and Humanities Sciences*, (43). <https://www.iasj.net/iasj/article/162923>
- Hong, X., Zhang, M., & Liu, Q. (2021). Preschool teachers' technology acceptance during the COVID-19: An adapted technology acceptance model. *Frontiers in Psychology*, 12, 691492. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.691492/full>
- Houssart, J., Roaf, C., & Watson, A. (2005). *Supporting mathematical thinking*. David Fulton Publishers.
- Issa, R. I., & Saleh, A. J. (2019). The Difficult Application of Modern Education Technology from the Point View of the Members of a Teaching Staff. *Journal of University of Babylon for Pure and Applied Sciences*, 27(1), 206-227. <https://www.iasj.net/iasj/download/cd6f3738e374fd5a>
- Karalar, H., Kapucu, C., & Gürüler, H. (2021). Predicting students at risk of academic failure using ensemble model during pandemic in a distance learning system. *International Journal of Educational Technology in Higher Education*, 18(1), 63. <https://link.springer.com/article/10.1186/s41239-021-00300-y>
- Kerimbayev, N., Umirzakova, Z., Shadiev, R., & Jotsov, V. (2023). A student-centered approach using modern technologies in distance learning: a systematic review of the literature. *Smart Learning Environments*, 10(1), 61. <https://link.springer.com/article/10.1186/s40561-023-00280-8>
- Moore, M. G., & Kearsley, G. (2011). *Distance education: A systems view of online learning*. Cengage Learning.
- Mulligan, C. A., & Ayoub, J. L. (2023). Remote Assessment: Origins, Benefits, and Concerns. *Journal of Intelligence*, 11(6), 114. <https://www.mdpi.com/2079-3200/11/6/114>
- Parahoo, S. K., Santally, M. I., Rajabalee, Y., & Harvey, H. L. (2016). Designing a predictive model of student satisfaction in online learning. *Journal of Marketing for Higher Education*, 26(1), 1-19. <https://www.tandfonline.com/doi/abs/10.1080/08841241.2015.1083511>
- Poquet, O., Kitto, K., Jovanovic, J., Dawson, S., Siemens, G., & Markauskaite, L. (2021). Transitions through lifelong learning: Implications for learning analytics. *Computers and Education: Artificial Intelligence*, 2, 100039. <https://www.sciencedirect.com/science/article/pii/S2666920X21000333>
- Radwan, M. (2012). *Design and implementation of training programs*. The Arab Group for Training and Publishing.
- Reed, J., & Vakola, M. (2006). What role can a training needs analysis play in organizational change? *Journal of Organizational Change Management*, 19(3), 393-407. <https://www.emerald.com/insight/content/doi/10.1108/09534810610668382/full/html>
- White, M., & Mackenzie-Davey, K. (2003). Feeling valued at work? A qualitative study of corporate training consultants. *Career Development International*, 8(5), 228-234. <https://www.emerald.com/insight/content/doi/10.1108/13620430310497395/full/html>
- Zweig, J., & Stafford, E. (2016). Training for online teachers to support student success: Themes from a survey administered to teachers in four online learning programs. *Journal of Online Learning Research*, 2(4), 399-418. <https://www.learntechlib.org/p/172573/>