

**General and Special Education Teachers' Attitudes
Toward Co- Teaching in an Inclusive Private Setting in
Dubai**

اتجاهات معلمي التعليم العام ومعلمي التربية الخاصة تجاه أسلوب التعليم
المشترك في إحدى المدارس الخاصة الدامجة في دبي

by

WALID ABDALLAH OBEIDAT

**Dissertation submitted in fulfilment
of the requirements for the degree of
MASTER OF EDUCATION**

at

The British University in Dubai

December 2020

DECLARATION

I warrant that the content of this research is the direct result of my own work and that any use made in it of published or unpublished copyright material falls within the limits permitted by international copyright conventions.

I understand that a copy of my research will be deposited in the University Library for permanent retention.

I hereby agree that the material mentioned above for which I am author and copyright holder may be copied and distributed by The British University in Dubai for the purposes of research, private study or education and that The British University in Dubai may recover from purchasers the costs incurred in such copying and distribution, where appropriate.

I understand that The British University in Dubai may make a digital copy available in the institutional repository.

I understand that I may apply to the University to retain the right to withhold or to restrict access to my thesis for a period which shall not normally exceed four calendar years from the congregation at which the degree is conferred, the length of the period to be specified in the application, together with the precise reasons for making that application.

Signature of student

COPYRIGHT AND INFORMATION TO USERS

The author whose copyright is declared on the title page of the work has granted to the British University in Dubai the right to lend his/her research work to users of its library and to make partial or single copies for educational and research use.

The author has also granted permission to the University to keep or make a digital copy for similar use and for the purpose of preservation of the work digitally.

Multiple copying of this work for scholarly purposes may be granted by either the author, the Registrar or the Dean only.

Copying for financial gain shall only be allowed with the author's express permission.

Any use of this work in whole or in part shall respect the moral rights of the author to be acknowledged and to reflect in good faith and without detriment the meaning of the content, and the original authorship.

Abstract:

This research investigates general and special education teachers' attitudes towards co-teaching. Includes investigating their attitudes towards the co-teaching model and the impact of collaboration, personal skills, and teachers' characteristics on co-teaching implementation. The study will provide important information about the difficulties facing educators in implementing effective co-teaching. The data obtained from this research will help understand general and special teachers' attitudes towards co-teaching, its efficiency, and the barriers it faces in its implementation. Moreover, help the schools create a more effective support system of inclusive education for all learners in the future. The study targeted general education and special education teachers working in inclusive classrooms from the KG stage to grade 12 in a private school in Dubai. The data collected by individual surveys and semi-structured interviews indicated that the general and special education teachers have a positive attitude toward co-teaching. Further, lack of professional development, lack of time allocated for planning, lack of human and educational resources has been identified as the barriers facing the effective implementation of co-teaching.

نبذة مختصرة:

ستقوم الدراسة بالبحث في اتجاهات المعلمين تجاه نموذج التدريس المشترك ومدى تأثير التعاون والمهارات الشخصية وخصائص المعلمين على تنفيذ وفعالية هذا النموذج ، ستوفر الدراسة معلومات مهمة حول الصعوبات التي تواجه المعلمين في تنفيذ التدريس المشترك الفعال، كما ستساعد البيانات التي تم الحصول عليها من هذا البحث في فهم اتجاهات معلمي التربية الخاصة والتعليم العام تجاه التدريس المشترك ، وكفاءته ، والعقبات التي تواجه تطبيقه.

من ناحية أخرى ، قد تساعد نتائج هذه الدراسة المدارس على إنشاء نظم دعم أكثر فعالية للتعليم الدامج لجميع المتعلمين في المستقبل، استهدفت الدراسة معلمي التعليم العام والتربية الخاصة العاملين في الفصول الدراسية الدامجة من مرحلة الروضة إلى الصف الثاني عشر في مدرسة خاصة في دبي، أشارت البيانات التي تم جمعها من خلال المسوح الفردية والمقابلات إلى أن معلمي التعليم العام والتربية الخاصة لديهم اتجاهات إيجابية تجاه نموذج التدريس المشترك، كما تم تحديد نقص التطوير المهني ، وقلة الوقت المخصص للتخطيط ، ونقص الموارد البشرية والتعليمية على أنها معوقات أساسية تواجه التنفيذ الفعال للتعليم المشترك.

Acknowledgement

I would like to thank my supervisor, Prof. Eman Gaad, for her consistent support and guidance throughout the research stages and my entire journey at BUID. This work would not have been done without her support and follow-up. I'm also very thankful to all Academic staff at BUID for the knowledge and encouragement I have received over the last two years. Appreciation and gratitude are due to my wife Heba for being patient and supporting me during this dissertation's compilation.

Table of Content

No.	Content	Page
Chapter (1)		
I.	Introduction.	1
II.	History of Education in UAE and the emergence of Inclusive Education.	2
III.	Rational and Research Questions.	3
IV.	Definitions.	5
Chapter (2)		
Literature Review		
I.	Inclusive education.	5
II.	Co-teaching.	7
III.	Co-teaching stages	9
IV.	Co-teaching models	10
V.	Why Co-teaching?	12
VI.	Barriers to effective co-teaching	12
VII.	Theoretical Framework	13
VIII.	Review of relevant researches	14
Chapter (3)		
	Methodology and The Design of The Study	20
Chapter (4)		
Findings of the study		
I.	Introduction	22
II.	Participants General information - all participants	24
III.	Section (1): GED&SED teachers' attitudes toward co- teaching	26

IV.	Section (2): Special education teachers' attitude toward co-teaching	32
V.	Special Education teachers' general data presentation	33
VI.	Special education teachers' attitude toward co-teaching/RQ.1	34
VII.	Teachers Knowledge and experience about co-teaching RQ.1	36
VIII.	Co- teaching impact on students' progress, RQ No.1	37
IX.	Main barriers to effectively implement co-teaching, RQ No.3	38
X.	Section (3): General education teachers' attitude toward co-teaching	40
XI.	General Education teachers' data presentation	40
XII.	General education teachers' attitude toward co- teaching/RQ.2	42
XIII.	GED Teachers' Knowledge and experience about co-teaching RQ.2	43
XIV.	Co- teaching impact on students' progress, RQ No.2	44
XV.	Main barriers affecting implement co-teaching, RQ No.3	45
XVI.	Summary of Semi- Structured interviews	48
XVII.	Discussion	51
Chapter (5)		
I.	Limitations	54
II.	Ethical treatment	54
III.	Feasibility	55
IV.	Conclusion	55
V.	Recommendations for future research	56

List of Tables

- I. Table (1): Participants General information - Overall participants:
- II. Table No. (2): All teachers' responses to the section 2 of the survey questions
- III. Table (3): Special Education teachers - General information
- IV. Table No. (4): Special education teachers' responses to the section 2 of the survey questions
- V. Table (5): General Education teachers - General information
- VI. Table No. (6): General education teachers' responses to the section 2 of the survey questions

Chapter (1)

I. Introduction:

The interest in inclusive education has been rapidly increasing internationally and across the UAE in the last 20 years. During this period, the governmental legislations encouraged and challenged educators to find an effective support system for students with disabilities in mainstream schools. Inclusion involves the full participation of all students in all aspects of schooling. It involves regular schools and classrooms being responsive, willing to genuinely adapt, and change to meet all students' needs (Loreman, Deppeler & Harvey, 2010 p 2). In April 2000, more than 183 countries worldwide adopted a World Declaration of Education for all. For many countries, this was a significant change in the education system from catering mostly for the elite and middle classes to the most extensive, most comprehensive mass education system ever (Armstrong, Spandagou .2010. p.46).

The education system in the UAE has shown significant changes. These changes mainly targeted the teaching practices, learning outcomes, and the acceptance of students with Educational Needs and Disabilities (SEND) in regular schools within inclusive education. The people of determination rights guaranteed by the law "A person's special needs shall not be a reason to deprive him/her of their rights and services especially in health and education" (UAE federal law .29/2006 article N.2). Furthermore, Dubai Inclusive policy framework and its appendixes emphasized the importance of collaboration and the partnership between general education and special education teachers. The framework indicated that 60% of the special education teachers'(support teacher') time must support general education teacher teachers. Both general and special education teachers must work closely to co-plan, co-teach, and make suitable modifications to meet the SOD's needs. This study aims to identify the general and special education teachers' attitudes toward co-teaching in selected inclusive schools in Dubai.

II. History of education in the UAE and the emergence of inclusive education:

The education system in the UAE has rapidly developed since the state establishment in 1971. The interest in the education of students with a disability has started in 1979 and gradually improved. It is adapted significantly to indicate the right to education for all students with special educational needs. The improvement in the educational system is directly proportional to the multiple economic developments witnessed by the state. In 1985, the UAE national curriculum was developed by the ministry of education, and they were therefore given the responsibility for both public and private education systems. Consequently, a different government education department was established within each emirate to ensure high-quality provision is maintained across schools. The ministry of education has established a special department to ensure schools provide an adequate education for students with special needs and encourage and prepare them to have effective participation in their community. In 2006, the UAE government issued the federal law number (29), which was the first federal law in the UAE clearly states the rights of people with special needs in health and education. It was followed by the release of general rules for the provision of a special education program in 2010. According to the ministry of education guidebook, "Inclusive education means that all students in a school regardless of their strengths or weaknesses in any area become part of the school community" (Hassan,2008. p.8 as sighted by Anati 2012.).

Dubai is one of the seven emirates of UAE located on the coast of the Arabian Gulf. Dubai consists of multi-nationalities and a center of trade and tourism in the middle east. In 2014, Dubai's government released law No. 2, highlighting the importance of people with disabilities' rights. However, as a response to HH Sheikh Mohammad's vision, the Knowledge and Human Development Authority KHDA (the educational quality assurance and regulatory authority of the government of Dubai) ran different awareness and training programs and professional

development workshops. In 2016 the KHDA released Dubai Inclusive Policy Framework, which provides comprehensive and detailed instructions that explain the KHDA's vision and expectations for special and inclusive education.

Later, in 2017, the Executive Council Resolution released law No.2 to ensure that Dubai's private schools provide adequate inclusion provision for the students with determination (Implementing Inclusive Education, KHDA, P.8). Furthermore, a new and modified version of the federal law 29/2006 has been released, the new version reviewed and amended by the Ministry of Community Development to ensure that the law is aligned with the international agreements on students of determination's rights. (Emiratis today newspaper -24/2/2019).

In April 2017, HH Sheikh Mohammad Bin Rashid Al Maktoum launched the national policy for empowering people with special needs. The policy stated that people with special needs or disabilities would be referred to as 'People of Determination' to recognize and appreciate their achievement in different fields.

III. Rational and research questions:

The researcher works as a special education teacher. He is a co-teacher in inclusive classrooms since 2012. Over the last eight years, he practiced and experienced co-teaching and its impact on the students' achievement, the difficulties facing its implementations, and the level of coordination and collaboration that needs to be in place with the general education teacher to ensure effective co-teaching. To adhere to the UAE and the KHDA's instructions concerning students of determination. Schools should increase collaboration and communication opportunities between the special and general education teachers.

Co-teaching is one of the best inclusive practices that enable students with disabilities to receive interventions within the mainstream classroom. Co-teaching occurs primarily in a shared classroom workspace. Students are generally not pulled out to receive instruction in another physical location (Peery,2020. P.20). However, this research's findings will help educators, administrators, and the stakeholders identify and understand the difficulties facing the effective implementation of the co-teaching.

The findings of this study will also enhance the significance of the Co-teaching instructional model to be used instead of the exclusion models such as separate classrooms or pull-out sessions. Furthermore, very few studies investigated this problem in the middle east. Within the United Arab Emiratis, few studies have examined this problem; therefore, the study will contribute to closing the literature gap. To obtain sufficient data about general and special education teachers' attitudes toward co-teaching in an inclusive setting. This research will examine the following questions:

1. What is the special education teachers' attitude toward co-teaching in an inclusive setting?
 - How are the special education teacher's knowledge and experience in co-teaching?
 - How is co-teaching impact students' progress from the special education teacher's perspective?
2. What is the general education teachers' attitude toward co-teaching in an inclusive setting?
 - How are the general education teacher's knowledge and experience in co-teaching?

- How is co-teaching impact students' progress from the general education teacher's perspective?
3. What are the main barriers that teachers face to implement co-teaching effectively?

IV. Definitions:

The following is an illustration of the shortcuts that have been used within the research, whether in the survey or the research papers:

GED: General Education Teacher(s)/ Student(s).

SED, SE: Special Education Teacher(s).

SOD: Students of Determination, the official and current used the term to call people with special needs in U.A.E.

LST: Learning Support Teacher.

IEP: Individual Educational Plan.

Chapter (2)

Literature Review

I. Inclusive education:

The concept of inclusive education emerged before more than 30n years. Special education started as a teaching approach for individuals with disabilities segregated from general education. Inclusive education aims to fulfill students' needs within the general education. Over the past 30 years, some people argued that teaching students with disabilities in segregated programs be more efficient as they will be taught in small classes and receive individual instruction by special education qualified teachers.

On the other hand, some people questioned the ethical and legal implications of excluding students with special needs from general education. Moreover, many researchers investigated and highlighted the rights of people with disabilities of having equal opportunities for education and the right to a better life. However, due to many governmental law changes, there have been many laws that push the efforts toward inclusive education. In 1990, the United States adjusted and renamed the Education for All Handicapped Act to Individuals with Disability Education Act (IDEA), which stated that students with a disability must be provided free public education in the least restrictive environment. (W. Murawski, 2010.p32)

Inclusive education strives to change the mindset and schools' structure, so all students despite differences in gender, economic status, race, culture, and ability, can learn in the same school setting (WADE,2000). Fully inclusive educational settings need to adapt their services, resources, teaching methods, and the curriculum to meet the students' needs in their setting (Fredricson & Cline,2009). The American National General of Inclusive Education and Restructuring (NGERI) defined inclusive education as " providing to all students including

those with significant disabilities equitable opportunities to receive effective educational services with the needed supplemental aids and support in their neighborhood schools."

In 2016 the United Nations defined inclusive education as a systemic reform process embodying modifications and changes in the content, teaching, methods, structure, and strategies to overcome barriers and provide students with age-appropriate services within an equitable and participatory learning experience environment. The concept of inclusive education has been internationally known during the 1990s. Educators in the education field have been resistant to defining inclusive education, but it is defined as a journey, not a destination, and a process, not a place (Graham, 2020).

Dubai Inclusive Policy Framework (2016) defined inclusive education as a provision that is committed to educating all students, including those with special educational needs and disabilities, in a common learning environment where all students have equitable access to instruction, resources, and support. Schools must allow students to be effective and successful learners with full participation in the school community (DIPF, P.6).

There is no specific definition of inclusive education. It is a culture, theme, process, and mindset among the school community. Students from different abilities, cultures feel accepted, supported, and have fair opportunities to access the school curriculum, resources, facilities, and effectively participate in the school community.

II. Co-teaching:

Introduction:

For decades now, educators have often been Co-teaching intending to help all students, including those with disabilities, succeed when it's really done effectively. Co-teaching means two licensed educators collaborate with equal responsibility for the instructional process in the classroom. Each educator brings expertise to the Co-teaching relationship. One might begin with more knowledge of the content area and begin with more outstanding expertise in designing instruction.

For students with disabilities, the planning for the best results for every single is vital to meet their own unique needs. The co-teaching relationship has to be firm with shared responsibility, good communication, and trust, and there has to be sufficient planning and collaboration time to foster. It is essential to mention that with the wide variety of students. Schools need to serve, there is a continuum of educational placements that schools need to offer, so the decision to engage a student in a co-taught class has to be based on a collaborative look at various information sources.

For students in special education, this is a decision to be made by their Individualized Education Program teams. However, Co-teaching can provide a truly supportive learning environment for many different students, improving their literacy and other academic skills, helping them become more college and career ready. Co-teaching is closely connected to so many approaches that schools are working on a powerful way to help all students reach their most tremendous potential.

Co-teaching is a service delivery option designed to address students' needs in an inclusive classroom by having a general education teacher and a special education teacher teach together in the same classroom to meet the needs of individual students. For true co-teaching to occur, both professionals must co-plan, co-instruct, and co-assess a diverse group of students in the same general education classroom (Murawski, 2005, p.10).

In this method, the general education teacher and the special education teacher handle the class management, instruction delivery, and progress. Evaluation by sharing responsibility and close co-planning can meet the different students' needs simply and directly. Co-teaching is a fun way for students to learn from two or more people who may have different ways of thinking or teaching (Villa, Thousand & Nevin,2013, page 4).

Two teachers can better meet the needs of students. There are some prerequisites for co-teaching. The partnership between the general education teacher and the special education teacher must be built based on a spirit of equality, mutual respect, shared accountability, and resources (Conmderman, Bresnaha & Pederson, p.10-16).

In co-teaching, both the general and special education teachers have an active role in instructional learning. The collaboration between the two teachers might be temporary for a few hours per day or permanent for the entire academic year. In the last few years, the co-teaching model becoming the preferred instructional method in inclusive classrooms.

III. Co -Teaching Stages:

Beginning stage: at this stage, the general education teacher and the special education teacher initiates their professional relationship. However, both teachers might feel uncomfortable

sharing teaching roles, resources, and responsibilities in this stage. Communication at this stage may be polite and avoid conflict areas; both teachers striving to build their relationship (Canderman, Brenahan & Pedersen.p.18).

Compromising stage: at this stage, the professional communication between the co-teachers will be expanded. Both teachers have developed a professional relationship. They are working together and have active participation in the process. Further, students still identify one of the partners as the primary teacher and the other as the assistant teacher (Canderman, Brenahan & Pedersen.p.18).

The collaboration stage: this stage is the final goal of co-teaching where both teachers maintain a high level of collaboration, communication, acceptance, and respect (Stein, 2018.p14).

IV. Co-teaching models:

One Teach, One Assist:

within this model, one teacher will lead the instruction while the other teacher circulates and supports students to understand the task that they are working on it. Moreover, the teacher who helps students summarize and illustrates what the lead teacher has explained will redirect students' attention and advance their understanding. This co-teaching model is the most frequently used approach in co-teaching. The support role should be more than walking around and passively watching students. The teacher in the support role must be actively engaged with students; however, this approach should be used in conjunction with other approaches. It is recommended to use this model only about 15-20 percent of the class time (Murawski,2010. P.260).

One Teach, One Observe:

In this co-teaching model, one teacher will lead the instruction, and the other teacher observes. The observer role is to collect data about students' participation, attention, social skills and analyze how they work together. The co-teachers will meet to discuss the observation findings and make decisions accordingly.

Alternative teaching:

students will be divided into two groups; one of these groups usually being smaller than the other group. One teacher will lead the larger group, and the other teacher will teach the smaller group. Students in the smaller group may receive alternative instruction to revise prior content that they did not achieve. When using an alternative teaching approach, teachers have to make sure that the large group is not receiving new instruction while the small group is pulled (Murawski,2010. P.269).

Parallel teaching:

this co-teaching model breaks the class into two heterogeneous groups. There are many ways to implement parallel teaching, such as teaching the same content in the same way, teaching the same content differently, or teaching different content. However, teachers might use different teaching methods, resources, and technology to deliver instruction. In this co-teaching model, teachers share responsibility for content instruction and planning (Murawski,2010. P.260).

Station teaching:

In this co-teaching model, teachers create two to three instruction stations; each teacher will lead a group (Stein, 2018, P.25). Each teacher takes his/her group to various stations when a group of students works independently (Peery, P.31). Teachers repeat the instruction to each

group that comes through the station. Teachers can organize stations so each group of students can focus on a specific part of the topic. Station teaching is considered a regrouping method where the students do not work in the traditional large group.

Team teaching:

In this teaching model, teachers share the responsibility for content instruction and planning. Both teachers teach collaboratively and lead the instruction. They can provide diverse viewpoints for the same content so students will maximize their thinking. Furthermore, realize that different responses to some answers are appropriate, the co-planning and preparing activities are vital to this model's effectiveness. The more prepared the teachers are, the more likely they will be able to effectively use Team Teaching.

V. Why co-teaching?

Many researches have discussed the importance and the benefits of co-teaching for students with a disability, general education students, and teachers. Murawski (2010) states that co-teaching will enable students with disabilities to access the curriculum and to have a positive social outcome, more individual attention, more engagement, and developing self-confidence. Whereas general education students will have a chance to improve their academic skills by being exposed to differentiated instruction delivered by two teachers, the existence of a special education teacher might help at-risk students who may need modifications. Teachers reported being happier and not feeling overwhelmed (Villa& Thousand& Nevin,2013). Moreover, teachers involved in the Co-teaching relationship have professional development opportunities, learning new teaching strategies, mutual experience, and feedback.

VI. Barriers to effective co-teaching:

The barriers to effective co-teaching have been investigated by many researchers conducted over the last 20 years. Ratcliff (2016) Found that the main barrier to effective Co-teaching is lack of planning time and lack of training and professional development. Murawski (2010) Addressed the mean common barriers two effective Co-teaching such as lack of training, teacher's personality or philosophical clashes, limited resources, scheduling issues, reluctance to lose control, lack of time, and lack of administrative support.

VII. Theoretical framework:

The concept of co-teaching is that people are collaborating and working together to enhance students' learning. One of the theories that discussed how learning happens by teaching students in groups or social settings and the way that people act and interact in group situations is by Lev Vygotsky (Trans. 1965), which is called a social constructivist theory. Constructivism is a theory that elaborates on the way people learn and develop. Social constructivism can be described as socialization, a process of acquiring skills, knowledge, and dispositions that enable an individual to participate in their group or society. "This socialization process consists of reciprocal interactions and joint construction of meaning by the individual and others in the social context" (Sivan, 1986, p. 211). Social constructivism looks at students' interactions as they engage with their peers and with adults to help them gain meaning and understanding.

Social constructivism emphasizes the social nature of knowledge and the importance of social interaction. According to this perspective, learners build their knowledge in social situations and context. (Masciotra,2012).

Based on the constructivist theory, students can learn best when they can build their knowledge. The social aspect of working and learning from a variety of people helps students to make their connections and gain a better understanding of concepts. A central concept of constructivism is that learners play an active role in their own development. Vygotsky (trans. 1965) suggested that learning precedes development, noting that it is after children have the opportunity to observe and approximate a new skill and practice it, with the help of more capable peers, that they eventually incorporate it into their own cognitive constructs (Mallory 1994).

VIII. Review of the studies that examined the research's problem:

The traditional style of supporting students with special needs was supporting them in a separate setting. At the current time, the interest in inclusive education has internationally increased. U.N conventions and governmental legislation stated the rights of people with special needs, including the right to education. These students have the right to be educated within the nearest school in their neighborhood. Students with disabilities must have equitable opportunities to access the curriculum, resources, and school facilities.

The education system worldwide witnessed significant changes to adapt its aspects to meet the students' needs in the least restrictive environment. Collaboration between general and special education teachers become an essential factor in ensuring the quality of support provided to students with special needs. Co-teaching emerged as an effective method to meet students' needs in an inclusive setting by maintaining close communication and collaboration between GED and SE teachers.

Several studies and researches investigated the GED and SE teachers' perspectives toward co-teaching and examined its impact on students' academic achievement and progress. Within this

chapter, the researcher will introduce and summarize the most important and relative studies in the literature.

Stach (2016) found that students with a disability had significantly lower English, Math, Writing, and Science scores than the students without a disability on a graduation test. Also, there was no significant difference between a student with a disability and a student without a disability in social studies. There were no gains for the academic or writing for co-teaching. Co-teaching is not an acceptable intervention for all students because their educational needs are not met (Stach,2016). However, this study did not mention that the test was with accommodations for students with a disability or not. Furthermore, the study targeted the students with a disability regardless of their diagnoses and severity of the disability.

Christopher Khoury (2014), a researcher from North Texas University, researched the effect of co-teaching on LD students' academic achievement outcomes. The study found that students who were pulled out to resources classes need specially designed instruction due to the setting's nature. Special education students are not exposed to rich content. Moving these students to the co-teaching setting may be the method schools use to educate students with the disability. Special education students will perform at a higher level while in a co-teaching setting (Khoury,2014). It should be taken into consideration that the findings in this study were built based on the that special education students received co-teaching instruction for a short period. On the other hand, the methodology and data interpretation were not sufficient and explicit. Furthermore, in contrast between the two studies, the studies' results were drastically different. The first study indicated that the co-teaching approach is not appropriate for the overall students. There is no significant impact of the co-teaching in the academic achievement outcomes. The second indicates a significant impact of the co-teaching in many areas of the

academic achievement outcomes. It recommended that the co-teaching approach for the students with a disability.

Furthermore, the two mentioned studies were not specific, and they targeted the student with a disability in general. Hesleden (2011) concluded that students at risk who are educated in classes using co-teaching models had higher average Biology scores than those taught without the co-teaching method. Students with a disability had high academic gains compared to the other groups. Another research conducted by Gonzalez (2015) assumed that general education students in co-taught classrooms do not significantly outperform general education students in traditional classrooms (Gonzalez ,2015).

How does inclusion with co-teaching affect students' performance? This research conducted by Hutchinson (2015) the findings of this study concluded that students with a disability in the experimental group tested statically significantly higher than the students in the control group in some parts of summative assessment. However, there was no significant impact of the co-teaching on the students' performance on the summative assessment. Anyhow, the sample of this study was small, and the results cannot be generalized.

Co-teaching models affect students' performance positively. The most massive gains were when the special education teacher worked with qualified general education teachers (Cermele, 2017). Whereas Parker (2017) researched the impact of co-teaching in student achievement and behavior, the study found that the co-teaching may not close the gap for students. However, it can be valid as a behavior modification method. Co-teaching has a significant effect on student behavior, particularly at the middle level, which is the age stage that students are becoming more independent and examining new experiences. James (2015) found that general

education students do not benefit more than those studying in regular and traditional classrooms. The past studies are closely related to the proposed research question number one and number two. The results of these studies were inconsistent and had anomalous findings.

Students have positive attitudes of their learning experience in co-teaching classrooms; special education students had better perception than their general education peers. The younger special education students have shown favorable perception more than the older students (Hayward, 2018). In 2012, Matthew Lersch conducted a research to investigate students' perceptions of co-teaching. The study found that the students had different perceptions in co-taught classrooms.

Students emphasized that having two teachers providing instruction will be better than being taught by one. In a co-teaching setting, students stated that each teacher had a unique instructional strength. Furthermore, having two teachers will increase students' involvement. However, the teacher's rules are not as important as students' activities (Lersch 2012).

The two past studies are related to the third research question of this proposal. Another research was conducted to determine the link between co-teaching and mathematics achievement (Word, 2012). the study focused on fifth and eighth grade special education students' test results in co-taught math classes. The results of this research indicated no significant relationships between co-teaching and math achievement. There are eighth-grade teachers tried to figure out the effectiveness of co-teaching approach, its impact on the students' achievement, and the benefits of this approach for both regular and SEN students. However, revised studies' results were inconsistent and needed to be related to variables like age, gender, academic level, type, and disability severity.

Malin and MeRaae,2010 investigated co-teaching believes in supporting inclusive education. The study found no significant difference between general and special education teachers on their reported beliefs and teaching methods. Teachers have demonstrated minimal discrepancy in their feedback. They are willing to work together using the co-teaching method. Moreover, co-teaching becomes the most effective approach to initiate partnerships to fulfill students' needs, which emphasizes that collaboration between general and special education teachers should continue to grow (Sherman,2008).

The partnership between the general and special education teachers is related to the team is formed, the training they received, availability of the time for co-planning, and continued administrative support. However, assign the special education teacher to co-teach with multiple general education teachers at the same time will complicate co-teaching implementation and affect the partnerships (Ann.E. McCarthy.2012).

Sipe,2019 indicated that co-planning had been identified as the number one condition for co-teaching to be effective. Co-teaching is generally beneficial to students with special needs and general education students. Teachers have noticed growth in students' academic and behavioral performances. Teachers also mentioned that their lesson plan was more challenging and meaningful when they have qualified co-teacher.

Karen Rabren, a researcher from Auburn University, conducted a study in 2004 to identify teachers' and students' perspectives of co-teaching and the efficiency of this teaching approach. The findings of this study showed significant differences in students' academic achievement

between students exposed to a co-teaching method compared to students exposed to traditional one teacher-delivering instruction.

The general and special education teachers who participated in this study had reported positive perspectives about co-teaching. Planning between teachers is essential in an inclusive setting and should be organized (Holliday,2011).

A study conducted by (Stumpf,2015) verified that schools' effective professional development programs for the co-teachers were a key to the positive impact of co-teaching.

(Case,2017) investigated co-teaching relationships, the researcher explored the teacher's attitude toward inclusive education and the aspects of successful inclusion. The results of this research highlighted co-planning and communication as essential factors for effective skills-based co-teaching. One more study investigated co-teaching was the study of (Batts,2014), the purpose of this study was to determine how co-teaching training program using the five models of co-teaching impacts the relationship of co-teachers. The researcher used pre-and post-training assessments to measure the impact. This study's findings mentioned that teachers became more intentional with their planning for lessons, and the training makes them mindful of how to communicate and collaborate effectively.

In 2009 Cary Harper conducted research to investigate teaching staff and students' perceptions of co-teaching in a rural secondary school setting during the first year of implementing the program. The findings of this study showed that lack of planning was the main teachers' concern. Students mentioned that they did not notice any difference in their academic achievement due to being exposed to co-teaching models.

Allisa Nunes 2018 conducted research to investigate the special education teachers' perspectives on co-teaching. This qualitative case study was aimed to investigate the perception and the experience of special education teachers in a middle school setting. The researcher was seeking to collect data identifying challenges teachers face to effectively implement co-teaching. And how teachers describe their collaboration and co-teaching relationships with their co-teachers. This study's findings showed that the most significant challenges that inclusion teachers facing were workload, professional differences, and communication challenges.

Chapter (3)

Methodology and the design of the study:

The study intends to investigate the general and special education teachers' attitudes toward co-teaching and identify the main barriers that affect its implementation in an inclusive setting. The researcher selected the mixed research method design to conduct the study. Mixed method research is the type of research in which a researcher mixes quantitative and qualitative research approaches. The researcher's mixed research method may be used to collect quantitative and qualitative data to check if the two types of data show similar results (Creswell, Clark,2018. p.42).

Within this study, the researcher will collect data using a quantitative survey followed up with semi-structured interviews with selected participants who completed the survey to explain the reason behind and the meaning of the quantitative survey results.

For quantitative data, a precise sample number can be calculated according to the accuracy and the level of probability that research needs (Cohen, Manion& Morrison,2007. p.125).

The survey provides a quantitative or numeric description of trends, attitudes, or opinions of a population (Jhon& David Creswell,2018. p.45).). The semi-structured valued for its accommodation to a range of research goals reflects variation in its use. It allows for the involvement of the participant. It can be carried in one sitting or several to maximize the benefits from the semi-structured interview. The researcher has to be well prepared for the interview and give considerable thought to the interview questions.

The school setting of the research study was an American curriculum private school in Dubai educational district. This is a fully inclusive school implementing co-teaching since 2015 since

students with special needs receiving support within the regular classrooms by general and special education teachers. Teachers employed are in grade PK-12; the researcher obtained the school Director General's approval to conduct the research study.

This study sample consists of 35 teachers, 26 general education teachers, and nine special education teachers. The participants teaching in grades from PK -12 and have at least one student with special needs in their classes. The sample consisted of participants of diverse ages, nationalities, and phases. However, Due to the current Covid-19 pandemic situation, the researcher made the required measures to ensure full adherence to the Knowledge and Human Development Authority's and Dubai Health Authority's precautionary measures that restricted use and share printed material and face to face meetings.

Therefore, the participant received a link for an online survey. The participants have been informed that their input will be kept confidential. Moreover, the participants are not required to include any personal data that might disclose their identity. There is no clear final answer, for the appropriate sample size depends on the purpose of the study and the nature of the population (Cohen, Manion& Morrison,2007. p.120).

The survey used Likert scale questions containing 30 questions, 29 closed-ended questions, and one open-ended question. As the participants requested to list the most critical barriers, they are facing in co-teaching implementation in their own words.

The qualitative data obtained through 3 semi-structured interviews, and the interview form consisted of five open-ended questions about co-teaching. The selected participants were one special education teacher from phase2 and two general education teachers from phase3 and 4.

The semi-structured were conducted virtually using Microsoft Teams and Schoology. A school-wide used teaching and communication platform. The Interviewed teachers were asked about co-teaching relationships, its influence on teacher's skills and experience, its impact on students' progress, barriers to effective implementation of co-teaching, and suggestions for improvement. During the interviews, the researcher was taking notes and recording the teachers' responses. As mentioned earlier, sharing printed material is strictly prohibited according to school safety and precautionary measures. Once the interviews were completed, the obtained information was transcribed for data analysis; however, teachers who participated in the semi-structured interviews were guaranteed to be anonymous.

Chapter (4)

The Results of the study

I. Introduction:

The purpose of this study was to investigate the general and special education teachers' attitudes toward Co-teaching and to identify the main barriers to effective implementation of co-teaching. Thirty-five participants have completed the survey with 26 general education teachers and nine special education teachers. Moreover, semi-structured interviews were conducted with one special education teacher and two general education teachers. The data was obtained from the semi- structured interviews used to validate and support the data collected from question number 30, related to research question number 3.

The researcher used a worldwide, famous website for survey creation. However, the data analysis has been done by the website. The analysis included analyzing the general responses of the special and general education teachers and consisted of specific analysis for general education teachers' responses and the special education teachers' responses. The researcher also generated a gender basis analysis for male and female participants.

The survey was divided into two sections. The first section consisted of questions 1 to 10. It aims to collect general information about the participants, such as gender, age, qualifications, years of experience teaching students with special needs, teaching phase, and training that they have received in and pre-service.

Section 2 of the survey measured teachers' attitudes toward Co-teaching and the most common barriers facing its effective implementation. Teachers have been asked about the importance of co-teaching and its importance to ensure that the students with special needs are receiving the

support needed in mainstream classrooms. Does co-teaching make a positive impact on the students' progress? Does the Co-teaching method benefit both students with special needs and general education students?

Teachers were also asked about their perspectives about if co-teaching maximizes students' experience and knowledge by being communicated with two teachers. Moreover, this section of the survey investigated the importance of co-planning and its influence on the quality of the curriculum adaptations made to meet the students' needs.

On the other hand, some questions of section 2 measured the teachers' attitudes toward inclusive education in general. Teachers have been asked if the students with special needs should be supported in separate settings. Data was summarized, analyzed, and interpreted and to frequency and percentage for an accurate description of the Likert scale results.

The options strongly agree and agree will be grouped. Strongly disagree and disagree will be grouped. The neutral option will have its own group. The findings of this research study will be presented in narrative and graphical format.

II. Participants' general information presentation:

The study was conducted in a private American curriculum school in Dubai. The sample consisted of eight male and 27 female teachers, six teachers were from the age of 20 to 29 years old, 17 teachers were from 30 to 39 years old, and 12 teachers were plus 40 years old. 82% of the participants have a degree in education, whereas 17% do not have an educational degree.

Three teachers have taught students with disabilities in a regular class for less than one year, 11 teachers have taught students with disabilities for 1 to 5 years, whereas most of the teachers

were teaching students with special needs for more than five years. Three of the participants were KG - phase 1 teachers, 11 were elementary - phase 2 teachers, 8 were grade 6 to 8 phase - 3 teachers, and 13 were grade 9 to 12 phase - 4 teachers. Moreover, 17% of the overall participant has never been part of special education training. In comparison, 20% of the teachers have taken pre-service training, and 60% of the participants had their training in service at the current school (Table 1).

Table (1): Participants General information - Overall participants:

Components	Sub-Components	Frequency	Percentage
Male	-	8	23 %
Female	-	27	77 %
General education teacher	-	26	74 %
Special education teacher	-	9	26%
Age	20-29 years	6	17 %
	30-39 years	17	49 %
	+40 years	12	34 %
Experience teaching students with disability	Less than 1 year	3	8.5 %
	1-3 years	6	17%
	3-5 years	5	14 %
	More than 5 years	21	60 %
Phase of teaching (grades he / she is teaching)	Phase 1(KG)	3	8.5 %
	Phase 2 (Elementary)	11	31 %
	Phase 3(Grades 6-8)	8	23 %
	Phase 4 Grades 9-12)	13	37 %
Special Education Training	Never	6	18 %
	Pre- Service	7	20 %
	In- Service	21	62 %

Pre- service/ In- service training duration	Less than one week	9	26 %
	1 week -1 month	8	23.5 %
	2-6 months	8	23.5 %
	More than 6 months	9	26 %

In order to answer the research questions, the data analysis will be interpreted within three sections. The first section will illustrate the overall teachers' attitudes toward co-teaching. The second section will explain the special education teachers' attitudes and the barriers to effective co-teaching identified by this group. The third section will elaborate on the general education teachers' attitudes toward co-teaching and the obstacles facing its implementation as determined by this group.

III. Section (1): general and special education teachers' attitude toward co-teaching:

This research indicated that general and special education teachers demonstrated a positive attitude toward the co-teaching approach. The majority of the teachers, 33 teachers 83%, stated that co-teaching is essential to ensure that students with special needs receive the needed support in the mainstream classroom.

91% of the teachers agree that co-teaching impacts students with special needs positively and helps them achieve their goals. Almost all teachers, 33/ 94%, agreed that both students with special needs and general education could benefit from co-teaching (Figure 1). However, there is one teacher who disagreed, and one teacher was neutral.

The teachers' responses were reasonably close when asked if the students with special needs could be best served in a separate setting since 37% agreed, 46% disagreed, and 17% were neutral. 82% of teachers believed that co-teaching provides students with opportunities for

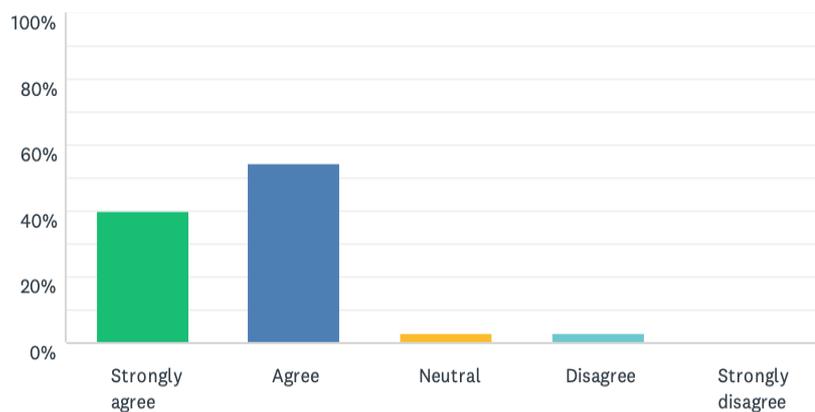
mutual communication with two teachers. Thus, this will maximize their experience and knowledge.

Furthermore, most general and special education teachers admitted that their planning skills were embedded by co-planning with a co-teacher. Teachers also reported that co-teaching allows them to regularly co-plan, enabling them to make appropriate and need- based modifications to every lesson.

Figure (1) Teachers' responses to Q12.

Q12 Both SOD and GED students can benefit from Co-teaching.

Answered: 35 Skipped: 0



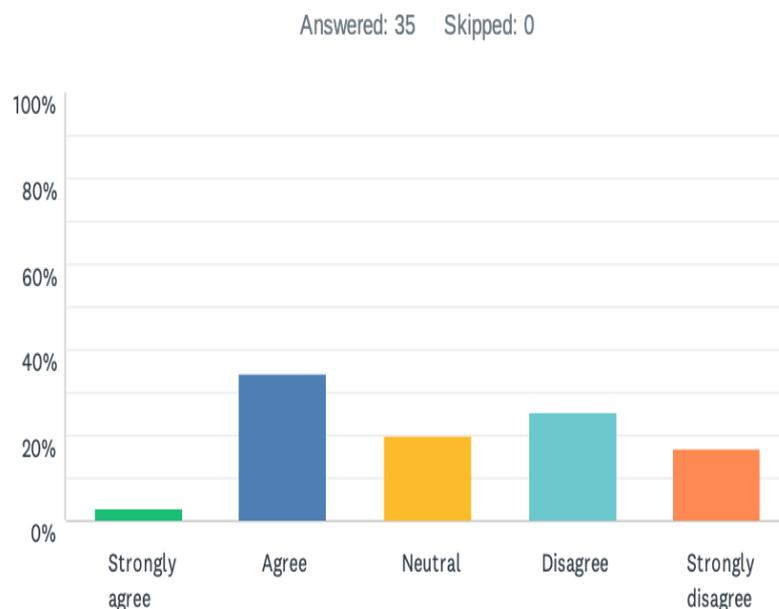
ANSWER CHOICES	RESPONSES	
Strongly agree	40.00%	14
Agree	54.29%	19
Neutral	2.86%	1
Disagree	2.86%	1
Strongly disagree	0.00%	0
TOTAL		35

One of the challenges of co-teaching is the argument about special education teachers' contributions to the content area. However, within this study, 37% of teachers agreed that

special education teachers are not qualified to teach the topic's content, and this will restrict their participation and efficiency in the class, while 42% disagreed with the previous statement. But it worth to mention here that 20% of the participants were neutral which might indicate that they have doubts about special education teacher's ability to teach the content (Figure 2).

Figure (2): Teachers' responses to Q12.

Q17 Special education teachers are not qualified to teach the subject's content, and this will restrict their participation and efficiency in the class.



Some of the survey questions were also measuring teachers' understanding of the co-teaching models, roles, and responsibilities for the general and special education teachers. Specifically, questions number 18,19, and 25 focused on teachers' experience and knowledge in co-teaching. The survey results demonstrated that 51% of the participants did not agree that the co-teaching in an inclusive setting means that the general education teacher will have an assistant teacher in the class regardless of the qualifications he/she has.

On the other hand, there is around 50% of the participants agree or not sure about the previous statement. Moreover, the teachers' responses on questions number 18&19 reflected that a significant number of teachers do not have the required understanding, knowledge, and experience about co-teaching. Since 34% of the participants agree that the co-teacher role is to sit next to the students with special needs and supporting them, 48% of the participants disagreed this statement.

More than 50% of the teachers did not agree that exposing students to two teachers might confuse them and negatively affect their progress, while 20% found that might be true.

One more time, the teachers showed a positive attitude toward co-teaching since most participants think that the general education teacher's instructional effectiveness will be enhanced by having a qualified special education teacher in the class. One teacher only disagrees and has a different opinion.

Time availability is one of the common obstacles affecting the effectiveness of co-teaching. 29% of the teachers of this school agreed that the co-teaching is a time-consuming practice. Therefore, the best approach to support students with special needs is providing the general education teacher with sufficient information and training on how to support the students without the need to co-plan and co-teach with the special education teacher, but 54% of the participants disagree with that, and 17% were neutral.

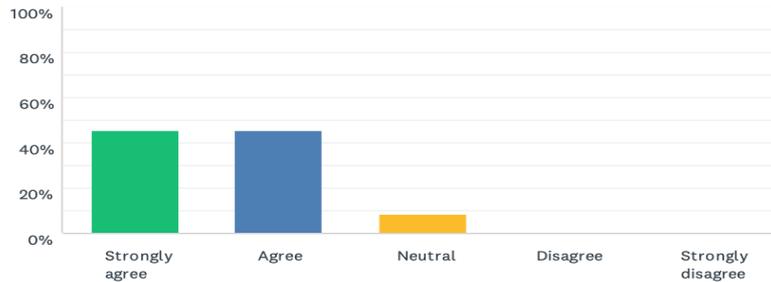
Another challenge facing teachers in this school is the documentation work. 63% of teachers agreed that the lack of clarity about who will be making the documentation work is one of the main concerns about co-teaching. On the other hand, the large majority of the teachers reported that the communication and the characteristics of the special and general education teachers are playing a vital role in the effectiveness and success of the co-teaching approach (Figure 3).

Moreover, the majority of the participants, 82%, disagree with saying that co-teaching is not effective and inapplicable.

Figure (3)- Teachers personal skills and characteristics

Q28 The communication and personal skills/characteristics of the SE/GED are playing a vital role in the effectiveness and success of the co-teaching method.

Answered: 35 Skipped: 0



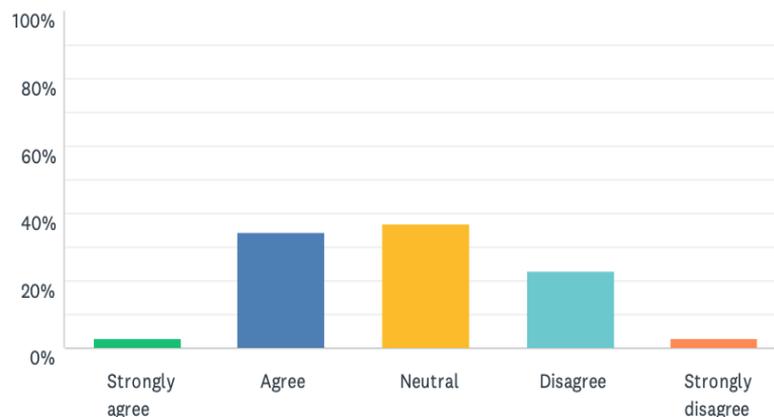
ANSWER CHOICES	RESPONSES
Strongly agree	45.71% 16
Agree	45.71% 16
Neutral	8.57% 3
Disagree	0.00% 0
Strongly disagree	0.00% 0

The teachers in this school are in need to get more training about co-teaching, 36% of the teachers only indicated that they have adequate knowledge about co-teaching and its different models (Figure 4).

Figure (4)- Teachers' knowledge about co-teaching

Q25 I have adequate knowledge about co-teaching and its different models.

Answered: 35 Skipped: 0



Overall, the research results show that the teachers in this particular school have a positive attitude toward co-teaching. Nevertheless, there is a significant number of teachers who lack the required knowledge and experience. Moreover, the lack of planning time, documentation, and clarity of the roles have been identified as critical barriers to effective co-teaching implementation—table (2) providing detailed data about all teachers' responses to the survey questions. More interpretation will be provided about special and general education teachers' responses in sections 2 and 3.

Table No. (2): All teachers' responses to the section 2 of the survey questions

No.	Components	Strongly agree	Agree	Neutral	disagree	Strongly disagree
10.	Co-teaching is essential to ensure that SOD students are receiving the support needed in the mainstream classroom.	48 %	46 %	3 %	3 %	0
11.	Co-teaching makes a positive impact on the SOD students' progress and helps them achieve their goals.	40 %	51 %	8.5 %	0	0
12.	Both SOD and GED students can benefit from Co-teaching.	40 %	54 %	3 %	3 %	0
13.	The needs of the SOD students can be best served in special, separate settings.	23 %	14 %	17 %	23 %	23 %
14.	Co-teaching provides students with opportunities for mutual communication with two teachers. Thus, this will maximize their experience and knowledge.	37 %	46 %	11 %	6 %	0
15.	Co-teaching gives me the opportunity to co-plan with my co-teacher regularly. Therefore, we can make appropriate and need-based modifications to every lesson.	54 %	37 %	6 %	0	3 %
16.	Special education teachers are trained to use different teaching methods to teach students with disabilities more effectively. Therefore, it would be better if they support the SOD students by pull-out sessions only.	23 %	20 %	11 %	40 %	6 %
17.	Special education teachers are not qualified to teach the subject's content, which will restrict their participation and efficiency in the class.	3 %	34 %	20 %	26 %	17 %
18.	Co- teaching in the Inclusive setting means that the GED teacher will have an assistant teacher in the class regardless of what qualifications she/he has.	3 %	28.5 %	17 %	40 %	11.5 %

19.	The (LST/SE) co-teachers' role is to sit next to the SOD students and support them.	6 %	28.5 %	17 %	37 %	11.5 %
20.	Exposing students to two teachers who might use different instructional methods will confuse them and negatively affect their progress.	8.5 %	11.5 %	20 %	48.5 %	11.5 %
21.	GED teachers' instructional effectiveness will be enhanced by having a qualified SE teacher in the class.	23.5 %	65 %	9 %	0	3 %
22.	I feel comfortable working with a co-teacher in my class.	23 %	54 %	11.5 %	8.5 %	3 %
23.	Co-teaching is a time-consuming practice. Therefore, the best approach to support the SOD students is providing the GED teacher with sufficient information and training on how to support the child without the need to co-plan nor co-teach with the SE teacher.	6 %	23 %	17 %	40 %	14 %
24.	Co-teaching is not effective and inapplicable.	0	6 %	11.5 %	49 %	34 %
25.	I have adequate knowledge about co-teaching and its different models.	3 %	34 %	37 %	23 %	3 %
26.	One of the main concerns about co-teaching is the lack of clarity about who will be making the modified work and documentation?	11 %	51 %	9 %	26 %	3 %
27.	According to my experience, co-teaching has had a positive impact on my SOD students' progress and on my teaching skills as well.	11 %	63 %	23 %	0	3 %
28.	According to my experience, co-teaching has had a positive impact on my SOD students' progress and my teaching skills.	46 %	46 %	8.5 %	0	0
29.	I respect my co-teaching partner and allow him/her to lead the instruction as appropriate.	51 %	37 %	11.5 %	0	0

IV. Section (2): Special education teachers' attitude toward co-teaching:

This section will discuss special education teachers' responses. Nine special education teachers participated in the research. The survey questions have been written to cover the main areas of the research's questions. Teachers' perspectives, attitudes, knowledge, and experience with Co-teaching impact students' performance. Furthermore, it considered barriers affecting the effective implementation of co-teaching. However, some questions were covering more than

one area. Special education teachers' responses will be interpreted and linked to these areas and the research questions.

V. Special Education teachers' general data presentation:

Nine special education teachers have taken the survey, two males and seven females. 67 % aged between 30- 39 years old and have a degree in education. 66 % of the special education teachers have more than 5-year experience working with students with disabilities. Three teachers were working in elementary school, and 4 of them teaching in the middle school, while two teachers are teaching in high school. The large majority, 88% of the special education teachers, have taken in-service training, which consists of training programs duration from one week to more than six months (table 3).

Table (3): Special Education teachers - General information

Components	Sub-Components	Frequency	Percentage
Male	-	2	22 %
Female	-	7	78 %
Age	20-29 years	0	0
	30-39 years	6	67 %
	+40 years	3	33 %
Educational Qualifications	Yes	6	67 %
	No	3	33 %
Experience teaching students with disability	Less than 1 year	1	11 %
	1-3 years	1	11 %
	3-5 years	1	11 %
	More than 5 years	6	67 %
Phase of teaching (grades he / she is teaching)	Phase 1(KG)	0	0
	Phase 2 (Elementary)	3	33 %
	Phase 3(Grades 6-8)	4	44 %

	Phase 4 Grades 9-12)	2	22 %
Special Education Training	Never	0	0
	Pre- Service	1	11 %
	In- Service	8	89 %
Pre- service/ In- service training duration	Less than one week	1	11 %
	1 week -1 month	2	33 %
	2-6 months	2	22 %
	More than 6 months	3	33 %

The research question number (1): What is the SE teachers' attitude toward co-teaching in an inclusive setting?

VI. Special education teachers' attitude toward co-teaching/RQ.1:

The findings of the study showed that special education teachers have a positive attitude toward co-teaching. The teachers reported that co-teaching is essential to ensure that students with disabilities receive the needed support in the mainstream classroom. All of the teachers agreed that co-teaching gives them good opportunities to co-plan with the general education teachers regularly, enabling them to make need-based curriculum adaptations every time.

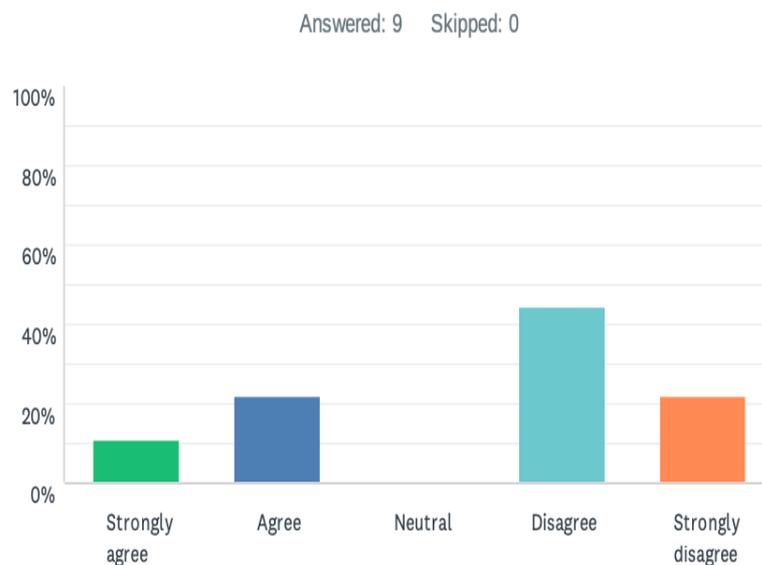
100% of the special education teachers confirmed that the general education teacher's instructional effectiveness would be enhanced by having a qualified special education teacher in the class. On the other hand, one teacher reported that she/he does not feel comfortable working with a co-teacher in the class, but the majority of the special education teachers have no issues with that.

The special education teachers' response to question number 23 was unexpected. Since 33% of the special education teachers believe that co-teaching is a time-consuming practice and the best approach to support students is to train the general teachers on how to support the children with disabilities without the need to co-teach or co-plan with the general education teacher. In

contrast, 66% did not agree with the previous statement (Figure 5). Almost all SED teachers agreed that constant communication and the personal skills of the SED and GED teachers play an essential role in co-teaching effectiveness. 100% of the teachers indicated that they respect their co-teaching partner.

Figure (5) Special education teachers' response to Q23

Q23 Co-teaching is a time-consuming practice. Therefore, the best approach to support the SOD students is providing the GED teacher with sufficient information and training on how to support the child without the need to co-plan nor co-teach with SE teacher.



ANSWER CHOICES	RESPONSES	
Strongly agree	11.11%	1
Agree	22.22%	2
Neutral	0.00%	0
Disagree	44.44%	4
Strongly disagree	22.22%	2

Summary: The special education teachers' attitude toward co-teaching is positive. The majority of the teachers realize the importance of co-teaching. They showed readiness to collaborate with their co-teachers in order to meet students' needs. However, it was clear that

some responses reflected teachers' doubts and lack of conviction about the effectiveness of co-teaching (Table No.4).

VII. Teachers Knowledge and experience about co-teaching RQ.1:

Compared to general education teachers, special education teachers are likely to have more knowledge of co-teaching. This conclusion is that special education teachers are working in the field of special education; thus, they are expected to have more experience as well. 44% of the special education teachers disagree that the needs of the students with special needs can best be served in a segregated setting. Two special education teachers agreed with this statement, and three teachers were neutral. The researcher discussed this response with one of the special education teachers who agreed with this statement during the semi-structured interview. The teacher justified her response that supporting the student in a separate setting gives her a chance to focus on students' weak areas and IEP goals away from the class's background noise and distractions.

33% of the special education teachers indicated that they are not qualified to teach the content, which might restrict their participation and effectiveness in the general classroom. The majority of the special education teachers did not agree that in the co-teaching approach, the SE/LST teacher's role is to sit close to SOD students and support them. This response refers to an in-depth understanding of the co-teaching model, especially one teach-one assist model. The special education teachers' role in this model is to walk around the class and support students with special needs and the other students when appropriate.

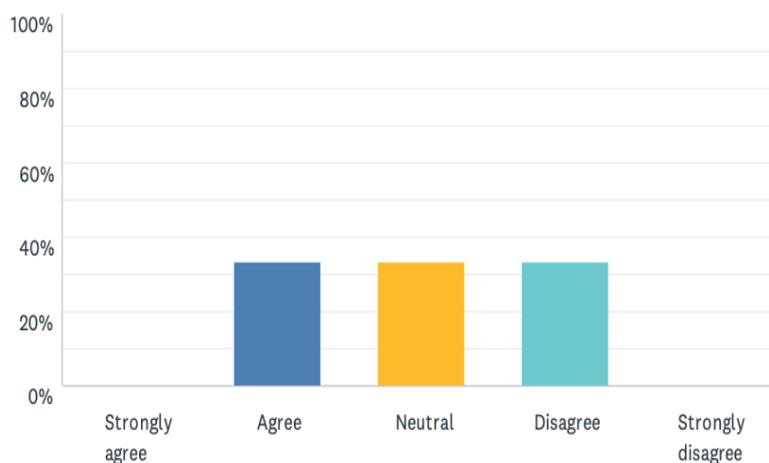
Summary: Special education teachers have adequate knowledge and experience in co-teaching. However, the teacher's responses were careful as 33% of the teachers admitted that they do not have sufficient knowledge about co-teaching, and 33% selected to be neutral (figure

6). Moreover, the analysis of the special education teachers' responses showed that they have a better understanding of co-teaching than general education teachers. However, the sample size and the number of participants from each category must be taken into consideration when comparing the findings between GED and SED teachers.

Figure (6)

Q25 I have adequate knowledge about co-teaching and its different models.

Answered: 9 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	0.00%	0
Agree	33.33%	3
Neutral	33.33%	3
Disagree	33.33%	3
Strongly disagree	0.00%	0
TOTAL		9

VIII. Co-teaching impact on students' progress, RQ No1:

The large majority, 88% of the special education teachers, agreed that co-teaching positively impacts the SOD students' progress and helps them achieve their goals. Both students with special needs and general education students benefit from co-teaching.

66% of the special education teachers stated that co-teaching enables students to communicate with two different teachers; thus, improving their skills and maximizing their knowledge. Implementing an ideal co-teaching program will give students with special needs a chance to be involved with heterogeneous groups. This action will enable each student to be in close contact with many students from diverse capabilities. Hence, the student with special needs will develop his/her social and academic skills. Furthermore, from 66% of special education teachers' perspectives, exposing students to two teachers who might use different teaching methods will not affect students' progress.

In comparison, 22% see that there will be an adverse effect on students' progress when two teachers teach them. From special education teachers' perspective, co-teaching is an essential method to support students with specific needs. Finally, 77% of the SED teachers stated that co-teaching positively impacted their students' progress according to their experience.

Summary:

IX. Main barriers that teachers face to implement co-teaching, RQ No.3 effectively:

The data used to identify the barriers affecting effective implementation of co-teaching from special education teachers' perspectives and experience has been obtained from the semi-structured interview and the analysis of particular questions in the survey (Q17,23,26 and 30).

The special education teachers have indicated the following as the main barriers affecting effective co-teaching implementation:

Lack of planning time.

Load of work – documentation.

Lack of training and professional development workshops.

General education teachers' collaboration.

Table No. (4): Special education teachers' responses to the section 2 of the survey questions

No.	Components	Strongly agree	Agree	Neutral	disagree	Strongly disagree
10.	Co-teaching is essential to ensure that SOD students are receiving the support needed in the mainstream classroom.	67 %	22 %	11 %	0	0
11.	Co-teaching makes a positive impact on the SOD students' progress and helps them achieve their goals.	55 %	33 %	11 %	0	0
12.	Both SOD and GED students can benefit from Co-teaching.	33 %	55 %	11 %	0	0
13.	The needs of the SOD students can be best served in special, separate settings.	22 %	0	33 %	33 %	11 %
14.	Co-teaching provides students with opportunities for mutual communication with two teachers. Thus, this will maximize their experience and knowledge.	22 %	44 %	22 %	11 %	0
15.	Co-teaching gives me the opportunity to co-plan with my co-teacher regularly. Therefore, we can make appropriate and need-based modifications to every lesson.	44 %	55 %	0	0	0
16.	Special education teachers are trained to use different teaching methods to teach students with disabilities more effectively. Therefore, it would be better if they support the SOD students by pull-out sessions only.	33 %	0	11 %	44 %	11 %
17.	Special education teachers are not qualified to teach the subject's content, which will restrict their participation and efficiency in the class.	0	33 %	11 %	11 %	44 %
18.	Co-teaching in the Inclusive setting means that the GED teacher will have an assistant teacher in the class regardless of what qualifications she/he has.	0	22 %	11 %	33 %	33 %
19.	The (LST/SE) co-teachers' role is to sit next to the SOD students and support them.	0	11 %	22 %	44 %	22 %
20.	Exposing students to two teachers who might use different instructional methods will confuse them and negatively affect their progress.	11 %	11 %	11 %	44 %	22 %
21.	GED teachers' instructional effectiveness will be enhanced by having a qualified SE teacher in the class.	25 %	75 %	0	0	0
22.	I feel comfortable working with a co-teacher in my class.	22 %	44 %	22 %	0	11 %
23.	Co-teaching is a time-consuming practice. Therefore, the best approach to support the SOD students is providing the GED teacher with sufficient information and training on how to support the child without the need to co-plan nor co-teach with the SE teacher.	11 %	22 %	0	44 %	22 %

24.	Co-teaching is not effective and inapplicable.	0	0	11 %	44 %	44 %
25.	I have adequate knowledge about co-teaching and its different models.	0	33 %	33 %	33 %	0
26.	One of the main concerns about co-teaching is the lack of clarity about who will be making the modified work and documentation?	11 %	44 %	0	33 %	11 %
27.	According to my experience, co-teaching has had a positive impact on my SOD students' progress and on my teaching skills as well.	22 %	55 %	11 %	0	11 %
28.	According to my experience, co-teaching has had a positive impact on my SOD students' progress and my teaching skills.	55 %	44 %	0	0	0
29.	I respect my co-teaching partner and allow him/her to lead the instruction as appropriate.	44 %	55 %	0	0	0

X. Section (3): General education teachers' attitude toward co-teaching:

This section will provide interpretation for General education teachers' responses. Twenty-six general education teachers have participated in the study. Three of them were selected for semi-structured interviews. The answers for research questions number 2 and 3 will be presented, discussed and elaborated within this section. The findings of general education teachers' attitudes, teacher's knowledge, and experience Co-teaching impact on students from teachers' perspectives, and barriers affecting effective implementation of co-teaching will be discussed respectively in this section.

XI. General education teachers' - General data presentation:

The total number of general education teachers who participated in this study was 26 teachers; this consisted of six males and 20 females. 65% of the GED participants were between 20-39, and 34 were above 40 years. The large majority of the GED participants have a degree in education. 57 % of the general education teachers have more than five-year experience working with students with disabilities. The participants are teaching in different grades and phases, as three were teaching in phase- 1, 8 teachers were teaching in phase- 2, 4 teachers were teaching

in phase 3, and 11 teachers were teaching in phase 4. More than 50% of the participants have taken special education training, whether pre or in – service. (table 5).

Table (5): General Education teachers - General information

Components	Sub-Components	Frequency	Percentage
Male	-	6	23 %
Female	-	20	77 %
Age	20-29 years	6	23%
	30-39 years	11	42 %
	+40 years	9	34 %
Degree in education	Yes	23	88.5 %
	No	3	11.5 %
Experience teaching students with disability	Less than 1 year	2	8 %
	1-3 years	5	19 %
	3-5 years	4	15 %
	More than 5 years	15	58 %
Phase of teaching (grades he / she is teaching)	Phase 1(KG)	3	11.5 %
	Phase 2 (Elementary)	8	31 %
	Phase 3(Grades 6-8)	4	15 %
	Phase 4 Grades 9-12)	11	42 %
Special Education Training	Never	6	24 %
	Pre- Service	6	24 %
	In- Service	13	52 %
Pre- service/ In- service training duration	Less than one week	8	11 %
	1 week -1 month	5	33 %
	2-6 months	6	22 %
	More than 6 months	6	33 %

The research question number (2): What is the general education teachers' attitude toward co-teaching in an inclusive setting?

XII. General education teachers' attitude toward co-teaching/RQ.2:

The analysis of general education teachers' responses demonstrated that 96% of the participants agree that co-teaching is very important to ensure that students with special needs receive appropriate support (figure.7).

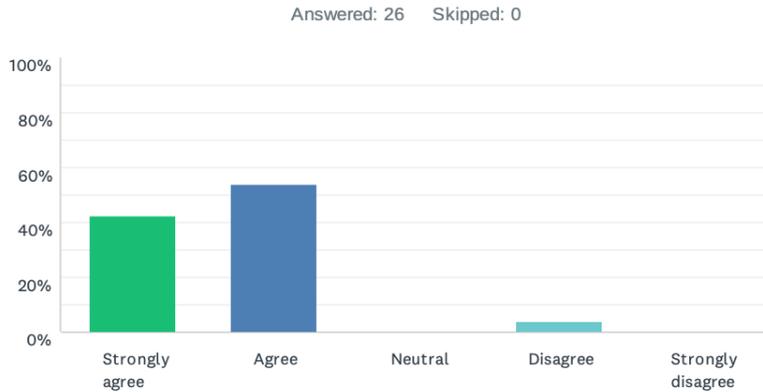
The researcher was surprised and not expecting this percent. However, associating the teachers' responses to this question with their responses on questions 11,12,14and 15, indicating that the general education teachers have a positive attitude toward co-teaching. They understand and appreciate its importance as a collaborative approach to teach students and meet their needs. This finding was also validated by the semi- structured interviews that have been done with the teachers. During the interview, the GED teachers provided positive feedback about the co-teaching relationships with their partners.

Moreover, 84% of the general education teachers indicated that their instructional effectiveness would be enhanced by having a qualified special education teacher in the class. Around 80% of the GED teachers mentioned that they feel comfortable working with a co-teacher in their classes. The majority of 88% of the teachers emphasized communication and personal skills in co-teaching relationships.

Summary: This study's findings demonstrated that most general education teachers who currently co-teach at this school are satisfied with the co-teaching approach and show a positive attitude toward it. This response was a strong indication that the co-teaching program at this particular school is effective. However, teachers indicated many significant factors affecting co-teaching effectiveness.

Figure (7)- General Education teachers' responses to Q10

Q10 Co-teaching is essential to ensure that SOD students receiving the support needed in the mainstream classroom.



ANSWER CHOICES	RESPONSES	
Strongly agree	42.31%	11
Agree	53.85%	14
Neutral	0.00%	0
Disagree	3.85%	1
Strongly disagree	0.00%	0
TOTAL		26

XIII. General Education Teachers' Knowledge and experience about co-teaching

RQ.2:

One of the common issues raised by the general education teachers was the lack of knowledge and training in the co-teaching models. All of the interviewed general education teachers reported using one teach-one assist co-teaching model and lacking the information about the effective implementation of the other models.

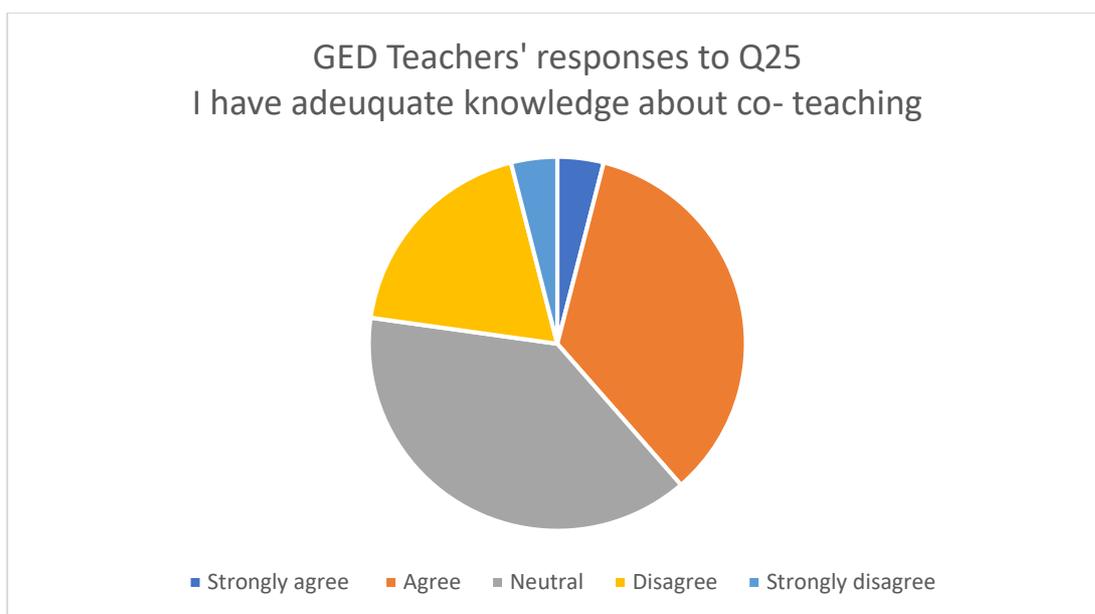
40% of the general education participants agreed that it would better support students with disabilities by pull-out sessions only. This percent was shocking to the researcher as this response does not match the positive responses and overall satisfaction. The researcher carried out his questions and asked the general education teachers during the interviews.

Teachers clarified that some severe cases might not benefit from co-teaching and supporting them in a separate setting might be more effective! 39% of the general education teachers

expressed their concerns about the special education teachers' ability to teach the content and how this will restrict their participation and the effectiveness in the class. Moreover, teachers' responses showed an apparent misunderstanding of the special education teachers' role in the co-teaching program. Only 39 of the general education teachers mentioned that they have adequate knowledge about co-teaching and its different models.

Summary: Despite the positive attitude that the general education teachers demonstrated toward co-teaching, it was clear that teachers lack the necessary information and practical training about the right method to implement it. Moreover, teachers need to know more about the different models of co-teaching and its benefits.

Figure (8)- General Education teachers' knowledge about co-teaching



XIV. Co-teaching impact on students' progress, RQ No.2:

The results of the data obtained from the survey and the semi-structured interviews show that co-teaching positively impacts students' progress as 91% of the general education teachers reported that.

Furthermore, 96% of the general education teachers indicated that both students with disabilities and general education could benefit from co-teaching. Teachers also believe that

co-teaching provides students with opportunities for mutual communication with teachers, which will enrich their knowledge.

According to 73% of the GED participants' experience, co-teaching has positively impacted the students with disability succession. However, some teachers raised concerns about the confusion that might occur when exposing students to different teachers with diverse teaching methods, 20% of the 20 general education teachers were concerned about the impact of co-teaching on students' understanding.

XV. Main barriers that teachers face to implement co-teaching, RQ No.3 effectively:

The third question of this research study was to collect data about the main barriers that affect co-teaching effective implementation. The common barriers to effective Co-teaching are lack of training, teacher's personality or philosophical clashes, limited resources, scheduling issues, reluctance to lose control, lack of time, and lack of administrative support (Murawski, 2010).

The quantitative and qualitative data obtained from general education teachers' responses identified the following main barriers facing effective co-teaching.

The general education teachers identified a lack of time, lack of training, and lack of human resources as the main barriers. Moreover, 39% of the general education teachers were concerned about the special education teachers and their ability to teach the subject's content. Some teachers believe that this issue will affect the special education teacher's contribution and effectiveness. Teachers added that this lack of knowledge about the content might affect the entire co-teaching relationship and restrict the team's capability to use diverse co-teaching models.

During the interview with the researcher, teachers highlighted a barrier that the researcher believes is worth taking more time to study. Teachers indicated that the lack of human

resources and qualified special education teachers affect the co-teaching relationship's quality since the available special education teachers have to co-teach and co-plan with many general education teachers. Consequently, special education teachers became tired, distracted, and struggle to fulfill their commitment in some cases. 64% of the general education teachers mentioned that one of the main concerns about co-teaching is the lack of clarity about making the modified work and the documentation. General education teachers justified their concern that they are already overloaded with documentation and paperwork as they are preparing exams, worksheets, and resources for their lessons. They think special education teachers have less work than general education teachers, so it is more sensible to assign them such tasks. Finally, one more barrier affecting co-teaching relationship and effectiveness is identifying roles and responsibilities according to the implemented co-teaching model.

43% of the general education teachers agree that the special education teacher's role is to sit next to students with special needs and support them. However, the same percentage of teachers do not agree with this and see that the special education teacher's role is beyond that.

Table No. (6): General education teachers' responses to the section 2 of the survey questions

No.	Components	Strongly agree	Agree	Neutral	disagree	Strongly disagree
10.	Co-teaching is essential to ensure that SOD students are receiving the support needed in the mainstream classroom.	42 %	54 %	0	4 %	0
11.	Co-teaching makes a positive impact on the SOD students' progress and helps them achieve their goals.	34 %	58 %	8 %	0	0
12.	Both SOD and GED students can benefit from Co-teaching.	42 %	54 %	0	4 %	0
13.	The needs of the SOD students can be best served in special, separate settings.	23 %	19 %	11 %	19 %	27 %
14.	Co-teaching provides students with opportunities for mutual communication with two teachers. Thus, this will maximize their experience and knowledge.	42 %	46 %	8 %	4 %	0

15.	Co-teaching gives me the opportunity to co-plan with my co-teacher regularly. Therefore, we can make appropriate and need-based modifications to every lesson.	58 %	31 %	8 %	0	4 %
16.	Special education teachers are trained to use different teaching methods to teach students with disabilities more effectively. Therefore, it would be better if they support the SOD students by pull-out sessions only.	19 %	27 %	11 %	38 %	4 %
17.	Special education teachers are not qualified to teach the subject's content, which will restrict their participation and efficiency in the class.	4 %	34 %	23 %	31 %	8 %
18.	Co-teaching in the Inclusive setting means that the GED teacher will have an assistant teacher in the class regardless of what qualifications she/he has.	4 %	31 %	19 %	42 %	4 %
19.	The (LST/SE) co-teachers' role is to sit next to the SOD students and support them.	8 %	35 %	15 %	35 %	8 %
20.	Exposing students to two teachers who might use different instructional methods will confuse them and negatively affect their progress.	8 %	11 %	23 %	50 %	8 %
21.	GED teachers' instructional effectiveness will be enhanced by having a qualified SE teacher in the class.	23 %	61 %	12	0	4 %
22.	I feel comfortable working with a co-teacher in my class.	23 %	58 %	8 %	11	0
23.	Co-teaching is a time-consuming practice. Therefore, the best approach to support the SOD students is providing the GED teacher with sufficient information and training on how to support the child without the need to co-plan nor co-teach with the SE teacher.	8 %	23 %	23 %	38 %	11 %
24.	Co-teaching is not effective and inapplicable.	0	8 %	11 %	50 %	34 %
25.	I have adequate knowledge about co-teaching and its different models.	4 %	35 %	38 %	19 %	4 %
26.	One of the main concerns about co-teaching is the lack of clarity about who will be making the modified work and documentation?	11 %	54 %	11.5 %	23 %	0
27.	According to my experience, co-teaching has had a positive impact on my SOD students' progress and on my teaching skills as well.	8 %	65 %	27 %	0	0
28.	According to my experience, co-teaching has had a positive impact on my SOD students' progress and my teaching skills.	42 %	46 %	11	0	0
29.	I respect my co-teaching partner and allow him/her to lead the instruction as appropriate.	54 %	31 %	15 %	0	0

XVI. Summary Semi- Structured interviews:

The semi-structured interview is a collecting data method used by the researcher to collect qualitative data from particular participants. The interview form consisted of five main questions asking about co-teaching relationships between the general and special education teachers, how each teacher describes his/her knowledge and experience in co-teaching. Moreover, there was a question about students' rights to be taught in an inclusive setting. Finally, the teachers have been asked about the barriers affecting their co-teaching relationship. The researcher has interviewed three teachers, one special education teacher, and two general education teachers, and all of them were females.

The special education teachers are the advocates of their students. The special education teacher's interview was very productive; she described her co-teaching relationship with her partner, indicated that they have in advance scheduled meetings for co-planning, and usually meet weekly. The teacher also mentioned that she is collaborating and co-teaching with around four teachers as she is the case manager for four students. This teacher has received in-service training about co-teaching, IEP, and accommodations. She mentioned that the training helped her to improve the quality of co-teaching program outcomes.

However, she emphasized the need for more training programs about the different models of co-teaching. When asked about the SOD students' rights to inclusive education, the teacher advocated her students' rights. Further, she was aware of UAE federal laws and regulations regarding the people of determination rights. She highlighted the rights of students to have equitable access to the curriculum and resources. At this point, the researcher expanded the conversation by indicating that according to the survey results, 22% of the special education teachers strongly agreed that the needs of the SOD students could be best served in a special

separate setting. The teacher commented that some special needs students still need to be pulled out to get specialized services with a well-equipped resources room.

Furthermore, the special education teacher indicated some barriers that are facing effective co-teaching implementation. She said that personal skills and the characteristics of the general education teacher are playing a vital role in the success of the co-teaching relationship. Lack of time was also a significant barrier as the teacher reported since she has to co-plan with many teachers and needs a long time to find a convenient time for everyone.

The special education teacher has used two models of co-teaching with her partner. According to this teacher's experience, the most used co-teaching model is the one teach- one assist approach. She's also indicated that they are using station models sometimes.

The interview with the general education teachers was conducted separately. The researcher has interviewed two general teachers focusing on the previously mentioned question and discussing some of the survey's findings. The general education teachers expressed their satisfaction with their co-teaching relationships with their partners, one of the teachers experiencing the co-teaching for the first time. "The co-planning with a special education teacher is facilitating my work, make me confident and allow me to provide the support needed," the teacher reported. The GED teachers co-teaching enhanced their instructional skills since they gained excellent experience in curriculum adaptation for different types of disabilities over time.

One of the general education teachers indicated that she has good co-teaching experience since she is practicing co-teaching five years ago. Nevertheless, both teachers need professional

development workshops to expand their knowledge and improve their co-teaching relationships. Teachers have agreed the right of the students with special needs to be taught within the mainstream classroom. One of the teachers expressed her concern about the severe cases and believed it would be better to receive alternative support outside the class. Both teachers showed a lack of information about the UAE regulations concerning students of determination.

The general education teachers agreed with what was mentioned by the special education teacher and literature about the lack of planning time. This massive obstacle affects the quality of the co-teaching outcomes and the teachers' relationships. since scheduling issues are common and frequent among this process, this causes conflicts in some cases.

The second significant barrier influence the effectiveness of co-teaching is lack of training and professional development. They need to know more about roles and responsibilities, models of co-teaching, pros and cons for each model, and how they can overcome the barriers they face. The general education teachers also agreed with what was mentioned by the special education teacher. The most used co-teaching model is one teach- one assist. The station models are in use during the students' group work or collaborative learning which is a school-wide practice.

However, the special education teacher mainly focuses on the students with the disability group. The researcher concluded that despite the positive attitude and passion toward co-teaching that teachers have shown. However, the implementation of the co-teaching model one teaches -one assist is not accurate as the special education teacher often provides support to the students with disabilities only.

XVII. Discussion:

This study was conducted to investigate general and special education teachers' attitudes toward co-teaching in an inclusive setting and identify the main barriers affecting its effective implementation. This area has rarely been investigated in the middle east and UAE. The researcher shared an online survey with 35 general and special education participants and conducted three semi-structured interviews to obtain the required quantitative and qualitative data. This study's findings were interesting and will be beneficial for future studies intending to investigate the same problem.

This study's findings found that both general and special education teachers working at this school have a positive attitude toward co-teaching programs. The majority of the teachers stated that co-teaching is very important to ensure that students with special needs receive the needed support in the mainstream classroom and positively impact their progress. According to teachers' perspectives and experience, co-teaching is beneficial for students with disabilities and general education students.

Co-teaching relationships allow teachers to teach, plan, and assess together, so teachers will become more able to make appropriate and need-based modifications to the curriculum. This type of collaboration will embed teachers' skills and experience. Moreover, the study deduced that very few teachers have a negative attitude toward inclusive education and co-teaching. These few responses agreed the segregation of the students with special needs and believed that supporting them in a separate setting would be better for them.

Despite the positive feedback that teachers provided about co-teaching, co-teaching in this school is not meeting the international standards. The researcher noticed that one co-teaching

model was frequently used at the school. The standard co-teaching practice within the school is one teach – one assist. Usually, the general education teacher leads the instruction, while the special education teacher supports the other students. This feedback emphasizes a strong need for a comprehensive training program to be given for the teachers to enhance their knowledge about co-teaching.

The third research question of this study was about identifying the main barriers facing co-teaching effective implementation. Question number 30 in the survey was asking teachers to list the barriers they are facing. Teachers have listed several obstacles that prevent them from having effective co-teaching implementation. However, the fourth question on the interview was explicitly asking about the main barriers to effective co-teaching. Moreover, the survey examined teachers' perspectives about at least three common barriers identified in the literature.

Teachers have indicated many barriers according to their experience, such as:

- Lack of resources.
- Lack of training
- Multi-tasking and workload.
- Online learning – Distance learning
- Documentation
- lack of resources for accommodations and modifications.
- Collaborative workspace.
- Lack of timing for co-planning.
- Students' attitudes.
- Special education teacher co-teaches and co- plans with many teachers.
- Paperwork.
- Language barrier.

- Teachers collaboration.
- Lack of communication
- Using different teaching methods might confuse students.
- Few special education teachers are available at school.

The following barriers have been identified as the main barriers hindering implementing effective co-teaching at this particular school. Each barrier will be discussed separately:

Lack of planning time: Having sufficient time to co-plan with co-teacher has been identified as the most critical factor for ensuring the success of co-teaching, or conversely, the number one barrier when it is absent (Murawski.2010. p.48). This study's findings indicated that the lack of planning time is one of the main barriers hindering co-teaching effective implantation. Schools must provide teachers who have students with special needs in their classes with adequate time for co-planning.

Lack of training:

Lack of professional development in team teaching is essential to have effective team teaching. It is very challenging for a teacher to co-teach with a partner when he/she does not have the required knowledge to do that. Lack of professional development has led many teachers to have a negative experience with co-teaching (Murawski, .2010. p.47).

Lack of human resources (special education teachers):

The central pillar of establishing a co-teaching relationship is the availability of two qualified special and general education teachers. The availability of a sufficient number of special education teachers will undoubtedly improve the co-teaching program's quality and efficiency.

Lack of resources: The lack of resources is always one of the main barriers affecting the quality of co-teaching outcomes. Lack of resources might cause conflict between teachers and significantly negatively affect the co-teaching relationship.

Chapter (5)

I. Limitations:

- Size of the sample: The sample's size consisted of a limited number of participants as it was conducted in one private school. Therefore, the findings of the research cannot be generalized.
- The ratio of special education teachers verses the general education teachers:
- The sample of participants for this study consisted of 9 special education teachers versus 26 general education teachers; this must be considered when reading the findings of the special education teachers' attitude.
- Due to the current situation of Covid-19, the researcher shared an online survey with the participants as sharing printed material is not allowed currently.
- Due to the current situation of the Covid-19 pandemic, the semi-structured conducted virtually.

II. Ethical treatment:

The researcher maintained ethical treatment throughout the research process. The researcher obtained informed consent from the school director general; the participants have not requested to disclose any personal data. The participants' responses will be kept confidential and will never be used for any other purpose. The identity will be anonymous. Participation in the study was optional. The participant received a letter attached to the survey explaining the study's purpose, what required teachers, and confirmation of confidentiality.

III. Feasibility:

his research will contribute close to the gap in the literature, as mentioned earlier in the research. A few types of research investigated this problem within the middle east and the United Arab Emirates. The study's findings might play a gaudiness role in schools' principles

and stakeholders to take the required measures to improve the quality of co-teaching outcomes in their schools. Moreover, the effective implementation of co-teaching, which is the teaching approach investigated in this study, will encourage the schools to register more students with special needs. The students will be supported within the regular classroom and might not require additional school budget costs.

IV. Conclusion:

The purpose of this research study was to investigate the special and general education teachers' attitudes toward co-teaching in an inclusive setting. The targeted sample was general education teachers and special education teachers with at least one student with a disability in their classes. The result of this research demonstrated that general and special education teachers have a positive attitude toward the co-teaching approach. The majority of the teachers, 33 teachers 83%, stated that co-teaching is essential to ensure that students with special needs receive the needed support in the mainstream classroom.

91% of the teachers agree that co-teaching positively impacts the students' progress and helps them achieve their goals. Almost all teachers, 33/ 94% agreed that both students with special needs and general education students could benefit from co-teaching. The research identified the lack of time for co-planning, lack of human and supplemental resources, and lack of training as the significant barriers facing the effective implantation of co-teaching.

Co-teaching is an instruction delivery approach. It is requiring two licensed and qualified teachers working together collaboratively to meet students' needs. One teacher is trained and has experience in teaching a large group of students, and the other is trained and has experience in supporting individuals and meeting students' needs (Peery,2020. p.26). This approach could be implemented in different models. An awareness of the varied co-teaching models is

important with the understanding to be intentional when selecting the right model for a specific lesson (Stein,2018. p.35). However, the implementation of co-teaching is challenging and could be affected by different factors. Lack of experience, and limited understanding of the co-teaching process, unclarity of the roles and responsibilities are factors that might lead to reluctant co-teaching.

Teachers' attitudes and readiness are significantly affecting the success of co-teaching, as it is the cornerstone in this process. When teachers are qualified, trained, have a positive attitude, and work collaboratively, co-teaching will be efficient and beneficial for students with special needs and general education students. Moreover, to ensure a successful co-teaching approach, teachers must be provided with adequate administrative support. Administrators play a crucial role in finding or creating time for teachers to plan, providing resources among staff, and encouraging the partnership between teachers (W. Murawski,2010. p.49).

V. Recommendations for future research:

As this study's problem is rarely investigated within the UAE, the researcher highly encourages researchers to examine this problem more and more to reach a practical and successful co-teaching approach implanted in the UAE and Dubai in particular. There are many areas that researchers can focus on it for future researches. The researcher recommends the other researchers use the experimental research design to investigate the co-teaching impact on students' academic achievement. The researcher believes that the literature in the middle east and the United Arab Emirates needs more research on this particular problem. It will be a valued addition to the literature to know if there is a significant difference in the academic achievement between students exposed to a co-teaching teaching approach compared to students exposed to a traditional one teacher deliver instruction approach. Furthermore, the researcher recommends the following areas to be investigated by future researches.

- Conduct research investigating teachers' attitudes across Dubai schools, a bigger sample size.
- Examine the co-teaching impact on students' progress using an experimental research design.
- Use an observation data collection method to validate the results of data collected by surveys and interviews.
- Investigate barriers facing co-teaching implementation in inclusive schools.
- Investigate the ratio of schools uses co-teaching as the main approach to deliver support to students with special needs.
- Conduct a gender-based comparison between women's and men's teachers' attitudes.

Finally, this study aimed to investigate the general and special education teachers' attitudes toward co-teaching in private inclusive settings in Dubai. A mixed-method research design was used to answer the research questions. The data collected by semi-structured interviews and an online survey. The study's findings showed that the general and special education teachers in the investigated setting have a positive attitude toward co-teaching as a collaborative approach to support students with special needs. The significant barriers to effective co-teaching have been identified and discussed in the study. It is hoped that this study's results will pave the way for future research in this rather version area of research and encourage further development of the field.

References

Anati, N. (2012). INCLUDING STUDENTS WITH DISABILITIES IN UAE SCHOOLS: DESCRIPTIVE STUDY. *International Journal of Special Education*. Retrieved from:

https://www.researchgate.net/publication/285994640_Including_students_with_disabilities_in_UAE_schools_A_descriptive_study

Banks, Cheryl M., "A Qualitative Study on Teachers' Perceptions of Co-Teaching in Inclusion Classrooms" (2018). Seton Hall University Dissertations and Theses (ETDs). 2606. <https://scholarship.shu.edu/dissertations/2606/>

Batts, Felicia O., "Effective Strategies for Co-Teaching" (2014). Specialist in Education Degree (Ed.S.) Theses. 3. <https://kb.gcsu.edu/eds/3/>

Burley, Kathryn Rose, "A Study of How the Components of Effective Co-Teaching are Implemented in Middle School Content Area Classrooms in One Suburban School District" (2015). School of Education Student Capstone Theses and Dissertations. 240. https://digitalcommons.hamline.edu/hse_all/240/

Brown, Z. (2016). *Inclusive Education: Perspectives on pedagogy, policy and practice* (The Routledge Education Studies Series) (1st ed.). Routledge.

Cermele, Amy Marie, "Measuring the Impact of Three Different Co-Teaching Models on Student Test Results in Ninth-Grade Algebra I" (2017). Education Doctoral. Paper 300. https://fisherpub.sjfc.edu/cgi/viewcontent.cgi?article=1303&context=education_etd

Conderman, G. J., Bresnahan, M., & Pedersen, T. (2008). *Purposeful Co-Teaching: Real Cases and Effective Strategies* (1st ed.). Corwin.

Creswell, J. W., & Creswell, J. D. (2014). *Research design qualitative, quantitative, and mixed methods approaches*. Los Angeles: SAGE.

Creswell, J. W., & Clark, V. P. L. (2017). *Designing and Conducting Mixed Methods Research* (3rd ed.). SAGE Publications, Inc.

Creswell, J. W., & Creswell, D. J. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). SAGE Publications, Inc.

Creswell, J. W., & L., P. C. (2018). *Designing and conducting mixed methods research*. Thousand Oaks, CA: SAGE.

Cary L. Harper, B. A. (2009). PERCEPTIONS OF THE CO-TEACHING EXPERIENCE: EXAMINING THE VIEWS OF TEACHING STAFF AND STUDENTS. Marietta College.

Cohen, L., Manion, L., & Morrison, K. (2007). Research methods in education. London: Routledge.

Case, Matthew, "A Qualitative Case Study of Coteaching Relationships" (2017). Electronic Theses and Dissertations. Paper 3327.<https://dc.etsu.edu/etd/3327/>

Daniels Harry (Professor in Special Education and Educational Psychology University of Birmingham) & Garner Philip (Professor of Special Education Needs Nottingham Trent University). (2000). Inclusive Education (World Yearbook of Education) (1st ed.). Routledge.

Dubai Inclusive Policy Framework (2016), KHDA publications.

https://www.khda.gov.ae/cms/webparts/texteditor/documents/Education_Policy_En.pdf

Frederickson, T. (2009). *Special Educational Needs, Inclusion And Diversity* (2nd ed.). Open University Press.

Galletta, A., & Cross, W. E. (2013). Mastering the Semi-Structured Interview and Beyond: From Research Design to Analysis and Publication (Qualitative Studies in Psychology, 18). NYU Press.

Gonzalez, Linda "The Effects of Co-Teaching on the English Language Arts Achievement of General Education Tenth-Grade Students"(2015) Education Master. Paper 39.

Graham, L. (2020). Inclusive Education for the 21st Century: Theory, policy and practice (1st ed.). Routledge.

<https://scholarworks.csustan.edu/bitstream/handle/011235813/927/GonzalezL%20Sp2015.pdf?sequence=1>

Hutchinson, Kaitlin Marie, "How Does Inclusion With Co-Teaching Affect Student Performance on Summative Assessments?" (2015). Masters Theses. Paper 4.

https://digitalcommons.otterbein.edu/cgi/viewcontent.cgi?article=1003&context=stu_master

Holliday, Lindsay, "Effective Co-Teaching Within the Inclusive Classroom." (2011). Education Masters. Paper 70.

https://fisherpub.sjfc.edu/cgi/viewcontent.cgi?article=1069&context=education_ETD_master

Haselden, P. G. (2011). Effects of Co-Teaching on the Biology Achievement of Typical and At-risk Students Educated in Secondary Inclusion Settings, *Electronic Journal for Inclusive Education*, 2 (8).

<https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?referer=https://www.google.ae/&httpsredir=1&article=1131&context=ejie>

Inclusive Education: International Policy and Practice)] [Author: Ann Cheryl Armstrong] published on (January, 2010). (2010). Sage Publications Ltd.

Inclusive Education: Making Sense of Everyday Practice. (2017). Brill - Sense.

Khoury, Christopher “The Effect of CO-Teaching on the Academic Achievement Outcomes of Students with Disabilities” (2014) Education Doctoral. Paper 102.

https://digital.library.unt.edu/ark:/67531/metadc699966/m2/1/high_res_d/dissertation.pdf

Loreman, T., Dappeler, J. M., & Harvey, D. (2011). *Inclusive education: Supporting diversity in the classroom*. Crows Nest, N.S.W.: Allen & Unwin.

McCarty, A. E. (2013). *Co-Teaching in the Inclusion Classroom: Teacher Perspectives and Practices*. George Mason University.

Mallory, B. L., & New, R. S. (1994). Social Constructivist Theory and Principles of Inclusion: Challenges for Early Childhood Special Education. *The Journal of Special Education*, 28(3), 322-337. doi:10.1177/002246699402800307

Murawski, W. W. (2005). *Collaborative teaching in elementary schools: Making the co-teaching marriage work!* Thousand Oaks: Corwin.

Murawski, W. (2009). *Collaborative Teaching in Elementary Schools: Making the Co-Teaching Marriage Work!* (1st ed.). Corwin.

Malian, I., & McRae, E. (2010). Co-Teaching Beliefs to Support Inclusive Education: Survey of Relationships between General and Special Educators in Inclusive Classes, *Electronic Journal for Inclusive Education*, 2 (6).

Nunes, A. (2018). *Inclusion Teachers’ Perspectives on Coteaching*. Walden University.

Parker, Alicia “The Impacts of Co-Teaching on the General Education Student” (2010) Education Master. Paper 118.

Available at:

<https://stars.library.ucf.edu/cgi/viewcontent.cgi?referer=https://www.google.ae/&httpsredir=1&article=5194&context=etd>

Parker, Ashley "The Impact of Co-Teaching on Student Achievement and Behavior at a Title I Middle School" (2017) Education Master. Paper 44.

https://csusm-dspace.calstate.edu/bitstream/handle/10211.3/198635/ParkerAshley_Fall2017.pdf?sequence=3

Ratcliff, Christopher, "Co-Teaching: How do Teachers Rate Barriers to Effective Co-Teaching?" (2016). All Capstone Projects. Paper 227.

Rabren, K. (2009). An Examination of Co-Teaching Perspectives and Efficacy Indicators. Remedial and Special Education.

Sivan, E. (1986). Motivation in Social Constructivist Theory. *Educational Psychologist*, 21(3), 209-233. doi:10.1207/s15326985ep2103_4

Stein, E. (2017). *Two Teachers in the Room* (1st ed.). Routledge.

Sipe, E. A. (2019). *Co-Teaching: An Interview-Based Study of the Perceptions of Secondary Co-Teachers*. University of Pittsburgh.

Stumpf, Jennifer A., "A Case Study of Co-Teaching Practices in Minnesota" (2015). *Culminating Projects in Education Administration and Leadership*. 9.

https://repository.stcloudstate.edu/edad_etds/9

UAE federal law 29/2006, § 2 (2006).

<https://government.ae/en/information-and-services/education/education-for-people-with-special-needs>

Villa, R. A., Thousand, J. S., & Nevin, A. (2013). *A Guide to Co-Teaching: New Lessons and Strategies to Facilitate Student Learning* (Third ed.). Corwin.

Wade, S. E. (2000). *Inclusive Education: A Casebook and Readings for Prospective and Practicing Teachers* (1st ed.). Routledge.

Word, Sharble, "The Link Between Co-Teaching and Mathematics Achievement for Students with Disabilities" (2012). *Dissertations*. 621.

<https://aquila.usm.edu/cgi/viewcontent.cgi?article=1645&context=dissertations>