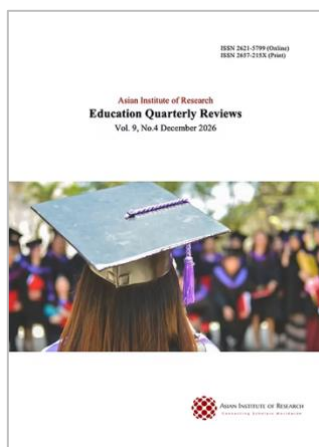




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Evaluation of Gifted Programs According to the Educational and Learning Capital Model

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Abstract

This study aims to examine gifted education programs according to the Educational and Learning Capital Model from the perspectives of teachers working with gifted students. The research followed a descriptive survey design. The study sample consisted of 260 teachers of gifted students from King Abdullah II Schools for Excellence and the Jubilee School. Two scales were developed; the first was used to examine gifted education programs according to the Educational Capital Model, and the second was used to examine gifted education programs through the Learning Capital Model. Together, the two scales comprised a total of 70 indicators based on the Educational and Learning Capital Approach (ELCA). Descriptive analysis used means and standard deviations. Teachers reported high levels of availability and use of educational and learning capitals. The mean value obtained from the first scale was 1.67 (SD = 0.274), while the mean value obtained from the second scale was 1.78 (SD = 0.258). Among the educational capitals, didactic educational capital ranked first, while infrastructural educational capital ranked last. Among the learning capitals, telic learning capital ranked first, while organismic learning capital ranked last. The assignment of a dedicated teacher to the innovation laboratory is recommended.

Keywords: Educational Capital, Gifted Education Programs, Learning Capital, Program Evaluation

1. Introduction

1.1 Background and Rationale

Supporting gifted students continues to grow as an area of interest within modern schooling systems because gifted individuals represent a significant potential source of intellectual and creative capacity that could generate positive contributions to community-wide social development and economic prosperity. Thus, government investment in developing human capital is being made with the intention of generating broader benefits for society at large, individual families, and the gifted students who receive those investments. Ultimately, when governments invest in supporting gifted students, they enhance the competitive position, standing, and value of their societies. In order to further increase support for gifted students, it would be helpful to invest in gifted education and provide students

with learning environments that have been designed to assist them appropriately based on their unique abilities and needs. This will enable gifted students to utilize their ability for creativity and innovation (Ghnam, 2019).

In today's rapidly developing digital environment, which is constantly evolving as a result of emerging technologies and the rapid dissemination of information, there is an increasing demand for schools to develop evaluation models that will allow them to assess how well their gifted education programs are addressing students' needs in terms of cognitive, social, emotional, and other developmental needs. Program evaluation provides feedback to teachers, students, and parents about the services being provided to gifted students and whether those services align with international standards (Abdulrazzaq, 2019), ultimately enhancing the instructional process.

Program evaluation aids in determining what should be done about current circumstances. The decisions that are made could be to expand or develop gifted education programs, as stated by the Ministry of Education (2024) in its evaluative studies of its departments, directorates, and schools. Additionally, program evaluation aids in identifying and providing recommendations to improve gifted education programs, as exemplified by Rababah (2025).

The goal of developing gifted education programs in Jordan was rooted in the vision of the Ministry of Education and its strategic plans for enhancing the quality of education and efficiently utilizing talented human capital. In recent years, gifted education programs in Jordan have grown in terms of both the populations they serve and the variety of instructional approaches used. While this growth has been positive, there continues to be a concern regarding the provision of consistently high-quality programming that encompasses a comprehensive approach, including the learning environment, instructional resources, facilities, and instructional strategies. Thus, there is a significant need for research-based models for evaluating programs such as those described above; particularly, Alfaiz et al. (2022) found that Ziegler's Educational and Learning Capital Model provides a unifying theoretical basis for understanding how individual and environmental variables are interrelated in affecting talent development.

According to Ziegler and Phillipson (2012), gifted education advances when optimal developmental conditions are provided, a principle that has long been central to gifted education. Traditionally, attention was directed not only toward the gifted student but also toward the environment in which the student could achieve exceptional performance. Effective gifted-learning environments are characterized by rich learning resources. These resources can be divided into external, environmental resources and internal, individual learning resources.

Ziegler and Baker (2013) used the term learning capital for internal resources and educational capital for external resources in order to distinguish the two. Together, these categories constitute the Educational and Learning Capital Model (ELCA).

Ziegler (2005) first proposed the Actiotope Model of Giftedness, which later informed the classification of educational resources. Grounded in dynamic systems theory, the model treats the individual and the environment as an interconnected system.

In 2019, educational approaches were derived from this perspective. Subsequently, levels of educational environments for gifted students were introduced to facilitate understanding of how educational environments can be developed and how their outcomes can be predicted (Ziegler & Stoeger, 2024), while seven principles for managing educational resources were subsequently added (Ziegler et al., 2025). Accordingly, Ziegler's conceptualization of giftedness, classification of resources, emphasis on their comprehensiveness, principles for their management, and classification of educational environments together constitute an integrated and comprehensive theoretical basis for program evaluation.

The current research builds upon that base and provides an evaluation of gifted education in Jordan based on the Educational and Learning Capital Model. The study also assesses gifted education programs in terms of both the positive (strengths) and negative (weaknesses) aspects of each component. Therefore, it is expected to contribute to improving the quality of these programs and aligning them with internationally accepted standards of gifted

education while still addressing the cultural and educational needs of the Jordanian population.

1.2 Statement of the Problem

King Abdullah II Schools for Excellence and the Jubilee School represent two successful examples of gifted education programs in Jordan. They are also considered a nationwide investment in human capital. A literature review was performed to identify the gaps that exist with respect to empirical research on evaluations of gifted education programs. According to Abdulrazzaq (2019), many prior studies did not provide sufficient evidence to demonstrate whether such programs had been effective; similarly, Rababah (2025) found that the current state of affairs necessitates empirically based recommendations to strengthen the effectiveness of gifted education programs.

The study problem consists of two main components. First, it addresses the necessity of performing a comprehensive evaluation of each gifted education program. Many researchers, including Abdulrazzaq (2019), Alodat and Almomani (2019), and others, have evaluated gifted education programs. The goal of these studies was to identify both the positive aspects of each program and the areas where improvements could be made. However, a comprehensive evaluation of all program components can provide a broader understanding of program effectiveness and support more effective improvement recommendations through better management of program components.

The second component concerns the limited capacity of existing program evaluation criteria to identify the actual challenges and gaps affecting gifted education programs. The field therefore requires contemporary and comprehensive criteria that account for the factors contributing to program success and the development of rich educational environments for talent development, including external economic and cultural factors as well as internal learning and psychological factors (Ziegler, Stoeger, & Balestrini, 2017).

Furthermore, gifted education program evaluation should be developed as a comprehensive and continuous process conducted within contemporary scientific frameworks and standards. The ELCA model provides such a theoretically grounded framework for identifying weaknesses and opportunities for improvement.

1.3 Research Questions

Accordingly, and in line with the study objective of evaluating gifted education programs through the Educational and Learning Capital Model from teachers' perspectives, the study problem is expressed in the following main research question:

How do teachers evaluate gifted education programs using the Educational and Learning Capital Model?

The main question is addressed through the following subquestions:

1. How do teachers evaluate gifted education programs using the Educational Capital Model?
2. How do teachers evaluate gifted education programs using the Learning Capital Model?

1.4 Significance of the Study

This study is significant because it focuses on gifted students and the need for programs that address their needs and foster the development of their talents. It also contributes to the Arabic theoretical literature on the Educational and Learning Capital Model and its use in evaluating gifted education programs.

The study findings and instruments are also expected to benefit educational officials, practitioners, and researchers in gifted education by helping sustain services for gifted students, promoting services that respond to their needs, and supporting further development of gifted education program evaluation.

1.5 Conceptual and Operational Definitions

1.5.1 Evaluating Gifted Programs

Conceptual definition of evaluation: Neumeister and Burney (2019, p. 3) define gifted program evaluation as the application of sound research methods to examine program processes and outcomes, determine how well a program addresses a social need, and assess its outcomes for stakeholders.

Operational definition of evaluation: Evaluation is operationally defined as assessing the performance indicators of gifted education programs according to Ziegler's Educational and Learning Capital Model in King Abdullah II Schools for Excellence and the Jubilee School, with the aim of identifying strengths and areas of deficiency in gifted education programs.

The National Association for Gifted Children (NAGC, 2019) conceptually defines gifted programs as educational frameworks intended to maximize the potential of individuals with high abilities through advanced educational environments that offer challenge, support, and opportunities for personal and cognitive growth.

Operational definition of gifted programs: Gifted programs are operationally defined as programs provided in Jordanian schools serving gifted students, specifically King Abdullah II Schools for Excellence and the Jubilee School, together with the educational and pedagogical services they provide.

1.5.2 Educational and Learning Capital Model

Ziegler, Stoeger, and Balestrini (2017, p. 25) define the Educational and Learning Capital Model as a resource-oriented approach in which material and nonmaterial resources can be used to achieve educational goals directed toward excellence.

Operational definition of Educational Capital: Educational Capital is operationally defined as the score obtained by determining the extent to which gifted education program indicators are represented across the following dimensions: economic, social, cultural, infrastructural, and didactic educational capital.

Operational definition of Learning Capital: Learning Capital is operationally defined as the score obtained by determining the degree to which gifted education program indicators are represented across the following dimensions: telic, actional, episodic, attentional, and organismic learning capital.

1.6 Theoretical Framework

1.6.1 Gifted Education

Gifted education constitutes a social benefit that should be grounded in clearly defined goals and policy visions and implemented by specialists, educators, and teachers through the preparation of educational materials and the creation of opportunities for gifted students to demonstrate their talents. Gifted students represent a form of human wealth that can be developed through investment in their education, leading to patents and diverse innovations, strengthening links between funding for gifted education and educational institutions, contributing to technological and economic institutions, and identifying underserved gifted individuals in rural areas, which may expand the available workforce (Clinkenbeard, 2007).

Educational programs are important for supporting gifted students because they respond to their psychological needs, including reducing feelings of alienation by allowing them to interact with peers who have similar characteristics and by creating a safe and participatory environment in which their concerns can be addressed. These types of educational programs also help develop and encourage self-actualizing behaviors as well as a variety of positive social/behavioral skills by providing students with guidance that is suitable and supportive (Abu Hanish, 2023). Specialized preparation and professional development for teachers of gifted students can contribute to achieving these goals. Teachers' abilities to identify gifted students, especially those from underrepresented populations, and to appropriately use and apply instructional strategies along with the most effective methods for

grouping students will be enhanced by their preparation and professional training (Kettler et al., 2015).

1.6.2 Evaluation of Gifted Programs

Neumeister and Burney (2019) characterize gifted program evaluation as a systematic, research-based examination of program processes and outcomes in relation to a social need. They further indicated that the purpose of gifted program evaluation is to provide stakeholders with a systematic method for examining program outcomes.

They identified several elements of comprehensive gifted program evaluation, including a strong theoretical foundation, with the Educational and Learning Capital Model as one example, together with qualitative data addressing nonacademic dimensions such as social skills, mental health, and creativity.

The first is formative evaluation, which involves assessing the strengths and weaknesses of the existing program and its implementation in order to identify recommendations that can improve efficiency and effectiveness. The second is summative evaluation, which identifies the areas of services provided to gifted students and provides justification for program expenditures. In this sense, summative evaluation determines the value of the program and informs decisions concerning whether the program should be expanded, discontinued, or continued.

Internal evaluation is carried out by a team from within the institution, whereas external evaluation is conducted by a specialized team, such as experts in gifted education from outside the school. To address the limitations associated with internal evaluation and preserve high-quality practice in gifted education, Landrum et al. (2001) recommend that gifted programs undergo formal evaluation every five years.

1.6.3 Educational and Learning Capital Model

Ziegler (2005) conceptualizes giftedness as developing through an ongoing reciprocal relationship between individuals and their environments, with both individual actions and environmental influences taken into account. The model treats giftedness as an attribution based on a prospective assessment of a person's potential; it emphasizes individual action rather than a fixed personal trait. A person is therefore considered gifted on the basis of an assessment indicating potential for outstanding accomplishment rather than possession of an inherent internal characteristic. The Actiotope Model of Giftedness contains four core components: action repertoire, subjective action space, environment, and goals.

Ziegler and Baker (2013) call for gifted education programs to provide long-term access to all ten educational and learning resources. For example, from this point of view, developing talent is not just about developing talent itself. It is also necessary to develop an adaptive actiotope by adapting actions to the environment. In addition, it is important to create an overall balance in the actiotope so that excellence can be achieved.

1.6.4 External Educational Capital

Ziegler, Stoeger, and Balestrini (2017) discussed giftedness and the identification of gifted individuals without relying solely on intelligence quotient scores and academic achievement. They described factors associated with the individual as learning capital and factors associated with the environment as educational capital.

External educational capital encompasses environmental resources that can support teaching and learning. It includes the following forms of capital:

- Economic Educational Capital: Financial resources and material assets directed toward education, such as equipment, schools, and trainers.
- Social Educational Capital: People and institutions that facilitate learning, including teachers, parents, mentors, and social networks.
- Cultural Educational Capital: Cultural values and practices that can facilitate or hinder excellence, such as stereotypes concerning women in scientific fields.
- Infrastructural Educational Capital: Material and organizational facilities that provide opportunities for learning,

such as training centers, laboratories, and libraries.

- Didactic Educational Capital: Knowledge used to design and improve teaching and learning processes, including advanced instructional methods and effective feedback.

1.6.5 Internal Learning Capital

Internal learning capital comprises personal resources that individuals can draw upon to improve learning. It includes the following forms of capital:

- Organismic Learning Capital: The individual's physical health, mental health, and fitness.
- Telic Learning Capital: The goals individuals set in pursuit of their needs.
- Actional Learning Capital: The repertoire of actions an individual can perform, together with relevant knowledge and skills.
- Episodic Learning Capital: Available action patterns or solutions for recurring situations within a particular domain.
- Attentional Learning Capital: Attentional resources that can be directed toward learning, including the duration, concentration, and selectivity of attention.

1.7 Previous Studies

Ziegler, Chandler, et al. (2017) examined gifted education through a resource-oriented methodological framework grounded in dynamic systems theory and aligned with the principles of the Actiotope Model of Giftedness. As part of their research, they defined educational capital as all external factors that contribute to student growth/development; conversely, they defined learning capital as all those internal factors contributing to student growth/development. They further articulated that it would be ideal to direct learning toward goals that will help students develop greater flexibility and resiliency; however, they stated that students should apply the principle of continuity as well. Furthermore, they emphasized the minimum availability of resources that can affect student development because progress may be constrained by whichever resource is least available. Finally, they suggested that educators use support and control systems, including continual feedback and support networks, to help students learn and develop toward their full potential; they also recommended expanding diagnostic and identification tools and using the QELC questionnaire.

Ziegler et al. (2019) conducted a study described as the first to distinguish resource availability from access to educational and learning resources for specific purposes. The study examined three assumptions: that educational and learning capitals demonstrate predictive validity for academic achievement beyond general intelligence; that the availability of resources is essential for professional talent development in STEM; and that achievement levels increase as resources are used more effectively. The first sample consisted of 365 sixth-grade students, the second consisted of 90 women divided into three groups, and the third consisted of 74 long-distance runners divided into four groups according to achievement level.

Reutlinger et al. (2020) examined the domain specificity of educational and learning capital in Germany and Australia by comparing school learning with learning to play a musical instrument. The empirical study included 365 students. The findings showed that the availability of educational and learning capital varied between school learning and musical-instrument learning.

Al-Hroub (2023) evaluated how both educational and learning capital impact gifted education in Palestine; this was done using the Educational and Learning Capital Model as a guide for the study. The study examined such areas of practice as teachers receiving proper training, the ability to recognize and define giftedness, the effective utilization of social resources, and the effective utilization of financial resources for gifted education in Palestine. Ziegler et al. (2025) used the ELCA framework to evaluate national systems for supporting talented students. The authors evaluated how available, accessible, and effectively coordinated these resources were across family, school, institutional, and policy levels. They based this on the hypothesis that systems providing rich and well-coordinated access to such resources would provide more opportunities for students to achieve long-term excellence. They also stated that it was important to identify where a system is weakest, as a deficiency in that

area could limit or restrict the potential of the entire system.

Roy et al. (2026) investigated and established an overall understanding of how giftedness manifests and is determined in India, along with potential obstacles and opportunities, by combining the Educational Capital Model with traditional Indian frameworks. Their results suggested that giftedness existed in areas other than academics, specifically in the arts and spirituality. They also found significant amounts of cultural, social, and didactic forms of educational capital within the communities studied (i.e., community support networks). However, they found that the levels of infrastructural capital in some schools were low, in addition to shortages in economic capital. Finally, they found evidence of sex-based and geographically based discriminatory practices in education. As a result of these findings, they recommended that national education policies be implemented to create more equal and accessible educational experiences for all students and ensure their access to similar opportunities.

2. Materials and Methods

2.1 Research Design and Population

A descriptive survey methodology was adopted. The study covered 14 schools offering gifted education programs within King Abdullah II Schools for Excellence and the Jubilee School. Two groups were included in the sample: a pilot group of 30 male and female teachers who completed the instruments for psychometric testing, and a randomly selected main sample of 260 teachers from the same population.

2.2 Study Delimitations

2.2.1 Temporal Delimitations

Data collection took place during the second semester of the 2025/2026 academic year.

2.2.2 Spatial Delimitations

The study was limited to King Abdullah II Schools for Excellence and the Jubilee School.

2.2.3 Subject Delimitations

The study focused on gifted education programs in relation to their evaluation using the Educational Capital Model in Jordan.

2.2.4 Human Delimitations

The human scope of the study comprised teachers working with gifted students at King Abdullah II Schools for Excellence and the Jubilee School.

2.3 Study Limitations

Generalization of the findings from this study may be affected by the psychometric properties of the tools used in this study, i.e., the validity and reliability of these tools, as well as teachers' cooperation and responsiveness to these tools.

2.4 Study Instruments

2.4.1 Theoretical Basis of the Scales

The teacher-version scale for evaluating gifted education programs according to the Educational and Learning Capital Model was developed from the concepts of educational and learning capital derived from the Actiotope

Model of Giftedness. The Actiotope Model of Giftedness provided the conceptual foundation for constructing the scale items.

2.4.2 Description of the Instruments

Both assessment tools used the same scale format and each contained five dimensions. The Educational Capital Scale assessed Economic, Cultural, Social, Infrastructural, and Didactic Educational Capital, whereas the Learning Capital Scale assessed Organismic, Telic, Actional, Episodic, and Attentional Learning Capital. Each dimension contained seven items, resulting in 35 items per scale.

2.5 Pilot Study

2.5.1 Pilot Study Procedures

For the pilot study, the teacher version of the instrument was administered in paper form to educators at King Abdullah II School for Excellence in Al-Salt, Jordan, none of whom were included in the main study sample.

2.5.2 Expert Validity

A panel consisting of experts from several relevant educational disciplines from multiple institutions of higher education throughout Jordan and the Arab world reviewed both instruments. One instrument measured Educational Capital, while the other measured Learning Capital. The main goal in conducting this review was to determine whether the items on both instruments clearly communicated their intended meaning (i.e., clarity), whether each item correctly reflected the respective dimension being measured, and whether it corresponded to the domain for which it was developed. Suggestions from reviewers regarding both instruments were incorporated into the revised versions of the instruments. Several items were deleted as recommended, including: "We supervise student activities held at the school that generate profits," "We guide students toward winning monetary awards," "We organize events and activities to invite and welcome guests and political media representatives," "We are prepared to teach gifted students," and "I simplify content for multilingual students." Repeated items, such as "Students have high confidence in their academic abilities," were also removed.

Al-Haylat and Al-Maqousi provided spelling and orthographic revisions. Dr. Ali Al-Odat reformulated all items in both scales, and his revisions were adopted. Al-Bdour recommended reducing the number of items, and accordingly, seven indicators were retained for each dimension instead of nine. Abu Shabab, Al-Lala, Al-Dababneh, Aqel, Al-Khawaja, Al-Masarweh, and Al-Qamash also provided guidance on item clarity and formulation.

2.5.3 Construct Validity

Construct validity was examined by calculating Pearson correlation coefficients between each item and its assigned dimension, and between each item and the total scale score, to determine how adequately the items represented the Educational and Learning Capital Model.

Correlations between the educational and learning capital dimensions and the total score of the teacher version ranged from 0.579 to 0.942, indicating relatively high and statistically significant relationships at the 0.01 level. Correlations between individual items and their respective dimensions, as well as with the total scale score, were positive, high, and statistically significant at the 0.01 and 0.05 levels (two-tailed).

2.6 Reliability of the Study Instruments

Internal consistency was assessed using Cronbach's alpha together with split-half reliability.

2.6.1 Split-Half Reliability

The reliability of the instruments was assessed by dividing the indicators within each dimension of the two scales, each comprising seven indicators, into two sequentially overlapping halves. The correlation coefficient between the two halves was then calculated and statistically corrected using the Spearman-Brown formula for unequal length and the Guttman split-half coefficient.

For the Educational Capital Scale, Spearman-Brown values ranged from 0.710 for Infrastructural Educational Capital to 0.904 for Cultural Educational Capital; corresponding Guttman coefficients ranged from 0.690 to 0.897. For the overall 35-indicator scale, the two halves correlated at 0.856, with a corrected Spearman-Brown coefficient of 0.923 and a Guttman split-half coefficient of 0.883.

For the Learning Capital Scale, the corrected Spearman-Brown coefficients for Organismic Learning Capital, Effective Learning Capital, and Attentional Learning Capital ranged from 0.915 to 0.924, while the Guttman coefficients ranged from 0.873 to 0.919. Cognitive Learning Capital yielded coefficients of 0.790 for Spearman-Brown and 0.645 for Guttman, while Telic Learning Capital yielded 0.563 and 0.490, respectively.

2.6.2 Cronbach's Alpha Reliability

Across the Educational Capital dimensions, Cronbach's alpha values ranged from 0.772 to 0.886, while values for the Learning Capital Scale ranged from 0.886 to 0.940. Cronbach's alpha if item deleted results indicated that removing any individual indicator would not improve overall reliability, supporting retention of all indicators.

2.7 Main Study Procedures

The study instruments were administered electronically to 260 teachers: 114 male teachers (43.8%) and 146 female teachers (56.2%). Of the total sample, 12 participants (4.6%) were from the Jubilee School, while the remainder were from King Abdullah II Schools for Excellence distributed across the following locations: Jerash, 22 teachers (8.5%); Ajloun, 35 (13.5%); Madaba, 44 (16.9%); Irbid, 22 (8.5%); Al-Muqabalayn, 36 (13.8%); Sahab, 30 (11.5%); Ma'an, 12 (4.6%); Mafraq, 19 (7.3%); Aqaba, 13 (5.0%); Al-Salt, 3 (1.2%); and Tafilah, 12 (4.6%).

3. Results and Discussion

To answer the study questions, means were calculated to describe the extent to which teachers' ratings applied to the indicators of each dimension, while standard deviations were calculated to determine variability in participant responses. The findings are interpreted with reference to the theoretical framework and previous studies.

First Research Question: How Do Teachers Evaluate Gifted Education Programs Using the Educational Capital Model?

3.1 Educational Capital

Overall, evaluation of gifted education programs according to the Educational Capital Model produced a mean score of 1.67 (SD = 0.274).

The highest-ranked dimension was didactic educational capital; then came cultural educational capital; followed by social educational capital; after that, economic educational capital; and lastly, infrastructural educational capital. As Ziegler, Stoeger, and Balestrini (2017) stated, these rankings show how teachers are able to access and utilize environmental or outside sources of support for developing their instructional strategies and creating a variety of ways in which students may learn. These findings reflect those of Abdulrazzaq (2019); however, they differ from those found in Rababah (2025).

3.1.1 Didactic Educational Capital

In addition to collecting data regarding the five dimensions of educational capital, these survey instruments also asked questions related to didactic educational capital. The results showed that didactic educational capital was

the highest-ranked dimension. The average rating for didactic educational capital was 1.80, and the standard deviation was 0.284. In regard to didactic educational capital, it was found that teachers were consistent in using their knowledge and skills to enhance instruction for gifted students. Therefore, the study's findings provide some evidence supporting Ziegler, Stoeger, and Balestrini (2017) and the development of teachers' knowledge and skills as critical factors for providing an effective program for gifted students.

The highest-rated indicator within didactic educational capital was "I build positive relationships with students." The overall mean for this indicator was 1.91 (scale: 1–2). The standard deviation for this indicator was 0.285. Kettler et al. (2015) stated that teachers require appropriate preparation in order to understand how to implement effective teaching techniques for their students.

The lowest-rated indicator, "I design personalized paths for my students," had an average rating of 1.57 on a scale from one to two. The standard deviation of the ratings was 0.555. This is consistent with what Ziegler et al. (2025) discussed regarding the principle of multiple pathways; it also relates to Reutlinger et al. (2020) concerning differences in learning capital and educational capital between school education and learning to play a musical instrument; finally, it corresponds with Roy et al. (2026), who emphasized the effectiveness of the traditional Indian educational systems of the Guru-Shishya Parampara and the Panchakosha model.

3.1.2 Cultural Educational Capital

Cultural Educational Capital averaged 1.78 (SD = 0.25). Teachers agreed to a high extent that cultural values and practices supported excellence, as noted by Ziegler, Stoeger, and Balestrini (2017).

The indicator "I instill the value of personal development in students" ranked first, with a mean of 1.96 (SD = 0.202). The finding aligns with the principle of continuity discussed by Ziegler, Chandler, et al. (2017) and with Ziegler et al. (2019), who indicated that greater availability of resources and continuity in their provision contribute to more advanced outcomes.

The lowest-ranked indicator, "I communicate with students' teachers from previous educational stages to support their learning," recorded a mean of 1.52 (SD = 0.630). Ziegler, Chandler, et al. (2017) proposed the development of continuous support networks and the monitoring of areas of tension to prevent deterioration in students' performance.

3.1.3 Social Educational Capital

Social Educational Capital averaged 1.65 (SD = 0.361). The highest-ranked indicator, "I encourage students to participate in diverse scientific fields," had a mean of 1.85 (SD = 0.358). Ziegler et al. (2025) reviewed the principle of multiple pathways, which provides students with opportunities to develop diverse talents and abilities. The lowest-ranked indicator, "I share educational resources with other schools," averaged 1.33 (SD = 0.743), indicating a moderate level of resource sharing with other schools. This may be attributable to the nature of the resources and the geographical distance between schools. This finding contrasts with the importance attached to examining minimum resource availability within the resource-oriented approach (Ziegler, Chandler, et al., 2017).

3.1.4 Economic Educational Capital

Economic Educational Capital averaged 1.62 (SD = 0.451). The indicator "I encourage students to achieve academic excellence" averaged 1.92 (SD = 0.287). High academic achievement may help an individual receive a scholarship and/or maximize its benefits.

The degree to which teachers participate with decision-makers regarding how funds are allocated for developing students' innovative capabilities was found by the researcher to be at a moderate level (mean = 1.31, SD = 0.729) because such participation has not been established as a regular responsibility for teachers.

3.1.5 Infrastructural Educational Capital

Infrastructural Educational Capital had a mean score of 1.48 (SD = 0.433). This suggests that teachers consistently used the organizational and material learning resources available to them, including laboratories, libraries, equipment, and stationery, as indicated by Ziegler, Stoecker, and Balestrini (2017).

Regarding the item "I allocate time for my students in the innovation lab," the average was 1.33 and SD = 0.744. It is worth noting that another item also received a moderate score: "I arrange field trips that support learning." It should be noted that school administration and educational policies can both hinder or enable the implementation of field trips.

The highest-rated item was "I use modern technology in teaching," whose average was 1.72 and SD = 0.473. Ziegler, Chandler, et al. (2017) mentioned the need for adequate resource availability for gifted students.

Second Research Question: How Do Teachers Evaluate Gifted Education Programs Using the Learning Capital Model?

3.2 Learning Capital

Evaluation of gifted education programs according to the Learning Capital Model yielded an average of 1.78 (SD = 0.258) from teachers' perspectives. The dimensions were ranked from highest to lowest as Telic Learning Capital, Actional Learning Capital, Episodic Learning Capital, Attentional Learning Capital, and Organismic Learning Capital.

Data indicate that teachers are well equipped to develop the internal learning potential of gifted learners. This is according to the Learning Capital Theory of Ziegler, Stoecker, and Balestrini (2017), which has identified teachers' ability to do this as an important factor. This would likely be due to their preparation and continuing education as teachers. In accordance with Ziegler, Chandler, et al. (2017), the data also support the importance of providing feedback, establishing ongoing supportive relationships for students, and providing direction in such a way that encourages student resilience and adaptability.

3.2.1 Telic Learning Capital

Telic Learning Capital averaged 1.83 (SD = 0.293), indicating strong agreement among teachers regarding the consistency of practices directed toward desired outcomes for gifted students. This pattern is consistent with Ziegler et al. (2017), who emphasized the role of Telic Learning Capital in supporting gifted students in meeting their needs.

The top-rated indicator was "I provide students with social reinforcement." It averaged 1.89 (SD = 0.315). Education is viewed as highly important by society in Palestine, according to Al-Hroub (2023). Thus, it should be expected that social reinforcement would have a higher level of emphasis.

The bottom-rated indicator was "I develop students' twenty-first-century skills, including thinking, digital skills, and life skills." It had a mean of 1.79 (SD = 0.443). According to Ziegler et al. (2019), there is a distinction between having available educational and learning resources and having access to those resources when needed.

3.2.2 Effective Learning Capital

Effective Learning Capital averaged 1.82 (SD = 0.293). In accordance with the theoretical model presented by Ziegler, Stoecker, and Balestrini (2017), the findings indicate a high level of teacher support for developing the knowledge and skills students need to perform well.

Among the individual indicators, the highest-ranked was "I develop students' decision-making skills," with a mean of 1.88 (SD = 0.320). This may reflect the emphasis placed on developing and enhancing students' intellectual and

leadership abilities within Jordanian society. As such, it has been suggested that resources need to be directed toward achieving their intended purpose, as noted by Ziegler et al. (2019).

The lowest-ranked indicator was "I provide students with diverse learning experiences," which averaged 1.70 (SD = 0.492). Variation among teachers likely reflects differences in the extent to which they provide such experiences.

3.2.3 Cognitive Learning Capital

Teachers showed a high degree of support for students' Episodic Learning Capital ($M = 1.80$; $SD = 0.287$) by providing them with established solutions to recurring problems in their areas of specialization. On the other end of the spectrum, the highest-rated item was "I encourage my students to learn from their mistakes." The mean ($M = 1.90$; $SD = 0.318$) for this item supports the work of Ziegler, Chandler, et al. (2017), which encourages a goal-oriented approach to developing students' ability to be resilient and flexible. Teachers identified the item "I conduct detailed evaluations to assess each student individually so I can tailor the instruction according to each student's needs" as having the lowest level of support ($M = 1.64$; $SD = 0.542$). According to Ziegler, Chandler, et al. (2017), teachers should utilize specific evaluation strategies to inform students about how they are performing academically and how their learning capital is developing.

3.2.4 Attentional Learning Capital

The average for the Attentional Learning Capital dimension was 1.18 ($SD = 0.297$). According to the theoretical model of Ziegler et al. (2017), attentional capital refers to the extent to which teachers support students in directing their attentional resources toward learning.

The highest-rated indicator was "I create an environment that makes it possible for my students to be able to focus and really learn." This had a mean of 1.90 ($SD = 0.318$).

The second highest-rated indicator was "I have strategies to support my students when they are having trouble focusing," and its mean was 1.76, with a standard deviation of 0.429. Ziegler, Chandler, et al. (2017) further emphasized the need for continuous assessment of students' learning resources.

3.2.5 Organismic Learning Capital

The average value for the Organismic Learning Capital dimension was 1.65 and had an associated standard deviation of 0.335. According to Ziegler, Stoeger, and Balestrini (2017), as part of their theoretical conceptualization of Organismic Learning Capital, the focus is on how teachers provide support for students' physical and mental health and physical fitness.

Only nine of the 260 teachers who participated in the study specialized in physical education. The indicator "I supervise sports activities in collaboration with specialists" averaged 1.09 ($SD = 0.753$). This result indicates a neutral average response along with considerable variability in responses; similar results were found by Abdulrazzaq (2019), in which teachers identified the need for improvements in the physical environment and services designed to meet students' recreational needs.

The indicator "I interact with students in ways that support their psychological well-being" averaged 1.85 ($SD = 0.358$). Providing feedback professionally may help develop learners who are resilient and psychologically robust (Ziegler, Chandler, et al., 2017).

4. Conclusion

Gifted education programs in Jordan showed high levels of educational and learning capital. The dimension "Didactic Educational Capital" was shown to be the highest among the five educational capital dimensions. On the other hand, "Infrastructural Educational Capital" was found to rank last. "Telic Learning Capital" ranked first

among all the learning capital dimensions, whereas "Organismic Learning Capital" ranked last. Furthermore, the results of this study identified several areas for improvement, such as teacher involvement in school budgeting decisions, sharing school resources, conducting field trips, utilizing an innovation laboratory, and providing students with sports-related opportunities.

Recommendations from the research include strengthening appropriate educational policies and developing a new full-time teacher position assigned to the innovation laboratory. This study makes an academic contribution by showing how the Educational and Learning Capital Model can function as a holistic assessment tool for evaluating gifted education programs within the Jordanian context. Moreover, it adds to the existing Arabic-language literature by linking external educational resources to internal learning resources and identifying measurable indicators that permit evaluation of gifted education program implementation.

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