

The Degree of Practices Teachers of Students With Autism Spectrum Disorder to Dimensional Effective Teaching

Mahmoud Sameer Faris Obaid^{[a],*}

^[a] Ph.D, Associate professor, Dep. special education, Arab American University, Jenin, Palestine.

*Corresponding author.

Received 25 August 2024; accepted 3 June 2025

Published online 26 June 2025

Abstract

The current study aimed to assess the level of teaching practices among teachers of students with Autism Spectrum Disorder (ASD) in terms of effective teaching dimensions. Additionally, it aimed to investigate the differences in teachers' practices based on gender and years of experience. The study sample comprised (44) randomly selected male and female teachers out of a total of (67) teachers working with students with (ASD) in Amman, the capital city, representing 65% of the study population. To achieve the study objectives, the researcher developed an observation guide covering effective teaching dimensions (lesson planning, classroom management and organization, teaching methods, and assessment) consisting of (69) items. The reliability and validity of the guide were confirmed using appropriate statistical methods. The results indicated that the level of teaching practices among teachers of students with ASD in terms of effective teaching dimensions was moderate for all dimensions and the overall observation guide. Furthermore, there was no significant difference between male and female teachers in their competence levels related to the three dimensions of the observation guide. Similarly, the results showed no statistically significant differences in the mean scores of teachers based on their years of experience. The study concluded with several recommendations, including the need to enhance the competencies of teachers working with students with ASD through training programs. Additionally, teachers should be trained in using modern and effective teaching methods.

Key words: Teachers; Students with Autism spectrum disorder; Effective teaching

Obaid, M. (2025). The Degree of Practices Teachers of Students With Autism Spectrum Disorder to Dimensional Effective Teaching. *Higher Education of Social Science*, 28(2), 1-10. Available from: URL: <http://www.cscanada.net/index.php/hess/article/view/13553> DOI: <http://dx.doi.org/10.3968/13553>

1. INTRODUCTION

The developments in the field of special education, including the education of students with Autism Spectrum Disorder (ASD), have led to advancements in teaching training methods. (Eisenberger, Conti, and Antonio) emphasized the need for effective special education management to encourage teachers to apply new teaching methods based on different dimensions of effective teaching. This includes teaching behaviors that promote intellectual growth and implementing educational activities that support success and empowerment in learning. Consequently, researchers have explored modern approaches to training teachers to educate students with special needs, including those with ASD.

A student with autism spectrum disorder is viewed as a unique case, and what works for one student may not work for another. This shows the challenge faced by teachers of this category of students and their need to search for resources and support as needed. The challenges are diverse in implementing their education process. Therefore, the teacher must be flexible, creative and efficient. Therefore, using effective strategies is necessary to achieve teaching goals, interact with students, and enhance their learning and success. (School Mental Health, 2024). Ciurana and García (2024) indicated the necessity of using basic concepts in receiving information and the importance of shifting to using effective practices.

The results of the Garman-McClaine (2024) study indicated that special education teachers have more positive attitudes toward research-based educational practices for students with autism spectrum disorder than general education teachers. Furthermore, Brooks' (2023) study maintained that participants desired more training to gain a better understanding of autism spectrum disorder and the inclusive environment, and that collaborative relationships help create an environment where students with autism spectrum disorder can. On the other hand, Goldstein, Sellars, and Velez (2023) recommended the need for effective use of assessment data in developing the goals of the individualized educational program for students with autism spectrum disorder. In addition, Logan, Iacono and Trembath (2024) emphasized that communication functions for people with autism spectrum disorder can be taught using a systematic, multi-component approach implemented through activities.

1.1 Problem Statement and Research Questions

Despite the progress in teaching students with autism spectrum disorder, teachers still face challenges in teaching this category of students due to the diversity of their special needs and the specificity of each case. Teachers need specialized training and qualification to be able to educate people with autism spectrum disorder. However, effective use leads to effective results. Achieving improvement in the behavior of students with autism spectrum disorder requires the use of effective strategies practiced by a specialized, competent and skilled teacher (El-Zraigat, 2016).

Regarding the population of the current study, there are occasional efforts to train teachers of students with autism spectrum disorder in effective teaching methods, but these efforts often lack competence and scientific foundations. Improving teaching methods for students with ASD and enhancing the effectiveness of specialized educational programs for them have not received the attention they deserve. Numerous studies have highlighted the necessity for special education teachers, particularly those working with students with ASD, to possess specific competencies related to effective teaching. However, existing teacher training programs mainly focus on pre-service or in-service training, emphasizing mastery of effective teaching conditions. These competencies are also linked to the changing roles of teachers. Therefore, this study aims to answer the following main question: What is the extent of practice among teachers of students with ASD in the dimensions of effective teaching?

1.1.1 Study Questions

This study specifically seeks to answer the following questions:

- a) What is the extent of practice among teachers of students with ASD in the dimensions of effective teaching?
- b) Does the extent of practice among teachers of

students with ASD in the dimensions of effective teaching differ based on the gender of the teacher?

- c) Does the extent of practice among teachers of students with ASD in the dimensions of effective teaching differ based on the teacher's years of experience?

1.1.2 Significance of the Study

The current study holds theoretical and practical significance as following:

1.1.2.1 The theoretical importance

a) The importance of this study is derived from the urgent need for teachers of students with ASD to have extensive theoretical knowledge and relevant studies related to effective teaching.

b) Additionally, the study is significant due to its novelty and authenticity. The Arabian environment, and specifically the Jordanian context to the extent of the researcher's knowledge, lacks studies attempting to create an observation guide for understanding the extent of practice among teachers of students with ASD in the dimensions of effective teaching.

1.1.2.2 The practical significance

The practical significance of the study is evident in the following points:

a) By understanding the extent of practice among teachers of students with Autism Spectrum Disorder (ASD) in the dimensions of effective teaching, it can help authorities identify the needs of these teachers for in-service training programs in the field of effective teaching. This understanding can aid them in achieving their personal goals and actively contributing to the progress of their nations. This, in turn, leads to the continued excellence and development of students. Both students and teachers are required to experience minimal stress in the classroom, as there is an inverse relationship between stress and high academic achievement.

b) This study can contribute to the development of pre-service or in-service training programs for teachers of students with ASD. The study's proposed framework for effective teaching dimensions for students with ASD can be utilized in these programs.

1.1.3 Study Objectives

This study aimed to determine the extent of practice among teachers of students with Autism Spectrum Disorder (ASD) in the dimensions of effective teaching. Specifically, it aimed to:

- a) Identify the level of practice among teachers of students with Autism Spectrum Disorder for the dimensions of effective teaching.
- b) Determine whether there are differences in the extent of practice among teachers of students with Autism Spectrum Disorder in the dimensions of effective teaching based on gender and years of experience.

1.1.4 Study Limits and Constraints

- a) Human Limits: This study was limited to teachers of

students with Autism Spectrum Disorder of both genders in schools dedicated to this category of students in Jordan.

b) Spatial Limits: The study was conducted in schools catering to students with Autism Spectrum Disorder in the city of Amman, Jordan, specifically.

c) Temporal Limits: The study was conducted in the second semester of the academic year 2022-2023.

As for the study constraints, this research was restricted to the tools used in it. Consequently, the accuracy and reliability of the results obtained depend on the accuracy and stability of these tools. Additionally, the current study was confined to the sample of teachers working with students with Autism Spectrum Disorder in the city of Amman.

1.1.5 Procedural Definitions

a) Degree of Practice: The degree estimated by the observer for the teacher's practice of educational competencies during the implementation of educational activities within the classroom. This estimation is based on the competencies specified in the observation tool (Classroom Observation Card) prepared for the current study.

b) Teachers of Students with Autism Spectrum Disorder: These are individuals who perform or have performed the teaching function in any of the schools where students with Autism Spectrum Disorder are present in the city of Amman, Jordan, and are selected based on specific criteria.

c) Dimensions of Effective Teaching: These are the set of teaching behaviors and skills that learners need to acquire and demonstrate in order to successfully and efficiently carry out their tasks, ensuring the achievement of desired educational objectives. Effective teaching is characterized by the behavioral performance of the teacher that corresponds to the educational situation (Al-Qamish & Al-Sa'aydeh, 2007). In this study, these dimensions include Lesson Planning, Classroom Management and Organization, and Assessment.

2. THEORETICAL FRAMEWORK AND PREVIOUS STUDIES

2.1 Theoretical Framework

2.1.1 Definition of Autism Spectrum Disorder

A review of educational literature reveals several definitions attempting to describe Autism Spectrum Disorder (ASD), most of which focus on the behavioral aspects of autistic children. They have been described as exhibiting traits such as isolation, withdrawal, uneven growth, and a failure to establish relationships with others. Young (2004) views autism as a developmental disorder, a disturbance in the systems that process environmental stimuli. This leads to significant and varied individual reactions to certain stimuli, as well as significant

interactions among these stimuli, resulting in difficulties in dealing with them effectively.

The Diagnostic and Statistical Manual of Mental Disorders: DSM-5 (2013) defines Autism Spectrum Disorder (ASD) as a disorder characterized by deficits in two core areas: social communication and social interaction, and restricted patterns of behavior, interests, and activities, often manifested by repetitive behaviors. ASD includes three levels of severity, with symptoms typically appearing in early developmental periods, causing significant impairments in social and occupational functioning (Gresh, 2023).

2.1.2 Effective Teaching

The process of teaching is defined as "the process of imparting knowledge, training skills, and providing instructions or information." Or it is an "activity aimed at helping the learner achieve educational objectives, to achieve educational goals, enabling them to grow cognitively, emotionally, and physically." Teaching is also "a process through which both the learner and the teacher, along with the curriculum and other variables, are systematically organized to achieve predetermined objectives. (Mar'i and Al-Hilah, 2002)

2.1.2.1 As for effective teaching

Effective teaching, according to Propy and Good (1986), is defined as "teaching that involves the selection and orchestration from a wide array of teaching behaviors according to a specific student population and specific educational goals, not merely applying skills believed to be generic."

Medley (1982) defined it as "teaching that focuses on identifying specifications that lead to increased student achievement or learning with the intention of generalization" (Kyriacou, 1992).

The following definition of effective teaching can be adopted:

"Effective teaching is the type of teaching that leads to significant learning or achievement on the part of students. It is based on the quality of teaching practices adhered to by the teacher as a methodology in providing education and in fulfilling their leadership role" (Adam, 2002).

From the previous definitions, it is evident that there are differing opinions on the factors that make teaching effective. This leads us to the following question:

What are the main dimensions of effective teaching?

Skills for effective teaching can be categorized into three primary dimensions:

Planning, Instruction and Classroom Management, Evaluation.

Planning for students with special needs can generally be categorized into three types:

a) Long-Term Objectives: These are the expected achievements of students over a specific period (a year, a semester, etc.). These objectives should be measurable, student-oriented, and encompass all student needs.

Derived from the curriculum, these objectives reflect the academic content for students and are derived from the overall educational philosophy.

b) Short-Term Objectives: These are measurable and observable procedural steps designed to assist students with special needs in gradually transitioning from their current performance level to the achievement of long-term objectives. They are determined by breaking down long-term objectives into their component elements (Lerner, 2000).

c) Daily Objectives: These refer to the skills and behaviors the teacher expects students to achieve within one school day or a single class period. This type of planning necessitates preparation of methods and materials, as well as continuous monitoring of students' progress (Flint, 1996).

2.1.2.2 Teaching and Classroom Management

Most of the skills associated with effective teaching are focused on the dimension of instruction and classroom management. This dimension represents the executive aspect of other dimensions in the teaching process. The following is an overview of this dimension:

First: Teaching : Various definitions have pointed out that teaching consists of the following elements: Teaching skills, Content and educational activities, Teaching methods, Teaching aids and materials, Educational environments (Lerner, 2000).

2.1.2.3 Second: Classroom Management

Classroom management refers to maintaining classroom order, providing an encouraging emotional and social atmosphere for learning, and organizing the learning environment. This is achieved through understanding the nature and social needs of the learners, working methods, observing and monitoring students (Al-Qamsh & Al-Sa'aydeh, 2007). Educational literature has highlighted classroom management skills, including:

- Selecting appropriate strategies for behavior regulation and modification.
- Monitoring students' behaviors.
- Determining methods for behavior regulation inside and outside the classroom.
- Efficiently managing teaching time.
- Regulating student behavior.
- Efficiently managing classroom.
- Using verbal and non-verbal communication skills.
- Employing appropriate reinforcement techniques.
- Organizing the classroom in a way that facilitates communication and interaction among students (Mercer, 1997; Lerner, 2000; Fagg et al., 1992).

2.1.2.4 The Third Dimension: Evaluation

Evaluation refers to the collection of educational information about students in order to make appropriate decisions. The objectives of evaluation include:

- Referring students to suitable educational programs.
- Determining students' readiness to receive educational services.

- Designing individual educational programs and selecting appropriate goals.

- Assessing the progress of students in the individual educational program.

- Making appropriate changes and modifications (Flint, 1996).

Two fundamental principles must be considered in evaluating students with special needs. The first is the continuity of the evaluation process. Evaluation precedes the beginning of teaching and accompanies it until the end to ensure that the goals specified in the individual educational plan are achieved in the manner and criteria specified in the behavioral objectives. The continuous assessment of students with special needs is important as it provides teachers and students with feedback. The teacher observes their students, determines their progress, identifies the difficulties they face, and then makes appropriate adjustments. Progress records of students can be maintained, and their performance in lessons can be monitored on a daily, monthly, quarterly, or yearly basis, with special records provided for student evaluation. Daily direct measurements can be used, involving observation and recording of students' performance in the skills they have learned using error rates or success rates (Flint, 1996; Lerner, 2000).

2.2 Previous Studies

Many previous studies have addressed the topic of teachers' general practice of the dimensions of effective teaching. However, as per the researcher's knowledge, few studies have specifically explored the practice of teachers working with students with Autism Spectrum Disorder in terms of effective teaching dimensions. The following is a presentation of studies related to teachers' practice of effective teaching dimensions.

Shavelson (1983) conducted a study aiming to identify the essential skills that special education teachers must possess to achieve effective teaching. The results of the study highlighted the necessity for special education teachers to have the following skills to achieve effective teaching: focusing on planning, the importance of teachers making appropriate educational decisions, and utilizing educational objectives efficiently, as well as making good use of time. In another study conducted by Johnson and Pugach (1991), the effectiveness of using peer collaboration in training teachers to teach problem-solving skills to students with mild learning difficulties was examined. The study aimed to meet the needs of their students. The study sample consisted of 48 teachers in elementary school as the experimental group and 43 teachers as the control group. The results of the study indicated that teachers in the experimental group worked on enhancing their students' cognitive and mental abilities. Furthermore, these teachers increased their ability to understand their students' problems and were able to solve 86% of the issues they faced in the classroom.

In another study conducted by Billingsley (1992), the aim was to determine the competencies required for new teachers and experienced teachers working with intellectually disabled children, emotionally disturbed children, and children with learning disabilities to enhance their teaching. The study also aimed to identify the differences in training needed for these teachers. To measure this, a list was developed consisting of 80 items distributed across seven areas: teaching strategies, behavioral therapy strategies, individualized educational program development, inclusion and collaboration, curriculum, assessment and diagnosis, and modification and adaptation issues. The development of this list was based on Virginia Certification Requirements, relevant literature, teacher interviews, and expert reviews. The results can be summarized as follows:

- a) All teachers emphasized the importance of the items on the list and their relevance to their competencies in the field.
- b) Both new and experienced teachers acknowledged their moderate training needs in the seven aforementioned areas.
- c) Teachers of children with learning disabilities recognized the need for training in teaching methods specific to their students more than teachers of children with other special needs categories.

Al-Zu'bi (1993) conducted a study aiming to construct a tool for evaluating the effectiveness of special education teachers. The researcher relied on the following dimensions of effective teaching: planning, teaching, assessment, and classroom management. The researcher also identified a significant number of items reflecting the effectiveness of special education teachers in Jordan. These items were related to planning, teaching, classroom management, and evaluation. as following, the researcher identified 11 items for the planning dimension, 19 items for the teaching dimension, focusing on multiple skills mainly: using appropriate teaching materials, excitement and motivation, creating a comfortable and suitable classroom environment, considering individual differences in students' abilities, using feedback and gradually addressing topics from easier to more difficult ones. Additionally, the researcher identified 11 items related to classroom management, efficient classroom management, maximizing instructional time efficiency, organizing classroom activities, and providing clarifications. After the evaluation, the researcher identified 14 items for the evaluation dimension, emphasizing the use of appropriate and diverse assessment methods, observing and recording students' behaviors in specific records, using tests and measures specific to students, and considering the principle of continuity in evaluation.

Ramsey and Algozzine (1995) conducted a study aimed at understanding the expected knowledge of special education teachers, including those teaching students with learning disabilities. The study utilized the Teacher

Competency Test (TCT) and was administered to a large sample of special education teachers in 48 American states. The test covered specific topics, including effective teaching methods for this student population. The study results revealed variations among states regarding the mastery of competencies required for special education teachers, as indicated by the Teacher Competency Test (TCT). Consequently, states needing improvement were provided with training programs to enhance their teachers' proficiency in various aspects, including exercises related to effective teaching methods.

Hamill, Jatzen, and Bargerhuff (1999) conducted a study aimed at identifying the competencies needed by teachers working in inclusive educational environments, which include students with diverse abilities as indicated in educational literature related to this area. The study concluded that the most important competencies for teachers were those related to teaching methods and classroom practices. Additionally, teachers' notable competencies included flexibility in handling diverse situations and knowledge about their students.

A study conducted by Al-Samadi and Nahar (2001) aimed to evaluate the proficiency of special education classroom teachers in the United Arab Emirates (n = 96) in effective teaching skills and the differences in the level of mastery of these skills based on gender, qualification, and teaching experience. The study procedures included observing the sample individuals while they were teaching special education classes, where observers assessed their teaching skills using a tool prepared for this purpose. The results showed that general skills related to planning, teaching, and evaluation were well available. It appeared that mastering educating skills related to teaching implementation exceeded their mastery of planning and evaluation skills. The results indicated that the proficiency level of female teachers in all competencies (planning, instructional implementation, and evaluation) was statistically higher than that of male teachers. Also, graduates with a bachelor's degree demonstrated better mastery of these competencies compared to those with a diploma. Finally, it was evident that teachers with experience exceeding seven years possessed teaching skills at a higher level than their counterparts with less than seven years of teaching experience. No statistically significant differences were found in the planning and evaluation dimensions or the overall score, attributed to differences in experience level.

2.2.1 A reflection on the previous studies reveals several key points

In light of the previous studies presented, the following points were emphasized:

- The scarcity of both Arabic and foreign studies that have investigated the extent to which teachers of students with autism spectrum disorder practice effective teaching dimensions.

- The importance of competencies related to teaching methods for special education teachers in general and teachers of students with autism spectrum disorder in particular.

- The significance of training for special education teachers in general and teachers of students with autism spectrum disorder in competencies related to teaching methods before and during their service was emphasized.

- Previous studies emphasized the need to find competent teachers for teaching students with autism spectrum disorder. They also highlighted the limited research and studies in the Arab context in this field.

- Previous studies stressed the necessity of specific qualities that special education teachers, in general, and teachers of students with autism spectrum disorder, in particular, must possess to be described as effective teachers.

Therefore, the need for a study of this nature becomes apparent. Such research contributes to clarifying the importance of competencies related to effective teaching methods for teachers of students with autism spectrum disorder that teachers should possess before their service. If lacking, effective in-service training programs should be designed to achieve this goal, which is the aim of the current study.

3. STUDY METHODOLOGY AND PROCEDURES

Research Method: The current study employed a descriptive-analytical methodology to assess the extent of practicing effective teaching dimensions by teachers working with students on the autism spectrum. This assessment was conducted through the use of a classroom observation card/guide specifically developed by the researcher.

Table 1
Distribution of Study Sample by Gender Variables and Years of Experience

Years of experience	Sex	Total		
Less than 5 years	Male	4	3	7
	Female	6	2	8
5-10 years	Male	5	2	7
	Female	6	2	8
More than 10 years	Male	6	1	7
	Female	5	2	7
Total		32	12	44

Study Sample: The study population consisted of all teachers working with students on the autism spectrum in the city of Amman, totaling 67 teachers, both male and female. These teachers were distributed across various schools and educational centers catering to students with autism spectrum disorder (ASD). The study sample comprised 44 teachers, randomly selected from the study population, representing 65% of the total teachers working

with students on the autism spectrum in Amman. The selection was made through a random sampling method, as included in Table 1.

Study Tool: The researcher developed an observation guide to assess the extent of practicing effective teaching dimensions by teachers working with students on the autism spectrum, as following:

Objective of the Guide: The primary objective of preparing this guide is to use it to determine the extent to which teachers of students with autism spectrum disorder practice the dimensions of effective teaching.

Scope of Competencies Included in the Guide: This guide encompasses three main areas: lesson planning, teaching and classroom management, and evaluation each of which includes a set of proposed competencies necessary for teachers working with students on the autism spectrum disorder within the classroom.

Observation System Used in This Study: For each competency, five boxes were provided to assess the extent to which a particular competency applies to the teacher. These values were translated into grades as follows: Applies to a very high degree (5), Applies to a high degree (4), Applies to a moderate degree (3), Applies to a low degree (2), Does not apply (1).

3.1 Tool Validity and Reliability

Validity: The items of the study tool (observation guide) were presented to ten experts who are faculty members specializing in Jordanian universities. They were asked to provide their opinions on the items of the observation guide in terms of their suitability in measuring the intended constructs. Based on their feedback, the observation guide was finalized. Initially, the guide consisted of 72 items. Phrases that at least 90% of the experts agreed on their suitability were selected, resulting in a final tool with 66 items after expert validation.

3.1.1 Reliability of the Observation Guide

The internal consistency reliability coefficients (Cronbach's alpha) for the entire observation guide and its dimensions were calculated. The reliability coefficient for the entire guide was 0.88, indicating high reliability. The reliability coefficients for all dimensions ranged from 0.85 to 0.91, which are considered high and acceptable for the study purposes. Table 2 presents the reliability coefficients (Cronbach's alpha) for the observation guide related to the extent of teachers' practice of effective teaching skills.

Table 2
Reliability Coefficients (Cronbach's Alpha) for the Observation Guide

Dimension	Reliability coefficient (Cronbach's Alpha)
Planning for teaching	0.86
Classroom management, organization, and teaching method	0.85
Assessment	0.91
Total score	0.88

3.2 Statistical Analysis

After conducting the study, the researcher entered the study's data into the statistical analysis software (SPSS). Descriptive statistics including means and standard deviations were calculated. Moreover, statistical tests such as the t-test and analysis of variance (ANOVA) were performed.

3.3 Study Variables

The study included the following variables:

A. Independent Variables: Gender: Male, Female

Experience: and it have 3 levels: Less than 5 years, 5-10 years, More than 10 years.

B. Dependent Variable: The total score of practice among the study sample regarding the competencies outlined in the observation guide for effective teaching dimensions among teachers of students with autism spectrum disorder.

4. RESULTS AND DISCUSSION

The study aimed to determine the degree of practice among teachers of students with autism spectrum disorder in the dimensions of effective teaching, specifically answering the following question:

The first research question addressed was: "What is the degree of practice among teachers of students with autism spectrum disorder in the dimensions of effective teaching?" To answer this question, the study calculated the means and standard deviations for the prevalent dimensions of effective teaching among the teachers. The results are presented in Table 3.

Table 3
Mean Scores and Standard Deviations for Prevalent Dimensions of Effective Teaching among Teachers of Students with Autism Spectrum Disorder, Ranked Descending by Mean Scores

Rank	No.	Dimension	Mean score	Standard deviation	Level
1	3	Evaluation	3.34	.27	Average
2	2	Classroom management, organization and teaching methods	2.98	1.05	Average
3	1	Lesson planning	2.95	1.10	Average
Effective teaching (total)			3.09	1.04	Average

Table 3 shows that the mean scores ranged from 2.95 to 3.34. Evaluation ranked first with the highest mean score (3.34), while lesson planning ranked last with a mean score of (2.95). The overall mean score for the dimensions of effective teaching was 3.09.

The current study's findings differ from those of Al-Samadi and Al-Nahar (2001), whose study showed that general skills related to planning, teaching, and Evaluation were well available. Even if it appeared that mastering the skills related to teaching implementation

exceeded their mastery of planning and assessment skills. However, in the present study, evaluation ranked first, followed by classroom management, organization, and teaching methods, and lesson planning ranked last. The current study's results partially agree with Engelhard's study (1993), which indicated that teachers' mastery of competencies related to lesson planning, teaching, and assessment was low and required training. Similarly, the study aligns with the findings of John-Jennings (1998), which identified issues faced by teachers due to their lack of mastery in effective teaching dimensions, including planning, classroom management, organization, presentation, and the use of appropriate assessment methods for students with learning difficulties.

Moreover, the current study's results are in line with Al-Zu'bi's study (1993), where the researcher based the study's tool on the following dimensions of effective teaching: planning, teaching, evaluation, and classroom management. These dimensions were considered key aspects in evaluating teachers.

The second question: Does the degree of practice of teachers of students with autism spectrum disorder differ in terms of effective teaching dimensions based on the teacher's gender?

To answer the second question, the arithmetic means and standard deviations of the responses of male and female teachers on the observation guide regarding the degree of practice of teachers of students with autism spectrum disorder for effective teaching dimensions were calculated. Table 4 illustrates this.

Table 4
Comparison of Male and Female Teachers' Performance on Effective Teaching Dimensions: Mean Scores and Standard Deviations

Dimension	Gender	Number	Mean score	Standard Deviation
Lesson planning	Female	20	3.25	.47
	Male	24	4.53	.54
	Total	44	4.01	.79
Classroom management, organization and teaching methods	Female	20	3.30	.69
	Male	24	3.61	.50
	Total	44	3.58	.63
Evaluation	Female	20	3.29	.82
	Male	24	4.48	.69
	Total	44	4.21	.58
Total	Female	20	3.26	.57
	Male	24	4.86	.86
	Total	44	4.02	.73

Arithmetic Means and Standard Deviations of the Observation Guide for Teachers of Students with Autism Spectrum Disorder Based on the Teacher's. It is evident from Table 4 that there is a significant difference in the mean scores of male and female teachers in the dimension

of lesson planning. The mean score for male teachers was (3.25), whereas the mean score for female teachers was (4.53), favoring female teachers. In the dimension of classroom management, organization, and teaching methods, the mean score for male teachers was (3.30), while the mean score for female teachers was (3.61), with the difference favoring female teachers. In the evaluation dimension, the mean score for male teachers was (3.29),

and for female teachers, it was (4.48), again favoring female teachers. In the overall total score of the observation guide for assessing the effective teaching practices of teachers of students with autism spectrum disorder, the mean score for male teachers was (3.26), and for female teachers, it was (4.86), with a difference of (0.60). To determine the statistical significance of these differences, the researcher employed One Way ANOVA analysis, as shown in Table 5.

Table 5
One Way ANOVA Analysis for the Observation Guide Results on the Degree of Practice of Teachers of Students with Autism Spectrum Disorder in Effective Teaching Dimensions, According to Teacher Gender

Dimension	Source of variability	Sum of squares	Degrees of freedom	Mean square	F-value	Statistical significance
Lesson planning	Between two genders	.691	1	.697	1.533	.0103
	In two genders	16.038	38	0.421		
	Total	16.622	39			
Class management, organizing and teaching methods	Between two genders	.362	1	.362	0.93	.461
	In two genders	15.311	38	0.402		
	Total	15.671	39			
Evaluation	Between two genders	.611	1	.611	1.611	.474
	In two genders	14.212	38	.374		
	Total	14.441	39			
Full scale	Between two genders	.167	1	.167	.474	.325
	In two genders	13.343	38	.351		
	Total	13.121	39			

As it's shown in Table 5 There is no statistically significant difference at the ($\alpha \geq 0.05$) level between the means of male and female teachers' evaluations on the dimension of lesson planning. The calculated (F) value was (1.533), which is not statistically significant at the ($\alpha \geq 0.05$) level, meaning there is no difference between male and female teachers in their performance on competencies related to lesson planning. There is no statistically significant difference at the ($\alpha \geq 0.05$) level between the means of male and female teachers' evaluations on the dimension of classroom management, organization, and teaching methods. The calculated (F) value was (0.93), which is not statistically significant at the ($\alpha \geq 0.05$) level, indicating no difference between male and female teachers in their assessment of competencies related to classroom management, organization, and teaching methods. There is no statistically significant difference at the ($\alpha \geq 0.05$) level between the means of male and female teachers' evaluations on the dimension of assessment. The calculated (F) value was (1.611), which is small and not statistically significant at the ($\alpha \geq 0.05$) level, meaning there is no difference between male and female teachers in their competencies related to assessment. There is no statistically significant difference at the ($\alpha \geq 0.05$) level between the means of male and female teachers' evaluations on the three dimensions of the observation guide related to the effective teaching practices of teachers working with students with autism spectrum disorder.

The researcher did not find any previous studies that compared between genders in the level of mastering the

dimensions of effective teaching, regarding agreement or differences, except for the study conducted by (Al-Ayed, 2003), which aligned with the current study's results. Its findings indicated no statistically significant differences attributed to gender in issues related to program organization and planning. Also, the study by Samadi and Nahar (2001) differed from the current study's results, where its findings suggested that the level of mastery of female teachers for all competencies (planning, teaching execution, and assessment) was higher statistically compared to male teachers. According to the researcher's opinion, this difference might be due to variations in the preparation methods for students' teachers between Jordan, where the current study was conducted, and the United Arab Emirates, where the study of Samadi and Nahar took place. Perhaps this result is due to clear differences in the qualification and training levels. Regarding the absence of differences in the level of mastery among teachers working with students with learning difficulties concerning the dimensions of effective teaching based on gender (males and females) in the current study, the researcher suggests that this could be because both genders undergo similar preparation conditions before service during university studies. Also, their training during service is mostly similar since teachers working with students with special needs are generally trained on the same competencies and training programs, which are disseminated by the Ministry of Education to schools where teachers of students with special needs are present throughout the kingdom.

“Does the level of practice of teachers working with students with autism spectrum disorder differ based on their years of experience?”

To answer this question, the means and standard deviations of the practice of teachers working with students with learning difficulties for the dimensions of effective teaching were calculated based on the variable of experience. Table 6 below illustrates this.

Table 6
Means and Standard Deviations of the Practice of Teachers Working with Students with Autism Spectrum Disorder for the Dimensions of Effective Teaching Based on Years of Experience

	Categories	Amount	Arithmetic mean	Standard deviation
Lesson planning	Less than 5 years	16	3.98	.42
	5-10	15	3.97	.55
	More than 10 years	13	3.64	.81
	Total	44	3.88	.64
Class management, organizing and teaching methods	Less than 5 years	16	3.61	.50
	5-10	15	3.81	.62
	More than 10 years	13	3.76	.82
	Total	44	3.73	.64
Evaluation	Less than 5 years	16	3.78	.45
	5-10	15	3.67	.54
	More than 10 years	13	3.42	.77
	Total	44	3.63	.60
Full scale	Less than 5 years	16	3.75	.40
	5-10	15	3.82	.51
	More than 10 years	13	3.65	.77
	Total	44	3.74	.55

The Table 6 shows apparent variations in the means and standard deviations of the practice degree of teachers of students with learning difficulties in the effective teaching dimensions, depending on the categories of the variable of years of experience. To demonstrate the statistical significance of the differences between the means, one-way analysis of variance was used according to Table 7.

Table 7
One-Way Analysis of Variance for the Effect of Years of Experience on the Practice Degree of Teachers of Students with Autism Spectrum Disorder in Effective Teaching Dimensions

	Source of variability	Sum of squares	Degrees of freedom	Mean square	F-value	Statistical significance
Lesson planing	Between groups	.899	2	.445	1.096	.346
	Inside groups	15.024	42	.406		
	Total	15.912	44	.406		
Class management, organizing and teaching methods	Between groups	.212	2	.105	.250	.787
	Inside groups	15.5442	42	.420		
	Total	15.751	44	.420		
Evaluation	Between groups	.713	2	.357	1.007	.371
	Inside groups	13.186	42	.356		
	Total	13.897	44	.356		
Full scale	Between groups	.171	2	.088	.276	.765
	Inside groups	11.751	42	.318		
	Total	11.922	44	.318		

The Table 7 indicates no statistically significant differences at the ($\alpha=0.05$) level attributed to years of experience. The results of the current study partially differ from the study conducted by Al-Samadi and Al-Nahar (2001), which showed that teachers with more than seven years of experience have better teaching skills compared to their counterparts with less than seven years of educational experience. However, no statistically significant differences were observed in the planning, evaluation, or overall scores based on the difference in experience levels. The current study’s results also differ from those of Holloman (1999), which showed that less experienced teachers exhibited higher levels of difficulties compared to those with more years of experience. The current study’s results align with the findings of Al-Khuzai (2001), which indicated no differences in the level of proficiency among teachers in effective teaching skills attributed to teaching experience. However, the current study’s results partially align with the findings of Al-Ayid (2003), aiming to identify the problems faced by teachers, indicating no statistically significant differences attributed to the number of years of experience or in those problems. The researcher believes that the current study’s results regarding the impact of teaching experience, represented by the absence of statistically significant differences attributed to years of experience for teachers in the observation guide overall and in each of its dimensions, may be due to teachers being accustomed to traditional teaching methods practiced by their predecessors. Additionally, it might result from the educational outputs’ weakness for teachers during their university studies before graduation. The researcher sees all of this as contributing to the emergence of the result of no statistically significant differences attributed to years of experience for teachers in the observation guide overall and in each of its dimensions among teachers of students with autism spectrum disorder in the study sample.

CONCLUSIONS AND RECOMMENDATIONS

Teaching students with autism spectrum disorder requires a teacher capable of using targeted, specialized strategies. Effective education helps reduce symptoms, improves learning ability, and encourages growth. Students with autism spectrum disorder are in essential need of developing their behavior, support and encouragement. This can be achieved through an effective teacher who uses effective teaching strategies.

Based on the study's findings, the researcher recommends the following:

- Training teachers on effective practices in teaching students with autism spectrum disorder.
- Providing teachers with the practical skills necessary to achieve effective practices in teaching the autism spectrum disorder group.
- Enhancing the competencies of teachers for students with autism spectrum disorder by providing them with training courses. Additionally, training teachers on the use of modern and effective teaching methods is crucial.
- Easing the burden on teachers of students with autism spectrum disorder by introducing the role of a teaching assistant.
- Increasing the allocated time for teaching students with autism spectrum disorder to allow teachers to implement their therapeutic programs thoroughly and comprehensively.

REFERENCES

- Adam, M. (2002). Effective Teaching as Perceived by Field Application Students of Physical Education Department at King Saud University. *Journal of Educational Research Center*, 11(21): 99-127.
- Billingsley, B. (1992). *A Comparison of Staff Development Needs of Beginning and Experienced Special Education Teachers of the Mild Disabled (Beginning Teachers)*. DAI-A53/05, 1481, Nov.
- Brooks, C. (2023). Teaching Students with Autism in an Inclusive Environment: A Case Study. *ProQuest LLC, Ed.D. Dissertation*, Liberty University.
- Ciurana, M. & García, M. (2024). How Does Universal Design for Learning Help Me to Learn?: Students with Autism Spectrum Disorder Voices in Higher Education. *Studies in Higher Education*, 49(6): 899-912.
- Eisenberger, J., Conti, D., and Antoni, R. (2000). *Self-Efficacy: Raising the Bar for Students with Learning Needs*. New Jersey: Prenceton, NJ, Eye of Education.
- El-Zraigat, I. (2016). *Autism: Behavior, characteristics and treatment*. Amman: Dar Wael Publishing.
- Fagg, S., Ahere, D., Skelton, S., and Thornber, A. (1990). *Entitlement for All in Practive: Abroad, Balanced and Relevant Curriculum for Pupils with Severe and Complex Learning Difficulties in the 1990's*. London: David Fulton.
- Flint, A. (1996). *Becoming an Effective Teacher, (3rd ed.)*. New York: McGraw-Hill.
- Garman-McClaine, B. (2024). A Comparison of General and Special Education Teachers' Attitudes toward Evidence-Based Practices for Students with Autism Spectrum Disorder. *Psychology in the Schools*, 61(7): 2880-2892.
- Goldstein, S., Sellars, T. & Velez, A. (2023). From Eligibility Assessment to Intervention for Students with Autism Spectrum Disorder. *Psychology in the Schools*, 60(2): 364-377.
- Himill, L., Jantzen, A. and Bargerhuff, M. (1999). Analysis of Effective Educator Competencies in Inclusive Environments. *Action in Teacher Education*, 21(3): 21-37.
- Johnson, J., & Pugash, C. (1991). Peer Collaboration Accommodating Students with Mild Learning and Behavior Problems. *Exceptional Children*, 57(5): 454-464.
- Kyriacou, C. (1992). *Effective Teaching in School*. London: British Library.
- Lerner, J. (2000). *Learning Disabilities Theories, Diagnosis & Teaching Strategies, (8th ed.)*. Boston: Houghton Mifflin Company.
- Logan, K., Iacono, T. & Trembath, D. (2024). Aided Enhanced Milieu Teaching to Develop Symbolic and Social Communication Skills in Children with Autism Spectrum Disorder. *Augmentative and Alternative Communication*, 40(2): 125-139.
- Mercer, D. (1997). *Students with Learning Disabilities, (5th ed.)*. USA: Prentice-Hall,
- Mur'i, T. & Al-Hilah, M. (2002), *General Teaching Methods*. Amman: Dar Al-Maseera.
- Qimish, M. & Al-Jawaldeh, F. (2011). *Learning Disabilities (An Applied Perspective), 1st edition*. Amman: Dar Al-Thaqafah.
- Qimish, M. & Al-Muaayta, K. (2010). *Psychology of Children with Special Needs, 1st edition*. Amman: Dar Al-Maseera.
- Qimish, M. & Al-Sa'aida, N. (2007). *Modern Issues and Trends in Special Education, 1st edition*. Amman: Dar Al-Maseera.
- Rusan, F., Al-Khatib, J. & Al-Natour, M. (2004). *Learning Disabilities, 1st edition*. Kuwait: Arab Open University Publications.
- Samadi, J., & Al-Nahar, T. (2001). Proficiency Level of Special Education Teachers in the United Arab Emirates in Effective Teaching Skills, *Journal of Educational Research Center*, 10(19), 193-216.
- School Mental Health. (2024). *Autism: Effective Strategies for the Classroom*. DC Public Schools.
- Shavelson, R. (1983). Review of Research on Teachers, Pedagogical, Judgments, Plans and Decisions. *Review of Educational Research*, 1(3): 392-413.
- Waqfi, R. (2003). *Learning Disabilities, 1st edition*. Amman: Princess Tharwat College Publications.
- Zu'bi, N. (1993). *Constructing a Tool for Measuring the Effectiveness of Special Education Teachers*, Unpublished Master's Thesis, University of Jordan, Amman, Jordan.