

What Professional Development Areas could be recommended to Support Teachers in Middle Government Schools in the Emirate of Sharjah for Effective Inclusive Education?

ما هي مجالات التنمية المهنية الموصى بها لدعم مدرسي الحلقة الثانية من التعليم
ام في إمارة الشارقة من أجل تعليم شامل فعال؟

**By
Mohamed Gamil Elbediwy**

Student ID number: 100106

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Faculty of Education

Dissertation Supervisor

Professor: **Eman Gaad**

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Abstract

The world witnesses a huge movement of change, nowadays, that aims to the reform of the educational systems in both developed and developing countries. A picture of this reform is the inclusion of learners with special educational needs in mainstream schools. The ultimate requirement to achieve such reform is to prepare teachers in mainstream schools to teach learners with special educational needs as most of the teachers, if not all of them, are neither qualified enough to deal with SEN learners, nor equipped with the appropriate tools to teach such learners. The UAE as a model of the developing countries sets an example regarding education system reform. On the other hand, it is taking huge steady steps on the road of inclusion. This research investigates the professional development needs of teachers in middle government schools in the Emirate of Sharjah to become inclusive.

Dedication

To my mother;

I am really blessed to have someone like you

To my wife;

Thanks a million for your understanding and support

To my children;

You are the best thing that has ever happened to me

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Chapter One

1. Introduction

Nowadays, the world witnesses a huge movement of change that aims to the reform of the educational systems in both developed and developing countries. One picture of this reform is the inclusion of learners with special educational needs in mainstream schools to receive an equal share of education. As stated by Gaad (2004), the thrust for inclusion has become “phenomenal” all over the world. The educational system in the United Arab Emirates (UAE) is one of those systems that trying its best to adopt an inclusion policy that spare all people with special needs the opportunities to receive appropriate educational services. However, a set of requirements should be considered to guarantee an effective inclusive system.

The most important of all requirements is the need to prepare teachers in mainstream schools to teach learners with special educational needs as most of the teachers, if not all of them, are neither qualified enough to deal with SEN learners, nor equipped with the appropriate tools to teach such learners. No one can deny the crucial role teachers play in making inclusion successful and effective since they are the ones on whose shoulders lie the burden of implementation. Therefore, their teaching skills as well as their performance must be enhanced to be able to provide instruction that acknowledges the special needs learners’ abilities. This enhancement cannot come to existence unless through an “integrated system” (Gaad et al., 2006) that promotes well-prepared professional development programs that quenches their thirst in terms of how to teach special needs learners on one hand, and make them feel confident that they are able to teach such learners.

The need for professional development of general teachers has become very demanding since it contributes to the success and effectiveness of inclusion. According to Jenkins and Ornelles (2009), effective inclusion of learners with special needs in mainstream schools requires all teachers in the school to be able to teach those learners, which will be possible by training teachers on using teaching approaches relevant to special needs education, and promoting cooperation among teachers in terms of planning and preparing assessment for those learners.

In a study done by Ornelles et al. (2007) it concluded that general teachers needs to be

professionally developed regarding Individualized Educational Plans (IEP), characteristics of different disabilities, and teaching approaches relevant to SEN education to maintain an effective inclusive system. Moreover, Buczynski and Hansen (2010) argue that teacher professional development has a great impact on learners achievement, professional growth of the teacher as it increases his pedagogical knowledge, and the quality of the educational service provided.

1.1 The United Arab Emirates (UAE) in Lines

The UAE is an Arab country that is situated in the southeast part of the Arabian Peninsula that overlook the Arabian Gulf. It is bordering the Kingdom of Saudi Arabia to the west and the south, the Sultanate of Oman to the west, and the Arabian Gulf to the north. The UAE has a total area of 83,600 square kilometers. Sheikh Zayed Bin Sultan Al Nahyan, the founder of the UAE, declared the foundation of the UAE in 1971. The UAE is a federation that contains seven Emirates; Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al-Quwain, Ras Al-Khaimah and Fujairah. Abu Dhabi is the capital of the UAE and Dubai city is the biggest city in the UAE that is famous for its shopping centers that attracts many tourists from all over the world. The climate of the UAE is a tropical desert one with little or even no rainfall (Gaad, 2006).

The population of the UAE is estimated 8.2 million inhabitants of whom only 13% are local Emiratis. The other 87% of the population are expatriates who come from diverse cultures (Gaad,2008). The UAE includes various nationalities that come from other Arab countries, India, Philippine, Iran, Europe and America (Gaad, 2010). The UAE has grown a strong economic system since the discovery of the crude oil in 1960s. This strong economy urges the UAE to take steady huge leaps towards development on one hand and to have a rapid phase in reforming different systems of the state on the other. The UAE government spares no effort to guarantee a prosperous life to its citizens by providing them with the essentials of life such as housing, education and health care all for free of charge. Additionally, the UAE is considered to be the sixth richest country in the world (Forbes, 2012).

1.2 The Education System of the UAE

The UAE education system is believed to be relatively new if it is compared with other education systems worldwide. It started formally in the year 1952 with very few numbers of schools. However, before that period there was another type of education (the informal education) which was provided by a “Mutawwa” (an old man who was teaching children the holy Quran and Hadith). According to the Ministry of Education, it was not until the year 1953/1954 when the formal education started to take place in formal schools. Additionally, the academic year 1953/1954 is announced to be the first formal academic year in the UAE (Ministry of Education, 2013). According to Anati (2013), the education system of the UAE started to be effective by the year 1962 and an increase in the number of schools was noticed. At that time, a number of 20 schools were providing educational services to almost 4000 learners across the UAE.

Since the discovery of crude oil, the UAE is trying its best to enhance all of its systems. A great deal of attention was directed to improving and reforming the education system. The UAE vision 2020 aims to raise the percentage of the nationals contribution in education to 90% by the year 2020 (Anati, 2012). As a result, the ministry of education worked very hard to establish different departments that are responsible for ensuring that education is delivered to all citizens in accordance with the principle of equity and with no discrimination based on sex, age, race, or disability. Moreover, the UAE ministry of Education established a department that concerned with the education of the children with special educational needs (Anati, 2013).

As stated by Gaad (2010), there are two types of education, public and private education, with four different cycles are supervised by the UAE Ministry of Education; kindergarten where children aged 4 and 5 join, primary cycle where students receive their education till grade 5, preparatory cycle (cycle2) where students get educated till grade 9. This cycle lasts for 4 years, and secondary cycle (cycle3) where students receive their education until grade 12. This cycle lasts for 3 years. Additionally, public (governmental) schools are gender-segregated however private ones are “co-educational” (Anati, 2013). Moreover, education is compulsory for UAE citizens till grade 9 and they can attend public schools totally for free. Therefore, no wonder the UAE government directs a quarter of its expenditure to education (Abu Dahbi.ae, 2011b, as cited in Anati, 2013).

1.3 Special Education in the UAE

Special education in the UAE started formally since 1979 and it went through stages during the two past decades. In the first stage, students with special needs were to get schooling in “Centers for preparation and Rehabilitation for the Handicapped” (Gaad, 2008). Additionally, learners with intellectual disability “previously referred to as mental retardation” (UAE Ministry of Education, 2013) were not allowed to join public schools (Gaad, 2008).

Other learners with vision or hearing impairments as well as those with sensory impairment and were allowed to join public schools. For those whose disabilities are not very obvious, they were allowed to be placed in special classes in mainstream schools to receive their education till they reach grade three. At that time, the decision should be made whether to keep them in schools, if they can cope with other normal learners in terms of academic achievement, or to move them out of school and place them in a special education center (Gaad, 2008).

Bradshaw (2004) (as cited in Anati, 2013), argues that it is difficult to decide on the percentage of learners with special needs in the UAE, therefore, he suggests that it is the same as the “worldwide average” which is between 8 to 10% of the total population (Bradshaw,2004). To protect the rights of those learners and other persons with special needs as well as to guarantee those persons chances of equal share of education in all educational institutions, the federal law No.29 of the year 2006 was passed (Gaad, 2011). The Ministry of Education, by this law, was committed to spare educational opportunities for learners with special needs in mainstream schools as well as providing them with education that acknowledges their abilities. According to Hassan (2008), the former Minister of Education, (as cited in Anati, 2013), the community of a school should include all learners with no regard to their abilities.

The UAE, on the other hand, takes the lead in the Arab world by adopting and implementing inclusion. This clearly appears in the 2020 education vision adopted by the UAE as the decision was made and the plans were prepared to provide educational service to various categories of learners based on their needs and abilities with leaving “no one behind” and adopting the motto “school for all” that promotes the principle of equity.

1.4 UAE Philosophy, Vision, and Mission regarding Special Education

The UAE cares a lot about the welfare of its citizens and pays special attention to those with special needs. That was the impetus behind adopting an educational philosophy, vision and mission, which reflects that care.

A- Philosophy:

Each learner should be provide with a healthy environment that promotes his emotional intellectual, physical, and social growth as well as being a motivating one which develops his/her potentials regardless hi/her strengths or weaknesses areas.

B- Vision:-

Providing learners with special needs with a high quality educational services that based on international standards and worldwide best practices to prepare them to be working cogs in the machine of the society.

C- Mission:

Ensuring and monitoring the provision of individualized educational programs to learners with special needs using appropriate resources.

1.5 Philosophy of Inclusion in the UAE

UAE gives priority to special needs learners to be provided with a decent educational service based on the principle of equity and social justice. It adopts the fact that learners with special needs have the right to get access to general education and be taught in mainstream schools with their “age-appropriate” normal peers (UAE MoE,2013).

Moreover, both general and special needs teachers should secure special needs learners a supportive safe environment that promotes their potentials, as well as, they should use all resources that prepare those learners to be active members in the society. This philosophy reflects the commitment of the UAE to provide learners with special needs equal shares of education on one hand and it gives the chance to achieve the principle of “school for all” that UAE advocates on the other.

1.6 The Rational of the Study

A body of researches on inclusion of learners with special educational needs in mainstream schools in UAE was done. However, a few numbers shed the lights on what teachers in general schools require to contribute to the success of this inclusion. The importance of this study is derived from its being an investigation of the professional needs of teachers in mainstream schools to maintain an effective inclusion on one hand, and being emerged from the philosophy of inclusion in the UAE on the other.

Since the philosophy of inclusion in the UAE requires all teachers to provide learners with special needs a high quality service that acknowledge their different abilities, teachers (specially general ones) needs to learn how to deal with such learners in accordance with their unique strengths and weaknesses. Consequently, to train teacher on how to work with those learners, it is very important first to decide on their professional development needs which is the main aim of this study.

A group of researches argues that the majority of teachers in mainstream schools have a negative attitude towards inclusion. As stated by Gaad (2004, as cited in Gaad, 2008) teaching special needs learners is very stressful. This stress can be a result of teachers' lack of awareness in terms of the nature and characteristics of different disabilities, and the instructional approaches relevant to teaching learners with special needs. Some other researches have proved that general teachers feel confident to teach learners with special needs when they are equipped with the suitable tools for that. Jenkins and Ornelles (2009) argue that effective inclusion does not only require general education teachers to be able to teach, but also they need to have the basic knowledge about how to teach learners with special needs.

Based on what previously mentioned, this study is of a great importance as it investigates and decides on the professional development needs of general education teachers to achieve an effective inclusive education.

1.7 Purposes of the Study

The main purposes of this study are to

- 1- investigate if general education teachers are qualified enough to contribute to the success of an inclusive education.
- 2- investigate regular professional development programs provided to those teachers to enhance their skills to teach learners with special needs.
- 3- investigate if general education teachers are confident to teach learners with special needs.
- 4- investigate the professional development needs teachers require to support inclusive education.

1.8 Research Questions

This study sought to address the following questions;

1. Are teachers in middle government schools in the Emirate of Sharjah qualified enough to maintain an effective inclusive education?
2. Are there any regular professional development programs to enhance general education teachers' skills to teach SEN students?
3. Are teachers in middle schools confident to teach students with special educational needs?
4. What are the professional needs teachers required to support inclusive education in middle government schools in the Emirate of Sharjah?

1.9 Background about Participant Schools

Three middle government schools were involved in this study. The three of them are boys' schools and they are located in different neighborhoods of the Emirate of Sharjah, which is the third biggest Emirate of the UAE. Almost all the three schools are the same in terms of the number of students enrolled, the number of classrooms, the number of teachers and the number of administration representatives. Each school has 22 classrooms with almost 60 teachers of all different subjects. There is only one special education teacher in each school. Two of the three schools have two social workers each while the third has only one. The three schools have almost the same number of learners with special needs. Although the three schools are closely similar, some major differences were noticed in terms of teachers' attitude towards inclusion.

1.10 Structure of the Study

This study contains five chapters; introduction chapter, literature review chapter, methodology chapter, finding and discussion chapter, and conclusion and recommendations chapter. Chapter 1 is an introduction, which gives an idea about the topic of the study as well as a brief background about the UAE, the education system of the UAE, special education in the UAE, philosophy, vision, and mission of special education in the UAE. Additionally, this chapter gives an idea about the philosophy of inclusion in the UAE, rational behind the choice of the topic of the study, and the purposes of the study. Moreover, this chapter underpins research questions, and provide a brief background about the school investigated.

Chapter 2 starts by giving a review of the chapter then it explains the method that will be followed in searching the literature and it outlines the purpose of the literature review. This is a review of the literature on certain topics. First, it discusses teachers' professional development in the context of inclusion then it reviews learning disability in terms of screening and intervention. Additionally, chapter 2 reviews literature for topics important for teachers' development from the perspective of inclusion such as individualizes educational plans, behavioral intervention plan, diversity and learning styles, assistive technology, Transition plans, accommodation, teaching approaches related to teaching learners with special needs and individual professional development plan.

Chapter 3 outlines methodology of the study. It discusses the method used to collect data and method of analysis, ethical considerations, research design, questionnaires, interviews and validity and reliability. Chapter 4 reports the findings of the study and its discussion. Chapter 5 concludes the answers to the research questions and suggests some recommendations.

Chapter 2 Literature Review

2.1 Chapter Overview

This chapter investigates the literature related to teacher professional development needs to become inclusive. The following topics will be discussed in light of that.

- Teacher professional development as a tool of reforming educational systems as well as being effective tool to maintain inclusive education.
- Learning Disability: Screening and Intervention.
- Individualized educational Plan (IEP) as an evidence of providing appropriate service.
- Behavioral Intervention Plan (BIP)
- Diversity and Learning Styles: identification and importance.
- Assistive Technology as a tool of promoting inclusive education.
- Transitive Plan as a guarantee for continued support for learners with special needs.
- Accommodation as an essential factor that contributes to the success of inclusion.
- Teaching Methodology related to special education
- Individual Professional Development Plan (IPDP) as an indicator of accountability.

2.2 Literature Research Method

In investigating literature related teacher professional development that leads to effective inclusive education, the University of Birmingham e-library (findit@bham), Sincedirect data base, Google Scholar, and “ERIC” data base were used to search for articles that contains the following keywords; “professional development”, “effective inclusion”, “disability”, “individualized educational plan”, “learning styles”, “accommodation”, “assistive technology”, “teaching methodology related to SEN”, “transitive plan”, “behavior intervention plan”, “screening learners with special needs”, and “individual professional development plan”

2.3 Purpose of the Literature Review

The main aim behind reviewing the literature related to teacher professional development for seeking an effective inclusion is to have a critical review of the most recent researches related to the topic of this research, which will help in identifying the professional development needs of general education teachers to become inclusive.

2.4 What Is Professional Development?

Reforming education has become an ultimate aim sought by all nations globally wise. An effective means that leads to this reform is teachers. Since reform entails more learning, teachers, consequently, should be spared numerous opportunities to learn new methods of introducing instructional content, new skills of dealing with learners, and new techniques of working collaboratively, sharing instructional problems and concerns. Moreover, teachers need to open their eyes on new wide horizons of professional development that sharpen their skills and enhance their performance. The cornerstone of enhancing teachers' work quality as well as their performance is the professional development. Bredeson (2003), states that teacher professional development can be located where teacher work, teacher learning and educational reform intersect.

According to smiley (1996), teacher professional development is referred to as educational step-child. Additionally, teacher professional development plays a critical role in improving schools according to researches (Bredeson & Johansson, 2000). Many researches and scholars defined teacher professional development, however, there is still some vagueness with regard to what is meant by professional development as terms like training, self-improvement and continuing education are interchangeably used to refer to professional development. Bredeson (2003) avoided this confusion by identifying professional development as all opportunities of learning involve the reflective and creative competencies of teachers in ways that enhance their performance. Based on the fact, that professional development focuses mainly on learning, it is clear that this definition sheds the light on three main points; learning, involvement and enhanced performance.

Kunter (2007), claims that teacher professional development is any formal or informal opportunities that widen and enhance teacher's professional skills. This definition emphasizes the importance of formal and informal opportunities. In the United States, as well as, in the European countries, teachers are required to attend formal and informal professional development programs regularly (Eurydice, 2008). Hill (2007), states that in the United States teachers are asked, in five year time, to finish 120 hours of professional development. However, according to Eurydice (2008) teachers in Europe are expected to complete from 12 to 57 hours of

professional development a year. Regarding informal professional development opportunities, it could be through classroom inter-visitation and observation, reading books, participating in teachers network and mentoring activities (Desimone et al., 2009).

2.5 Professional Development in SEN and Inclusion Context

According to the UN convention on the Rights of Persons with Disabilities, learners with special needs are to receive equal chance to access general, vocational, and adult education (Article 24). Consequently, a considerable number of learners with special needs was included in mainstream schools. The success of those learners, according to Poulou (2007), is not only dependent on special education teacher's skills to provide service that meet those learners' needs, but also on the general education teachers. Effective inclusion needs general education teachers to be equipped with the skills to teach such learners, as well as, the ability to collaborate with SEN teachers to tailor education that acknowledges those learners' abilities.

Ekins and Grimes et al. (2009), claim that the need to the professional development in inclusive education has become a very critical challenge for teachers. In the UK, for example, new regulated standards were set for teachers stating that all teachers should expect to teach learners with special needs in their mainstream classrooms. On the other hand, a body of researches approved that the majority of general education teachers are having a negative attitude towards inclusion and teaching learners with special educational needs. As stated by Smith and Smith (2000), the main reason behind that rejection is that, those teachers were not prepared to teach such learners so they feel unconfident dealing with them in their classrooms. According to a study done by Kamens et al. (2003) in the United States, general education teachers need to know more about learners with special needs in terms of; characteristics, classification, intervention and providing adaptation and accommodation, in order to give those teacher a rather clear vision about how to work with such learners. On the other hand this will pave the way for an effective inclusive education.

A recent study by Ornells et al. (2007), found that general education teachers lack knowledge in certain areas related to teaching learners with special needs such as; the Individualized Educational Plan (IEP), instructional approaches related to special education, and adaptation and

accommodation. Consequently, voices raised asking for preparing professional development programs to help general teachers cope with the situation, as well as, being able to teach learners with special needs. Moreover, there is a widespread acknowledgement that, effective inclusion requires effective teachers who play essential roles in providing quality education. Those effective teachers according to Pressly et al. (1992, as cited in Duffy, 2005), must have a clear vision as well as a clear understanding of their mission. Duffy (2005) argues that when teachers have clear understanding of their mission, they become “metacognitive” teachers. Additionally, Rosemary (2005) points out that, professional development result in the efficacy of teachers on one hand, and profound understanding of both instruction and pedagogy on the other.

Accordingly, there are new impetuses to the call for professional development programs that prepare teachers to be metacognitive as well as be able to teach learners with special needs, which will have a strong positive impact on inclusive education. Moreover, a Romanian study that was done to a total of 112 general education teachers in 2012 concluded that appropriate training for general education teachers regarding all aspects of inclusion and its principles will result in a change in teachers’ negative attitude towards inclusion and will lead to a better effective inclusive education system. Cardona (2009), concludes that, professional development enables teachers to meet the needs of all learners and helps create a new generation of teachers which reflects the quality of education and contributes to the success of inclusion. Savolainen (2009), claims that the quality of teachers clearly reflects the quality of the education system. Bailleul (2008), adds that effective inclusive teachers can create effective learning environment that contributes to better achievements. Reynolds (2009), concludes that inclusive effective teachers have a critical effect on developing inclusive education.

2.6 Learning Disability: Screening and Intervention

Learning difficulties (disabilities) is a term used to describe learners who face difficulties with education. A body of researches concludes that learning difficulties are due to brain dysfunction and that they are heritable. However, others have proven that this issue is elusive (Gabrieli, 2009). As stated by Pennington (2009), learning difficulties are partly genetic however, genes have little effect on learning difficulties (Willcut, Pennington et al., 2010). Historically wise, special education and learning disabilities are bonded to each other since special education is an

umbrella term for a number of learning problems. According to Bender (2008), notwithstanding having emotional or physical problems, learners with learning disabilities encounter problems in terms of learning performance and academic achievement, as they do not meet expectations which, results in an increasing need for providing special education. Learning disability is a challenge for education systems worldwide. Hallahan et al. (2005) discuss that, the number of learners with disabilities in classrooms is between 3 to 12 percent of the total number of the class. However, Mere and Poulen (2011), on the other hand, argue that the number of learning disabilities is a range from 2 to 40 percent of the population of the school. Bender (2008), states that, in the United 50 percent of disabled learners were identified were identified as learners with learning disabilities in the year 2001 which necessitated a provision of appropriate specialized education for those learners.

Solis et al. (2011), agree that, because of the abundance of learners with disabilities at schools, it is very demanding for all teachers to be familiar with learning disabilities as well as being able to identify learners with learning disabilities in their classrooms using different means of screening and identification. Jeromy (2007), states that, improvement in learning performance of learners with disabilities depends on both teacher's awareness of different types of disabilities and his ability to identify these disabilities. A study done by Gerster et al. (2005), concluded significant positive correlation between improving learners with disabilities' skills and the level of awareness of their teachers in terms of disability and its identification.

There are some different approaches that are used to identify learning disabilities; neurological, cognitive, and hybrid approach. These approaches will be discussed in the following lines in some details.

- Neurological Approach:

The neurological approach focusses on and assures the importance of identifying learners with learning disabilities according to behavior associated with brain dysfunction. This approach refers disability to minimal brain dysfunction rather to environmental factors. According to Clements (1966) (as cited by Fletcher, 2012), learners whose IQ is considered to be either near average, average, or above average and who have learning or behavioral difficulties are associated with dysfunction of the central nervous system. This dysfunction results in a number of impairments such as perception impairment, language impairment, or

conceptualization, memory and motor function impairments. Dyslexia is a good example of the neurological approach as it reflects clearly the impact of the minimal brain dysfunction. Ophthalmologists, on the other hand, refer to dyslexia as “word blindness”. The neurological theory of dyslexia, developed by Orton, suggests that dyslexia is part of a failure of the hemisphere of the brain that responsible for language and decoding. Fletcher (2012) argues that, based on the neurological approach a body of researches were conducted to identify the characteristics that can assess learning disabilities.

- Cognitive Approach:

Another approach that can be used to identify learners with learning difficulties is the cognitive approach, which emphasizes that cognitive functions and language are the center of learning difficulties. One tool of the cognitive approach that is used to identify learners with learning difficulties is the IQ. Achievement discrepancy that based on the difference between intellectual ability and academic achievement is another tool of this approach. Accordingly, if a learner scores a high IQ score and meanwhile fails to meet learning expectations, tis is considered to be an indicator of learning difficulty. However, Stuebing et al. (2002) argue that cognitive discrepancy that based on the difference between intellectual abilities and achievements does not have validity. One last way to identify learners with learning difficulties that based on the cognitive approach is by identifying strengths and weakness in cognitive processing through a group of cognitive tasks. Stuebing et al. (2012), identify three different patterns of strengths and weaknesses methods that are used to identify learning disabilities; latent data, inter-correlations, and cut-off points. Unlike the IQ-achievement discrepancy model, this model shows some validity.

- Instructional Models:

Because of difficulties cognitive discrepancy presented, the instructional models came to existence as an alternative. This model identifies learners with learning disabilities according to their poor achievement. On the other hand, it considers learning disability as a potential if the learner achieves below expectations. The instructional model, however, was criticized for depending solely on low achievement. Moreover, this method could not be accurate as it may include learners with other disorders. In addition, fletcher (2012), argues that, the

psychometric problems involved in the process of identification are not resolved by low achievement method.

- Response to Intervention Methods:

Another approach that provides service and intervention to special educational needs learners who are screened for academic and behavior problems in schools. This method mentors learners who are considered to be at risk of becoming special needs learners (Van Der Heyden & Burns, 2010). Some concerns were expressed about the response to intervention method as a standalone method since it is not enough to identify disabilities.

- Hybrid Approach:

The hybrid approach claims that, there is no gold standard in one only identification approach, however, there should be a group of methods used to identify learning disabilities to avoid the weakness of each approach. It, on the other hand, will give the chance for accurate identification and adequate intervention.

2.7 Individualized Educational Plan:

Special needs learners need a sort of education that is tailored to meet their specific educational needs. Since learners with disabilities are different in terms of the type and degree of severity of disability, they require a different individualized instruction as well as relevant appropriate assessment. Each learner with special educational needs is considered to be a standalone case who must be assessed comprehensively to identify his needs and strengths (IDEA 204). Consequently, there was an impetus for preparing individual educational plans (IEP) for those learners to guarantee and evaluate the quality of service provided to such learners. In this regards, this part of the literature review will discuss; what is an IEP?, the importance of IEP, stages of an IEP, and some related issues.

- What is an IEP and What Should It Include?

The individualized educational plan is a document that is specifically prepared to provide learners with special educational needs appropriate instruction that meets their needs. Satter (2001) states that an individualized educational plan states the needs of a learner with

disability and the way he/she will be taught to meet his/her needs. In other words, an IEP is considered as a contract among all those who are involved in the process of teaching a learner with special needs to ensure the provision of proper high quality service that meets the learners' needs. In addition, an IEP is a plan that is developed for a learner, which contains a summary as well as records about the education of that learner (BCSSA, 2009). Moreover, an IEP is a safeguard for parents as it assures that their kid is receiving instruction tailored to his/her needs. An IEP, on the other hand, is mainly designed for learners who are formally identified as special needs learners. However, it can be designed for those who are in need for an IEP regardless being formally identified or not. Karila and Alasuutari (2012), argue that the Finnish educational system requires an individual educational plan to be developed for each special needs child since 1980s. Additionally, the Finnish educational system requires the IEP to include provision of education as well as a description of all the support will be introduced to the learner. Moreover, the Finnish system sees the IEP as a pedagogical document that ensure the learner is provided with persistent proper support in accordance with his/her unique needs.

In Sweden, the individual educational plan was regulated and become mandatory in 1995. According to the Swedish education system, as soon as a learner is deemed as a learner with special needs, an IEP should be established for him/her in which "sensitive" information should be included about the learner's environment, school performance, and instruction provided. Joakim, Isaksson et al. (2007) argue that, the Swedish system requires IEP to be developed in accordance with the learner's needs and in cooperation between the school and the parents of the learner. Additionally, the IEP should state goals and strategies in order for evaluation.

The Malaysian educational system, on the other hand, claims that IEP is an official document that is established for learners with special needs and it should include clear goals, objectives, and resources used to achieve goals. Additionally, Toran et al. (2010) clarify that the IEP should have a statement of the learner's strengths and areas of needs, teacher-parent meeting schedule, all stakeholder involved in providing service, and periods of evaluating the IEP.

In Turkey, according to Kargin (2007), an IEP is a document of high importance that should be developed for learners with special educational needs after a rigorous comprehensive evaluation. Christle and Yell (2010), elaborates that the Turkish educational system emphasizes that, accurate information about the current level of performance of the learner, long and short term objectives, anticipated time for fulfilling objectives, and smart annual goals should be contained in the IEP.

The American literature, in the far west, states that, the IEP is a crucial document that is established for individuals with disabilities which helps in improving teaching and learning of those individuals (Office of Special Education and Rehabilitative Services, 2000). The American educational system sees the IEP as an individualized educational program rather than a plan as “plans are made to be broken” but programs should be followed. IEP, by the American Law, should contain specific information about the learner, his/her level of current performance, academic achievement, measurable annual goals, transition plan, and evaluation dates.

The Canadian literature, on the other hand, defines the IEP as a plan that is written to describe the service will be provided to a learner who is identified as a learner with special needs. In addition, it states the instructional program that is prepared for that is prepared to that learner based on assessing his/her strengths and areas of needs that have impacts on the learner’s educational performance. Moreover, Ontario Ministry of Education (2004) states that, an IEP should identify accommodations and modifications needed in accordance with the learner’s needs. In addition, an IEP should record alternative learning expectations that meet the unique needs of the learner.

In the Irish literature, an IEP is a system to identify where a learner is, where he/she is heading, how he/she will reach destination, who will provide help, and who will decide on the success of the journey. According to the Irish National council for Special Education (2006), the IEP is considered as a road map for those who are involved in providing educational service to learners with special needs. Additionally, the IEP should include the areas of needs of the learner and the intervention appropriately planned to meet these needs.

The UAE educational system is somewhat a new system (Gaad, 2011). However, it starts to consider preparing IEPs for learners with special needs. The IEP should be developed for a learner after being identified as a SEN learner and it should include information about the learner, long and short term objectives for all different school subjects, and time expected to achieve objectives with percentage of achievement.

All previously mentioned literatures emphasized the importance of the IEP and that it must be developed for learners with special needs to guarantee appropriate service. They identified the contents of an IEP to ensure the effective successful implementation.

- Why Is IEP Needed?

According to Sari (2002), the IEP plays a crucial role sparing learners with special needs plenty of opportunities to achieve success within the inclusive educational system since the loaded general educational program with heavy schedules hinders meeting the needs of learners with disabilities, as well as having a negative effect on the success of those learners in mainstream classrooms. In addition, planning educational programs appreciate differences and meet the needs of learners with disabilities will have a positive impact on the effectiveness of inclusive education. With regard to the natures of disabilities, it is extremely difficult for learners with special needs to make advantage of educational programs prepared for general education learners. A body of researches concluded the fact that educational programs prepared for mainstream learners are not appropriate for those with special needs since they do not meet their unique needs.

Consequently, the importance of developing IEPs is very clear, as an IEP has become the road map for an effective successful instruction for such learners. An IEP, on the other hand, is considered to be an effective tool that help teachers monitor learners' progress and growth. Additionally, it aligns educational programs with learners' needs. Moreover, IEPs give the chance for teachers, parents, and all stakeholders involved in the process of teaching a learner with special needs to discuss the learner's needs realistically and develop innovative ways to meet those needs. Finally, developing IEPs is of a great importance for both special and general education teachers as it enhances their knowledge and sharpens their skills to

teach learners with special needs, which results in an effective inclusion. IEPs, also, act as a tool of assessment that help teachers decide on learners' progress and achieving goals.

- Who Should Be Involved in Developing an IEP?

There is no one only person who is supposed to develop an IEP. However, a team of all those who are involved in the provision of the service to a learner with special needs is responsible for establishing the IEP. The team should include, but not limited to, parents, school administration representatives, special education teacher, general education teacher, any one who is involved in providing service, and the learner himself. According to the American Office of Special Education and Rehabilitative Services (2000), it is by law that the members of the IEP team should meet together, within thirty days of identifying the learner to be eligible as a special needs learner, to develop the IEP. Likely, Ontario Ministry of Education (2004) highlights that, Ontario regulation 137/01 mandates the principal of the school to make sure that the IEP was developed and a copy was sent for the parents of the learner and the learner if he is 16 within thirty days after identification. Therefore, the principle of the school calls for a meeting and decides on the members of the IEP team and they start writing the IEP immediately.

- What Should Be included in an IEP?

Since the IEP is considered as a road map for teaching learners with special needs, it should have detailed information about the learner that helps in providing high quality service. In a nutshell, an IEP should include the following;

1. Personal information

An IEP should tell about the learner it is developed for by giving a summary about his case, type and level of disability, any medical report, and information about the reasons and assessment of identification.

2. Current level of achievement

An IEP is expected to state the current performance of the learner and how he/she does at school. Such information is usually based on the learner's academic achievement, teachers' observations, and parents' notes. Current performance statement should

explain how learner's progress affected by hi disability. In addition, learners' areas of strengths and needs should be clarified.

3. Goals

Specific, measurable, achievable, realistic, and time limited (SMART) goals must be included in an IEP to identify the learning outcomes and expectations in accordance with the learner's unique needs, which will be achieved throughout the year. Theses goals will be divided into short-term objectives that will be evaluated periodically.

4. Strategies and Assessment

An IEP must state the strategies that will be used to assist the learner attain learning expectations. In addition, teaching approaches and resources used to provide service, as well as places, time, and personnel must be stated in the IEP. Moreover, types of assessment that will be used to monitor learner's progress should be included as well.

5. Accommodation and Modification

A list of accommodation and modifications that are required to help the learner to learn and participate must be included in the IEP.

6. Transition Plan

An IEP should contain a transition plan if the learner is 14 to 16 of age in which a statement of courses learner should take to achieve post-school goals.

7. Assistive Technology

Assistive technology according to Stiefbold (2012) is all equipment used to improve learning performance of learners with special needs. Consequently, a list of technology equipment that will be used in teaching the learner should be mentioned in the IEP.

8. Dates and Evaluation

An IEP should include all-important dates for periodical reports and IEP review.

9. Behavior Intervention Plan (BIP)

Some of the special needs learners included in mainstream classrooms need their IEP to contain a behavior intervention plan as their disabilities may affect their behavior in classroom. The ultimate aim of this plan is to identify what behavior needs to be changed and how change will take place.

2.8 Behavior Intervention Plan (BIP)

- What is a BIP?

According to Killu (2008), the most challenging problems teachers encounter in their classroom are those related to behavior especially with learners whose disabilities have impacts on their behavior. Therefore, teachers need to identify behavior needed to be changed the tools to change it. One suggestion in this regard is by improving self-recognition skills through establishing good rapport with learners as well as creating environments where those learners spared the chance to practice how to control themselves (Keat, 2008). Consequently, a behavior intervention plan (BIP) should be developed and included in the individual educational plans (IEPs) of those learners stating the desired behavior to be changed and how it will be changed. Lerner and Kline (2006) argue that, before preparing a BIP a functional behavior assessment should be done to identify how far learner's behavior interferes with his/her learning performance or with other learners' learning.

- Elements of a BIP

A behavior intervention plan should contain background information about the learner and his/her disability as well as how hi/her disability affects his/her behavior. In addition, some information about medication he/she is under and their interactions that may cause some negative behaviors should be included. Moreover, a summary about interventions previously implemented must be included as well. Another element of the BIP is a description of the problematic behavior desired to be changed and the replacement one. A BIP, on the other hand, should include a schedule that identifies periods to revise the plan. Additionally, a crisis management plan is recommended to be included in the BIP for dangerous behavior or behavior leads to hurting oneself or others. Finally, descriptions of changes in target behavior and how they can be measured, how intervention will be evaluated to measure progress or regression, and time for information to be shared with parents should be included.

- Behavior Intervention Strategies

Partin et al. (2010) argue that, to eliminate undesired behavior teacher interactions are highly appreciated. It was noticed that learners do not behave appropriately when they are asked to do something exceeds their developmental stage limits. Therefore, teachers should use different strategies to eliminate undesired behaviors (Crow, 2010). One strategy that can be used is by surrounding learners with a supportive environment that enhances appropriate behaviors. Lerner and Kline (2006) argue that another strategy that can be used to change inappropriate behavior is “reinforcement” which allow building a reward system that promotes target behaviors one last effective strategy is through praising learner for behaving in appropriate way. Wheatly et al. (2009) conclude that learners who receive praising for their positive behaviors replace undesired behaviors with appropriatw ones.

2.9 Diversity and Learning Styles

Kolb (2006) claims that, for decades learning and teaching depended on only lecturing to convey information. From a traditional perspective, learners were just like empty vessels that to be filled with facts and information. Hatcher and Bringle (2003) argue that, traditional educational method does not add much to learners’ knowledge, as it does not acknowledge learners’ diversity. Gyton (2000) states that traditional educational way such as in lecturing lets learners to be very passive since it does not challenge all different cognitive abilities of the learners. On the other hand, learning is all about receiving, processing, storing, and retrieving information. Although all humans have the same receiving organs, regardless if some of them is not functioning properly, they are different in using these receivers for better quick learning. For example, some people learn better when they listen to information, others when they see it, and else others when touch it. A body of researches concluded that learners learn better when they are taught in accordance with their learning styles as learning becomes easier and more effective (Haider et al., 2010).

- Importance of Identifying Learning Styles

According to Graf et al. (2009), learning style plays a crucial role in improving teaching and learning. Teachers gain a lot when knowing about their learners’ learning styles that is spares the chance for a deep understanding on one hand and helping the teachers choose the appropriate materials as well as aligning teaching strategies with their learners’ learning

styles on the other. Moreover, identifying learners' learning styles is important as it sheds the lights on the areas of strengths of the learners. Additionally, some studies conclude that identifying learning styles facilitate learning since it provides learners with education that acknowledge their diverse cognitive abilities.

- Screening for Learning Styles

Lindsay (1999) (as cited in Graf and Liu, 2009) argues that, there is a positive correlation between learners' learning styles and teaching approach on one hand, and the improvement of academic achievement and the learning performance of the learners on the other. Brusilovsky (1996) (as cited in Graf and Liu, 2009) states that, there are two main different models of identifying a learner's learning style which are collaborative and automatic models. In the first model, collaborative model, learning style is identified through feedback received from the learner using tools such as questionnaires. However, in the second model, automatic model, learning style is identified through observation. Some scholars believe that automatic model is more accurate than the collaborative one as it is more direct and its analysis based on different learning situations as well as different periods. Consequently, the ability to identify learners' learning styles is of a great importance for teachers as it helps provide appropriate teaching that acknowledge the diversity of the learners, which is the core of inclusive education.

2.10 Assistive Technology

Sisto et al. (2009) claims that technology plays an essential role in our lives nowadays. What was believed to be unimaginable yesterday becomes reality today thanks to technology. Schere and parette (2009) argues that assistive technology is any device or piece of equipment that gives the chance to a person with disability. In addition, assistive technology can help improve the teaching and learning of learners with special needs. Standen et al. (2011) explain that computer-based activities have an educational role in improving learning performance of learners with special needs. In a study done by Standen et al. (2009) it was concluded that computer games had a positive impact on enhancing the learning performance of learners with intellectual disabilities.

There are many types of assistive technology based on the type of disability. According to Stiefbold and Carolan (2009), there are many assistive technology devices that can be used by people with disabilities, such as: infrared, ultrasound, radio frequency, voice control devices. In addition, some computer software could be used also to help teaching learners with special needs such as text-to-speech, speech-to-text, and proofreading software. Plos et al. (2012) state that assistive technology can be a way to improve both life conditions and learning of learners with special needs as it can positively involve them in education as well as facilitate their learning.

2.11 Transition Plan

Transition is shifting from one stage to another. All human beings go through transition periods. However, transition for those with special needs could be very challenging. Moreover, a learner with special needs goes through a transition period when shifting from childhood to adulthood. Therefore, a learner with special needs should be developed a transition plan as soon as he/she is 14 to 16 of age to guarantee the continuity of support. According to Beyer and Kaehne (2008), the law of education, in the UK, requires school administrations to develop a transition plan for a learner with special needs who is 14 years old. Similarly, in the United States the principle of the school is expected to direct the IEP team to develop a transition plan if the learner is 16 of age. Transitional plans emphasize the importance of enhancing both academic and functional achievement of the learners with special needs. It must include post-school goals that ensure and guarantee a continued support when learners move from lower education stage to vocational or higher one.

2.12 Accommodation

Accommodation is of the essence of inclusive education. Accommodation is any change that take place regarding the learners' environment, assignments, assessment, or in-classroom activities to acknowledge learner's special needs (Alberta Education, 2006). Addressing the needs of a learner with special needs requires different types of accommodation to provide appropriate service. Accommodation, on the other hand has three main types: instructional, environmental, and assessment accommodations. Both special and general teachers should be fully aware of accommodation and its different types as well as the effective way to implement it

since it plays a key role in providing learners with special needs an appropriate service and promotes an effective successful inclusive education.

2.13 Teaching Methodology Related to Special Education

Teaching and learning are all about conveying, receiving, processing, storing, and retrieving information. Since learners with special needs may receive information in a different way from learners with no disabilities, then teaching those learners must adopt different approaches that suits their abilities and meet their needs. According to Bender (2008), the University of Kansas suggests a teaching strategy that contains eight steps, to teach learners with special needs. The steps of the strategy are pretesting, description, modelling, rehearsing, controlled practice, free practice, post-testing, and generalization. Another effective strategy that can be used in teaching learners with special education is through reciprocal teaching that is used to enhance metacognitive understanding of the material. Reciprocal teaching takes place through four stages which are prediction, asking questions, giving summary, and clarifying. One last strategy that can be very effective in teaching learners with special needs is the scaffolding instruction strategy that includes five stages. These stages are pre-engagement, shared goals, assessing understanding, appropriate assistance, and feedback and generalization stages. Finally, using different strategies that are tailored to teach learners with special needs will enhance their performance and will result in catering in accordance with their diversity.

2.14 Individual Professional Development Plan (IPDP)

Avalos (2011) states that the ultimate aim behind teacher professional development is to improve teacher's performance and accountability. Missouri School Board (2013) emphasizes that a teacher should be aware of his/her own learning needs, as he/she cannot go to his/her classroom with no idea about what or how to teach or achieve. A teacher, on the other hand, must show accountability by preparing his own professional development plan according to his professional needs keeping in mind that learning is an endless process. Six main elements are to be included in a teacher's IPDP which are a needs analysis for learning needs, a list of professional goals, achievement indicators, a statement of courses, programs, or activities that will help achieve his professional goals in addition to time schedule and tools of evaluation. In inclusive setting

teachers are more required to plan for their professional development as teaching learners with special needs requires a lot of professional development since there is always something new about special education every day therefore, teachers must be updated and ready for any changes to maintain the inclusive education system.

Chapter 3: Methodology

3.1 Chapter Review

This chapter of the research will discuss the methodology used in investigating the topic of the study. In this regard, the following topics will be investigated:

- Introduction about the research methodology
- participants
- Ethical considerations
- Research Design
- Data Collection tools
- Data analysis
- Validity and Reliability

3.2 Methodology Research Method

In investigating methodology related, the University of Birmingham e-library (findit@bham), Sincdirect data base, Google Scholar, and “ERIC” data base were used to search for articles that contains the following keywords; “research methods in education”, “qualitative research methods”, “quantitative research methods”, “research design”, “data collection tools for qualitative and quantitative researches”, “qualitative data analysis”, “quantitative data analysis”, “validity and reliability”.

3.3 Introduction

Gray (2009) states that methodology is the “philosophy and theoretical” interpretation of specific method a research uses. This definition focus on both philosophy represented in all the assumptions and questions the research deals with and theories used to investigate these assumptions. Methodology, on the other hand, gets its importance from being the main tool to explain the reasons behind decisions and choices made in research methods.

In seeking for answers for the research questions;

5. Are teachers in middle government schools in the Emirate of Sharjah qualified enough to maintain an effective inclusive education?
6. Are there any regular professional development programs to enhance general education teachers’ skills to teach SEN students?

7. Are teachers in middle schools confident to teach students with special educational needs?
8. What are the professional needs teachers required to support inclusive education in middle government schools in the Emirate of Sharjah?

The researcher used a mixed method in which both quantitative and qualitative methods were used to collect data. This mixed method helps a lot in giving powerful evidences for the conclusion (Yin, 2006). According to Rocco et al. (2003), the mixed method is of high importance in promoting “triangulation” which increases the validity of the study on one hand and adds depth and breadth to the study by using one method to develop the other on the other.

Quantitative method depends on the design of the study and data collection tools to control procedural bias while qualitative method depends on the researcher for that. In addition, quantitative method cares a lot about cause and effect, whereas, qualitative method cares about interpreting relationships. Moreover, quantitative method breaks phenomena down for the purpose of the study, however, qualitative one studies phenomena in a holistic fashion. Finally, quantitative method is guided by a predetermined hypothesis, but qualitative one develops hypothesis while investigating.

3.4 Ethical Considerations

Gray et al. (2009) argue that ethical considerations play a crucial role in research field therefore; researchers must pay a great attention to it while conducting their studies. On the other hand, the relationship between the researcher and the participants must appreciate respect and trust. The researcher, therefore, should show respect for the participant by considering essential moral principles (Beauchamp and Childer, 2001). These principles are “autonomy”, “non-maleficence”, “beneficence” and “justice”.

Autonomy means that anyone who is asked to participate in the study should have the choice to decide whether to participate or not on one hand. The researcher is responsible for explaining and clarifying what is investigated to him/her on the other. The participant, then, have all rights to either accept or refuse to participate. As stated by Parahoo (2006), Non-maleficence requires the researcher to guarantee participants that they will not receive neither physical nor psychological harm when or after participating in the research. Beneficence, on the other hand as

stated by Beauchamp and Childer (2001), means that both participants and the society benefit from the research. Parahoo (2006) emphasizes that the researcher should be aware of how to deal with and treat people participate in the research regardless their gender, color, race, or position and this is what meant by justice. Finally, the researcher should not use coercion to push people to participate in the research and he must understand that participants have the right to withdraw at any time from the research (BETRA, 2011).

3.5 Participants

Participants are the corner stone of a research as they contributes to the success of the study if they are well chosen. Gay et al. (2009) argue that, generalization and application of the results of a study can take place if participants are well chosen. In this research thirty teachers were chosen to participate who are working in three different middle government schools and whose ages range is between twenty five to fifty years of age. All participant were clarified that they have the choice whether to participate or not and they have the right to withdraw at any time without giving any reasons. Moreover, participants were assured that their participation will bring no harm to them and will have no impact on their careers.

3.6 Research Design

According to De Vas (2001) research design's importance stems its being the "logical structure of the inquiry". This research is structured to investigate the professional development needs of teachers in government middle schools to be inclusive therefore, it is a descriptive explanatory research. The main aim of the research design is to eliminate the ambiguity of the evidences of the research. Additionally, the research explores the topic in depth focusing on seeking information from the population involved through different tools of data collection.

Three main types of questions are addressed in the research: causal questions that focus on cause and effect, relational questions that investigate relationships among variables, and descriptive questions to describe the professional development needs of teachers in the three investigate government middle schools.

3.7 Data Collection

In this part of the study, data collection tools will be discussed. The ultimate aim behind collecting and analyzing data is to help find answers for the research questions. Trying to achieve this aim, two data collection tools were used to gather information from different resources. The first tool was a structured questionnaire (a quantitative tool) that was conducted to the teachers in the investigated schools and which was conducted face-to-face so there was no need for translating the questionnaire into Arabic for teachers whose English is poor as the researcher interpreted all the questions to them (see Appendix:1 Structured Questionnaire). The second tool was interviews done with school administration representatives in the respective schools. The researcher did the interpretation as well (see Appendices: 2 & 3 Interview Questions and Interview Sample).

3.8 Questionnaire

Brace (2008) argues that a well-structured questionnaire plays an important role in the success of the study as it is an “important element” of data collection and it is considered to be a “tool of scientific inquiry” (Kumar, 2008), that is used to achieve a lot of goals such as measuring variables, describing population, and inferring population. As indicated by McNabb (2010), the distinguishable characteristic of a questionnaire is that it is flexible since it is designed to meet the aims of the research. Additionally, a questionnaire can take many shapes in terms of length, complexity, and straightforwardness. Moreover, a questionnaire can be conducted through many ways: face-to-face, over the phone, or through the internet. As stated by McNabb (2010), to prepare a good questionnaire three objectives must be considered: it should collect data that help in answering the research questions, it should stimulate participants to full answer all the questions, and it should minimize potential error. The questionnaire prepared for this study included 45 questions and it was designed to achieve the three objectives previously mentioned. All the research questions were addressed by the questionnaire. The first research question was addressed through questions 1 and 2 of the questionnaire. The second research question was addressed through questions from 5 to 8 of the questionnaire. The third research question was addressed through questions 3 and 4 of the questionnaire. The fourth research question was addressed through questions from 9 to 45 of the questionnaire.

3.9 Interview

Interview is considered to be an effective tool of data collection as it spares the chance to the researcher to get in depth information from participants. Also, it is described as a “systematic process” (Kumar, 2008) through which qualitative data that is “inappropriate” to be measured (Gratton & Jone, 2010). Additionally, according to Keegan (2009), interview is a “versatile” method as it has many advantages such as it gives participant opportunity to freely express their ideas and elaborate on specific points. On the other hand, it helps the researcher to get insightful information about the research topic. Moreover, interview enables the researcher to investigate participant who are not able to fill out a questionnaire. According to Kumar (2008), there are two main types of interview: structured and unstructured interviews. In structured interview, the researcher prepared a set of structured questions by which he leads the participant to the area he/she investigates. Questions are designed in sequence and no chance for sub questions to be emerged. Unlikely, the unstructured interview depends on the participants. Questions are emerged from the conversation. The questionnaire prepared for this study is a structured one. Questions were designed to investigate the statusque of the investigated school in terms of inclusion and to get in depth information about the professional development needs of the teachers to maintain effective inclusive education.

3.10 Data Analysis

Data analysis is an important element that contributes to the success of a research. According to Robson (2003), decisions related to data in terms of types, quality, and method of analysis should be parts of methodology used from the very beginning. Bernard and Ryan (2010), argue that data analysis is an essential act and it even starts before the research does.

Two types of data were collected to answer the research questions: quantitative data, which was collected through a questionnaire, and a qualitative data, which was collected through interviews. To analyze the quantitative data, the IBM Statistical Package for the Social Science (SPSS) version 19 was used. Frequency (F) and percentage (%) statistical descriptors were used to get accurate analysis that leads to identify the professional development needs of teachers in meddle government schools to become inclusive. For analyzing qualitative data collected a computer

Assisted Qualitative Data Analysis Software (AQDAS) NVivo version 10 was used to obtain accurate insight results. Both quantitative and qualitative data will be discussed in details in the findings and discussion chapter of this dissertation.

3.11 Validity and Reliability

According to Jackson (2011), validity means “truthfulness”. In other words, it refers to the fact that the data collection tools accurately measure what they are intended to measure. On the other hand, Harder et al. (2010), argue that reliability means consistency of the results. Both validity and reliability were considered when conducting this research.

Chapter Four

Findings and Discussion

This chapter illustrates the results of the teachers survey and answer the main research question: "What Could Be Recommended to Support General Education Teachers in Middle Government Schools in The Emirate of Sharjah for Effective Inclusive Education?". This question will be answered through the following main four sub-questions as follows:

1. Are teachers in middle government schools in the Emirate of Sharjah qualified enough to maintain an effective inclusive education?
2. Are there any regular professional development programs to enhance general education teachers' skills to teach SEN students?
3. Are teachers in middle schools confident to teach students with special educational needs?
4. What are the professional needs teachers required to support inclusive education in middle government schools in the Emirate of Sharjah?

Findings from quantitative tool (Questionnaire)

To answer these questions, a questionnaire for 30 teachers was carried out face-to-face so there was no need to translate it into Arabic as the researcher interpreted all the questions to participants whose English is poor. The findings of the analysis of this survey can be presented as follow:

I. Sample teachers qualification:

1. Sample teachers numbers of years of experience:

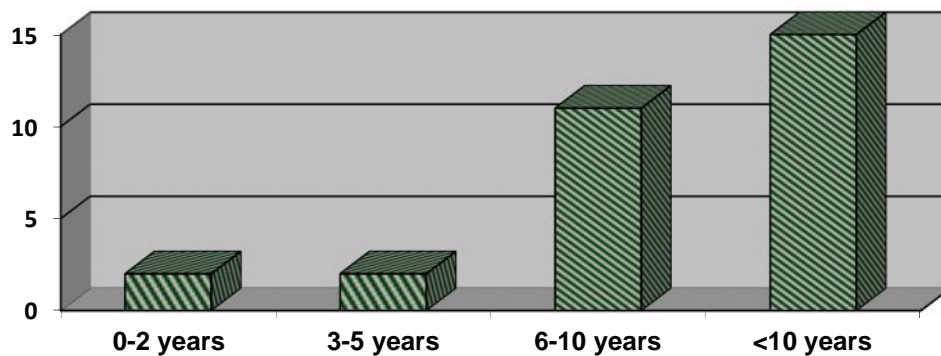
Table (1) and figure (1) show the distribution of sample teachers according to their years of experience in general education.

Table (1): the distribution of sample teachers according to their years of experience in general education.

No. of years of experience	Frequency	Percent
0-2 years.	2	6.7
3-5 years.	2	6.7
6-10 years.	11	36.7
More than 10	15	50.0
Total	30	100.0

The results included in the previous table indicate that exactly half of sample teachers (50%) has more than 10 years of working experience in middle government schools. Also, slightly more than one-third of sample teachers (36.7%) has a working experience ranging between 6-10 years. On the other side, 13.4% of sample teachers, their working experience ranged between 0-5 years. Generally, the results reveal that the sample teachers have a good experience enough to maintain an effective education.

Figure (1): the distribution of sample teachers according to their years of experience in general education.



2. Sample teachers' major specialization:

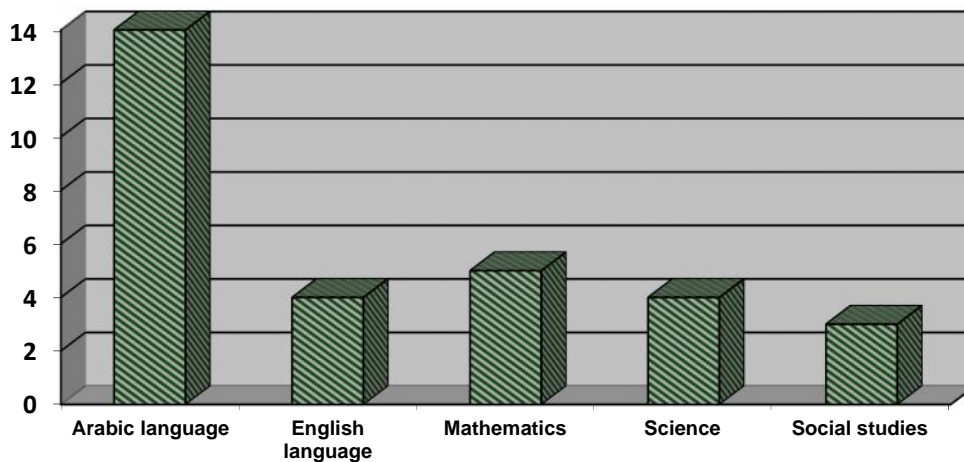
Table (2) and figure (2) show the distribution of sample teachers according to their major specialization.

Table (2): the distribution of sample teachers according to their major specialization.

Major specialization	Frequency	Percent
Arabic Language	14	46.7
English Language	4	13.3
Mathematics	5	16.7
Science	4	13.3
Social Studies	3	10.0
Total	30	100.0

The results included in the previous table indicate that nearly about half of sample teachers (46.7%) their major specialization is Arabic language. Also, 13.3%, 16.7%, 13.3% and 10% of sample teachers (36.7%) their major specializations respectively are English language, mathematics, science, and social studies. Generally, the results reveal that the sample teachers has varied specializations cover the major specializations of general education.

Figure (2): The distribution of sample teachers according to their major specialization.



II. Sample teachers received professional development programs:

1. The existence of discrete department for special needs in sample teachers schools:

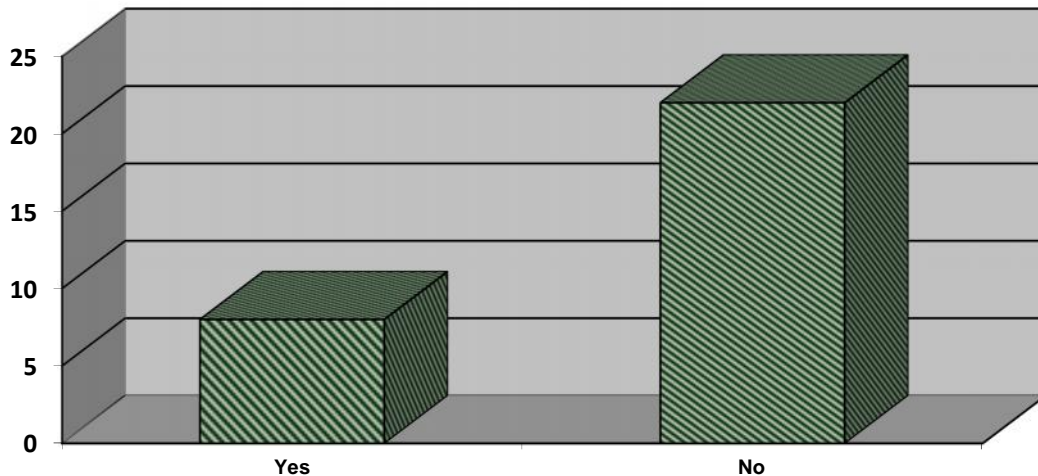
Table (3) and figure (3) show the distribution of sample teachers according to the existence of discrete department for special needs in their schools.

Table (3): the distribution of sample teachers according to the existence of discrete department for special needs in their schools.

Response	Frequency	Percent
No	22	73.3
Yes	8	26.7
Total	30	100.0

The results reveal that nearly about three-quarters of sample teachers (73.3%) their schools did not have a discrete department for special needs. Controversy, 26.7% of sample teachers their schools have a discrete department for special needs. As a result, the majority sample teachers did not practice the inclusion of students with special education needs in their schools or classes properly.

Figure (3): the distribution of sample teachers according to the existence of discrete department for special needs in their schools.



2. The existence of SEN team in sample teachers schools:

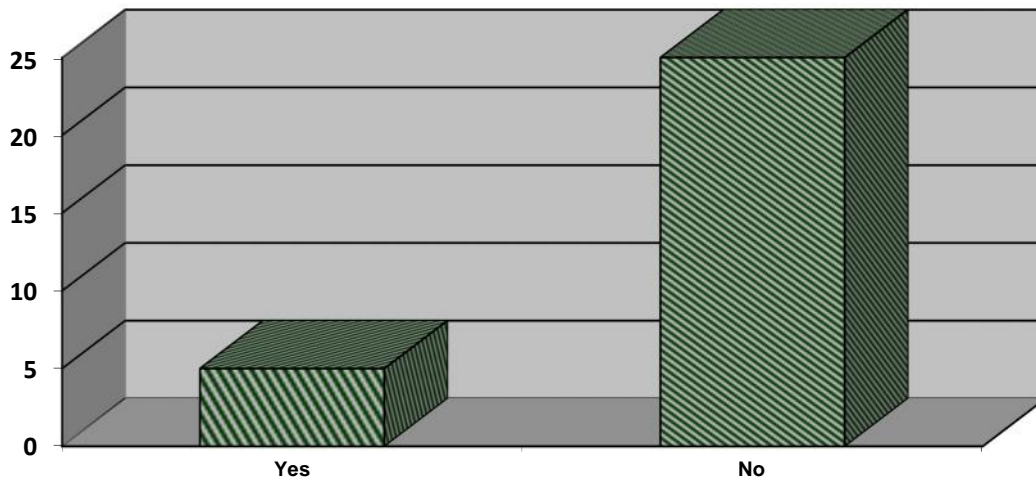
Table (4) and figure (4) present the distribution of sample teachers according to the existence of SEN team in their schools.

Table (4): the distribution of sample teachers according to the existence of SEN team in their schools.

Response	Frequency	Percent
No	25	83.3
Yes	5	16.7
Total	30	100.0

The results showed that the majority of sample teachers (83.3%) their schools did not have a SEN team. In addition, 16.7% of sample teachers their schools have a SEN team. These findings are consistence with the previous findings and reflect that the majority sample teachers did not have a SEN team that may offer help.

Figure (4): the distribution of sample teachers according to the existence of SEN team in their schools.



3. The existence of special education needs policy in sample teachers’ schools:

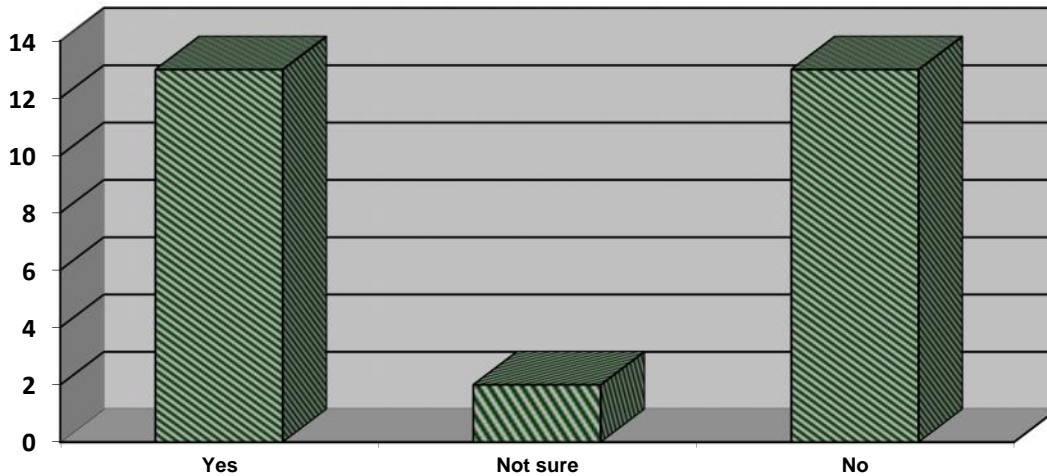
Table (5) and figure (5) show the distribution of sample teachers according to the existence of special education needs policy in their schools.

Table (5): the distribution of sample teachers according to the existence of special education needs policy in their schools.

Response	Frequency	Percent
No	15	50.0
Not Sure	2	6.7
Yes	13	43.3
Total	30	100.0

The results indicate that half of sample teachers (50%) their schools did not have a policy for special education needs. Moreover, 43.3% of sample teachers their schools have a special education needs policy and 6.7% of them not sure that their schools have that policy or not. It can be concluded that major changes should take place in the sample schools for better effective inclusion.

Figure (5): the distribution of sample teachers according to the existence of special education needs policy in their schools.



4. The existence of SEN professional development plan for teachers in sample teachers schools:

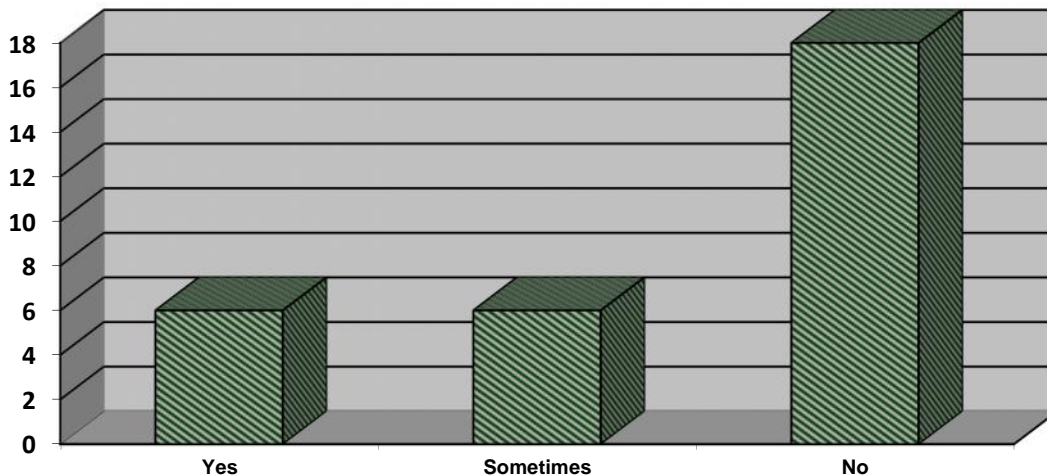
Table (6) and figure (6) present the distribution of sample teachers according to the existence of SEN professional development plan for teachers in their schools.

Table (6): the distribution of sample teachers according to the existence of SEN professional development plan for teachers in their schools.

Response	Frequency	Percent
No	18	60.0
Sometimes	6	20.0
Yes	6	20.0
Total	30	100.0

The findings of table (6) indicates that 60% of sample teachers, their schools did not have a SEN professional development plan for teachers. Furthermore, 20% of sample teachers their schools have a SEN professional development plan for teachers and 20% of them sometimes have that development plans in their schools. So, the importance of creating SEN professional development plans for teachers in the sample schools is apparent in that case.

Figure (6): the distribution of sample teachers according to the existence of SEN professional development plan for teachers in their schools.



III. Sample teachers feeling confident to teach students with special educational needs:

1. The sample teachers’ willingness to accept and teach students with special education needs:

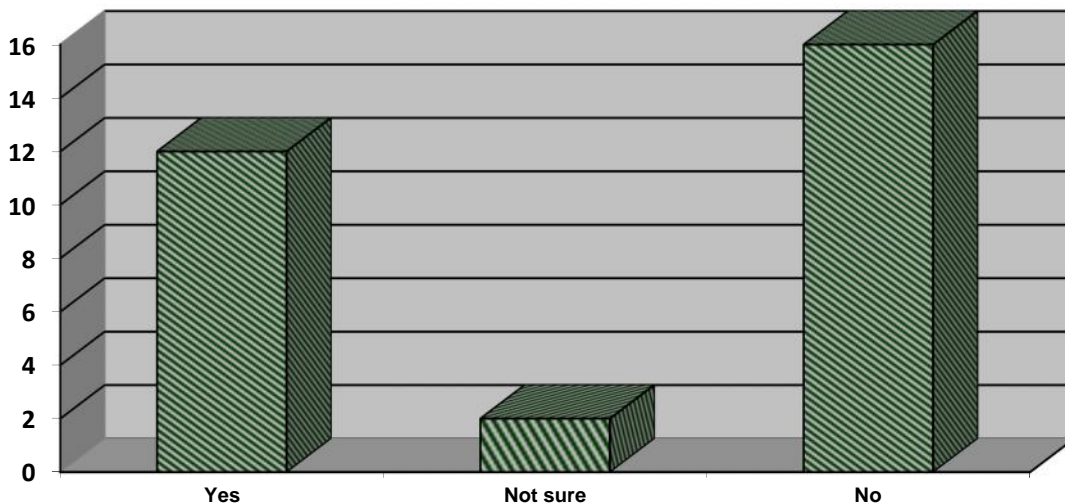
Table (7) and figure (7) show the distribution of sample teachers according to their willing to accept and teach students with special education needs in their classes.

Table (7): the distribution of sample teachers according to their willing to accept and teach students with special education needs in their classes.

Response	Frequency	Percent
No	16	53.3
Not Sure	2	6.7
Yes	12	40.0
Total	30	100.0

The findings of table (7) reveals that slightly more than half of sample teachers (53.3%) are not willing to accept and teach students with special education needs in their classes. On the other hand, 40% of them are willing to accept and teach students with special education needs in their class. In addition, about 6.7% of sample teachers did not have a clear decision about their willing to accept and teach students with special education needs in their classes. Accordingly, orientation and awareness program, of the message included in the accepting and teaching students with special education needs, are crucially needed.

Figure (7): the distribution of sample teachers according to their willing to accept and teach students with special education needs in their classes.



2. The sample teachers feeling confident to work with SEN students:

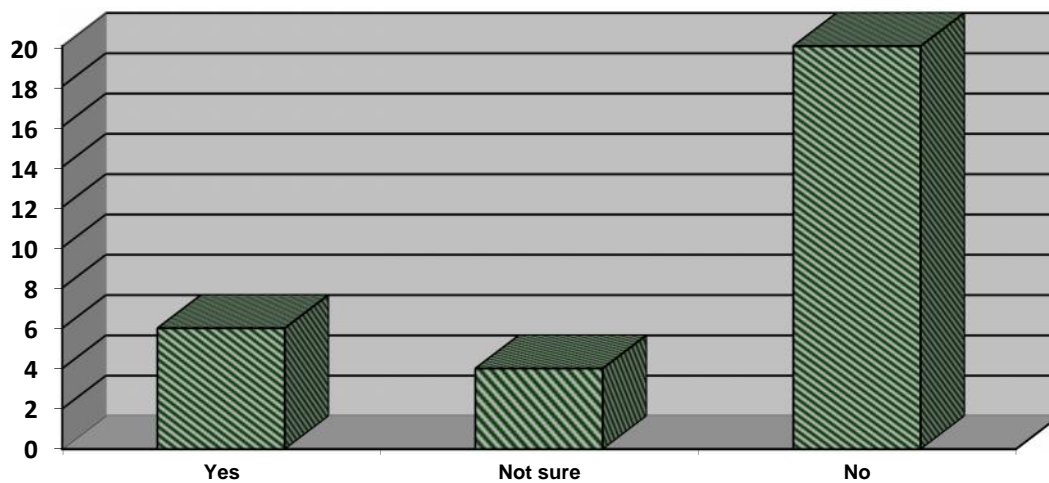
Table (8) and figure (8) present the distribution of sample teachers according to their feeling of confident to work with SEN students.

Table (8): the distribution of sample teachers according to their feeling of confident to work with SEN students.

Response	Frequency	Percent
No	20	66.7
Not Sure	4	13.3
Yes	6	20.0
Total	30	100.0

The findings included in table (8) indicates that about two-thirds of sample teachers (66.7%) are not feeling confident to work with SEN students. On the other hand, only 20% of them are feel confident to work with SEN students. Also, 13.3% of sample teachers are not sure if they feel confident to work with SEN students or not. This result reflects the importance of professional development programs for the sample teachers to increase their confidence work with SEN students.

Figure (8): the distribution of sample teachers according to their feeling of confident to work with SEN students.



IV. Sample teachers' professional needs required to support inclusive education in middle government schools:

1. The sample teachers' preparation of individual educational plan (IEP) for their students:

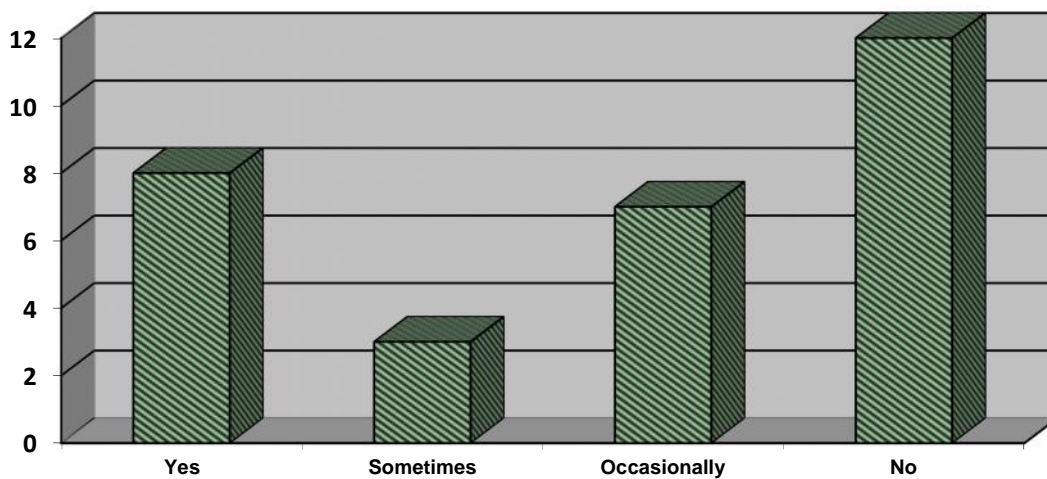
Table (9) and figure (9) illustrate the distribution of sample teachers according to their preparation of individual educational plan (IEP) for their students.

Table (9): the distribution of sample teachers according to their preparation of individual educational plan (IEP) for their students.

Response	Frequency	Percent
No	12	40.0
Sometimes	3	10.0
Occasionally	7	23.3
Yes	8	26.7
Total	30	100.0

The findings reveal that 40% of sample teachers do not prepare an individual educational plan (IEP) for their students. Inversely, 26.7% of sample teachers prepare an individual educational plan (IEP) for their students. Furthermore, 33.3% of sample teachers sometimes or occasionally prepare an individual educational plan (IEP) for their students.

Figure (9): the distribution of sample teachers according to their preparation of individual educational plan (IEP) for their students.



2. The (IEP) team:

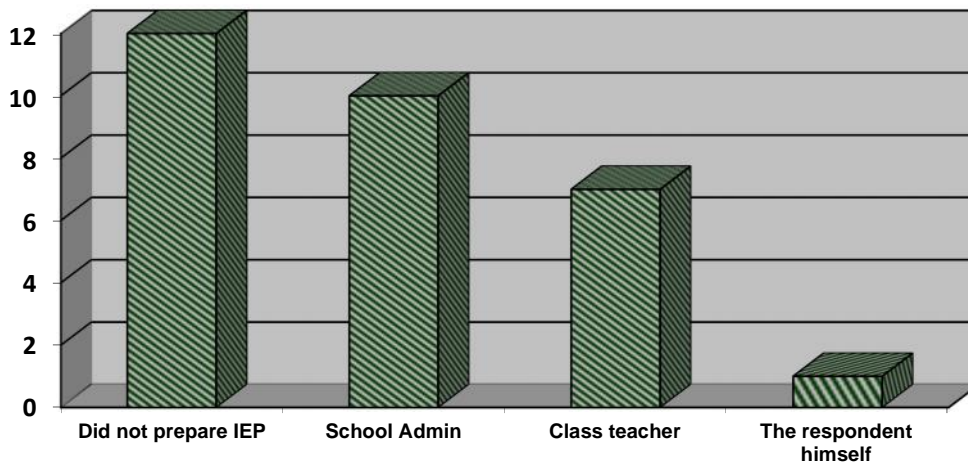
Table (10) and figure (10) illustrate the distribution of sample teachers according to who participates in preparing their (IEPs).

Table (10): the distribution of sample teachers according to who participates in preparing their (IEPs).

Response	Frequency	Percent
oneself	12	40.0
SEN Teacher	10	33.3
Class teachers	7	23.4
School Admin	1	3.3
Total	30	100.0

The findings reveal that 40% of sample teachers prepare an individual educational plan (IEP) for their students all by themselves. Inversely, 33.3%, and 23.4% prepare their IEPs respectively with the help of SEN teacher and other class teachers. Only 3.3% of sample teachers prepare their IEPs with the help of school admin. This finding reflects the urgent need for a training program for sample teacher in designing the IEPs.

Figure (10): the distribution of sample teachers according to the source of designing their (IEPs).



3. The use of SMART or SMARTER objectives by sample teachers:

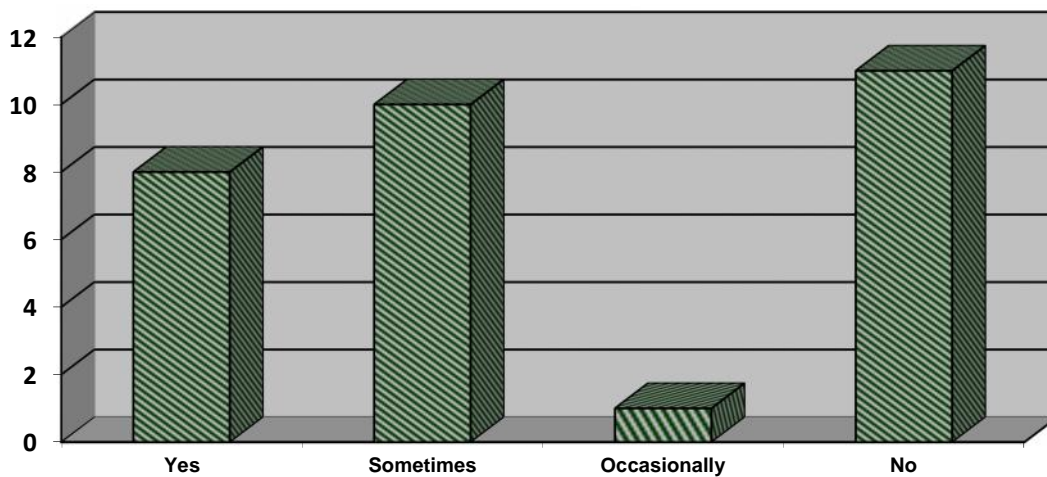
Table (11) and figure (11) illustrate the distribution of sample teachers according to their use of SMART or SMARTER objectives.

Table (11): the distribution of sample teachers according to their use of SMART or SMARTER objectives.

Response	Frequency	Percent
No	11	36.7
Sometimes	10	33.3
Occasionally	1	3.3
Yes	8	26.7
Total	30	100.0

The findings reveal that slightly more than one-third of sample teachers (36.7%) do not use SMART or SMARTER objectives. Inversely, 26.7% of sample teachers use SMART or SMARTER objectives. Moreover, 36.6% of sample teachers sometimes or occasionally use SMART or SMARTER objectives.

Figure (11): the distribution of sample teachers according to their using of SMART or SMARTER objectives.



4. The including of conditions and criteria in objectives by sample teachers:

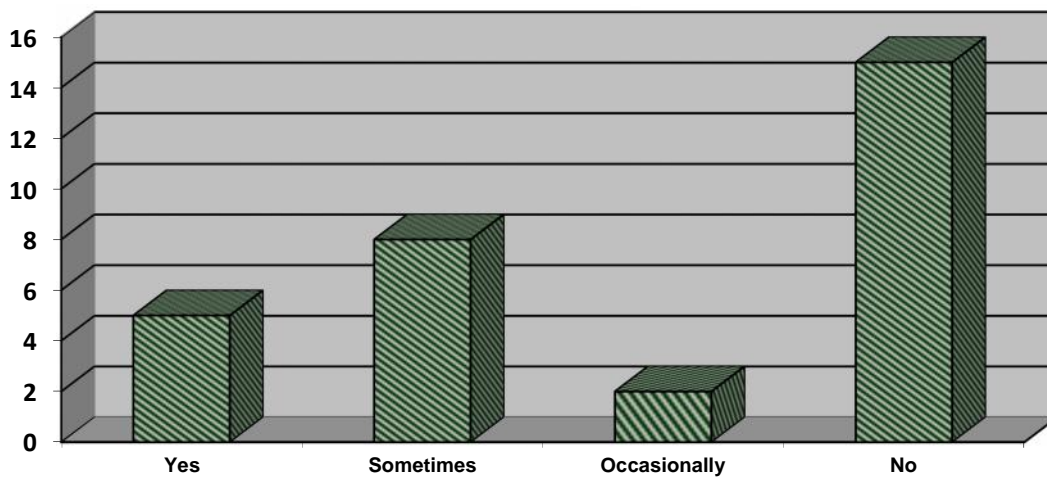
Table (12) and figure (12) illustrate the distribution of sample teachers according to their including of conditions and criteria in objectives.

Table (12): the distribution of sample teachers according to their including of conditions and criteria in objectives.

Response	Frequency	Percent
No	15	50.0
Sometimes	8	26.7
Occasionally	2	6.7
Yes	5	16.7
Total	30	100.0

The findings reveal that half of the sample teachers (50%) do not include neither conditions nor criteria in their objectives. Inversely, almost (33%) of sample teachers sometimes or occasionally include conditions and criteria in their objectives. Moreover, only 16.7% of sample teachers include conditions and criteria in their objectives.

Figure (12): the distribution of sample teachers according to their including of conditions and criteria in objectives.



5. The including of behavior intervention plan (BIP) in IEPs by sample teachers:

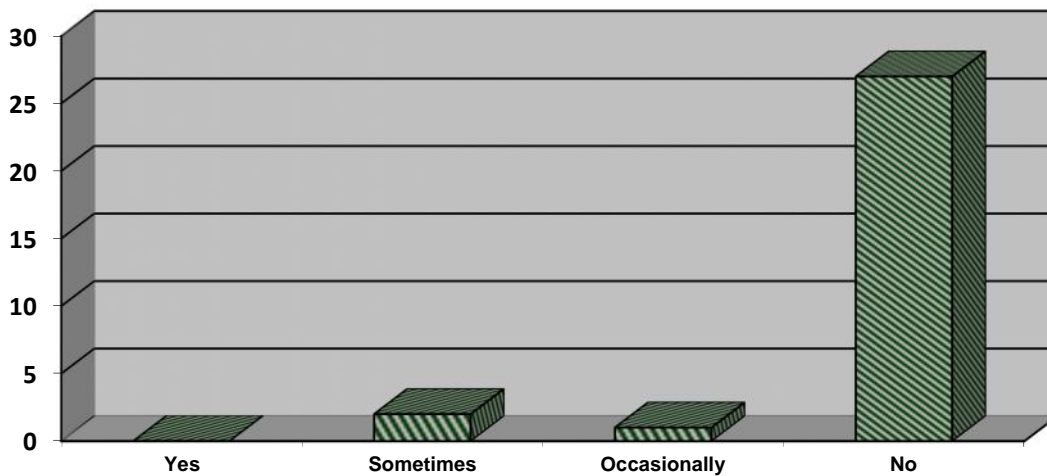
Table (13) and figure (13) present the distribution of sample teachers according to their including of behavior intervention plan (BIP) in their IEPs.

Table (13): the distribution of sample teachers according to their including of behavior intervention plan (BIP) in their IEPs.

Response	Frequency	Percent
No	27	90.0
Sometimes	2	6.7
Occasionally	1	3.3
Yes	-	-
Total	30	100.0

The findings reveal that 90% of sample teachers do not include behavior intervention plan (BIP) in their IEPs. Additionally, 10% of sample teachers sometimes or occasionally include behavior intervention plan (BIP) in his IEPs. However, none of the sample teachers is surely including behavior intervention plan in his/her IEPs.

Figure (13): the distribution of sample teachers according to their including of behavior intervention plan (BIP) in their IEPs.



6. The performing of functional assessment by sample teachers:

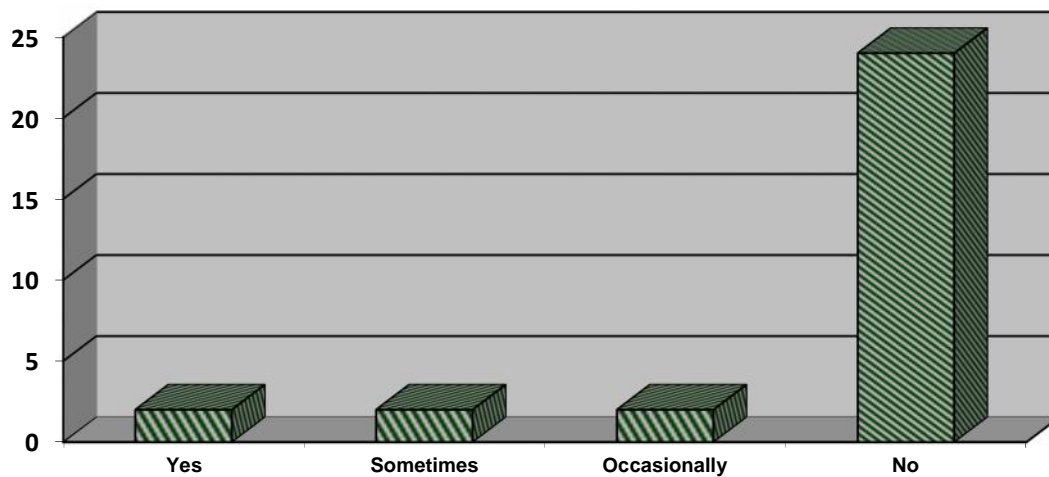
Table (14) and figure (14) present the distribution of sample teachers according to performing functional assessment.

Table (14): the distribution of sample teachers according to performing functional assessment.

Response	Frequency	Percent
No	24	80.0
Occasionally	2	6.7
Sometimes	2	6.7
Yes	2	6.7
Total	30	100.0

The findings of table (14) reveal that 80% of sample teachers do not perform functional assessment. On the other hand, only 6.7% of sample teachers perform functional assessment. Furthermore, 13.4% of sample teachers sometimes or occasionally perform functional assessment.

Figure (14): the distribution of sample teachers according to their performing of functional assessment.



7. The including of transition plans in IEPs by sample teachers:

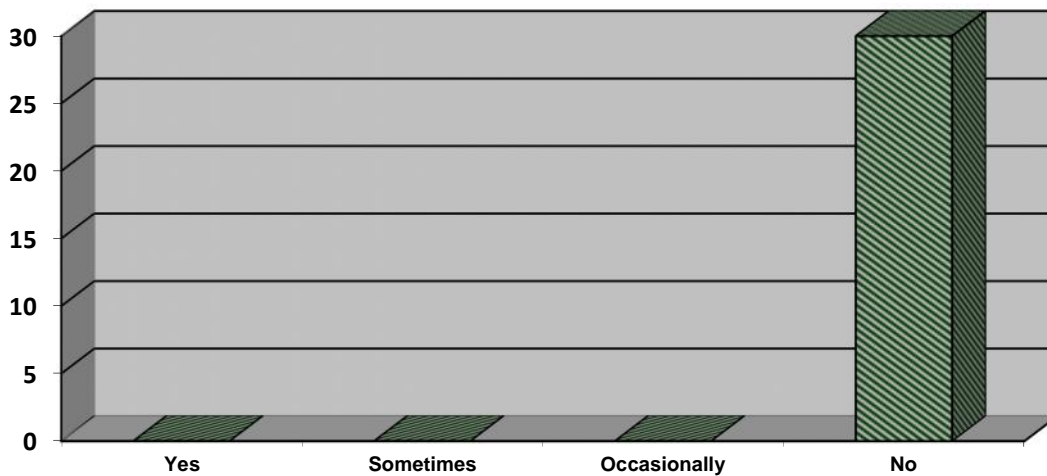
Table (15) and figure (15) present the distribution of sample teachers according to their including of transition plans in their IEPs.

Table (15): the distribution of sample teachers according to their including of transition plans in their IEPs.

Response	Frequency	Percent
No	30	100.0
Sometimes	-	-
Occasionally	-	-
Yes	-	-
Total	30	100.0

The findings reveal that the entire sample teachers do not include transition plan in their IEPs. Generally, the findings indicated that the sample teachers need intensive training on how to prepare a transition plan.

Figure (15): the distribution of sample teachers according to their including of transition plans in their IEPs.



8. The including of statements of accommodation and modifications in IEPs by sample teachers:

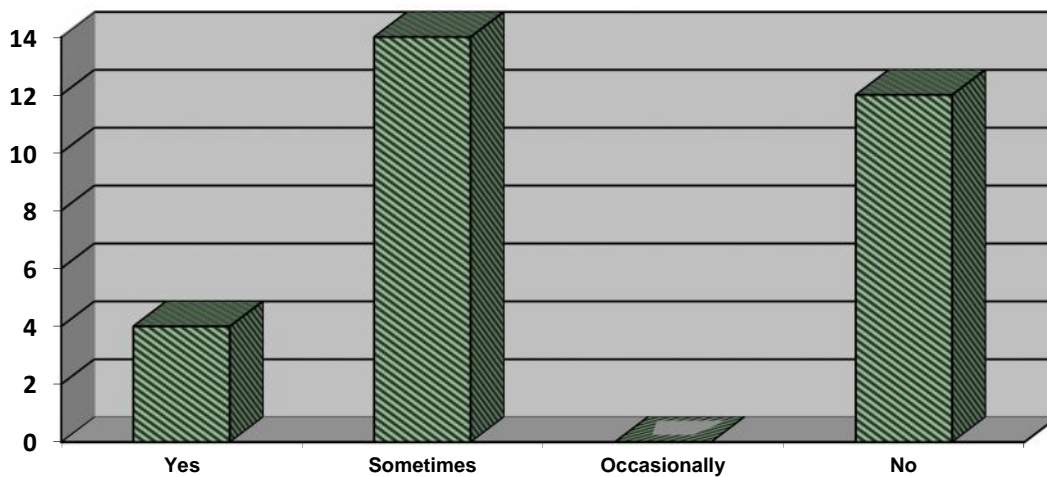
Table (16) and figure (16) show the distribution of sample teachers according to their including of statements of accommodation and modifications in their IEPs.

Table (16): the distribution of sample teachers according to their including of statements of accommodation and modifications in their IEPs.

Response	Frequency	Percent
No	12	40.0
Sometimes	14	46.7
Occasionally	-	-
Yes	4	13.3
Total	30	100.0

The findings reveal that only 13.3% of sample teachers include statements of accommodation and modifications in their IEPs. On the other hand, 40.0% of sample teachers do not include statements of accommodation and modifications in their IEPs. Moreover, 46.7% of sample teachers sometimes include statements of accommodation and modifications in their IEPs.

Figure (16): the distribution of sample teachers according to their including of statements of accommodatin and modifications in their IEPs.



9. The number of prepared IEPs by sample teachers for a student per-year:

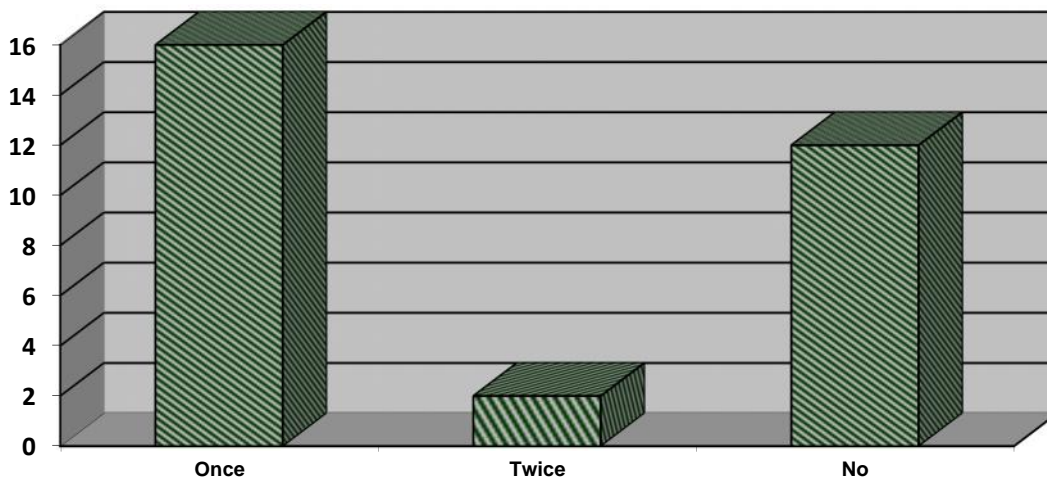
Table (17) and figure (17) show the distribution of sample teachers according to the number of IEPs that they prepared for a student per-year.

Table (17): the distribution of sample teachers according to the number of IEPs that they prepared for a student per-year.

Response	Frequency	Percent
No	12	40.0
Once	16	53.3
Twice	2	6.7
Total	30	100.0

The findings reveal that 53.3% of sample teachers prepare IEP once for students per year and 6.7% of them prepare IEP twice a year per student. On the other hand, 40% of sample teachers do not prepare IEP for students at all.

Figure (17): the distribution of sample teachers according to the number of IEPs that they prepared for a student per-year.



10. The ability of sample teachers to screen different disabilities:

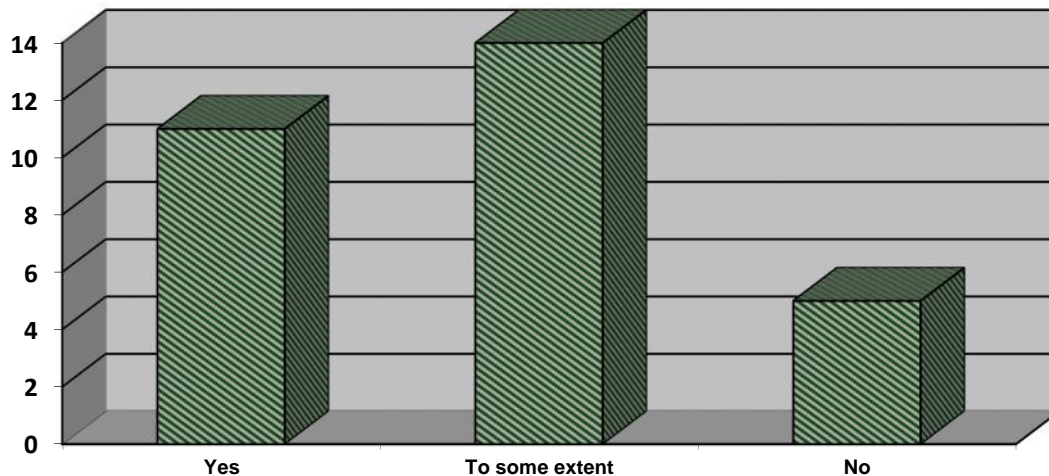
Table (18) and figure (18) illustrate the distribution of sample teachers according to their ability to screen different disabilities.

Table (18): the distribution of sample teachers according to their ability to screen different disabilities.

Response	Frequency	Percent
No	5	16.7
To some extent	14	46.7
Yes	11	36.7
Total	30	100.0

The results indicate that 36.7% of sample teachers think that they have the ability to screen different disabilities and 46.7% of them think that they have that ability to some extent. On the other hand, 16.7% of the sample teacher state that they do not have the ability to screen different disabilities. These results indicate the need to train sample teacher on the different ways to screen disabilities.

Figure (18): the distribution of sample teachers according to their ability to screen different disabilities.



11. The awareness of sample teachers regarding different ways of screening students with special educational needs:

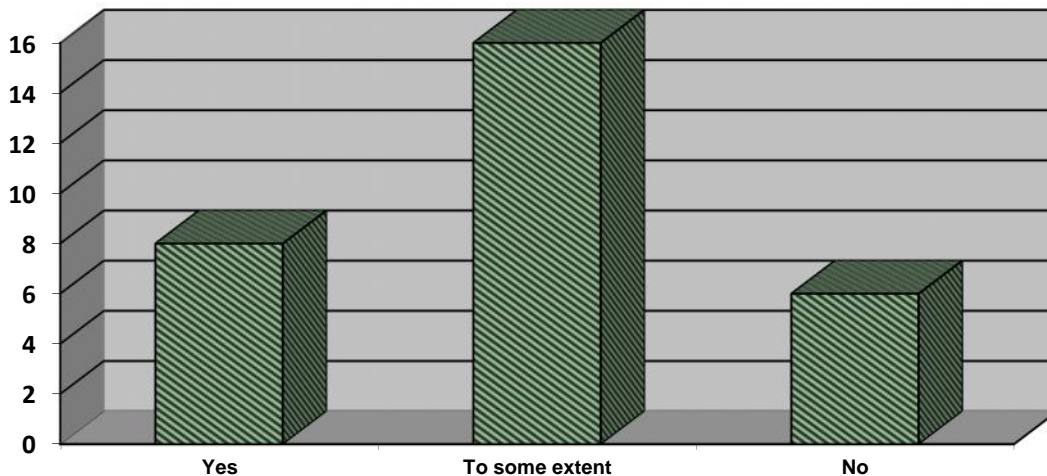
Table (19) and figure (19) illustrate the distribution of sample teachers according to their awareness regarding different ways of screening students with special educational needs.

Table (19): the distribution of sample teachers according to their awareness with different ways of screening students with special educational needs.

Response	Frequency	Percent
No	6	20.0
To some extent	16	53.3
Yes	8	26.7
Total	30	100.0

The results show that 26.7% of sample teachers are aware of different ways of screening students with special educational needs and 53.3% of them aware to some extent with these ways. Moreover, only 20% of the sample teachers are not aware of different ways of screening students with special educational needs. Based on the previous findings a training of sample teachers on the different ways of screening students with special educational needs is more than required.

Figure (19): the distribution of sample teachers according to their awareness with different ways of screening students with special educational needs.



12. The methods used by sample teachers to identify different disabilities:

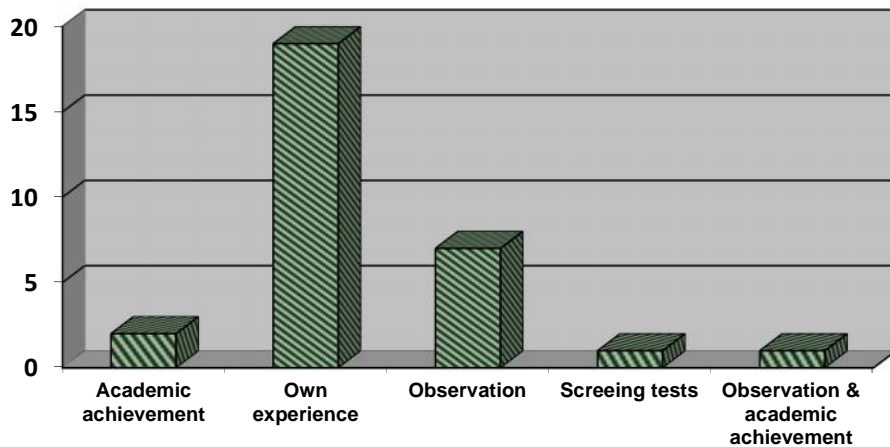
Table (20) and figure (20) present the distribution of sample teachers according to the methods they use to identify different disabilities.

Table (20): the distribution of sample teachers according to the methods they use to identify different disabilities.

Method	Frequency	Percent
According to academic achievement	2	6.7
According to my experience	19	63.3
Through observation	7	23.3
Using screening tests	1	3.3
Through observation and according to academic achievement	1	3.3
Total	30	100.0

The results indicate that near two-thirds (63.3%) of the sample, teachers use their experience to identify different disabilities and 23.3% of them use observations to identify different disabilities. Furthermore, 13.4% of the sample teacher use either academic achievement or screening test or both together to identify different disabilities. Therefore, there is a need for training sample teachers on the scientific methods of identifying different disabilities.

Figure (20): the distribution of sample teachers according to the methods they used to identify different disabilities.



13. The criteria used by sample teachers to identify SEN student:

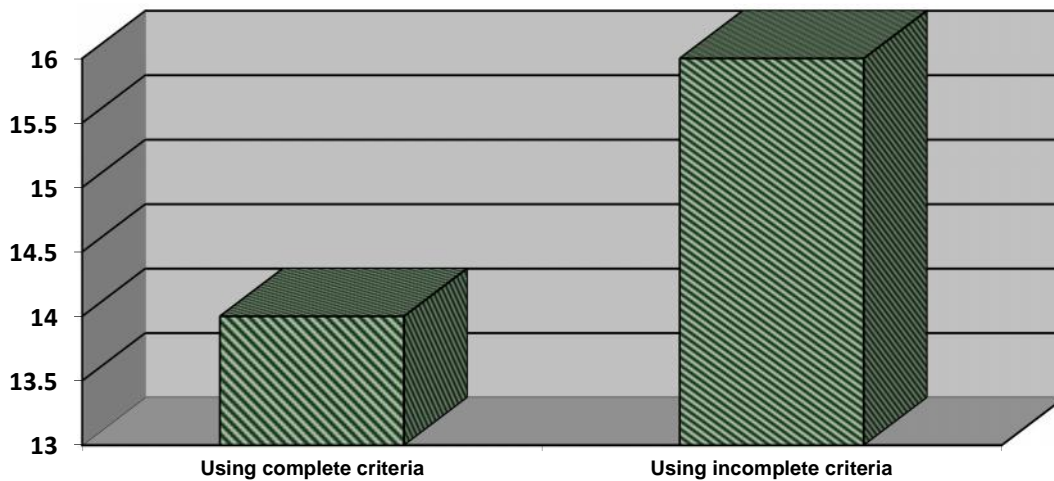
Table (21) and figure (21) show the distribution of sample teachers according to the criteria they use to identify SEN student.

Table (21): the distribution of sample teachers according to the criteria they use to identify SEN student.

Criteria	Frequency	Percent
A talented and gifted student	1	3.3
A Student with productive language Skills problems	4	13.3
An introvert student	6	20.0
A hyper active student	3	10.0
A student with receptive language skills problems.	2	6.7
All above	14	46.7
Total	30	100.0

The results indicate that near the half (46.7%) of sample teachers have a comprehensive vision about who is a SEN student, so they use different criteria to identify a SEN student. On the other hand, 53.3% of the sample teacher have incomplete vision about who is a SEN student, so they use limited criteria to identify a SEN student. Therefore, there is a need for training sample teachers on the criteria used to identify SEN student.

Figure (21): the distribution of sample teachers according to the criteria they used to identify SEN student.



14. Considering differentiation by sample teachers according to considering learning styles when planning and teaching:

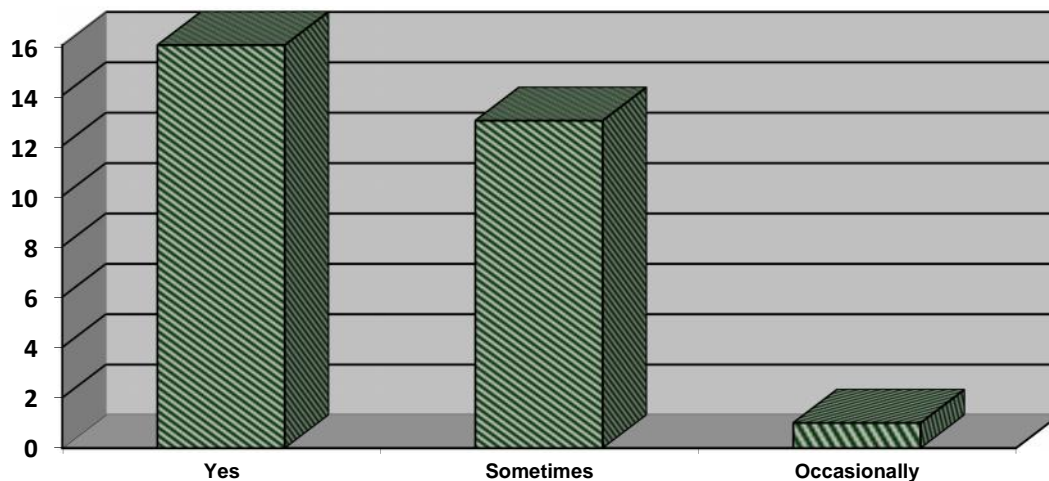
Table (22) and figure (22) illustrate the distribution of sample teachers according to their considering of differentiation according to learning styles when planning and teaching.

Table (22): the distribution of sample teachers according to their considering of differentiation according to learning styles when planning and teaching.

Response	Frequency	Percent
Occasionally	1	3.3
Sometimes	13	43.3
Yes	16	53.3
Total	30	100.0

The results show that slightly more than half of sample teachers (53.3%) consider differentiation according to learning styles when planning and teaching. Moreover, 46.6% of the sample teachers occasionally or sometimes consider differentiation according to learning styles when planning and teaching.

Figure (22): the distribution of sample teachers according to their considering of differentiation according to learning styles when planning and teaching.



15. Identifying students’ learning styles by sample teachers:

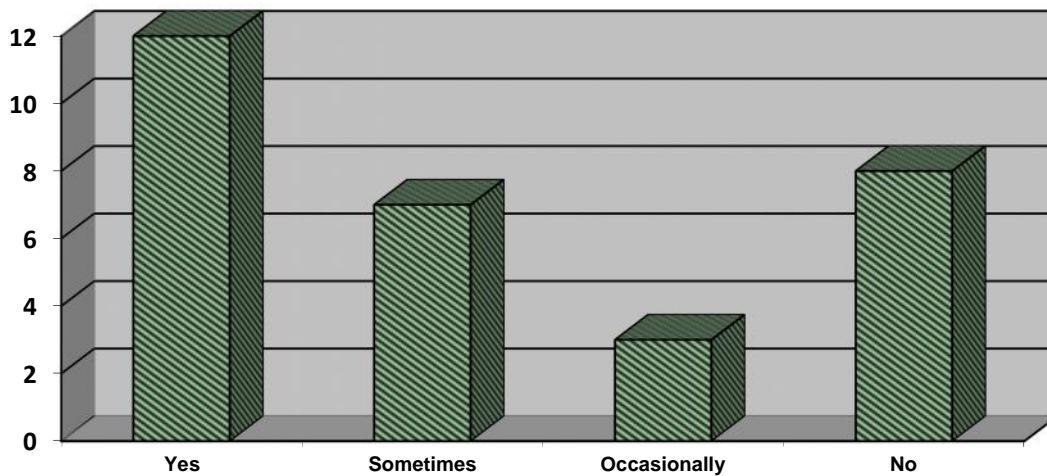
Table (23) and figure (23) show the distribution of sample teachers according to ways of identifying of their students' learning styles.

Table (23): the distribution of sample teachers according to ways of identifying of their students' learning styles.

Response	Frequency	Percent
No	8	26.7
Occasionally	3	10.0
Sometimes	7	23.3
Yes	12	40.0
Total	30	100.0

The results show that 26.7% of sample teachers do not identify their students' learning styles. On the other hand, 40% of the sample teachers identify their students' learning styles. Furthermore, 33.3% of sample teachers occasionally or sometimes identify their students' learning styles.

Figure (23): the distribution of sample teachers according to the identifying of their students' learning styles.



16. The methods used by sample teachers to identify their students' learning styles:

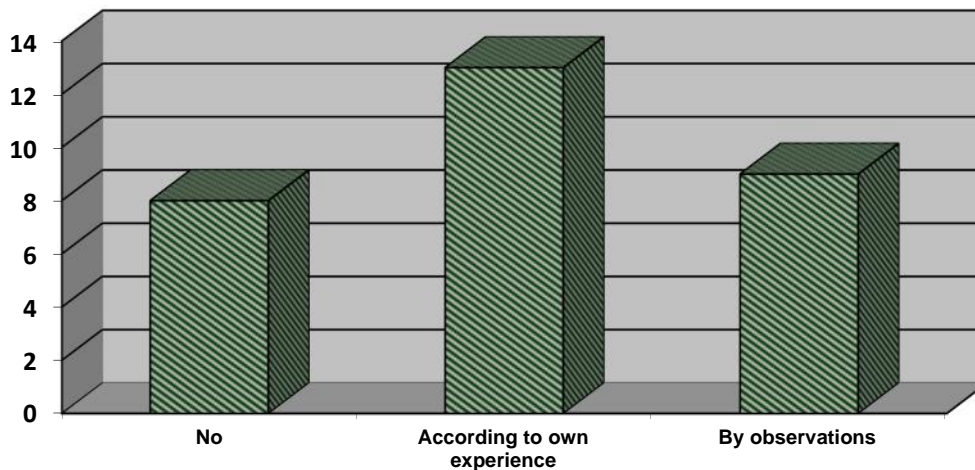
Table (24) and figure (24) show the distribution of sample teachers according to the methods they use to identify their students' learning styles.

Table (24): the distribution of sample teachers according to the methods they use to identify their students' learning styles.

Response	Frequency	Percent
Using identification tests	8	26.7
According to experience	13	43.3
By observation	9	30.0
Total	30	100.0

The results indicate that 43.3% of sample teachers use their own experience to identify their students' learning styles while 30% of them use observation in this regard. However, 26.7% of the teachers use identification test to decide on their students' learning styles. As a result, there is a need for training of sample teachers in the area of identifying students' learning styles and its practical methods.

Figure (24): the distribution of sample teachers according to the methods they used to identify their students' learning styles.



17. Using peer helper, multimedia, or e-resources in teaching SEN students by sample teachers:

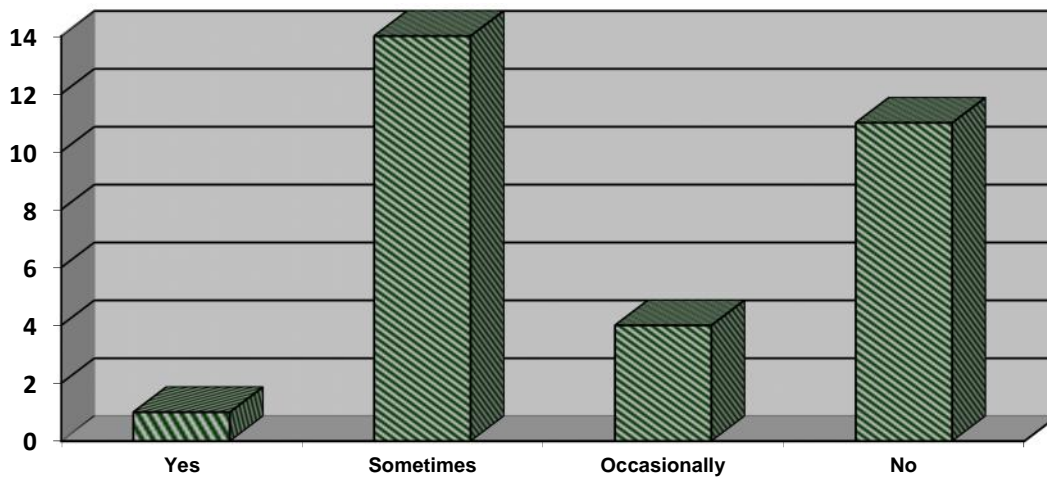
Table (25) and figure (25) show the distribution of sample teachers according to their use of peer helper, multimedia, or e-resources in teaching their SEN students.

Table (25): the distribution of sample teachers according to the use of peer helper, multimedia, or e-resources in teaching their SEN students.

Response	Frequency	Percent
No	11	36.7
Occasionally	4	13.3
Sometimes	14	46.7
Yes	1	3.3
Total	30	100.0

The results show that only 3.3% of sample teachers used peer helper, multimedia, or e-resources in teaching their SEN students. On the other hand, 36.7% of the sample teachers do not use peer helper, multimedia, or e-resources in teaching their SEN students. Also, 60% of sample teachers occasionally or sometimes use peer helper, multimedia, or e-resources in teaching their SEN students. Based on the previous results the sample teachers appeared to lack the skills of using peer helper, multimedia, or e-resources in teaching.

Figure (25): the distribution of sample teachers according to using of peer helper, multimedia, or e-resources in teaching their SEN students.



18. Using interactive exercises or text-to-speech/speech-to-text software to teach SEN students by sample teachers:

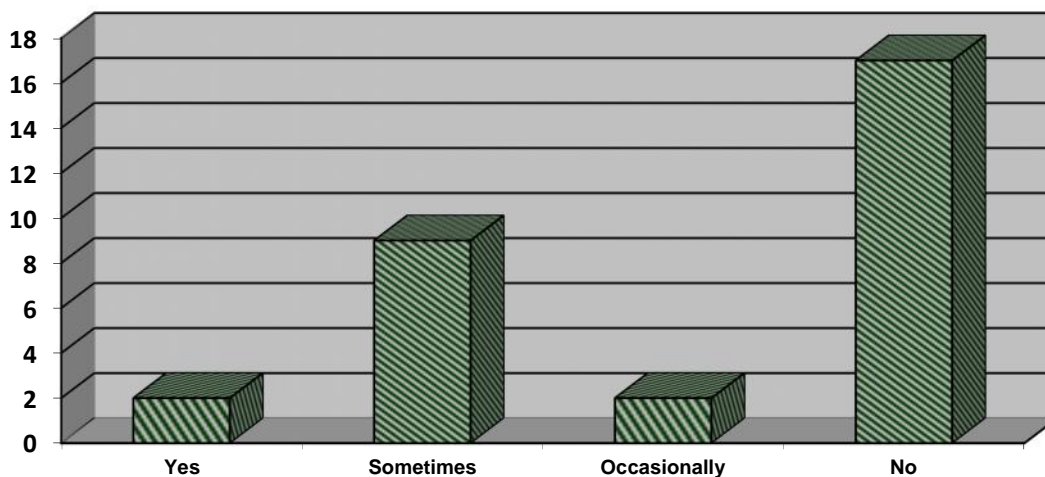
Table (26) and figure (26) show the distribution of sample teachers according to their using of interactive exercises or text-to-speech/speech-to-text software to teach their SEN students.

Table (26): the distribution of sample teachers according to using of interactive exercises or text-to-speech/speech-to-text software to teach their SEN students.

Response	Frequency	Percent
No	17	56.7
Occasionally	2	6.7
Sometimes	9	30.0
Yes	2	6.7
Total	30	100.0

The results reveal that only 6.7% of sample teachers use interactive exercises or text-to-speech/speech-to-text software to teach their SEN students. On the other hand, 56.7% of the sample teachers do not use interactive exercises or text-to-speech/speech-to-text software to teach their SEN students. Furthermore, 36.7% of sample teachers occasionally or sometimes use interactive exercises or text-to-speech/speech-to-text software to teach their SEN students. Based on the previous results the sample teachers appeared to lack the skills of using interactive exercises or text-to-speech/speech-to-text software in teaching.

Figure (26): the distribution of sample teachers according to using of interactive exercises or text-to-speech/speech-to-text software to teach their SEN students.



19. Using graph organizers and concept maps to teach SEN students by sample teachers:

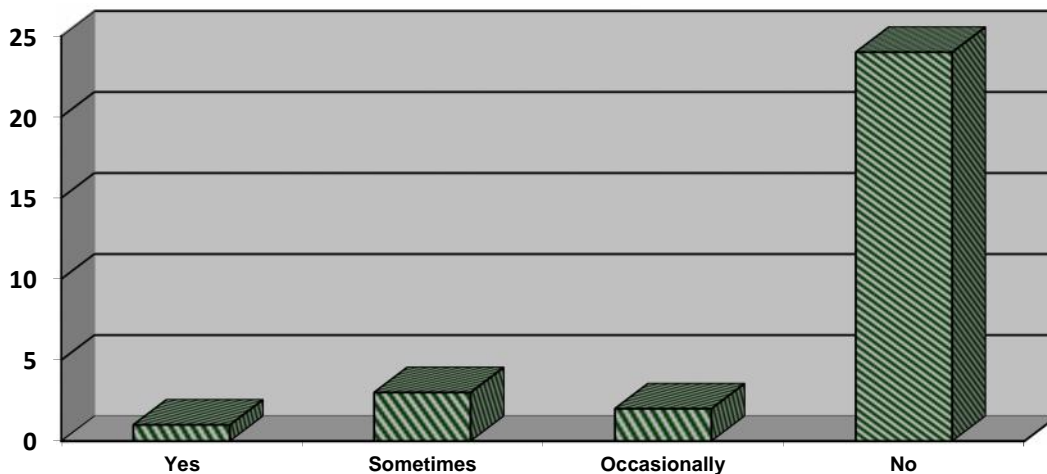
Table (27) and figure (27) present the distribution of sample teachers according to their use of graph organizers and concept maps to teach their SEN students.

Table (27): the distribution of sample teachers according to use of graph organizers and concept maps to teach their SEN students.

Response	Frequency	Percent
No	24	80.0
Occasionally	2	6.7
Sometimes	3	10.0
Yes	1	3.3
Total	30	100.0

The results reveal that only 3.3% of sample teachers use graph organizers and concept maps to teach their SEN students. On the other hand, the majority of sample teachers (80%) do not use graph organizers or concept maps to teach their SEN students. Moreover, 16.7% of sample teachers occasionally or sometimes use graph organizers and concept maps to teach their SEN students. Therefore, it can be concluded that the sample teachers appear to lack the skills of using graph organizers and concept maps in teaching.

Figure (27): the distribution of sample teachers according to using of using of graph organizers and concept maps to teach their SEN students.



20. Sparing extra time for SEN students to complete tasks or assignments by sample teachers:

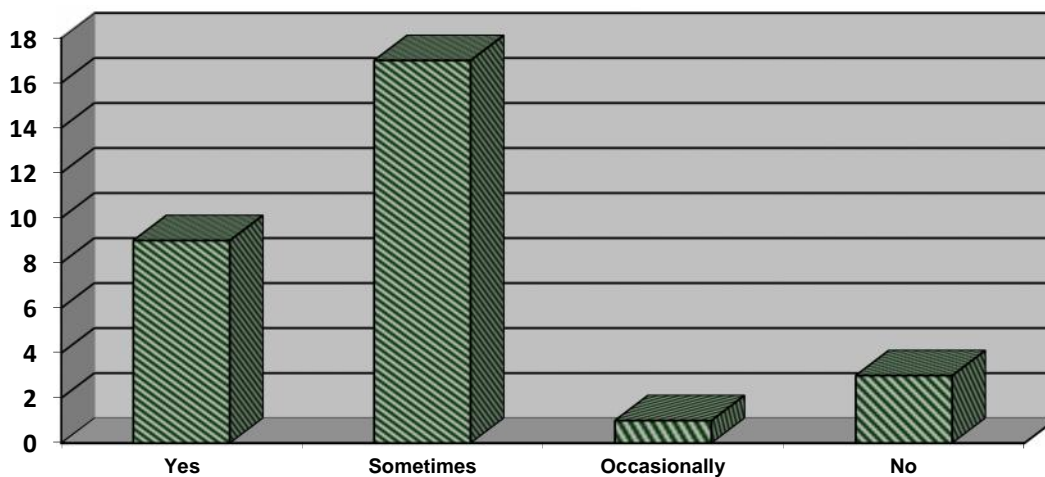
Table (28) and figure (28) present the distribution of sample teachers according to sparing extra time for their SEN students to complete tasks or assignments.

Table (28): the distribution of sample teachers according to sparing extra time for their SEN students to complete tasks or assignments.

Response	Frequency	Percent
No	3	10.0
Occasionally	1	3.3
Sometimes	17	56.7
Yes	9	30.0
Total	30	100.0

The results reveal that about one-third of sample teachers (30%) spare extra time for their SEN students to complete tasks or assignments. On the other hand, 10% of sample teachers do not spare extra time for their SEN students to complete tasks or assignments. Moreover, 60% of sample teachers occasionally or sometimes spare extra time for their SEN students to complete tasks or assignments.

Figure (28): the distribution of sample teachers according to sparing extra time for their SEN students to complete tasks or assignments.



21. Using alternatives to written tasks to check on knowledge and comprehension by sample teachers:

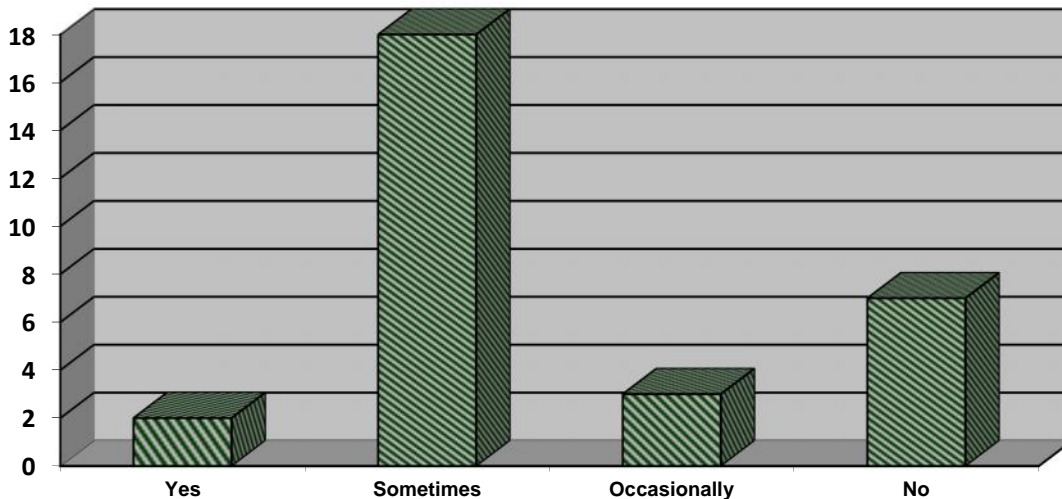
Table (29) and figure (29) show the distribution of sample teachers according to their use of alternatives to written tasks to check on knowledge and comprehension.

Table (29): the distribution of sample teachers according to their use of alternatives to written tasks to check on knowledge and comprehension.

Response	Frequency	Percent
No	7	23.3
Occasionally	3	10.0
Sometimes	18	60.0
Yes	2	6.7
Total	30	100.0

The results show that only 6.7% of sample teachers use alternatives to written tasks to check on knowledge and comprehension. On the other hand, 23.3% of sample teachers do not use alternatives to written tasks to check on knowledge and comprehension. Additionally, 70% of sample teachers occasionally or sometimes use alternatives to written tasks to check on knowledge and comprehension.

Figure (29): the distribution of sample teachers according to their using of alternatives to written tasks to check on knowledge and comprehension.



22. Pitching down subject or course content and evaluation by sample teachers:

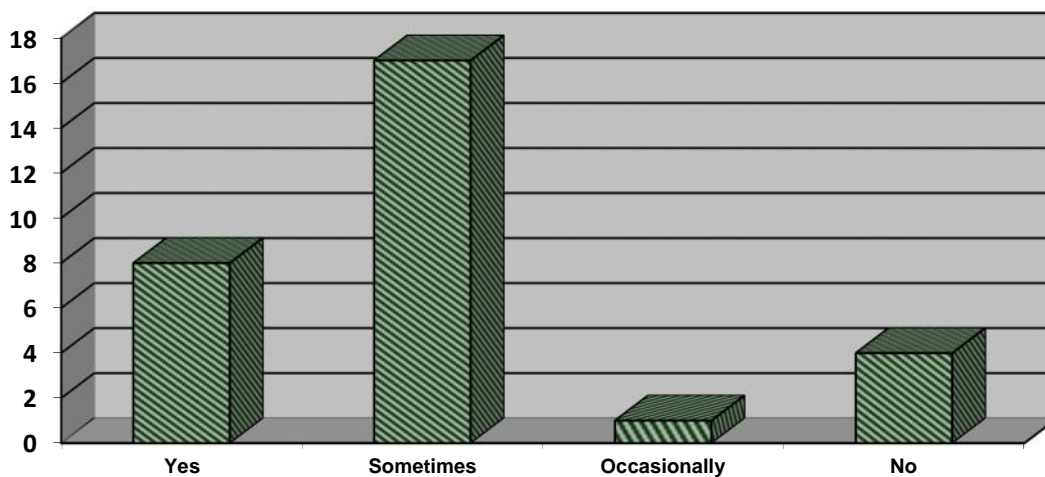
Table (30) and figure (30) show the distribution of sample teachers according to their pitching down subject or course content and evaluation.

Table (30): the distribution of sample teachers according to their pitching down subject or course content and evaluation.

Response	Frequency	Percent
No	4	13.3
Occasionally	1	3.3
Sometimes	17	56.7
Yes	8	26.7
Total	30	100.0

The results indicate that 26.7% of sample teachers pitch down subject or course content and evaluation. On the other hand, 13.3% of sample teachers do not pitch down subject or course content and evaluation. Additionally, 60% of sample teachers occasionally or sometimes pitch down subject or course content and evaluation.

Figure (30): the distribution of sample teachers according to their pitching down subject or course content and evaluation.



23. Familiarity of sample teachers with alternative keyboards:

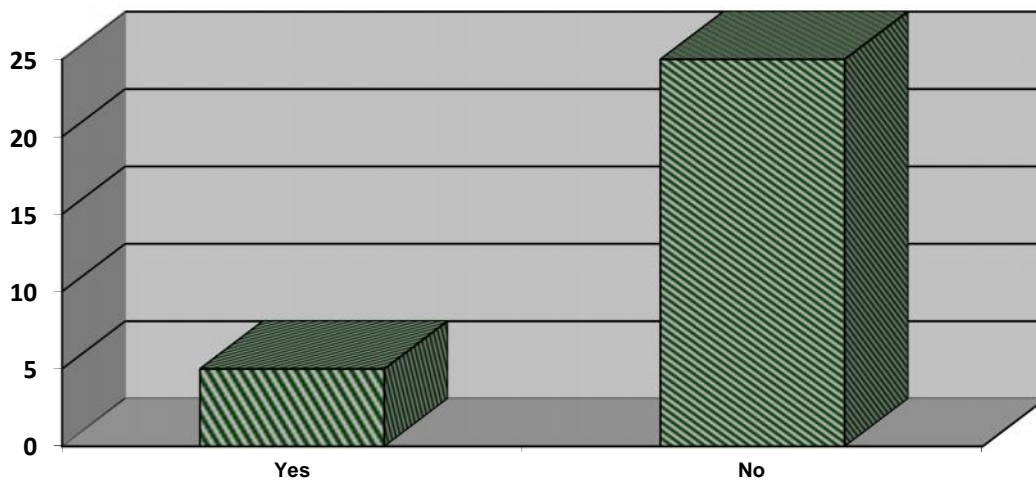
Table (31) and figure (31) show the distribution of sample teachers according to their familiarity with alternative keyboards.

Table (31): the distribution of sample teachers according to their familiarity with alternative keyboards.

Response	Frequency	Percent
No	25	83.3
Yes	5	16.7
Total	30	100.0

The results indicate that the majority of sample teachers (83.3%) are not familiar with alternative keyboards. On the other hand, 16.7% of sample teachers are familiar with alternative keyboards. Therefore, the results reveal that the sample teachers need a training program on using alternative keyboards.

Figure (31): the distribution of sample teachers according to their familiarity with alternative keyboards.



24. Familiarity of sample teachers with audio books:

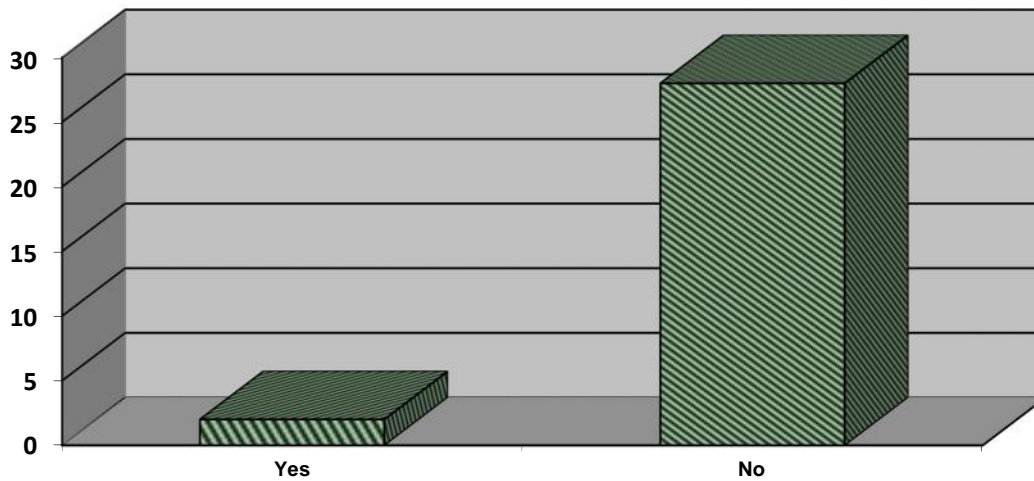
Table (32) and figure (32) illustrate the distribution of sample teachers according to their familiarity with audio books.

Table (32): the distribution of sample teachers according to their familiarity with audio books.

Response	Frequency	Percent
No	28	93.3
Yes	2	6.7
Total	30	100.0

The results indicate that the majority of sample teachers (93.3%) are not familiar with audio books. On the other hand, 6.7% of sample teachers are familiar with audio books. Therefore, the results reveal that the sample teachers need a training program on using audio books.

Figure (32): the distribution of sample teachers according to their familiarity with audio books.



25. Familiarity of sample teachers with electronic math worksheets:

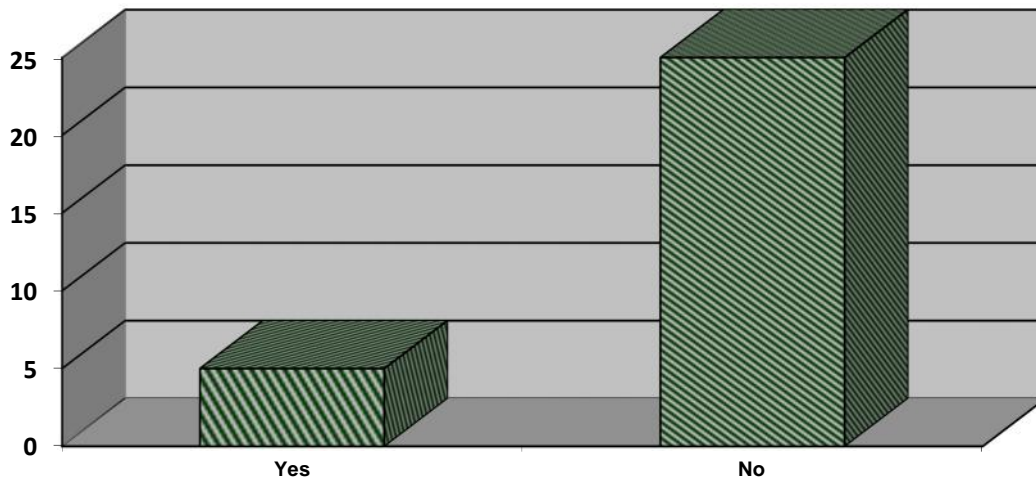
Table (33) and figure (33) illustrate the distribution of sample teachers according to their familiarity with electronic math worksheets.

Table (33): the distribution of sample teachers according to their familiarity with electronic math worksheets.

Response	Frequency	Percent
No	25	83.3
Yes	5	16.7
Total	30	100.0

The results reveal that the majority of sample teachers (83.3%) are not familiar with electronic math worksheets. On the other hand, 16.7% of sample teachers are familiar with electronic math worksheets. Therefore, the results reveal that the sample teachers need a training program on using electronic math worksheets.

Figure (33): the distribution of sample teachers according to their familiarity with electronic math worksheets.



26. Familiarity of sample teachers with personal FM listening system:

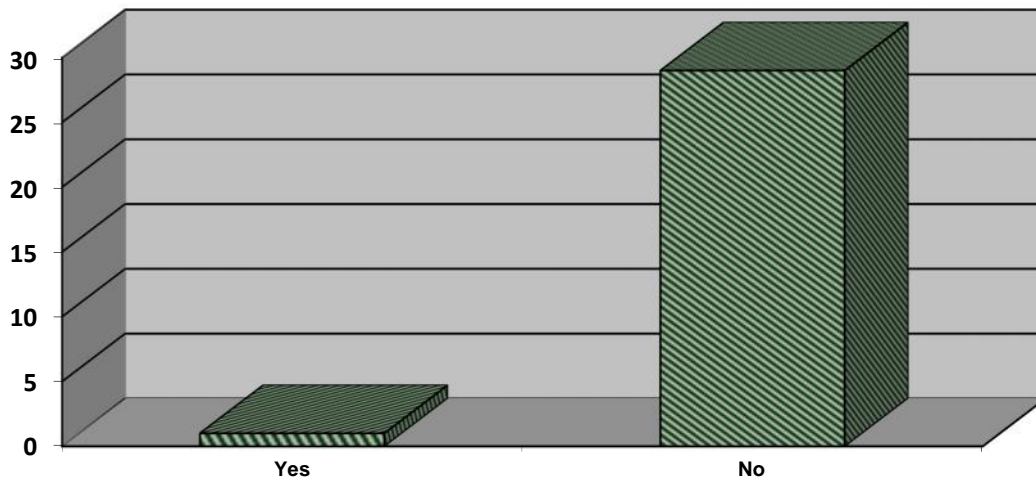
Table (34) and figure (34) illustrate the distribution of sample teachers according to their familiarity with personal FM listening system.

Table (34): the distribution of sample teachers according to their familiarity with personal FM listening system.

Response	Frequency	Percent
No	29	96.7
Yes	1	3.3
Total	30	100.0

The results reveal that the vast majority of sample teachers (96.7%) are not familiar with personal FM listening system. On the other hand, only 3.3% of sample teachers are familiar with personal FM listening system. Therefore, the results reveal that the sample teachers need a training program on using personal FM listening system.

Figure (34): the distribution of sample teachers according to their familiarity with personal FM listening system.



27. Familiarity of sample teachers with proofreading programs:

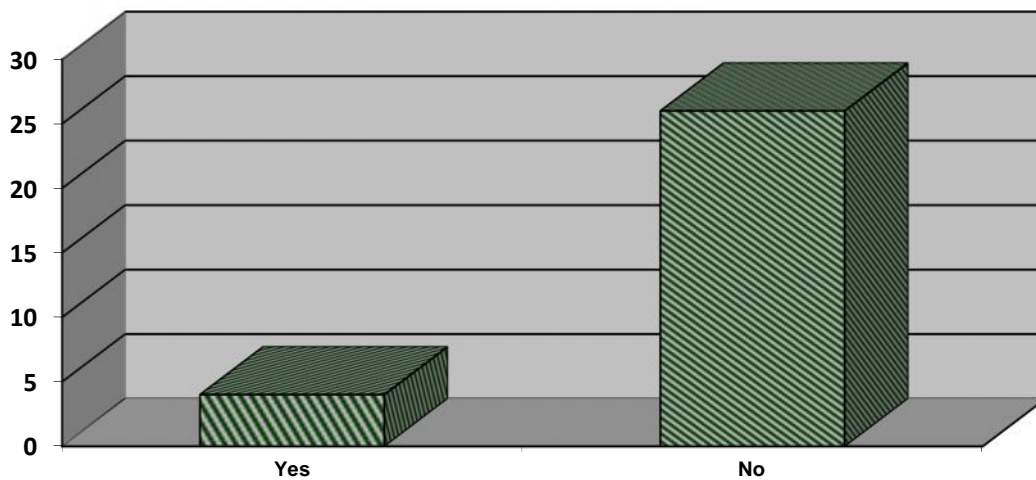
Table (35) and figure (35) illustrate the distribution of sample teachers according to their familiarity with proofreading programs.

Table (35): the distribution of sample teachers according to their familiarity with proofreading programs.

Response	Frequency	Percent
No	26	86.7
Yes	4	13.3
Total	30	100.0

The results reveal that the majority of sample teachers (86.7%) are not familiar with proofreading programs. On the other hand, 13.3% of sample teachers are familiar with proofreading programs. Therefore, the results reveal that the sample teachers need a training program on using proofreading programs.

Figure (35): the distribution of sample teachers according to their familiarity with proofreading programs.



28. The teaching approaches used by sample teachers to teach their SEN students:

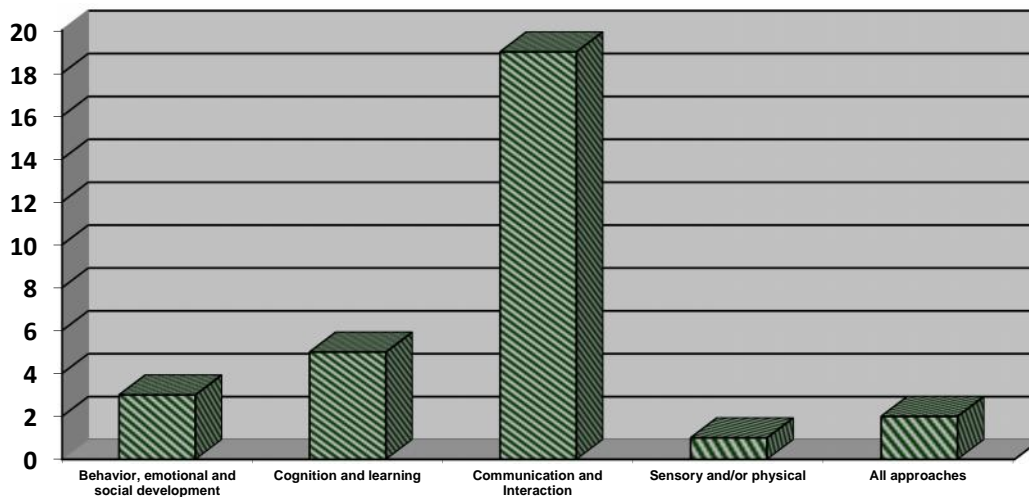
Table (36) and figure (36) show the distribution of sample teachers according to teaching approaches they use to teach their SEN students.

Table (36): the distribution of sample teachers according to teaching approaches they use to teach their SEN students.

Response	Frequency	Percent
Behavior, emotional and social development	3	10.0
Cognition and learning	5	16.7
Communication and Interaction	19	63.3
Sensory and/or physical	1	3.3
All above	2	6.7
Total	30	100.0

The results reveal that about two-thirds of sample teachers (63.3%) use communication and Interaction approach to teach their SEN students. In addition, 16.7%, 10% and 3.3% of sample teachers use cognition and learning, behavior, emotional and social development, and sensory and/or physical respectively to teach their SEN students. Moreover, only 6.7% used all the teaching approaches to teach their SEN students.

Figure (36): the distribution of sample teachers according to teaching approaches they used to teach their SEN students.



29. The ability of sample teachers to prioritize their tasks:

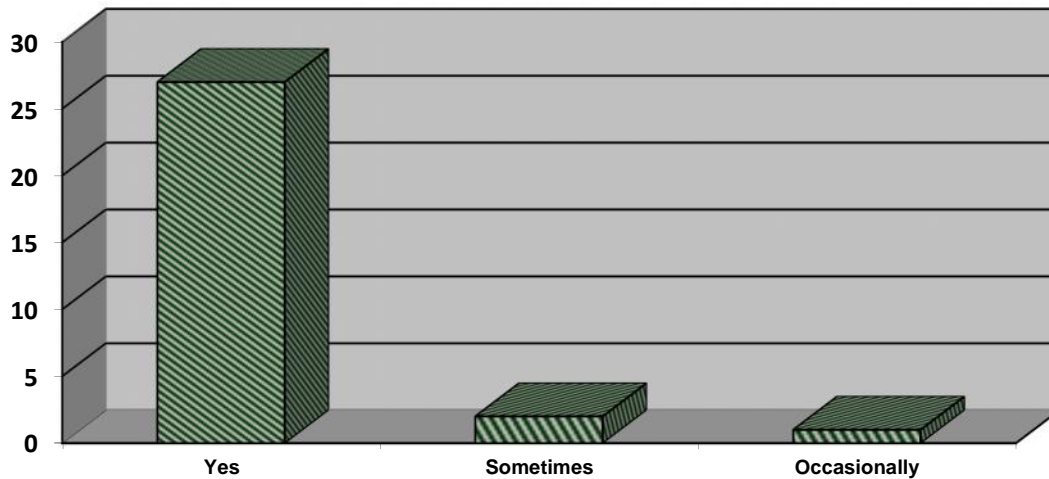
Table (37) and figure (37) show the distribution of sample teachers according to their ability to prioritize their tasks.

Table (37): the distribution of sample teachers according to their ability to their ability to prioritize their tasks.

Response	Frequency	Percent
Occasionally	1	3.3
Sometimes	2	6.7
Yes	27	90.0
Total	30	100.0

The results indicate that the vast majority of sample teachers (90%) are able to prioritize their tasks. On the other hand, 10% of sample teachers occasionally or sometimes are able to prioritize their tasks.

Figure (37): the distribution of sample teachers according to their to their ability to prioritize their tasks.



30. The ability of sample teachers to manage their time:

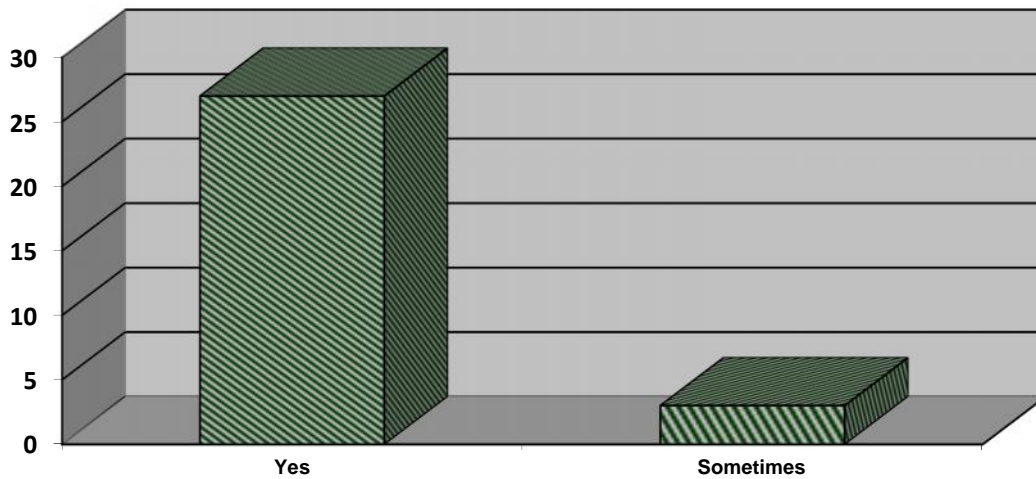
Table (38) and figure (38) show the distribution of sample teachers according to their ability to manage their time.

Table (38): the distribution of sample teachers according to their to their ability to mange their time.

Response	Frequency	Percent
Sometimes	3	10.0
Yes	27	90.0
Total	30	100.0

The results indicate that the vast majority of sample teachers (90%) are able to manage their time. On the other hand, 10% of sample teachers sometimes are able to manage their time.

Figure (38): the distribution of sample teachers according to their to their ability to mange their time.



31. Filing students and teachers’ documents by sample teachers on regular bases:

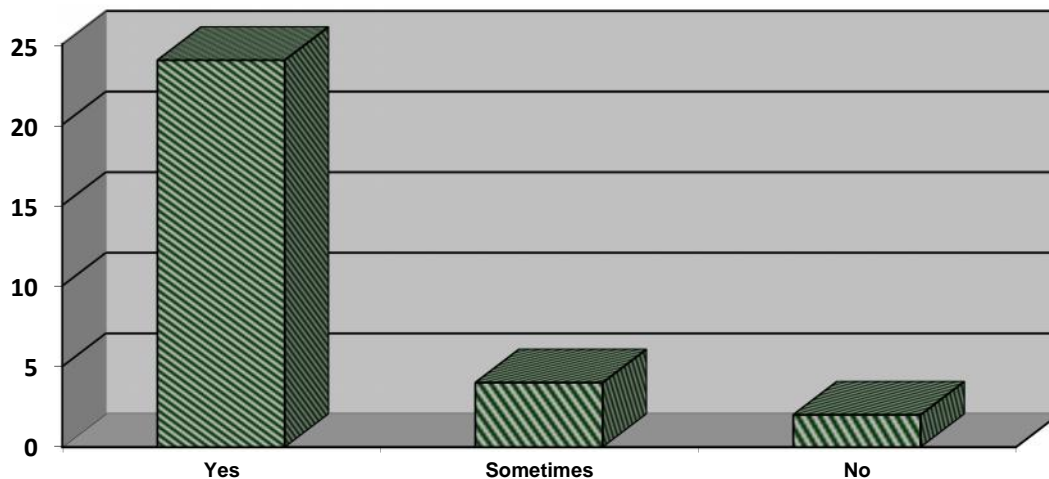
Table (39) and figure (39) show the distribution of sample teachers according to their ability to file students and themselves’ documents on regular bases.

Table (39): the distribution of sample teachers according to their ability to file students and themselves' documents on regular bases.

Response	Frequency	Percent
No	2	6.7
Sometimes	4	13.3
Yes	24	80.0
Total	30	100.0

The results indicate that the majority of sample teachers (80%) are able to file students and themselves' documents on regular bases. On the other hand, 6.7% of sample teachers are not able to file students and themselves' documents on regular bases. In addition, 13.3% of sample teachers did file students and themselves' documents on regular bases.

Figure (39): the distribution of sample teachers according to their ability to file students and themselves documents on regular bases.



32. Planning for professional development by sample teachers:

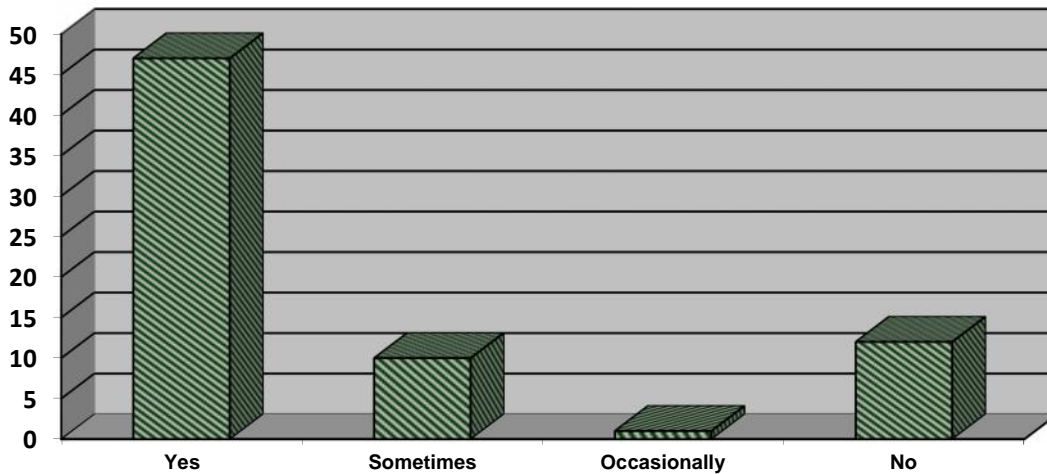
Table (40) and figure (40) illustrate the distribution of sample teachers according to planning for their professional development.

Table (40): the distribution of sample teachers according to planning for their professional development.

Response	Frequency	Percent
No	12	40.0
Occasionally	1	3.3
Sometimes	10	33.3
Yes	7	23.3
Total	30	100.0

The results reveal that 40% of sample teachers do not plan their professional development and 36.6% of them occasionally or sometimes plan their professional development. On the other hand, 23.3% of sample teachers plan their professional development. These results reflect the need for training sample teachers on planning their professional development.

Figure (40): the distribution of sample teachers according to the planning of their professional development.



33. Preparing individual professional development plan (IPDP) by sample teachers:

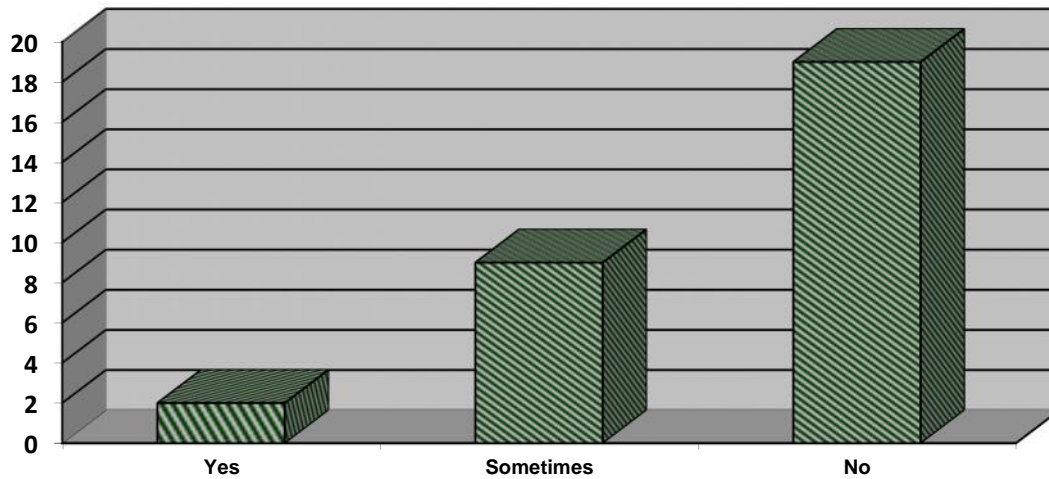
Table (41) and figure (41) illustrate the distribution of sample teachers according to their preparing of individual professional development plan (IPDP).

Table (41): the distribution of sample teachers according to their preparing of individual professional development plan (IPDP).

Response	Frequency	Percent
No	19	63.3
Sometimes	9	30.0
Yes	2	6.7
Total	30	100.0

The results show that 63.3% of sample teachers do not prepare individual professional development plan (IPDP) and 30% of them sometimes prepare IPDP. Inversely, only 6.7% of sample teachers prepared an individual professional development plan.

Figure (41): the distribution of sample teachers according to their preparing of individual professional development plan (IPDP).



34. The regularity of planning (IPDP) by sample teachers per-year:

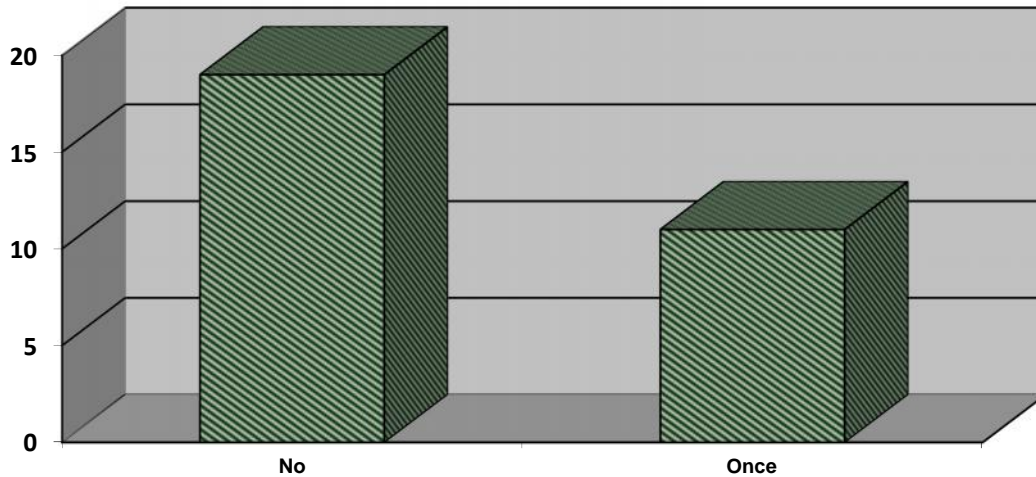
Table (42) and figure (42) show the distribution of sample teachers according to the regularity of planning their (IPDP) per-year.

Table (42): the distribution of sample teachers according to the regularity of planning their (IPDP) per-year.

Response	Frequency	Percent
No	19	63.3
Once	11	36.7
Total	30	100.0

The results show that the entire sample teachers who prepare individual professional development plan (IPDP) (36.7%), prepare it once per year.

Figure (42): the distribution of sample teachers according to the regularity of planning their (IPDP) per-year.



35. The most need professional development areas by sample teachers:

Table (43) shows the distribution of sample teachers according to the most needed professional development areas.

Table (43): the distribution of sample teachers according to the most needed professional development areas.

Areas	Frequency	Percent
Adaptation, modification and accommodation	1	3.3
Approaches and Techniques Relevant to SEN	1	3.3
Assessment Relevant to SEN	1	3.3
Behavior Intervention Plan (BIP)	1	3.3
Assessment relevant to SEN	3	10.0
Assistive technology	5	16.7
Identifying students' learning styles	2	6.7
IEP	7	23.3
Ways of screening SEN students	6	20.0
All above	3	10.0
Total	30	100.0

The most needed professional development areas by sample teachers can be in descending order based on the number of sample teachers seeking them as follows:

- IEP.
- Ways of screening SEN students.
- Assistive technology.
- Assessment relevant to SEN.
- Identifying students' learning styles.
- Behavior Intervention Plan (BIP).
- Adaptation, modification and accommodation.
- Approaches and Techniques Relevant to SEN.

Moreover, 10% of sample teachers need all the above mentioned areas of professional development. Therefore it can be reasonable to design a training program to qualify sample teachers to teach SEN students in the whole studied areas of professional development in addition to the areas appeared to represent a training need for them based on the rest of study findings.

Findings from qualitative tool (Interviews)

One of the data collection tools used in this research was interviews (qualitative tool). The aim behind using such tool is to get more deep information about the topic investigated. Interviews was held with school administration representatives (principals, principal deutes and social workers) (see Appendices; Interview Questions and Interview Sample). Findings from interviews analysis can be presented as follow;

- Almost all participants agree that their schools does not have a discrete special education department.
- Each of the participant schools has only on SEN teacher.
- None of the three schools has an inclusive education policy.
- None of the schools has a clear vision of how to implement inclusion rather they just follow directives received from the Education Zone with no slight idea about the effective ways of implementing inclusion.
- The service provided to learners with special needs is just the same one provided to learners with no disabilities.
- None of the schools has a professional development program to support inclusive education and to enhance teachers' teaching skills related to teaching learners with special needs.
- No action is taken in the three schools when a learner is labeled as a SEN learner except for sending out the circular received from the Education Zone, declaring that this learner is a SEN learner, to all the teachers in the school and sometimes the SEN teacher is the only one to be informed.
- The school admins have no specific role in preparing IEPs for learners with special needs. They just see it enough to follow up with the SEN teacher.
- No real accommodation was done to the school environment to support inclusion except for some access ramps and in one only school all the masts in the playground were covered with sponge to absorb any shock as not to cause learners any injuries.
- No behavior intervention plans were noticed in any of the investigated schools. Moreover, all of the school refers only to the social worker in this regard.
- Most of the school admins state that teachers feel confident when they teach learners with special needs, while some others argue that teachers do not feel comfort to teach learners with special needs as it adds more burdens to theirs.

Discussion:-

The main aim of this research is to investigate what could be recommended to support general education teachers in middle government schools in the Emirate of Sharjah for effective inclusive education. Therefore, the research sought to address the following questions;

9. Are teachers in middle government schools in the Emirate of Sharjah qualified enough to maintain an effective inclusive education?
10. Are there any regular professional development programs to enhance general education teachers' skills to teach SEN students?
11. Are teachers in middle schools confident to teach students with special educational needs?
12. What are the professional needs teachers required to support inclusive education in middle government schools in the Emirate of Sharjah?

4.1.1 Are teachers in middle government schools in the Emirate of Sharjah qualified enough to maintain an effective inclusive education?

Based on the findings and data analysis, exactly half of sample teachers (50%) has more than 10 years of working experience in middle government schools. Also, slightly more than one-third of sample teachers (36.7%) has a working experience ranging between 6-10 years. On the other side, 13.4% of sample teachers, their working experience ranged between 0-5 years, which means that teachers have a good experience enough to maintain an effective education. However, none of them is qualified to teach learners with special education needs. Kamens et al. (2003) concludes that general teachers need to know more about learners with special needs in terms of characteristics and ways of teaching. Moreover, regardless specializations or number of years of experience general teachers have, they still need to develop their teaching skills to be qualified to teach learners with special education.

4.1.2 Are there any regular professional development programs to enhance general education teachers' skills to teach SEN students?

Nearly about three-quarters of sample teachers (73.3%), their schools did not have a discrete department for special needs. Controversy, As a result, the majority sample teachers did not practice the inclusion of students with special education needs in their schools or classes properly. Additionally, the results showed that the majority of sample teachers (83.3%) do not have a SEN team in their schools that may offer help and support. On the other hand, half of sample teachers (50%) their schools do not have a policy for special education needs. Therefore, major changes should take place in the sample schools for better effective inclusion. Moreover, findings indicated that (60%) of sample, teachers' schools do not have a SEN professional development plan for teachers. In addition, interviews with school admins assured that teachers are only urged to attend professional development workshops given by the Education Zone or the Ministry of Education regardless they are related to inclusive education or not. One more thing that was noticed through the interviews is that professional development does not have a positive echo in the investigated school although it is very essential for both enhancing teachers performance and students' achievements as the quality of teachers reflect clearly the quality of the education system (Savolainen, 2009), and a better effective inclusion. According to Hill (2007), teachers in the United States are asked to finish 120 hours of professional development every five years however, teachers in Europe are expected to complete from 12 to 57 hours of professional development a year (Eurydice, 2008) which reflects the ultimate importance of professional development for teachers in general and for effective inclusive education in specific.

4.1.3 Are teachers in middle schools confident to teach students with special educational needs?

Findings reveal that slightly more than half of sample teachers (53.3%) are not willing to accept and teach students with special education needs in their classes. However, 40% of them are willing to do. In addition, about 6.7% of sample teachers did not have a clear decision about their willing to accept and teach students with special education needs in their classes. Additionally, two-thirds of sample teachers (66.7%) are not feeling confident to work with SEN students. The

main reason behind teachers' rejection of teaching learners with special need or feeling unconfident to teach them is that those teachers were not prepared to teach such learners as stated by Smith & Smith (2000). As indicated by Gaad (2008), on the other hand, teaching learners with special needs is "something new" to some extent in the UAE, which makes it a bit difficult for some teachers to cope with and which explains why some teachers in the investigated school think teaching learners with special needs is adding to their burdens.

4.1.4 What are the professional needs teachers required to support inclusive education in middle government schools in the Emirate of Sharjah?

Based on finding and data analysis, the following areas of professional development are urgently required to maintain an effective inclusive education in the middle government schools in the Emirate of Sharjah;

- IEP as the data analysis indicates that almost half of the teachers either do not prepare IEPs or occasionally do. Additionally, the majority of the teachers are preparing IEPs all alone by themselves. Moreover, school admin do not participate in planning IEPs, which is not acceptable. It is of a great importance for each learner with special needs to be developed an IEP (Karila & Alasuutari, 2012). Joakim, Isaksson et al. (2007) argue that the IEP should be develop in accordance with his/her needs. in addition, Sari (2002) sees that an IEP is a key factor in a learner with special needs' success within an inclusive system. On the other hand, there must be a team for developing IEPs. This team should include general teachers, SEN teacher, the principal of the school, a parent or a guardian, and the SEN learner. Ontario Ministry of Education (2004) claims that regulation 137/01 mandates the principal of the school to make sure that THE IEPs of SEN learners were developed and copies were sent to parents.
- Ways of screening SEN students
Findings reveals that a number of teachers are in need to trained on different ways of screening SEN students. Ways of screening SEN students play an important role in providing a high quality service as well as raising the probabilities of effective inclusion. Solis et al. (2011) emphasize that it is demanding for all teachers to be familiar with

learning disabilities as well as being able to identify learners with disabilities.

- Assistive technology.

A few number of teachers are familiar with different means of assistive technology that helps in teaching in general and helps a lot in teaching learners with special needs. However, Plos et al. (2012), argue that assistive technology can be a way to improve life condition of those with special needs.

- Assessment relevant to SEN.

As the findings reveals, most of the teachers are not familiar with different types of assessment used with learners with special needs. As was noticed most of the teachers in schools assess learners with special needs the same way they do with learners with no special needs which is not fair on one hand, and it is not legal on the other.

- Identifying students' learning styles.

According to the findings, the majority of the teachers have no idea about how to identify students' learning style or they just count on their experience to do so. Graf et al. (2009) state that learning style plays an important role in improving teaching and learning as well as promoting inclusive education system. Therefore, professional development programs on identifying and teaching according to students' learning styles should be considered to enhance teachers' teaching skills. A body of researches, on the other hand, conclude that better learning exists when learners are taught in accordance with their learning styles (Haider et al., 2010).

- Behavior Intervention Plan (BIP).

Based on date analysis none of the teachers prepare a behavior intervention plan however, Killu (20080) argues that the most challenging problems teachers encounter in classrooms are those related to behavior specially with those learners whose disabilities have an impact on there behavior. Consequently, it is crucial to include a behavior intervention plan in the IEP for such learners explaining to what extent the learner's behavior interferes with his/her learning performance (Lerner & Kline, 2006).

- Adaptation, modification and accommodation.

According to the data collected and analysis, schools are still struggling understand the true meaning of adaptation, modification and accommodation. However, some features of accommodation were noticed.

- Approaches and Techniques Relevant to SEN.

Teaching and learning are all about conveying, receiving, processing, storing, or retrieving information. Since learners with special needs must have a problem in terms of at least one of the previously mentioned skills, teaching such learners must consider certain approaches and technique that acknowledge their abilities. Most teachers in the investigated schools are teaching learners with special needs in the same way they are teaching other students. The reason behind that teachers' know nothing about approaches to teach those learners. Learners with special needs have all the rights to receive equal share of education in all "educational inistitutions" (Gaad, 2011) provided that they receive this education in the proper way that suit their unique needs.

Chapter 5

5.1 Conclusion

This research aims to investigate what could be recommended to support teachers in government middle schools in the Emirates of Sharjah for effective inclusive education. The literature was comprehensively investigated to get a depth and breadth view as well as a better understanding of the topic. Both qualitative and quantitative approaches were used as research methods. In addition different data collection tools were used (questionnaire and interview) to ensure reliability and validity. All data collected was analyzed using a variety of data analysis procedures. Some computer software such as the IBM Statistical Package for the Social Sciences (SPSS) version 19 and NVivo software (version 10) were used to ensure accuracy

All findings were investigated in light of the literature review that indicated both the status quo of the school investigated and the improvements needed to have an effective inclusive education. In addition, findings and data analysis gave accurate answers to the research questions. Through these answers it was easy to identify what is recommended for a better effective inclusion in middle government schools.

The rationale of this research is that it sheds the lights on what teachers in general schools require to contribute to the success of this inclusion. Moreover, the importance of this study is derived from its being an investigation of the professional needs of teachers in mainstream schools to maintain an effective inclusion on one hand, and being emerged from the philosophy of inclusion in the UAE on the other.

5.2 Recommendations

Based on the findings and data analysis of the study, there will be two types of recommendations; recommendations related to teachers and recommendations related to school administrations.

5.2.1 Recommendations Related to Teachers

The study recommends that teachers should receive professional development in the following areas;

- IEP.
- Ways of screening SEN students.
- Assistive technology.
- Assessment relevant to SEN.
- Identifying students' learning styles.
- Behavior Intervention Plan (BIP).
- Adaptation, modification and accommodation.
- Approaches and Techniques Relevant to SEN.

As to enhance their teaching skills of learners with special needs.

5.2.2 Recommendations Related to School Administrations

The study strongly recommend that school administrations receive professional development programs that gives them a deeper idea about inclusion and the procedures followed when a learner is labeled as a SEN learner. Additionally, schools administrations needs to be aware of the importance of adopting a policy for inclusive education as well as taking into consideration preparing in-house professional development plan so as to be an active partner who contributes to the success and effectiveness of the inclusive educational system.

5.3 Further Researches:

The study recommends further researches to be conducted to investigate more schools as this research investigated only three of them. In addition, further study can follow up on the implementation of the recommendations of this study.

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Appendices

APPENDIX 1 : Questionnaire

A Questionnaire to Identify Teacher Professional Development Needs

This survey aims to identify the professional development needs of middle schools SEN teachers in order to be inclusive in the Emirate of Sharjah.

1. Numbers of years of experience.

- 0-2
- 3-5
- 6-10
- More than 10

2. Which of the following is your major specialization?

- Arabic Language
- English Language
- Mathematics
- Science
- Social Studies
- SEN

3. Are you willing to accept and teach students with special education needs in your class?

- Yes
- No
- Not Sure

4. Do you feel confident to work with SEN students?

- Yes
- No
- Not Sure

5. Does your school have a discrete department for special needs?

- Yes
- No

6. Does your school have a SEN team?

- Yes

- No

7. Does your school have a Special Education Needs policy?

- Yes
- No
- Not Sure

8. Does your school have a SEN professional development plan for teachers?

- Yes
- No

9. Do you prepare individual educational plan (IEP) for your students?

- Yes
- Sometimes
- Occasionally
- No

10. Do you plan IEPs all alone by your self?

- Yes
- Sometimes
- Occasionally
- No

11. Who participates in planning your IEPs?

- School Admin
- parents / guardian
- Class Teachers
- Social Workers
- Students
- All Above
- None

12. Do you use SMART or SMARTER objectives?

- Yes
- Sometimes
- Occasionally

- No

13. Do you include conditions and criteria in your objectives?

- Yes
- Sometimes
- Occasionally
- No

14. Do you include behavior intervention plan (BIP) in your IEPs?

- Yes
- Sometimes
- Occasionally
- No

15. Do you perform functional assessment?

- Yes
- Sometimes
- Occasionally
- No

16. Do your IEPs include transition plans?

- Yes
- Sometimes
- Occasionally
- No

17. Do your IEPs include statements of accommodations and modifications?

- Yes
- Sometimes
- Occasionally
- No

18. How often do you prepare an IEP for a student per-year?

- Once
- Twice
- Three times

- Four Times

19. Are you able to screen different disabilities?

- Yes
- To Some Extent
- No

20. Are you aware of different ways of screening students with special educational needs?

- Yes
- To Some extent
- No

21. How do you identify different disabilities?

- According to My Experience
- Using Screening Tests
- Through Observation
- According to Academic Achievement
- All Above

22. Which of the following is a SEN student?

- A Talented and Gifted student
- A Student with Productive Language Skills Problems.
- An Introvert Student
- A Hyper Active Student
- A Student with Receptive Language Skills Problems.
- All Above

23. Do you consider differentiation according to learning styles when planning and teaching?

- Yes
- Sometimes
- Occasionally
- No

24. Do you identify your students' learning styles?

- Yes
- Sometimes
- Occasionally
- No

25. How do you identify students' learning styles?

- By Observation
- According to My Experience
- Using Identification Test
- According to Academic Achievement
- All Above

26. Do you use peer helper, multimedia, or e-resources in teaching your SEN students?

- Yes
- Sometimes
- Occasionally
- No

27. Do you use interactive exercises or text-to-speech/speech-to-text software to teach SEN students?

- Yes
- Sometimes
- occasionally
- No

28. Do you use graph organizers and concept maps to teach SEN students?

- Yes
- Sometimes
- Occasionally
- No

29. Do you spare extra time for SEN students to complete tasks or assignments?

- Yes
- Sometimes
- Occasionally

- No

30. Do you use alternatives to written tasks to check on knowledge and comprehension?

- Yes
- Sometimes
- Occasionally
- No

31. Do you pitch down subject or course content and evaluation?

- Yes
- Sometimes
- Occasionally
- No

32. Are you familiar with alternative keyboards?

- Yes
- No

33. Are you familiar with audio books?

- Yes
- No

34. Are you familiar with electronic math worksheets?

- Yes
- No

35. Are you familiar with personal FM listening system?

- Yes
- No

36. Are you familiar with proofreading programs?

- Yes
- No

37. Which teaching approach(s) of the following you use to teach SEN students?

- Communication and Interaction
- Cognition and Learning
- Behavior, Emotional and social development
- Sensory and/or Physical
- All Above
- None

38. Are you able to prioritize your tasks?

- Yes
- Sometimes
- Occasionally
- No

39. Do you manage your time?

- Yes
- Sometimes
- Occasionally
- No

40. Do you file students' documents as well as yours on regular bases?

- Yes
- Sometimes
- Occasionally
- No

41. Do you plan for your professional development regularly?

- Yes
- Sometimes
- Occasionally
- No

42. Do you prepare an individual professional development plan (IPDP)?

- Yes
- Sometimes
- Occasionally

- No

43. How often do you plan (IPDP) per-year?

- Once
- Twice
- Three Times
- Never

45. Which of the following professional development areas you seek most?

- IEP
- Ways of Screening SEN Students
- Assistive Technology
- Identifying Students' Learning Styles
- Assessment Relevant to SEN
- Organizational Skills
- Adaptation, modification and accommodation
- Individual Professional Development Plan (IPDP)
- Approaches and Techniques Relevant to SEN
- Behavior Intervention Plan (BIP)
- Functional Assessment
- Transition Plan
- All Above
- Other:

APPENDIX 2 : Interview Questions

Interview Questions

School:-

Name:

Position:

Date:

Location:

Time:

- 1. Does your school have a discrete special needs department?**
- 2. How many SEN teachers are there in the school?**
- 3. What can you tell me about the school policy related to inclusive education?**
- 4. How does school implement inclusion?**
- 5. In what way does the school provide educational service to SEN learners?**
- 6. What is the professional development program(s) adopted by the school to support inclusion?**
- 7. What are the procedures followed after a learner is labeled as a student with special needs?**
- 8. What is the role of the school admin in the IEP?**
- 9. What types of accommodations are done to the school environment to support inclusion?**
- 10. How does school deal with behavioral problems related to the student disability?**
- 11. How confident do you see teachers when teaching SEN students?**

APPENDIX 3 : Interview Sample

Interview Sample

School:- XXX

Name: XXX

Position: School Principal

Date: 13.02.2013

Location: Principal office

Time: 10:05 AM to 10:35 AM

12. Does your school have a discrete special needs department?

- Relatively, I can say yes.

13. How many SEN teachers are there in the school?

- The school has just only one SEN teacher.

14. What can you tell me about the school policy related to inclusive education?

- Actually, the school policy related to inclusive education emerges from the Ministry of Education's as we secure children with disabilities chances to get enrolled in the school.

15. How does school implement inclusion?

- The follows the education zone as well as the Ministry of Education's directives in this regard.

16. In what way does the school provide educational service to SEN learners?

- They attend the regular classroom.

17. What is the professional development program(s) adopted by the school to support inclusion?

- The school urges teachers to attend all professional development workshops held by the Education Zone or by the Ministry of Education.

18. What are the procedures followed after a learner is labeled as a student with special needs?

- A circular sent out to all teachers telling them about that learner and the SEN teacher is asked to follow up the learner.

19. What is the role of the school admin in the IEP?

- The school admin follow up on the SEN teacher to make sure an IEP is done.

20. What types of accommodations are done to the school environment to support inclusion?

- Access ramps were made and all the masts in the playground were covered with sponge to absorb any shocks.

21. How does school deal with behavioral problems related to the student disability?

- The social worker is invited to take care of these issues.

22. How confident do you see teachers when teaching SEN students?

- They are confident to some extent.