Synesis, v. 15, n.2, 2023, ISSN 1984-6754

THE LEVEL OF USING THE MONTESSORI CURRICULUM BY TEACHERS OF STUDENTS WITH INTELLECTUAL DISABILITIES[1]

O NÍVEL DE UTILIZAÇÃO DO CURRÍCULO MONTESSORI POR PROFESSORES DE ALUNOS COM DEFICIÊNCIA INTELECTUAL

MUBARAK SAAD ALDOSARI
Special Education Department, Prince Sattam Bin Abdulaziz University, Alkharj, Saudi Arabia
mub.aldosari@psau.edu.sa

Received: 5 Jan 2023
Accepted: 26 Mar 2023
Published: 17 April 2023

Corresponding author:
mub.aldosari@psau.edu.sa

Abstract: This study aims to identify the level of use of the Montessori curriculum by teachers of students with intellectual disabilities (ID) in elementary schools. It also aims to reveal whether there are statistically significant differences in the level of use of the Montessori curriculum by teachers according to the variables of gender, level of education, years of experience, and training they received. The study sample consisted of 304 teachers of students with ID in elementary schools in Riyadh. The results showed that teachers of students with ID use the Montessori curriculum with a low degree. The results showed there were statistically significant differences in the responses of the study sample according to the teachers' education levels and the number of training courses. These differences favored the study sample individuals with a higher level of education and individuals with more training courses. On the other hand, the results showed no statistically significant differences in the responses of the study sample about using the Montessori curriculum based on the teacher's experience or gender.

Keywords: Montessori curriculum. Intellectual disability. Teachers of students with intellectual disability.

Resumo: Este estudo tem como objetivo identificar o nível de utilização do currículo Montessori por professores de alunos com deficiência intelectual (DI) no ensino fundamental. Pretende ainda revelar se existem diferenças estatisticamente significativas no nível de utilização do currículo Montessori pelos professores segundo as variáveis género, nível de escolaridade, anos de experiência e formação recebida. A amostra do estudo consistiu de 304 professores de alunos com DI em escolas primárias em Riad. Os resultados mostraram que os professores de alunos com DI utilizam o currículo Montessori com baixa titulação. Os resultados mostraram que houve diferenças estatisticamente significativas nas respostas da amostra do estudo de acordo com o nível de escolaridade dos professores e o número de cursos de formação. Essas diferenças favoreceram na amostra do estudo indivíduos com maior nível de escolaridade e indivíduos com mais cursos de

[1] Prince Sattam Bin Abdulaziz University, College of Education in Alkharj, Saudi Arabia. Institutional email: mub.aldosari@psau.edu.sa. This project was supported by the Deanship of Scientific Research at Prince Sattam Bin Abdulaziz University under research project 2022/02/22342

formação. Por outro lado, os resultados não mostraram diferenças estatisticamente significativas nas respostas da amostra do estudo sobre o uso do currículo Montessori com base na experiência ou gênero do professor.

Palavras-chave: Currículo Montessori. Deficiência intelectual. Professores de alunos com deficiência intelectual.

1. Introduction

Programs for students with intellectual disabilities (ID) seek to provide students with ID functional academic skills, independence and self-reliance skills, and appropriate social interaction skills. In addition, these programs help students join vocational programs to practice suitable professions that can help them enjoy their lives and reduce any feelings of inferiority or frustration (Al-Qahtani, 2009). In order to achieve the goals of these programs, researchers and educators in the field of special education sought to research, develop, and find the best approaches that help develop the skills and abilities of students with ID.

The Montessori curriculum, developed by the Italian physician Maria Montessori, is one of the most important curricula that has achieved great success with students with disabilities, especially those with ID. These students with ID often suffer from deficits in mental and psychological processes that include memory, attention, concept formation, and perception, which results in difficulties in reading and arithmetic and prevents students from achieving their expected level of success (Jaber, 2011; Ramadan, 2014).

The Montessori curriculum is one of the most important learning approaches and philosophies applied to students with ID. The activities of the Montessori curriculum improve the level of academic achievement of students with ID, help to overcome the difficulties that may face these students, and increase the abilities of students with ID to master the initial reading skills that include flexibility in reading and reading comprehension (Morsi, 1994). Mustafa and Alhashims (2017) indicated that the Montessori curriculum focuses on training students' senses in their education, which reflects positively on the students' self-confidence, achievement, perseverance, respect, self-reliance, focus, and engagement in work.

In an evaluation of the Montessori curriculum, the International Encyclopedia of Education indicated that the Montessori curriculum is the method that has "withstood the challenge of time and has proven so far that it is the most reliable method. It has been able to continue since its first appearance at the end of the nineteenth century until the present

time" (Morsi, 1994, p. 465). Today, there are two popular methods of the Montessori curriculum. The first one is the original method adopted by the Association Montessori International (AMI). It is used in many countries, such as Europe, South America, India, and some Asian countries. The second method is a modified and new one, which was adopted by the American Montessori Society (AMS), and it is common in the United States of America (Jaber, 2011).

Alelwani (2015), Yen and Ispa (2000), and Yezbick (2007) indicated that the Montessori curriculum is based on philosophical foundations, including:

– Respecting the freedom of the student, which is consistent with his physical, mental, and psychological development. The student is free to choose the activities and means that he prefers within a set of predetermined activities. For this reason, Montessori calls for abolishing fixed seats that impede student movement.

– Enabling the student to play, through which he satisfies his tendencies and develops his abilities and language skills.

– Working on the integrated development of the student, including the mental, psychological, and physical aspects.

– Creating an effective educational environment that includes materials that depend on the senses so that the student can interact with them, which gives the student opportunity for what Montessori called self-learning.

– The student should be prepared to initiate. This should depend on the student's effort, as the teacher should not interfere by cutting off any activity student unless it is psychologically or physically harmful.

– Paying attention to the tangible things that provide the student with many skills.

– Respecting the student's capabilities and accepting differences and differences between students.

– Encouraging the student to take responsibility and participate in household tasks.

– Helping students build his knowledge through interaction with the environment. This helps the student to form mental images, which will later be the basis for abstract learning.

Ramadan (2014) indicated that the Montessori classroom is divided into five sections including practical life area, the senses area, the arithmetic area, the language area, and the culture area. According to the Montessori curriculum, students of different ages are included in one class. This creates cooperation and brotherhood between them, as students in the classes interact as a family who loves each other and builds collaboration (Alsayed, 2016).

2. The Present Study

Students with disabilities, especially students with ID, face many challenges that impede their learning in traditional educational programs offered to them. The most important challenge is the apparent deficiency in functional cognitive abilities, such as attention, remembering, perception, organizing inputs, deficiencies in adaptive behavior skills, and many problems in language (Alrousan, 2005). This requires effective curricula, strategies, and teaching methods that fit the individual needs of these students.

Due to the importance of the Montessori curriculum, some private kindergarten schools in the Kingdom of Saudi Arabia have adopted the Montessori curriculum in educating students, both those with and without disabilities. This made the researcher carry out the current study and shed light on this approach, especially since few studies researched the use of the Montessori curriculum in the education of students with ID. Therefore, the research questions of the current study are:

1- What is the level of use of the Montessori curriculum with teachers of elementary students with intellectual disabilities?

2- Are there significant differences in the level of use of the Montessori curriculum among teachers of elementary students with intellectual disabilities according to the variables of gender, academic qualification, years of experience, and the number of workshops they have attended about the Montessori curriculum?

3. Literature Review

Castellanos (2000) conducted a comparative study to reveal the effectiveness of the Montessori curriculum in the classroom to provide students with some personal and behavioral skills that develop students' self-esteem, self-efficacy, ability to achieve, and

social behavior. The study sample consisted of teachers in an elementary school who were applying the Montessori curriculum and another public elementary school where teachers were applying the traditional curriculum in the state of Florida. The results indicated statistically significant differences between the two schools, as the students' acquisition of self-efficacy, positive outlook, and self-esteem were improved in the Montessori school.

Rodriguez (2003) also conducted a study to investigate the role of the language curriculum in the Montessori curriculum in improving the effectiveness of the second language teaching approach applied in bilingual schools through language teaching tools in the language corner in Montessori classrooms.

Cordoba-Jackson (2007) also conducted a qualitative study to investigate the effectiveness of the Montessori curriculum as an alternative program in schools in the state of Florida. The study looked at how well it addressed the problem of weak educational outcomes, such as the low level of reading and writing of high school students and the high dropout rate of students from schools. The study sample consisted of eight teachers who have a license to practice teaching in the state of Florida, are currently working in Montessori schools, and have at least three years of previous experience working in a traditional teaching environment. The study results showed that the Montessori curriculum is a valuable alternative to more traditional educational programs. The study recommended that decision-makers and school principals study the quality of the Montessori curriculum and its applicability in public schools.

Henson (2009) also conducted a study to identify the benefits of applying the Montessori curriculum in addition to traditional teaching in one of the elementary schools with a large number of African American students to meet the needs of these students in the fourth and fifth grades to help improve their academic levels. Several research methods were used to collect the study data, such as a standardized questionnaire and personal interviews. The study data was collected through official records in the school and from the Texas Assessment of Knowledge and Skills (TAKS) Test Center. The study found that using the Montessori methods, in addition to using the traditional method, led to improvement in the academic achievements of African American students on state tests (TAKS). In addition, the study found that the study sample preferred receiving instruction through the Montessori curriculum compared with the traditional curriculum.

Ramadan (2014) also conducted a study to verify the effectiveness of a program based on Montessori activities to improve the psychological adjustments of a sample of

students with ID. The experimental method was used with a sample of ten elementary students in Badr City, Egypt, with mild ID, ranging from 8-12 years old. The study sample was divided equally into two groups: experimental and control. The study used a measure of psychological adjustment for students with ID and a program based on Montessori activities to improve psychological adjustment. The study found that there were statistically significant differences on the psychological adjustment scale between the scores of the experimental group members, whom the psychological adjustment program based on Montessori activities, before and after applying the program, in favor of the post measurement. This indicated the effectiveness of the program based on Montessori activities in improving psychological adjustment of students with ID. The results also indicated the continuity of the effectiveness of the program in improving the psychological adjustment of students with ID after the end of the follow-up period, which was estimated at (30) days.

Alsayed (2016) conducted an experimental study to verify the effectiveness of a motor program based on the Montessori curriculum in developing geographical concepts of students with ID. The study sample consisted of 20 kindergarten students with ID in schools in Egypt. The study sample was divided equally into two groups: experimental and control groups. The results of the study showed the effectiveness of the motor program in developing geographical concepts among students with mild ID. The researcher indicated that the motor program based on the Montessori curriculum contributed positively to the development of geographical concepts within the experimental group.

Rahman (2018) conducted a semi-experimental study using a one-group design to investigate the effectiveness of the Montessori curriculum in helping students with ID acquire some functional vocabulary in the Arabic language. The study sample consisted of 6 students with ID, ages 8-14 years old, from the Jabal Al-Najma Center for Rehabilitation of persons with disabilities in Ramallah, Palestine. To achieve the goal of the study, a functional vocabulary scale and educational lessons based on the Montessori curriculum were built. The application of the study extended for eight weeks, with 25-30 sessions for each student with ID according to the capabilities and needs of each student. At the end of the application phase, the results indicated the effectiveness of the educational lessons based on the Montessori curriculum in helping students with ID acquire some functional vocabulary in the Arabic language.

4. Methodology

Based on the nature of the study and its objectives and questions, the researcher used the descriptive survey method in the current study.

Participants

The study consisted of a random sample of (304) male and female teachers from public and private schools. Table 1 shows the demographic characteristics of the study sample.

Table 1. Demographic Characteristics of the Study Sample

Variable		Frequency	Percent
Gender	Male	162	53.3
	Female	142	46.7
Level of Education	Bachelor level	254	83.5
	Master level	44	14.5
	Doctoral level	6	2
Years of Experience	Less than 3 years	68	22.4
	5-10 years	73	24
	10-15 years	156	51.3
	15-20 years	4	1.3
	More than 20 years	3	1
Number of Workshops on the Montessori Curriculum	I did not take the training	236	77.6
	1 - 3 workshops	53	17.4
	More than 3 workshops	15	5

Instrument

The researcher designed a questionnaire in order to identify the level of use of the Montessori curriculum among teachers of elementary students with ID. The questionnaire was designed in the initial form and then presented to an expert in special education curriculum from King Saud University. Their feedbackwas then applied, and a final questionnaire was created.

The final questionnaire consisted of two parts:

– The first part included the primary data of the respondents, which were (gender, educational qualification, years of experience, and training courses related to the Montessori method).

– The second part included 23 items that reflect the level of use of the Montessori curriculum with teachers of elementary students with ID. The questionnaire utilized a 5-point Likert format.

Instrument Validity

The validity of the study instrument was verified through the following:

1. Apparent Validity:

The questionnaire was sent to nine experts specializing in special education curriculum for their feedback about the suitability of the questionnaire for the objectives of the study and to evaluate the questionnaire's items in terms of wording and clarity. According to the notes and suggestions of these experts, the researcher modified seven items, deleted two items, and added two times.

2. Internal Consistency Validity

After confirming the apparent validity of the study instrument, the questionnaire was sent electronically to the sample in the pilot study, which consisted of (50) male and female teachers, to ensure the validity of the internal consistency. the Pearson Correlation coefficient of the questionnaire was calculated to find out the validity of the internal consistency of the questionnaire as shown in Table 2.

Table 2: Correlation Coefficients between the Items of the Questionnaire and the Total Degree

Item	Correlation Coefficient	Item	Correlation Coefficient
1	0.970**	13	0.963**
2	0.979**	14	0.973**
3	0.970**	15	0.927**
4	0.989**	16	0.972**
5	0.984**	17	0.978**
6	0.929**	18	0.938**
7	0.972**	19	0.965**
8	**0.967	20	0.936**
9	0.884**	21	0.824**
10	0.968**	22	0.784**
11	0.962**	23	0.814**

12	0.974**		

**Statistically significant at a significance level α = 0.01

The statistical indicators shown in Table 2 reveal that the values of the correlation coefficients between the score of each items of the questionnaire and the total degree are statistically significant at the significance level of 0.01 or less, and all of them are positive values and ranged between (0.814) and (0.989). This means there is an acceptable degree of internal consistency, and the items are related to the total degree of the questionnaire, which reflects an acceptable degree of validity in the questionnaire items.

Reliability

To assess the reliability of the questionnaire, Cronbach's Alpha coefficient and the split-half method were used. The results are shown in table 3.

Table 3: Coefficients of Cronbach's Alpha and Half-Split Method

Half Split Method	Cronbach's Alpha
0.90	0.973

Table 3 shows that the reliability coefficients of Cronbach's Alpha and the half-split method are high, as the reliability coefficient of the Cronbach's alpha of the questionnaire was (0.973), and it reached (0.90) in the half-split method.

5. Results and Discussion

Q1) What is the level of use of the Montessori curriculum with teachers of elementary students with intellectual disabilities?

To answer this question, means and standard deviations in the responses of the study sample to the questionnaire were assessed (See Table 4).

Table 4: Means and Standard Deviations of Responses of the Study Sample to the Questionnaire

#	Item		Level of Use					Mean	Standard Deviation	Rank
			Never	Low	Moderate	High	Very high			
1	Teacher uses direct and organized observation to identify the needs of students with ID.		66	78	1	79	0	2.569	6	6
		%	21.7	25.7	6	26	0			
2	Teacher provides a valuable and interesting learning environment that suits the abilities and interests of students with ID.		80	75	70	79	0	2.487	11	11
		%	26.8	24.7	23	26	0			
3	Teacher takes into account individual differences when organizing the classroom environment and providing activities for students with ID.		78	73	87	66	0	2.464	15	15
		%	25.7	24	28.6	217	0			
4	Teacher plans educational activities that suit the needs and interests of the student with ID.		74	79	69	82	0	2.523	10	10
		%	24.3	26	22.7	27	0			
5	Teacher provides the activities in a logical sequence.		71	94	61	78	0	2.480	13	13
		%	23.4	30.9	20.1	25.7	0			
6	Teacher provides the activities in a logical sequence.		159	52.3	159	52.3	159	1.707	23	23
		%	75	24.7	75	24.7	75			
7	Teacher practices the activities before presenting them to the student with ID.		80	74	82	67	1	2.457	16	16
		%	26.3	24.3	27	22	0.3			
8	Teacher uses the teaching aids in the practical aspects that allow students with ID to interact with them.		62	82	78	82	0	2.592	2	2
		%	20.4	27	25.7	27	0			
9	Teacher teaches the student with ID through play and physical materials.		0	0	0	154	150	4.493	1	1
		%	0	0	0	50.7	49.3			

10	Teacher gradually uses difficult and complex materials.		80	26	80	26.3	80	2.41	19	19
		%	86	28.3	86	28.3	86			
11	Teacher provides assistance to students with ID when they need it.		78	90	73	63	0	2.398	20	20
		%	25.7	29.6	24	20.7	0			
12	Teacher provides students with ID with tools that they can use and learn.		62	95	68	79	0	2.539	7	7
		%	20.4	31.3	22.4	26	0			
13	Teacher allows students with ID to move freely within the boundaries of the classroom in a manner that does not interfere with the educational activities and with the time allotted for these activities.		64	75	89	76	0	2.582	4	4
		%	21.1	24.7	29.3	25	0			
14	Teacher helps students with ID to satisfy their desires to learn without hindrance or interruption.		84	72	75	73	0	2.541	17	17
		%	27.6	23.7	24.7	24	0			
15	Teacher prepares appropriate answers to the questions that are expected from students with ID.		149	78	67	0	1	1.740	22	22
		%	49	28.7	22	0	0.3			
16	Teacher provides a display board for the works of students with ID.		78	66	80	80	0	2.533	8	8
		%	25.7	21.7	26.3	26.3	0			
17	Teacher provides individual lessons for each student with ID.		74	86	67	77	0	2.484	12	12
		%	24.3	28.3	22	25.3	0			
18	Teacher avoids ambiguous phrases that are incomprehensible to a student with ID.		148	79	76	0	1		211	211
		%	48.7	26.26	25	0	3			
19	Teacher is flexible in changing the activity when the teacher feels the boredom of students with ID.		70	69	82	83	0	2.586	3	3
		%	23	22.7	27	27.3	0			
20	Teacher avoids informing students with		72	73	68	73	0	2.526	9	9
		%	23.7	24	28.3	24	0			

	ID about their inability to learn to avoid negatively affecting their motivation.									
21	Teacher chooses spaced starting times for the activity rather than consecutive ones.		83	68	81	72	0	2.467	14	14
		%	23.7	22.4	26.6	23.7	0			
22	Teacher is careful not to interrupt students with ID while they are doing their activities.		75	90	72	67	0	2.34	18	18
		%	24.7	29.6	23.7	22	0			
23	Teacher uses reinforcement methods and avoids punitive methods.		70	69	84	81	0	2.57	5	5
		%	23	22.7	27.6	26.6	0			
Overall Mean								**2.490**	**0.231**	

The statistical data in Table 8 show the overall mean of the study sample's responses about use level of teachers of students with ID of the Montessori curriculum in their teaching of students with ID in the elementary school was (2.49). This mean falls within the second category of the five Likert, which ranges between (1.81 - 2.6), which is the category that indicates the use level is low. This means that elementary teachers seldom use the Montessori curriculum when teaching students with ID.

Although a number of previous studies showed the effectiveness of the Montessori curriculum in providing students with ID with language, motor, social and academic skills (Alsayed, 2016; Rahman, 2018; Ramadan, 2014), the current study showed that the use level of the Montessori curriculum with teachers of elementary students with ID was low. This highlights the need for more attention and awareness of the importance and features of this curriculum as one of the important methods in teaching elementary students with ID.

This low level of use of teachers of elementary students with ID of the Montessori curriculum could be justified by a number of reasons, including the lack of studies related to the Montessori curriculum in Saudi Arabia. This approach did not receive sufficient attention in teacher preparation programs in Saudi universities. Students did not learn its effective teaching methods, which are characterized by several advantages, including understanding the student, his needs, his nature, and his own experiences. The Montessori curriculum focuses on the child, developing their senses, and providing a prepared

environment, which represents the three sides of the educational process. This positively affects students with ID psychologically, socially, physically, and academically.

Q2) Are there significant differences in the level of use of the Montessori curriculum among teachers of elementary students with intellectual disabilities ID according to the variables of gender, academic qualification, years of experience, and the number of workshops they have attended about the Montessori curriculum?

First: Gender Variable

The researcher used an independent sample to identify whether there are statistically significant differences in use level of the Montessori curriculum by teachers of elementary students with ID according their gender (see Table 5).

Table 5: Independent-Samples T Test for Gender Variable

Gender	Mean	N	Standard deviation	T-value	Sig
Male	2.5572	162	0.83686	1.495	0.136
Female	2.4140	142	0.82970		

Table 5 shows no statistically significant differences at the level of significance of 0.05 or less in the responses of the study sample to the questionnaire about the teacher's level of use of the Montessori curriculum according to the gender variable. It is possible to justify this result by the fact that all teachers graduated from the same teacher preparation programs in Saudi universities. In addition, they worked under the umbrella of one education ministry, which most likely led to the absence of differences between male and female teachers in the degree of their use level of the Montessori curriculum.

Second: Academic Qualification Variable

The researcher used a one-way analysis of variance (One Way Anova) to identify whether there are statistically significant differences in the use level of the Montessori curriculum in teachers of elementary students with ID according to a difference in educational qualification (see Table 6).

Table 6: Differences in Level of Use of the Montessori Curriculum Among Teachers of Elementary Students with ID According to Difference of Variable of Educational Qualifications

	Sum of squares	df	Mean square	F-value	Sig
Between groups	4.551	2	2.276	*58.734	0.05
Within groups	11.662	301	0.039		
Total	**16.213**	**303**			

* The mean difference is significant at the 0.05 level.

Table 6 shows statistically significant differences at the level of significance of 0.05 or less in the responses of the study sample to the questionnaire about use level of the Montessori curriculum by teachers of elementary students with ID according to differences in the academic qualification of the teachers.

To determine whom the differences favored in each category of academic qualification, the Scheffe test was used (see Table 7).

Table 7: Scheffé Post Hoc Analysis for Academic Qualification Variable

Academic Qualification		Mean Difference (I-J)	Std. Error	Sig.
Bachelor	Master	- *0.30839	0.03214	0.000
	Doctoral	- *0.45464	0.08130	0.000
Master	Bachelor	*0.30839	0.03214	0.000
	Doctoral	- 0.14625	0.08566	0.234
Doctoral	Bachelor	*0.45464	0.08130	0.000
	Master	0.14625	0.08566	0.234

* The mean difference is significant at the 0.05 level.

Table 7 shows that there are statistically significant differences at the level of significance of 0.05 or less in the responses of the study sample to the questionnaire about the differences in use level of the Montessori curriculum by teachers of elementary students with ID according to the difference of academic qualification variable in favor of the highest academic qualification. The result showed statistically significant differences between holders of bachelor's and master's degrees in favor of holders of master's degrees, and the differences between holders of bachelor's and doctoral degrees were in favor of Ph.D. holders. There were no statistically significant differences between master's and

Ph.D. holders. This may be justified because holders of a higher academic degree (Master's and Ph.D.) - compared to holders of a bachelor's degree - may have more information, knowledge, and familiarity with studies and research related to effective methods and strategies in teaching students with ID, such as the Montessori curriculum.

Third: Years of Experience Variable

The researcher used a One Way Anova to identify whether there are statistically significant differences in use level of the Montessori curriculum with teachers of elementary students with ID according to a difference in the years of experience of the teachers (see Table 8).

Table 8: Differences in Level of Use of the Montessori Curriculum Among Teachers of Elementary Students with ID According to the Variable of Their Experience

	Sum of squares	**df**	**Mean square**	**F-value**	**Sig**
Between groups	0.222	4	0.056	1.039	0.387
Within groups	15.991	299	0.053		
Total	**16.213**	**303**			

* The mean difference is significant at the 0.05 level.

Table 8 shows no statistically significant differences at the level of significance of 0.05 or less in the responses of the study sample to the questionnaire about use level the Montessori curriculum with teachers of elementary students with ID according to differences in the years of experience of the teachers.

This result may be justified because the years of experience for the majority of the study sample (51%) are between 10-15 years, which made their responses similar. o, the result showed that variable of years of experience does not affect the responses of the study sample.

Fourth: Variable of Number of Workshops on the Montessori Curriculum

The researcher used a One Way Anova identify whether there are statistically significant differences in use level of teachers of students with ID of the Montessori curriculum in their teaching of students with ID in elementary schools according to

differences in the number of workshops they attended about the Montessori curriculum(see Table 9).

Table 9: Differences in the Level of Use of the Montessori Curriculum Among Teachers of Elementary Students with ID According to the Variable of Number of Workshops on the Montessori Curriculum

	Sum of squares	**df**	**Mean square**	**F-value**	**Sig**
Between groups	4.082	2	2.041	*50.633	0.05
Within groups	12.132	301	0040		
Total	**16.213**	**303**			

* The mean difference is significant at the 0.05 level.

Table 9 shows that there are statistically significant differences at the level of significance of 0.05 or less in the responses of the study sample to the questionnaire about use level of the Montessori curriculum with teachers of elementary students with ID according to the difference in number of workshops they attend about the Montessori curriculum.

To determine whom the differences come in favor of in each category, the Scheffe test was used (see Table 10).

Table 10: Scheffé Post Hoc Analysis for Variable of Number of Workshops on the Montessori Curriculum

Number of Workshops on The Montessori Curriculum		**Mean Difference (I-J)**	**Std. Error**	**Sig.**
I did not take training workshop	1 -3 workshops	- 1.40996	0.12036	0.000
	More than 3 workshops	- 0.92473	0.14927	0.000
1 -3 workshops	I did not take training workshop	- 0.92473	0.12036	0.000
	More than 3 workshops	- 0.48523	0.18092	0.029
More than 3 workshops	I did not take training workshop	1.40996	0.14927	0.000
	1 -3 workshops	0.48523	0.18092	0.029

* The mean difference is significant at the 0.05 level

Table 10 shows statistically significant differences at the level of significance of 0.05 or less in the responses of the study sample to the questionnaire about the differences in the Montessori curriculum by teachers of students with ID in favor of the study sample with more training workshops about the Montessori curriculum.

The researcher believes that training workshops about modern and effective trends, strategies, and methods in teaching students with ID, such as the Montessori curriculum, are essential in developing teachers' awareness. Including these educational developments and the foundations on which they are based in teacher training programs would bring about positive changes in teacher behavior and attitudes and provide them with new knowledge. These changes would help develop their abilities, refine their skills, influence their attitudes, and develop the habits and methods they use to succeed and excel in teaching students with ID.

6. Conclusion and Recommendations

In light of the findings of the current study, the researcher recommends the following:

1. Hold training workshops for teachers of students with ID in the elementary school.
2. Motivate teachers to use the Montessori curriculum when teaching students with ID in elementary school by encouraging teachers both financially and morally.
3. The Montessori curriculum should be studied in the special education departments of universities as one of the essential methods of teaching students with ID.
4. Encourage and convince decision-makers, officials, and school principals that the Montessori curriculum is valuable and can be used to benefit students in their schools.
5. Encourage researchers in the field of special to conduct studies on the Montessori curriculum.
6. Increase awareness of the families of students with disabilities on how to educate their children according to the philosophy of the Montessori curriculum.

References

Alqahtani, A. (2009). *Teaching strategies used by teachers of intellectual education institutes and programs in the city of Riyadh* (Unpublished master's thesis). College of Education, King Saud University.

Alrousan, F. (2005). Introduction to mental disability. Amman: Dar Al-Fikr for printing, publishing and distribution.

Alsayed, R. (2016). The effectiveness of a kinesthetic program to develop some geographical concepts in the mentally handicapped child using the Montessori method. *Journal of Psychological Counseling, 46* (1), 523-573.

Altalwani, R. (2015). *What do you know about the Montessori curriculum New learning site*? Retrieved July 15, 2018. From https://www.new-educ.com/

Castellanos, A. (2000). *A comparison of traditional vs. Montessori education in relation to children's self –esteem, self-efficacy, and prosaically behavior* (Unpublished doctoral dissertation). Carlos Albizu University.

Cordoba-Jackson, J. (2007).*The transferability of the Montessori program into public school in Florida* (Unpublished doctoral dissertation). Barry-University.

Hanson, B. E. (2009). *An exploratory study on the effectiveness of Montessori constructs and traditional teaching methodology as change agents to increase academic achievement of elementary Black students* (Unpublished doctoral dissertation). University Capella.

Jaber, W. (2011). *General teaching methods, planning and educational applications*. Amman: Dar Alfikr for publishing and distribution.

Morsi, M. (1994). *History of Education in East and West*. Cairo: World of Books.

Mustafa, T & Alhashemi, A. (2017). The impact of an educational strategy based on Montessori theory on my phonemic awareness. First-grade students in Jordan in light of the mother's educational level. *An-Najah University Research Journal, 31* (12), 2301-2328.

Rahman, A (2018). *The effectiveness of the Montessori method in providing students with mental disabilities some functional vocabulary* (Unpublished master's thesis). college of Educational Sciences, Al-Quds University.

Ramadan, F. (2014). *The effectiveness of a program based on Montessori activities to improve the psychological compatibility of a sample of children with mental disabilities* (Unpublished doctoral dissertation). Education college, Ain Shams University.

Rodriguez, L. (2003). *An analysis of a public school prekindergarten Montessori bilingual program* (Unpublished doctoral Dissertation). Sam Houston State University.

Yen, S. & Ispa, J. (2000). Children's temperament and behavior in Montessori and constructivist early childhood programs. *Early Education and Development, 11* (2), 171-18.

Yezbick, M. (2007). *How Montessori educators in the U.S. address culturally responsive teaching* (Unpublished master's thesis). San Francisco State University: San Francisco, CA.