Perspectives of Female Special and General Education Teachers Regarding their Collaboration in Primary Mainstream School in Riyadh City, Saudi Arabia

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as a thesis for the degree of Doctor of Education in Special Needs and Inclusive Education
in March 2020

I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

Signature: ……..

Acknowledgements

First and foremost, all praise and thanks are to Allah (God) the almighty for his many blessings on me, one of which was the completion of my dissertation. Then I would like to express my love and deepest thankfulness to my dear Mother for all her prayers to me to succeed. She always wished for and encouraged me to achieve my dreams.

I would like also to extend my heartfelt thanks to my sisters Hessa, Nourah, Moneerah, Reem and Nouf and brothers Turki, Khaild, and Ahmad for their support and encouragement throughout the years.

I wish to express my sincere gratitude to my husband Abdual aziz and my children Lana, Turki and Lateen for their support and immense patience. This was a long and arduous journey and their presence, love and encouragements accompanied me throughout these years.

Of course, I wish to express my gratitude to my supervisors Dr. Alison Black and Dr. Darren Moore and who were not only the academic supervisors for this study, but also great people who indirectly taught me lots of things. I do not exaggerate when I say that I learn something new each time I have a conversation with them. I would say thank you so much for their help, support and advice. I was very fortunate to have such a brilliant team of academics; their thought-provoking comments and recommendations surely contributed to the quality of this work.

My appreciation is extended to my friends for their love that encouraged me to complete this work and for their spiritual support that empowered me during my research journey.

I am also grateful to the Ministry of Education, which opened their doors and allowed me to carry out my research. Without their support, I would not have been able to accomplish this research.

Abstract

This study examines the collaboration between general and special education teachers in mainstream schools in Riyadh from their perspective. The purpose of the current research is to explore how mainstream primary school teachers (both general and special education) construct their experiences of collaboration with students who have learning difficulties (LD) in the mainstream curriculum setting. To achieve the aims of this study, a mixed methods approach was used (questionnaires and interviews) to collect data regarding both special education and general education teachers' perceptions of collaboration in mainstream primary schools in Riyadh, Saudi Arabia. Results showed that teachers are collaborating at a low level. In the interview phase, participants described their perceptions and the factors promoting examples of effective collaboration, and the barriers that might negatively affect collaboration. The findings from this research revealed that collaboration in some schools in Riyadh is inhibited by various factors including lack of time due to teachers' work overload; overcrowded classrooms; lack of awareness regarding the significance of collaboration; the absence of pre- and in-service training programs and workshops in the area of inclusive education; general education teachers' negative attitudes and lack of interest to working with students with learning difficulties; and lack of management support from schools' principles. Key concepts from the findings based on the research questions and previous literature which include teachers' perceptions of collaboration, involving further discussion personal beliefs and actual experiences of collaboration were discussed. Personal beliefs and actual experiences are discussed as key concepts based on the implicit and explicit findings from both research phases. This study offered implications and recommendations for several stakeholders, including teachers, school administration, policymakers and

researchers. For example, clear policy guidance for the roles of both general and special education teachers in collaboration could highlight its importance in mainstream schools. Considering these implications and recommendations would allow stakeholders to design initiatives, tools and actions based on what teachers believe and experience to assist in the development of collaboration between general education and special education teachers in mainstream schools in Saudi Arabia.

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Chapter One: Introduction

1.1 Introduction

The call for more democratic schools, in which the values of equality and acceptance of diversity is of significance to the whole educational process, has been promoted by numerous researchers and educators (Christoforakis, 2005; Zoniou-Sideri, 2005; Polichronopoulou, 2003; Booth, 1999). In addition, many international organisations and bodies (European Union, UNESCO) have published papers that contain the notions of inclusion and inclusive education, for example Towards Inclusive Education for Children with Disabilities: a Guideline, UNESCO Bangkok (2009) and the Policy Guidelines on Inclusion in Education, UNESCO (2009). These concepts were present in the Salamanca Statement (UNESCO, 1994) and refer to the principle of "Education for All." More specifically, "the inclusion movement has arisen out of the philosophy that advocates the provision of equal learning opportunities to disabled children, helping them to be socialised within a community and therefore one that advocates that all children, whether disabled or not, should be educated in mainstream schools" (Xanthopoulou, 2011, p. 5). This statement interprets inclusion as education that takes into account the needs of all children and thus promotes diversity in schools (Booth & Ainscow, 2002). Furthermore, inclusion refers to the reconstruction of public schools in their entirety (curriculum, ethos, type of support provided) to meet the needs of all students, thereby preventing the segregation of children with special needs and their placement in special settings (Giangreco et al., 2010; Zoniou-Sideri, 2005). Saudi Arabia has adopted the American policy of the No Child Left Behind Act (NCLB) to enhance the country's special education system. This

Act supports the best educational opportunities for all children, including those with special needs (U.S. Department of Education, 2004).

Inclusion is a complex process that frequently encounters practical difficulties in its application, even in countries which are “deeply committed to inclusive schooling” (Avramidis & Kalyva, 2007, p. 368), thus resulting in considerable variation in inclusive educational practices internationally. This is especially the case in Saudi Arabia, where many practical difficulties have emerged in the process of policymakers taking substantial steps towards supporting more inclusive educational practices (Alquraini, 2011). These difficulties have revealed the need to investigate the practices (for example, the collaboration between general and special teachers) used to promote the successful inclusion of children with special educational needs (SEN) into mainstream classrooms (Alquraini, 2011).

One of the practices used to promote inclusion is that of teacher collaboration (Cook and Friend ,1991). According to Friend and Cook (2003), they defined interpersonal collaboration as the direct interaction between at least two coequal parties voluntarily engaged in shared decision-making around a common goal. However, collaboration is not simply the act of communication between two or more individuals. Little (1990) argues that collaboration, in its truest form, is the joint work of teachers who take collective responsibility in the practice of teaching and approach to student learning. The aim of collaboration of both general and special teacher are to support the learning of students with special educational needs or physical disabilities, as well as to promote their inclusion in mainstream schools. Many researchers have stressed that teachers’ understanding of collaborative practices and their readiness to implement them are vital predictors of successful inclusion (Cook & Friend, 1995; DaMore & Murray, 2009; Pugach & Johnson, 1989).

Literature in this area is extensive in describing the positive outcomes of collaborative practices, (Cook & Friend, 1995) but lacks depth about teachers' perceptions and actual experiences of collaboration. Moreover, the literature largely ignores the collaborative dimensions of teachers' work situations (De Lima, 2003; Hattie, 2009). This study will contribute to understanding the nature of collaborative practices by investigating the difference between teachers' perceptions and implementation of these practices.

1.2 Problem Statement

Increasing the amount of collaboration among teachers is an important element of increased academic achievement and school change (Fullan, 2008; Hall & Hord, 2006; Leonard & Leonard, 2005). Although the idea of collaboration as an aspect of school improvement is well established, the conditions in some schools can inhibit staff from forming a true collaborative community (Carlone & Webb, 2006; Chenoweth & Theokas, 2013; Leonard, 2002). Currently, in Saudi Arabia, there is a lack of understanding of whether collaboration between general and special education teachers exists within mainstream schools, thus there is a gap in knowledge within this field of collaboration and inclusion. However, with the growing expectation of collaboration in mainstream schools, it is vital that researchers further explore differences between the collaborative perceptions and practices of teachers and their experiences of collaboration, so that plans can be created to adequately address the problem of inclusion of children with exceptional needs.

There is currently a drive internationally for inclusive education and within Saudi Arabia one of the facilitators of inclusion is believed to be collaboration between general and special education teachers within mainstream schools (Alquraini, 2013).

However, there is a gap in understanding the perceptions and current practice of teachers around collaborative practice.

This research aims to examine the perspectives of general and special education teachers regarding their collaboration in mainstream primary schools in Riyadh, Saudi Arabia. The educational authorities in Saudi Arabia are pursuing the task of integrating students with learning difficulties (LDs) into mainstream classrooms (RSEPI, 2002). Consequently, this research focuses on whether the collaboration between special and general education teachers is sufficient to ensure the success of these inclusion efforts. In U.S. schools, including collaboration within an inclusion model facilitates inclusion within the school (Weiss & Lloyd, 2002). However, in Saudi Arabia, this concept has not been well-developed within educational programmes.

To examine this problem, this research centres on the experiences and beliefs of primary teachers in Riyadh (both general teachers and special education teachers) responsible for collaboration. Also, this investigation seeks to identify the barriers, challenges, and benefits of collaboration as perceived by the general and special education teachers. Very few research articles shed light on the collaboration between special education teachers and general education teachers. Some articles highlighted the collaboration between special education teachers and associated service providers, but there is a lack of specific focus on the collaboration between special education and general education teachers, or any emphasis on student attainment (Friend & Cook, 2010; Malone & Gallagher, 2010). Moreover, to my knowledge, no studies have focused on exploring the perspectives of special and general education teachers regarding their collaboration in mainstream schools in Saudi Arabia.

Hence, to fill this gap, the main aim of this study is to offer an in-depth exploration of general and special education teachers' perceptions and practices regarding collaboration.

1.3 The Study Context

This section provides an overview of the Saudi Arabian education system. It starts by providing some information about Saudi Arabia as a country, including its religion. This is followed by an overview of its mainstream primary education, highlighting the Saudi education policy. Finally, information is provided regarding the situation in primary schools with respect to the inclusion of students with learning difficulties in the general student population.

The Kingdom of Saudi Arabia (KSA) is an Arab county located in Southwestern Asia, comprising about two million square kilometres, with a population of around 31 million people. Riyadh is the capital city of Saudi Arabia and has a population of about 8 million (General Authority for Statistics, 2016).

The religion of Islam permeates most aspects of Saudi Arabian life and culture (Al-Sadan, 2000). Thus, the education system has evolved in line with the Islamic view (Ministry of Education, 2008). For example, the first article in the Saudi Education policy (1995, p. 2) reflects the general principle that education in Saudi Arabia is based on "believe[ing] in Allah and Islam as religion and Mohammed as a prophet". Algamdi and Abduljawad (2002) claim that Islam is one of the most powerful forces shaping the education system in Saudi Arabia and has an impact on inclusion and integration.

On the one hand, Islam stresses the rights of individuals with disabilities to equality, participation in society, protection, education, rehabilitation, and social care (Hamza, 1993, as cited in Hassanein, 2015). Additionally, disabilities in Islam are not

viewed as a reason for discrimination (Ashencaen Crabtree & Williams, 2013). Indeed, in Saudi Arabia, one of the goals of the Saudi Education Policy (1995) is the education of students with SEN; for example, Article 56 states the goal of "education and caring of students with mental and physical disabilities students, in accordance with the guidance of Islam that makes education truly sharing among all of the nation" (Ministry of Education, 1995, p. 8). Hence, this policy strengthens the rights of students with SEN.

Another impact of Islam on the education system in Saudi Arabia, on the other hand, is the separation between male and female students and staff in schools after the kindergarten stage (Ministry of Education, 1995). This means that there are boys' schools with male staff and girls' schools with female staff.

Public school education in Saudi Arabia is free for all students. The education system in Saudi Arabia is centralised; the Ministry of Education (MOE) acts as its headquarters and is responsible for the overall administrative and operational issues in the delivery of education (UNESCO, 2011; Ministry of Education, 2008). All schools are under the supervision of the MOE, and it is the official organisation supervising the education of male and female students throughout the KSA. The MOE was established in 1953 to plan and supervise the provision of general education everywhere in the Kingdom (Al Salloom, 1991). It provides and oversees the following kinds of education: general education (primary, middle, and secondary), teacher training, and special education.

The education system in Saudi Arabia involves a number of stages, starting with kindergarten, for children aged three to five years. Primary education begins at age six and consists of six grades. This is followed by middle education, consisting of three grades, and then secondary education, also consisting of three grades (Saudi Arabian

Cultural Mission, 2006). However, the special education schools include six grades in primary school, although there is no middle school and secondary school for some students (e.g., physically impaired, intellectually impaired students). Students with specific impairments (e.g., blind and hearing-impaired students) schooling is accessible to them at each level (primary, middle, and secondary). Furthermore, the curriculum is the same as regular schools, with additional vocational curricula included (e.g., training for handcrafts, gardening, sewing, woodworking, and typing).

This study focuses on primary education, and the next section gives details about the primary education settings in both general education and special education, in order to explain the situation under study.

1.3.1 Mainstream Primary Education in the Saudi Context

The mainstream primary education system consists of six grades, and students must pass the exam at each level in order to move on to the next grade. In primary education, the education of all students is based on the curriculum provided by the MOE.

The mainstream students' general teachers must follow the curriculum provided by the MOE and are not permitted to add new curriculum items or to use textbooks other than those provided. Furthermore, the teachers are required to teach all the mandatory curriculum and are not allowed the opportunity to adapt the curriculum. The evaluation of students involves ongoing educational assessments which address each level of the curriculum. A range of evaluation techniques are used, with the aim of improving educational outcomes to reach the objectives set (Ministry of Education, 1999, 2014 a, 2015a).

The MOE offers the same curriculum for students with SEN in mainstream schools and in special schools. However, the general and special teachers are expected to adapt the curriculum depending on the students' abilities. Furthermore, the evaluation of students with SEN is based on ongoing assessments of their knowledge of the curriculum. This helps teachers use assessment techniques that are appropriate to the abilities of students (Ministry of Education, 2015d, 2014a, 2002).

The staff in mainstream schools include: the head teacher; deputy head teacher; general education teachers; special education teachers (for the resources room); laboratory organiser; school activities organiser; administrative assistant; information registrar; head teacher's secretary; service worker; and gatekeeper (Ministry of Education, 2015c). Special education teachers and general education teachers are both responsible for teaching students with learning difficulties (LD) in mainstream primary schools.

Special education teachers, or teachers of students with LD, have a Bachelor's degree in special education, with an emphasis on LD. These teachers take courses that focus specifically on LD, as well as courses on teaching reading, writing, and math skills to students with LD (Hussain, 2004). There are several differences between the special education programmes in Saudi Arabia and other countries. Completion of an accredited four-year teacher preparation programme in a university setting is the sole way to obtain a teaching licence in the Kingdom of Saudi Arabia (KSA). After taking general courses in their first year, special education pre-service teachers become more specialised in their second year, focusing on a disability category in the special education discipline. Special education teachers are required to select a specific special education category (e.g., LD, intellectual disability, autism) to concentrate on for the remainder of their university studies. In the last term (the eighth semester),

special education pre-service teachers must complete a practicum in order to graduate (Hussain, 2004).

General education teachers are authorised by the MOE to teach different subjects, such as math or reading, in general education classrooms (Ministry of Education, 2002). In addition, general education teachers must obtain a licence by completing an accredited teacher preparation programme as part of a university placement, typically over four years. The programme includes methods for teaching core subjects, with training (in public school) provided during the last quarter prior to their graduation.

1.3.2 Saudi Policy in Education

Since the UN approved the *Universal Declaration of Human Rights* (UDHR) in 1948, a number of initiatives across the world have been established to provide appropriate education for children and young persons with disabilities. The UDHR proclaims: “Every individual and every organ of society, keeping this declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance” (UDHR, 1948). In 1994, 92 countries, including the KSA, signed the UNESCO Salamanca Statement, pledging to adopt “inclusive education, enrolling all children in regular schools unless there are compelling reasons for doing otherwise” (UNESCO, 1994, p. 44). However, even though all students in the KSA are provided free education in both primary and secondary schools (Al-Mousa, 2010), between 1958 and 2000, the government did not provide any educational services to special needs students, with the exception of blind and deaf students (Al-Farsy, 2012).

The field of special education has developed slowly in Saudi Arabia, despite the country's efforts to help students with special needs since the late 1950s. Indeed, until 2000, special education programmes were based on the traditional models that segregated these students into separate institutions, with no efficient procedures or real initiatives put forward to incorporate children with disabilities into mainstream education. In 2000, however, the situation changed, as education in general was given more attention by the government (Al-Farsy, 2012). As a result, state funding for special education has since increased, and the fields of expertise that such funding cover have also expanded. According to Alquraini (2013), these areas now include deafness, autism, physical disabilities, learning difficulties, and intellectual disability.

Saudi Arabia has implemented the American policy of the No Child Left Behind Act (NCLB) to improve the country's special education system. This Act promotes the best educational opportunities for all children, including those with special needs (U.S. Department of Education, 2004). Saudi policymakers found the primary goal of NCLB to be vital for students both with and without a disability, and children with disabilities therefore began to be considered equal to mainstream children. Consequently, Saudi policymakers sought to grant similar high-quality educational provisions to both kinds of learners.

It is interesting to note also that Saudi policymakers may have accepted the NCLB because its contents do not contradict Islamic values (Al-Mosa, 2004). In order to maintain the religious values of Islam, the MOE recognises the importance of creating and implementing an educational policy that ensures Saudi's special education system incorporates a curriculum suitable for children with SEN. The MOE has therefore expanded its activities in working to establish legislative protections and guarantees for individuals with disabilities and ensuring equal educational access and

rights for all Saudi school-aged children. To this end, the MOE formulated a Disability Code, along with the Regulations for Special Education Programs and Institutes (RSEPI) (Alquraini, 2010).

The RSEPI supports the rights of children with disabilities to obtain free and appropriate education in a number of ways. Primarily, this legislation obliges schools to provide education for students with disabilities in a general education environment to the maximum extent, with the provision of a variety of alternate special education services. The RSEPI also requires that special education services (e.g., individualised education plans [IEPs]) must be provided to students with disabilities (RSEPI ,2002). In 2016, the defence minister launched a new policy named *Vision 2030*, (2016) built on three pillars: a vibrant society; a thriving economy; and an ambitious nation. One of the aims of this policy was to accelerate reforms of education and coordinate activities of stakeholders within education. Through this policy the ministry of education is attempting to improve the outcome of education through an education reform plan. This reformation plan consists of twelve goals, with the ninth goal focusing on providing students with disabilities with an appropriate education ensure independence and integrate them into society. The aim is to provide all Saudi children with the opportunity to enjoy better quality, multi-faceted education by investing in developing education in early childhood, refining the national curriculum and providing appropriate training for teachers and educational leaders.

1.3.3 Inclusion in Saudi Arabia's Schools

Saudi Arabia is one of the Arab countries to apply a policy of inclusion (Almosa, 2008, 2010). The RSEPI (2002) supports the integration of students with SEN; for example, Article 3.18 (2002, p. 15) indicates that "the regular school is the natural

environment educationally, socially and psychologically for students with special educational needs."

According to Hussain (2004) a number of patterns emerge from the inclusion of students with special needs in Saudi Arabian schools. The first pattern is the establishment of special classes or units in mainstream schools, in which students with disabilities have the opportunity to interact with mainstream students for most of the school day. The students with special needs also take part in activities with their mainstream peers outside the classroom, including break times, physical education, and school outings. The second pattern relates to the resources room, in which special education programmes are delivered to students with LD, and special individualised help is provided on a daily basis. Students with LD that qualify for this service can stay in regular classes for most of the day but may require special instruction in an individualised or small group setting for some portion of the day. This type of service is occasionally referred to as "pull out" or "withdrawal" support (Hussain, 2004).

In spite of the increase in special education services in Saudi Arabia, several challenges remain with regard to the inclusion of students with disabilities in mainstream education. For example, students with severe disabilities are still taught in special schools, and moderately disabled students attend separate classes within mainstream schools. Both these situations indicate that full inclusion has not yet been attained (Al-Ahmadi, 2009).

1.3.4 Inclusion of Students with Learning Difficulties (LD)

In Saudi Arabia, learning difficulties are defined as follows: "Disorders in one or more of the basic psychological processes involved in understanding or using spoken and written language, which are manifested in listening, thinking, talking, reading, writing, spelling, or arithmetic skills and are not due to factors related to mental

retardation; visual or hearing impairments; or educational, social, and familial factors" (Regulation of Special Education Programs and Institutes, 2002, p. 35). Students with LD are defined as students who are eligible for special education services because they struggle with reading, writing, or math, and they receive their instruction in the general education classroom from general education teachers and in resource rooms from special education teachers (two or three classes a week) (Hussain, 2004).

Abu Nayyan (2015) reported that the percentage of students with LD in Saudi Arabian schools was around 5%–10%. Students with LD typically spend most of their day in general education classrooms (Aldabas, 2015). A few times per week, however, these students receive other services associated with their needs in the resource rooms, including help with reading, writing, and math (Al-Khateeb & Hadidi, 2009; Al-Zoubi & Rahman, 2016; Mohammed & Ahmad, 2013).

1.4 Thesis Structure

This section defines the thesis structure and introduce the chapters that it contains. **The Literature Review Chapter** consists of two main sections, the first focuses on inclusion defining this concept and setting out the rationale for inclusion and effective strategies for improving inclusion. It moves on to discussing its history internationally and in the Kingdom of Saudi Arabia (KSA), The second section concerns collaboration between special and general education teachers and presents relevant definitions.as well discuss the importance of collaboration, types of collaboration, the role of teachers in collaboration and the beneficial and challenging aspects of collaboration.

The Methodology Chapter outlines the studies use of an explanatory sequential mixed methods approach. This chapter begins by defining mixed methods research and presenting the theoretical assumptions and justifications for its use. Then it

presents further detailed justifications and explanations for the chosen research design. The chapter discusses the collection and analysis of the quantitative and qualitative data collected during each phase of the study. Finally, the chapter ends with an explanation of the ethical considerations that underpinned the study.

The Findings Chapter includes two phases. In the first quantitative phase I begin by describing the data preparation and coding, testing the reliability and normality of distribution of dependent variables. Demographic information for the participants is presented, followed by presentation of inferential statistics as well as descriptive statistics used to address both research questions. In the second phase the analysis of the data collected from interviews conducted with a sample of 10 teachers is presented. Teachers' perceptions are analysed through the data derived from semi-structured interviews. The interviews were fully transcribed and analysed in relation to the research questions and the emergent themes.

The Discussion and conclusion Chapter begins with discussion about how the data illuminated the issues raised by the research aims. Moreover, this part of the study discusses the findings in relation to the literature, implications of the findings, recommendations for further research, and ends with the conclusion.

Finally, the **Appendices** provide supporting documents and tables that present details about the data collection methods and analysis.

To sum up, this chapter first provided an overview of Saudi Arabia in terms of its location, area, population, religion, and educational system, as well as information regarding the education in mainstream primary schools in the Saudi context. Furthermore, there was discussion around the history of Saudi educational policy and, finally, an overview was given regarding the inclusion policy in the Saudi context and

the practice of inclusion of students with LD in mainstream schools. The following chapter will provide a more detailed literature review focusing on inclusion, collaboration and gaps in the research.

Chapter Two: Literature Review

2.1 Introduction

This chapter discusses the relevant literature for my study and is divided into three main sections: Firstly, in addition to presenting relevant definitions, I discuss the history of *inclusion* internationally and in the Kingdom of Saudi Arabia (KSA), the rationale for inclusion and show the key elements that may improve inclusion.

The second section focuses on *collaboration* between special needs and general education teachers and presents relevant definitions. I discuss the importance of collaboration, types of collaboration, the role of teachers in collaboration and the beneficial and challenging aspects of collaboration. At the end of this section, I identify the gaps in the literature which will be explored in my study in order to gain a better understanding of Saudi Arabian teachers' perceptions and practices regarding collaboration.

The search for relevant literature was carried out in academic databases including the British Education Index database, E-Journals, Education Research Complete, ERIC, ProQuest Dissertations and Theses and Global Saudi Digital Library.

2.2 Overview of Inclusion

One of the practices used to promote inclusion is that of teacher collaboration (Cook and Friend,1991). Literature on inclusive education has repeatedly documented the positive impact of collaboration between teachers on the implementation of inclusion (Carter et al., 2009; Cook & Friend, 2006; Naraian, 2010; Spencer, 2005). According to Yeung (2012), inclusive education can be successful when supported by promoting a collaborative school culture. Thus, it is apparent that collaboration is a key element under the inclusion umbrella.

Inclusion, as an educational concept, does not have a specific, widely accepted definition (Imray and Colley, 2017). In the United States (US), inclusion has become a ‘buzz word’ since the passage of the Education for All Handicapped Children Act (Public Law 94-142; Mitchell, 2005). However, there is no official definition of inclusion in the US. Instead, the country’s official policy considers the concept to mean placing children with special educational needs (SEN) in regular education settings.

On the one hand, according to Hodkinson and Vickerman (2009), in the United Kingdom (UK), the government described inclusion as: not only that pupils with SEN should wherever possible receive their education in mainstream schools, but also that they should fully join their peers in the curriculum and the life of the schools. In support of this, Hodkinson and Vickerman (2009) stated that children with SEN should generally take part in mainstream lessons. rather than being isolated in separate units.

Furthermore, according to Ainscow (1995):

> The term inclusive education has an extensive meaning, which is not only about teaching children with SEN in regular classrooms, but also about giving equal opportunities to school age children to attend classes. In other words, restructuring schools is fundamental in order to respond to the needs of all children (p. 1).

Evans (2007) discussed the difficulty of finding a single straightforward definition of inclusion, since numerous terms and official definitions refer to the philosophy and practice of inclusion in British policies. In addition, Evans (2007) claimed that the most precise way to define inclusion is to differentiate between what inclusion is and is not. She claimed that inclusion concerns the quality of each individual’s experience in schools, which can be improved by recognising the different skills and abilities of individuals, providing opportunities for everyone to achieve, and creating an

environment that respects all individuals and removes barriers that may delay the learning process.

By contrast, the significant element in Evans's (2007) explanation is the word 'individual', which includes children with and without disabilities, school personnel and parents.

In Saudi Arabia, the Ministry of Education has followed the precedents set by other educators around the world, despite lagging behind in updating the relevant terminology and policy (Al-Farsy, 2012). To illustrate this, the Arabic word that has been used in the Saudi literature for the last three decades to describe the option of teaching students with special needs in regular education schools is ' دمج ,' which is pronounced 'damj.' The literal translation of this word is to merge, integrate, combine or consolidate. When Saudi researchers publish their work in English, they have used the term 'mainstreaming', even in the most recent literature for example in Alquraini (2010). In Saudi Arabia, the Ministry of Education has accepted the following definition: 'mainstreaming, operationally, which means educating children with special educational needs in regular education schools and providing them with special education services.' (Regulations of Special Education Programs and Institutes (RSEPI), 2002, p. 8).

Current literature has utilised the term 'inclusive education' to refer to teaching all students, regardless of their needs or backgrounds, using regular curricula in regular classrooms (Hallahan et al., 2009). This is a comprehensive concept of inclusion, defining inclusive education as provision for all children, regardless of any perceived difference, disability or other social, emotional, cultural or linguistic difference.

In next section, I will discuss literature examining the inclusion of students with disabilities in the US and Saudi Arabian cultures. Examples will be used from the US on the evolution of their inclusion policies and practice, however it is acknowledged that other countries may have had different pathways to inclusion.

2.3 The Movement Towards Inclusion

People with disabilities have existed since the beginning of time but have not always been treated appropriately (Almosa,2008). Special education has developed through several stages, starting with philosophers, physicians and religious leaders calling on communities to protect, integrate and accept people with disabilities. The eighteenth century marked a pivotal moment in history acknowledging that all people were capable of learning, however this was not the case across the world (Hallahan et al., 2009). When formal systematic education was introduced, terminologies used to define disabilities were also changed and, in fact, in the past four decades, new strategies were created to help students with disabilities to learn (Hallahan et al., 2009; Osgood, 2005).

When special education programmes were implemented, some educators believed that such students had different physical, emotional and intellectual needs that required greater attention from highly-trained staff members employing diverse approaches to teaching. Consequently, most specialists thought the best place for those students would be a separate classroom containing only a few students who shared similar features and difficulties, taught by a qualified teacher who was experienced and capable of meeting their unique needs. In some countries, including Saudi Arabia, most of these classrooms were either in different buildings or even in separate residential schools. However, it is critical to note that not all educators in the

1960s and 1970s shared the same opinion about segregating students with disabilities from regular classroom (Frederickson & Cline, 2009; Osgood, 2005).

Although this segregation was claimed to be justified and was believed to be in the best interests of the students, it raised concerns regarding the equality and civil rights of individuals with disabilities, causing heated debate amongst researchers, educators and policy makers (Frederickson & Cline, 2009; Osgood, 2005).

In the 1950s and 1960s, a major political movement in the United States promoted the equality and civil rights of all people regardless of their race, faith or culture. This movement was mainly against racial segregation, but it encouraged parents and teachers to advocate and fight for the rights of people with disabilities and to eliminate segregation from their communities. The movement also affected the 'segregation versus inclusion' discussion, resulting in many educational reforms and policies that confirmed the inclusion of individuals with disabilities in regular education public schools, for example United Nations Children's Fund (UNICEF) and the United Nations Education, Science and Cultural Organization (UNESCO, 1994, 2005) (Frederickson & Cline, 2009).

US laws, such as Public Law 94-142 and the Education for All Handicapped Children Act 1975, followed by the Individuals with Disabilities Education Improvement Act (IDEIA), the Rehabilitation Act 1973 and the American with Disabilities Act 1990 (ADA), were enacted in order to prevent discrimination, end students' exclusion from public schools and improve the educational environment regarding service provision for students with disabilities. The most vital element of these laws was the provision of a free, suitable public education for all children in the least restrictive environment possible (Osgood, 2005). Legislators of the No Child Left Behind Act (NCLB) and Individuals with Disabilities Education Improvement Act of 2004 (IDEA), previously

referred to as public law 94-142, insisted on equal access for special needs students with regard to the general education curriculum (Cawthon, 2004; Delano et al., 2009; Smith et al., 2010). The goal of the NCLB mandate was to confirm schools' provision of high-quality education for all students by monitoring the schools' progress in increasing standards (King, Lemons & Hill, 2012).

In the US, special education services have provided students with learning difficulties with the opportunity to equal access to free and appropriate US public education, allowing their integration into general education classrooms through inclusion (Aron & Loprest, 2012). One provision the legislators mandated in the NCLB Act was that schools must ensure that students with learning disabilities made annual yearly progress (AYP) in reading and mathematics in order to meet proficiency standards (DeSimone, 2009). Schools should essentially facilitate and provide opportunities for continual learning to assist students with learning difficulties to develop their knowledge and skills for the future (Aktaruzzaman et al., 2011; Sullivan, 1998).

The Kingdom of Saudi Arabia (KSA) was the first Arab country to implement mainstreaming in its schools (Almousa, 2010). The first effective trials of mainstreaming took place in the city of Hufuf, in the Eastern Region of the Kingdom, in 1984. In 1989, the kindergarten at King Saud University in Riyadh was opened to children with special educational needs. In 1990, the Ministry of Education started applying mainstreaming in its schools on a limited scale. However, a major move towards mainstreaming took place in 1996 when the Ministry put forward an educational strategy with ten main themes. One of the themes emphasised the role of public schools in the education of exceptional children whereby they were integrated

with their mainstream peers (Al-Mousa, Al-Saratawi, Al-Abduljabbar, Al-Batal & Al-Husain, 2008).

In Saudi Arabia, special needs education has changed in the last 30 years. Saudi Arabia assigns a part of its national budget to education for all children of school age. Furthermore, it is setting a precedent in formulating educational policies that place great emphasis on the concept of integrating students with disabilities into regular education schools in the region (Al-Mousa et al 2008). Therefore, educating children with special needs, including learning difficulties, in regular education schools is no longer a futuristic fantasy, but a living reality. This is underscored by the fact that the statistics show that the number of students with special needs receiving their education in regular schools exceeds that of students being educated in special institutes (Al-Mousa et al 2008).

Weber (2012) and Felimban (2013) asserted that the educational system in KSA allows students with learning difficulties to study in the same classrooms as students without learning difficulties. Students displaying mild or moderate disabilities are able to attend general schools and learn in the same classes as general education students.

In next section, I will discuss the rationale for inclusion of students with special needs.

2.4 The Rationale for Inclusion

Many policies and researchers have asserted that inclusion of students with special needs is very important. Because the ideology of inclusion education meets the needs of all students in public schools (Al-Rossan, 2003). Through, educated all

the students with special education needs and the mainstream students in a mainstream school with the provision of aids and service.

Teaching children with disabilities in regular classrooms with their peers has generated a great deal of debate (Imray and Colley, 2017). The advocates for inclusion believe that individuals with disabilities should be in the same school with their peers. However, the opponents of inclusion think that inclusive settings are not necessarily the best learning environments for all students, meaning that 'one size does not fit all' (AlMousa, 2010; Hallahan et al., 2009). Despite the fluidity of its definition, educational inclusion has not been successfully achieved in any educational system in any country despite some efforts of 30 years (Imray and Colley,2017).

On the other hand, Lipsky and Gartner (1997) summarised the key factors that firmly recommend inclusive settings as the most suitable educational environment for children with special needs. Firstly, they argue that research data show that students with special needs have the ability to attain a satisfactory learning level in mainstream classes as they do in segregated classrooms. Furthermore, there was no conclusive research indicating that students with special needs achieve better academic and social attainment in separate programmes. Rea, Mclaughlin and Walther-Thomas (2002) explored the academic and behavioural progress of students with Learning Disabilities (LD) in inclusive settings versus in pullout programmes. The findings obviously showed that students in the inclusive settings achieved higher grades in all subjects (reading, math, science, and social studies), did better on the standardized tests, had greater attendance rates, and exhibited fewer behaviour problems. This, however, was a small study involving 58 pupils with LD, 36 of whom received special education services in the general classroom, the rest received special education

services through the resource room. It took place in two middle schools in a suburban school district in the US and as such should not be taken as true for all schools.

Secondly, the labels attached to segregated classes were found to play a negative role by stigmatising students with disabilities, leading to adverse learning outcomes. Young (2011) states that when students with LD are separated from the general population, there is a likelihood of them being stigmatised, which places them in a different student subgroup or category further excluding them from mainstream education.

The third point Lipsky and Gartner (1997) focused on how mainstream education can offer appropriate learning opportunities for all students, including with special needs, when it is conducted with clear scientific measures. Having a more inclusive approach to education would facilitate in creating an education system which is more responsive to the needs to all learners ensuring the best possible opportunities for students to learn (Sasja Ras, 2008).

The fourth point related to the cost effectiveness of inclusive settings and their contribution to the improvement of the quality of education for all students, with or without disabilities. Such settings also advance and enrich teaching experiences for teachers in both mainstream and special education fields, as well as strengthening their collaboration and enhancing their professional development. The Centre for Studies on Inclusive Education (CSIE), (2000: 1) state that:

> The implementation of the inclusion agenda involves equality for all students and staff. Inclusive schools will have transformed their culture and polices to be more responsive to the needs of the students in the local area. Also, the barriers to learning must be eliminated, and this should entail working closely with parents and the local community. The teaching staff must perceive any difference

between students as an opportunity to support learning rather than as a barrier in learning.

The fifth point maintained that positive results had been identified with most studies examining the attitude of administrators, educators, parents, school staff and peers with regard to inclusion and its outcomes. Buell et al. (1999) stated that there was a positive relationship between the teachers' attitudes towards inclusion and their belief that they could affect the results of children with special needs in the classroom. In addition, they observed that teachers with more positive viewpoints of inclusion have more trust in their ability to help students in inclusive settings and modify classroom materials and procedures to accommodate students with special needs. Likewise, in Saudi Arabia, Al-Abdulgabar and Massud (2002) found that the inclusion programmes implemented in some schools had a positive effect on the teachers who worked in these schools.

Lipsky and Gartner's (1997) final point refers to the failure of segregated programmes to equip individuals with disabilities with the necessary skills to fully engage in all areas of life. Falvey (2004) could not find a single study during a period of 20 years (1984-2004) that would suggest that providing special education services for students with severe disabilities in segregated settings is better or more helpful than providing it in regular classrooms. Furthermore, Kennedy, Shukla, and Fryxell (1997) compared two groups of middle school students with severe disabilities who joined general and special schools over a year. They discovered that the students in the regular schools had greater levels of social interactions with their peers as well as with the school stuff, received more social behaviour support, and built more friendship networks compared to students in the special schools. Similar results were reported in earlier comparative studies (e.g., Brinker &Thorpe, 1984; Fryxell & Kennedy, 1995).

Inclusive practice might be a difficult prospect and research evidence has emphasized a series of challenges, such as limited teacher training, limited specialised support and variable teacher expectation (Lindqvist et al. 2011; Nel et al., 2014). This has resulted in teachers having a lack of knowledge and necessary skills to practice pedagogy in their classrooms, as well as unable to appropriately support those experiencing difficulties in learning (Schoeman 2012); along with a lack of resources and large classroom numbers (Human Sciences Research Council 2005).

Additionally, the various models to disability might also have affected the perceptions and outcomes of inclusion in the SEN context. The medical model of disability views disability as a 'problem' that belongs to the disabled individual. It is not seen as an issue to concern anyone other than the individual affected. The view taken with the medical model is that disability results from chronic illness and disease. It is informed by the idea that disability is caused by illness and impairment and entails suffering and some social disadvantage (Thomas, 2004).

Michael Bury, a British medical sociologist, has written extensively about chronic illness and disability. He argues disability is caused unquestionably by impairment. The impairment may be related to disease, active pathology, genetic disorders, accident or trauma (Bury,1994). Furthermore, individuals with disability are limited by their biological and psychological impairment and not from any barriers implemented by society. Gable (2014) argues that the medical model approach plays a vital role in the study of students with disabilities: it provides a professional knowledge base that 'describes characteristics and outcomes of students, builds theory and conceptual models, validates assessment instruments, and determines effective interventions' (Gable, 2014, p. 98).

The medical model used to identify the people with disabilities depends on scientific processes to determine the nature of disability and provide the appropriate intervention. Riddell argues that the medical model supports students by identifying and classifying special education needs (Riddell et al., 2000). In addition, the perspective taken by the medical model is that impairment can be individually addressed to bring students with disabilities up to expected norms using evidence-based practices to improve student outcomes (Gable, 2014).

On the other hand, from a medical perspective, it is easy to assume that nature has an accepted course of action and that a “failed” human condition is the result of pathological states. This aspect of the medical model has been central to the legitimization of the narrative of disability as an identified personal tragedy (Goffman, 1963). In Goffman’s stigma theory, disability is associated with a “marked identity” that discredits the individual (Rapley, 2004). People with disabilities are viewed as deviations from the norm; disability determines who they are and what they may become (Davis, 1997). This view might lead to the stigma that could be placed on students with LD and SE teachers alike (Link & Phelan, 2001). Likewise, Becker (1963) noted that different fields, such as science and medicine, have different definitions of deviance. According to Becker, from the point of view of society, a more specific definition of deviance is the ‘failure to obey group rules’ (1963, p. 8). This makes people who break the rules outsiders. Becker (1963) noted that social groups develop deviance by creating rules that enhance it. These rules enhance the labelling of a particular group of people, thus deeming them to be outsiders. A deviant is an individual whose labelling has been successfully applied.

Deviance depends on the perception and reaction of society in any given context and situation. Becker (1963) argued that ‘deviance and the labelling of such

are interpreted not from the act of deviance itself, or the breaking of behavioural norms, but from the responses of those who consider the behaviour deviant' (as cited in Bryant & Higgins, 2009, p. 254). Thus, society enforces rules of normality and abnormality. According to Schur, a 'social system produces the content of norms through emerging assessments and collective reactions' (1969, p. 317). The medical model has had a clear effect on inclusion and teachers' views, and these impacts the success of inclusion of students with special needs. For example, several researchers have found that teachers had lower motor expectations for students with disabilities than for their students without disabilities (Block & Krebs, 1992; Block & Vogler, 1994; Rizzo & Vispoel, 1992). Previous studies conducted in Saudi Arabia, have shown that society rejects and has a negative attitude toward people who are labelled as special needs; even teachers and parents see them as being different (Alquraini, 2011). One study conducted in Saudi Arabia with special education teachers showed that Saudi teachers prefer to teach students with special needs in a segregated environment, away from mainstream students (Al-Faiz, 2006). Though there have been continued efforts to unearth teacher perceptions and attitudes, the literature clearly illustrates how the medical model populates teachers' thoughts and mediates their preferences, as well as their dispositions, to students with disabilities (Grenier, 2007).

In contrast, the social model takes a different perspective. Finkelstein's name is closely connected to the establishment of the social model of disability (Finkelstein, 2001). He mentions that the social model takes a view of disability 'as a personal tragedy or you see it as a form of social oppression' (Finkelstein, 2001, as cited in Thomas, 2004, p. 571). Likewise, Finkelstein (2001) states, 'It is society that disables us and disabled people are an oppressed social group' (Thomas, 2004, p. 571). What

is asserted in this definition is that society impacts individuals with disabilities through the imposition of barriers. There are many kinds of social barriers, including limits to residential care and benefits, exclusion from employment and the educational mainstream, and less access to the built environment (Thomas, 2004).

In other words, according to the social model, the problem of disability therefore resides in the 'collective responsibility of society as a whole' (Llewellyn & Hogan, 2000, p. 159). This means that advocates of the social model assert that the direct cause of disabilities are barriers which build through society. Norwich (2009) states that, 'If an impairment can be a difficulty in some function, then it is likely that it can also be influenced by environmental factors and not just physical structural ones' (p. 6). Thus, recognize the differences between the concepts of disability and impairment and how those concern the relationship between disability and society an issue which need more attention.

However, the most preferred and adopted model by disabled people's organisations and most governments around the world e.g. USA and UK, (Degener, 2016) is the social model which seeks to eliminate unnecessary barriers that limit the involvement of individuals with incapacity in society (Shakespeare & Watson, 2001). The social model also recognises prevalent attitudes towards disabled people and comes up with proactive actions to accordingly deal with any kind of attitude that may be a limitation to a disabled person.

Labelling individuals with a disability label arguably may help the ability of individualised education programs to address educational needs (Gold & Richards, 2012). This view has shaped the debate around inclusion of students with LD in mainstream schools. Hence, it might have contributed to reducing the barriers to accessing the mainstream space. In this regard, this view facilitated a participatory

culture and called for the implementation of supportive structures in place for teachers and students alike (Abegglen and Hessels 2018; O'Connor and McNabb, 2020).

However, seen from the perspective of the social model, 'the very term disability suggests a deficit mode of thinking about the labelled students. Since the prefix *dis* is derived from Latin meaning "not" or "without", the term disability can be literally defined as not having ability' (Gold & Richards, 2012, p. 2). Labels may lead to prejudice and stereotypes. In turn, biases and stereotypes may affect how someone interacts with the person labelled. Thus, labelling may result in stereotyping, isolation, status loss, discrimination, powerlessness and oppression (Link & Phelan, 2001). It is important to note that stereotyping may lead a person or a group to isolate themselves from other people when judgemental views are voiced due to the reactions of others to variations or dissimilarities seen as disagreeable (Goffman, 1963).

Both the medical and social models of disability have their own benefits in drawing research conclusions about people with special needs. However, both models have their own limitations in thinking about disability. Despite this, both models have been the dominant approaches in informing studies of disability. In this sense, the medical model was challenged by the social model and more recently with the emergence of a new model - the rights-based model of disability. The latter perspective of disability has emerged with the adoption of the United Nations Convention on the Rights of Persons with Disability (CRPD) (Degener, 2016). O'Connor and Mcnabb (2020) argue that the rights based model was built to develop the social model by not only pointing to the barriers faced by students with disabilities, but also offering a moral "legal and moral traction, supported by internationally ratified treaties, including the CRC and CRPD, and is premised on individual quality of life" (p.4). It informs studies of disability to call for a change at all levels starting from where

decisions about inclusion are made to the practice at the level of schools. This perspective has been already recognised by researchers who argued that with a variety of positive outcomes including social and educational acceptance (Boyle et al. 2011b), the promotion of positive attitudes and increasing options for teacher education (Boyle et al. 2011b; O 'Gorman and Drudy 2010). The success of inclusive education relies on agreement among all relevant partners regarding a common vision, supported by specific procedures for putting this vision into practice. The move towards inclusion is a gradual one that should be based on clearly articulated principles that address system-wide expansion and multi-sectorial approaches including all levels of society (UNESCO, 2009).

In the next section I discuss the strategies that might lead to successful inclusion.

2.5 Element of Effective Inclusive Education

Among these changes is the inclusion of students with disabilities in a general education setting, who are taught and learn the same curriculum as their peers. The changes have resulted from the inclusion of students with special needs in general education classes and led to many changes in teachers' roles. Although teachers' roles in inclusive schools and classrooms are still evolving (Allday et al., 2013) and will vary in terms of specific settings and student populations, the job descriptions of special and general education teachers already look very different from those of 10, or even 20, years ago (Almousa, 2010). Under the umbrella of inclusion is the key concept of collaboration, which has been an additional change in what teachers jobs look like. For example, teachers now more often co-plan and co-teach, working together to directly instruct students with and without disabilities and assess them in multiple ways.

Table 1: Evidence of the factors that influence inclusion

Factors that influence inclusion	**Mentioned by**
Teaching strategies, Teaching experience, Knowledge and understanding, Specialist support from teachers or appropriately qualified assistants, appropriate premises; equipment and teaching and learning materials	Davis and Florian, (2004);
collaboration between teachers	El-Zein, (2009).
Additional time for lesson planning	Avramidis and Norwich (2002)
administration support, school leaders and teachers, efficient co-teaching professional development, collaboration, and access to support services	Carpenter & Dyal, (2007); Leatherman (2007); Villa, Thousand, Nevin & Liston (2005)

Davis and Florian, (2004) argue that inclusion can be shaped by the following factors: teaching strategies; teaching experience; knowledge and understanding; and training and teachers' beliefs; together with elements in the educational environment, such as: specialist support from teachers or appropriately qualified assistants; appropriate premises; equipment and teaching and learning materials; extra time for planning lessons (Avramidis and Norwich, 2002); and collaboration between teachers (El-Zein, 2009). A complete list from the literature can be found in Table 1.

Policies around the world have highlighted important factors and strategies that support successful inclusion. Policies, such as the Education of All Handicapped Children Act, Public law 94-142 (IDEA, 2004), marked a significant shift from segregated classrooms to more inclusive classrooms. An effective inclusion process requires a focus on several factors, including the following: administration support, committed school leaders and teachers, efficient co-teaching, an established inclusive

school community, communication, professional development, collaboration, and access to support services (Carpenter & Dyal, 2007; Leatherman, 2007; Villa, Thousand, Nevin & Liston, 2005). Accompanying this recent legislation and the notion of inclusive classes were new service delivery models for special education, including collaboration and co-teaching. Teacher collaboration has increased, bringing professionals from multiple disciplines together to promote progress and success for diverse groups of students (Cook & Friend, 1991; Gable, Arllen, Evans & Whinnery, 1997). Thus, effective inclusive practice requires engagement from all teachers to ensure positive outcomes for children with SEN (Boyle et al. 2011a; Hwang and Evans 2011; Sharma, Loreman, and Forlin 2012). In addition, it is clear that with the increase of SEN students' numbers in mainstream classrooms there is a need for investment in extra resources, including supplementary teaching support undertaken in collaboration with the class teacher (Devecchi et al. 2012).

The Education for All Handicapped Children Act of 1975 (PL 94–142) was the first policy to insist on multidisciplinary teams in schools; a component of legislation that has influenced multidisciplinary collaboration in several other countries. Legislation in England has also reinforced the necessity for collaboration between local educational authorities and the health and social services (DES 1978; The 1981 Education Act; The Children Act 1989). Scottish legislation (Education Scotland Act 2004) also stated that the integration of services is vital and has recently reinforced this by establishing integrated community schools (ICS). As well as in Ireland, further teaching support for pupils with SEN is implemented through special education support teams either in individual schools or across clusters of schools (DES, Circular 24/03). This means that many policies around the world insist on collaboration as an essential element of all areas of life.

Literature on inclusive education has repeatedly documented the positive impact of collaboration between teachers on the implementation of inclusion (Carter et al., 2009; Cook & Friend, 2006; Naraian, 2010; Spencer, 2005). A review of several related research suggests that teacher collaboration may, in fact, improve learning for both teachers and students (Williams, 2010). When teachers have opportunities to collaborate professionally, they build upon their distinctive experiences, pedagogies, and content (Goddard & Goddard, 2007). Pounder (1998) concluded that teachers who work on teams report a greater skill variety and knowledge of student performance, which, in turn, improves student outcomes.

Yeung (2012) reported that inclusive education can be successful when supported by strong leadership, promoting a collaborative school culture, fostering professional partnerships and facilitating students' learning. Schools already require collaboration in many areas, in for example meetings, field trip organisation and consultations between colleagues. Educators are keenly aware of the need to work with others to obtain the best results. However, Friend (2000) points out that several people are under the misconception that collaboration is natural and comes simply to those who want to collaborate. In fact, collaboration does not come naturally for each, and research shows that skills for communication and collaboration do not grow in the context of schools as needed, or as a result of having general and special education candidates in courses together, but rather need to be explicitly taught (Brownell, et al., 2006).

Collaboration is thus an important strategy to promote inclusion within schools, as seen in the literature, which is why it is an important concept to focus on in this study. The next section will explore the concept of collaboration and what this means.

2.6 Collaboration

There have been a number of definitions of collaboration in education literature, commonly describing the interactions between two people planning instruction (Friend & Cook, 2003; Murawski & Hughes, 2009; Paulsen, 2008). It is therefore important to develop a clear definition of collaboration within an educational context in order to enable all teachers to gain a solid understanding of collaboration and implement it effectively in the workplace.

Collaboration is the interaction between professionals who offer different areas of expertise yet share similar responsibilities and goals (Friend & Cook, 2007; Walther-Thomas, Korinek, McLaughlin, & Williams, 2000). A frequently cited definition in the special education literature is the one posited by Friend and Cook (2003). They define collaboration in schools as 'an interpersonal style for direct interaction between at least two coequal parties voluntarily engaged in shared decision-making, as they work toward a common goal' (p. 5).

Furthermore, according to Clark (2000), collaboration refers to 'a method of solving the problems of teaching and learning in partnerships with others' (p.56). When teachers engage in problem solving, they can become agents of change and innovation in the workplace (Little, 1990; Skrtic, 1991). Similar ideas have been suggested by other researchers, within the context of general education practice and school reform, regarding teachers having opportunities to engage in joint work towards common goals, monitor student progress, develop and perform consistent and common assessments, utilise assessment information to drive instructional practice, discuss and debate priorities about curriculum and teaching, and meet to discuss problems and identify solutions (DuFour, 2002; Friend & Cook, 2003; Fullan, 2001;

Fullan & Hargreaves, 1996; Rosenholtz, 1989; Skrtic, 1991). These types of activities could represent the enactment of collaboration in its truest and most effective sense.

Little (1990) describes several examples of teacher activities relating to collaboration, including sharing of materials, providing help or assistance and engaging in shared work. Little asserts that not all teacher activities result in teachers' discussion about classroom instruction or student and teacher learning. She refers to the strongest form of collaboration as 'joint work' and states:

> Collaboration or joint work anticipates truly collective action—teachers' decisions to pursue a single course of action in concert or, alternatively, to decide on a set of basic priorities that in turn guide the independent choices of individual teachers (p. 519).

Joint work is characterised by teachers' task interdependence, shared responsibility and collective action. Brownell and Walther-Thomas (2002) and Idol and Poaluci-Whitcomb (1994) agree that collaboration is an interactive process involving individuals with a range of expertise who are required to work in partnership to resolve mutually defined issues.

Cook and Friend (1991) argue that although collaboration is loosely defined and not clearly understood, societal trends emphasising collaboration in human services and business would influence the growth of collaboration in servicing special education students. They contended that the complexity of society, coupled with the inability of individuals to know everything they must know in order to act upon everything that requires attention, would contribute to the growth of the study of collaboration in education research. This prediction has rung true with the increase in collaboration research in schools between general education and special education teachers. One

way of understanding collaboration is to explore different typologies as will be discussed in the next section.

2.7 Types of collaboration

Collaboration can take many different forms, from adhoc communication to more formal planned activities. The literature in this field has identified several different types of collaboration: co-teaching; peer coaching; collaborative consultation; and collaborative problem solving (Brownell, Adams, Sindelar, Waldron & van Hover, 2006).

Some authors distinguish between the types of collaboration in different ways. There are significant differences in the literature when describing the *indirect collaboration* that takes place outside classrooms (e.g. teachers' problem solving, planning instruction or resolving students' issues) and *direct collaboration* that occurs in classrooms during the delivery of teaching or instruction for learners (Friend & Cook, 2003; Gable & Manning, 1997). However, the extent of collaboration varies both in the classroom and outside the classroom.

2.7.1 Indirect collaboration

Indirect collaboration refers to collaboration that takes place during teachers' meetings, either before or after school or during common planning periods, with a focus on discussing specific students and their learning and behavioural issues. Whenever teachers and other staff members in the school engage in small work groups to deal with issues, they may discuss student performance, curricular activities, the behavioural requirements of learners, or supportive models for new teachers—collaborating outside the classroom and not while teaching students. These collaborative groups are specific to activities that occur outside the classroom, rather

than during instructional time with students (Friend & Cook, 2003; Gable & Manning, 1997).

The main purpose of a collaborative group is to decide on a course of action when students with special need are encountering challenges with their learning, when they are at risk of failing at school or when they are displaying behavioural issues. Thus, it involves consultation as indirect collaboration. According to Friend & Cook (2007), collaborative consultation acknowledges the wide range of approaches that can result in effective problem-solving towards a shared aim when there are discrepancies in expertise, levels of knowledge and engagement. Moreover, Friend & Cook (2007) defined collaborative consultation as a practice that involves a range of interactions, from informal and friendly to professional and focused, with several other school colleagues.

Friend and Cook (2003) and Laycock and Gable (1991) identified the main objective of indirect collaboration to be that of achieving instantaneous positive results at the foundation level for students and teachers alike by relying on the knowledge and expertise of groups of professionals. As described in the research literature, collaborative groups are commonly comprised of special education teachers, general teachers, speech and language therapists, school psychologists, occupational therapists, experts in reading and mathematics, administrative personnel, school psychologists, other school staff members and even university researchers and subject specialists (Friend & Cook, 2003; Gable & Manning, 1997).

2.7.2 Direct collaboration

Direct collaboration refers to cooperative teaching or co-teaching in educational settings, encompassing situations in which two teachers share the responsibility of teaching diverse groups of students in a mainstream educational context (Friend &

Cook, 1991; Gable & Manning, 1997). The most common type of direct collaboration is co-teaching or team teaching, wherein teachers assume a number of teaching roles, including shadow teaching, teaching whereby one teacher teaches while the other assists, station teaching, complementary teaching, parallel teaching, supplementary teaching activities, team teaching and alternate teaching. Research conducted by Friend and Bursuck (2002) demonstrated that there is a variety of teaching and classroom arrangements that both general education teachers and special education teachers may employ in a co-teaching framework, including:

(1) Lead one / Support one, which entails that one teacher teaches and the other takes notes;

(2) Station Teaching, which involves dividing instruction into small sections or steps to be accomplished at each station;

(3) Parallel Teaching, which refers to delivering the same lesson in a simultaneous way by both the general education teacher and the special education teacher to various groups;

(4) Alternative Teaching, Small group for specialized skills, and the lead teacher to focus on the larger group;

5) Team Teaching: a. Speak and Add, which allows teaching to be carried out together / joint conversation b. Speak and Chart, which offers the opportunity for teachers to deliver instruction together while using mediums like speaker and writer or media support;

(6) Shadow Teaching, which encompasses that a lead teacher carries out the teaching, while the other teacher going round;

(7) Skill Groups, with each teacher being in charge of particular groups of students working on specific skills.

Studies have also examined how direct collaboration addresses meeting the needs of students with disabilities in the general education setting. Likewise, by working collaboratively, general and special education teachers enhance their

collaborative skills and may even acquire new skills (Paulsen, 2008). Teacher collaboration, as a term, has been used interchangeably in the literature (Little, (1990), Friend, and Cook, (2003)). Common terms which were used included: collegiality; consultation; co-teaching; team teaching; cooperative learning and teaching; inclusion; teacher support/assistance teams; peer collaboration; and complementary instruction. Due to this range of terms used in the literature, it makes the concept of teacher collaboration a more complex and potentially misunderstood phenomenon. However, the clear distinction between direct and indirect collaboration has provided more clarification on what activities are involved within this concept. Teachers who engage in indirect collaborative activities should be discussing and deliberating curriculum and teaching priorities and meet to discuss any issues, as well as identify solution. This indirect collaboration can potentially lead to direct collaborative activities with teachers working together sharing a common goal (Friend and Cook, 2003).

Nevertheless, in all the models, the focus is on teachers working together, with an assumption that collaboration leads to improved student academic achievement in inclusive classes (Brownell et al., 2006; Scruggs, Mastropieri & McDuffie, 2007; Zigmond & Magiera, 2002).

In the next section, I discuss the importance of collaboration for both students and teachers.

2.8 The Importance of Collaboration

Collaboration appears to be a ubiquitous term in education nowadays (Friend, 2000). Literature indicates that collaboration between special and general education teachers is one of the most vital factors relating to the effectiveness of the education of people with special educational needs (Beaton, 2007; Bauwens & Hourcade, 1996;

Blanton & Pugach, 2007; Sledge & Pazey, 2013; Sokal & Sharma, 2014; Tzivinikou & Papoutsaki, 2014; Vlachou, Didaskalou & Mpeliou, 2004; Strogilos et al., 2011).

Marzano et al. (2003), argues that it is the necessity for continued, intensive, hands-on teacher collaboration at the school level in order to promote and maintain better student performance. They also mention that collaboration means that any issues related to the student performance can be managed collectively by teachers, resulting in a quicker and more efficient resolution.

Collaboration between mainstream and special education teachers is widely recognised as essential for successful inclusion and effective instruction of students with disabilities (Brownell, Adams, Sindelar, Waldron & Vanhover, 2006). In summary, the literature has provided evidence of the importance of collaboration between special and general teachers. However, the roles of the teachers in this process needs to be clearly defined and will be discussed in the next section.

2.9 The Roles of Special and General education Teachers in Collaboration

Tannock (2009) identified special education teachers as specialists in individualised and differentiated teaching and learner accommodation, while mainstream education teachers have been recognised as content knowledge specialists (Ripley, 1997; Tannock, 2009). Ripley (1997) also argues that, while the role of the special education teacher is to facilitate adaptations, adjustments and material that supports a host of learning styles and approaches, the role of the general education teacher is to utilise their abilities to directly instruct students according to an assigned curriculum. This is the defined roles of both groups of teachers in some countries, for example in Saudi Arabia.

In view of these differing roles, it is important that general and special education teachers work together, utilising their expertise and skills to deliver meaningful instruction, to be involved in their students' learning and to evaluate all students regardless of their levels of ability (Winn & Blanton, 2005; Olsen, 2003; Friend & Cook, 2002). By working collaboratively, general and special education teachers enhance their collaborative skills and may even acquire new skills (Paulsen, 2008). Collaborative relationships allow special education teachers to help general education teachers to develop effective instructional strategies for application to their students, which in turn increases access to the general education curriculum (Murawski & Hughes, 2009).

In collaborative contexts, both special and general education teachers are responsible for providing services and accommodating students with special needs, making a complete understanding of collaboration important in providing effective and practical collaboration. Ensuring that included students remain in the classroom, while still accessing the accommodations they require to be successful, is at the heart of collaborative models (Vaughn, Bos & Schumm, 2003). Both special education teachers and general education teachers may be accountable for the success and failure of the learners (Winn and Blanton, 2005).

Collaboration can be defined as professional practice that supports and enhances teachers' ability to work collectively to promote a shared vision for student achievement and their teaching practices and improve learning for all learners. With government regulations (NCLB and IDEA) continuously calling for higher levels of achievement and performance for all learners, the concept of teacher collaboration is considered to be one of the most effective approaches for enhancing schools, teaching and student academic performance (Allday, et al., 2013). According to Thousand, Villa

& Nevin (2006), there is a firm belief that when teachers collaborate on their planning and teaching, they are better able to meet the needs of diverse students and fulfil their legal responsibilities' (p.239). The benefits of collaboration will be discussed in more detail in the next section.

2.10 Beneficial Outcomes of Collaboration

Collaboration as a method or strategy may lead to beneficial outcomes for students and teachers. Friend & Cook (2002) state the benefits of collaboration for teachers and students seem to be significant. Englert & Tarrant (1995) mention that by being involved in collaborative groups, teachers assume full responsibility for problem-solving situations that are pertinent to their field or specialism, their questions, and their respective classes. Moreover, the outcome for the action-focused aspect of collaboration usually relates to interventions for learners and for increasing teachers' self-confidence and professional identity. One requirement for teacher collaboration lies in teachers assuming full responsibility for, and control of, students' learning processes and practical issues (Little, 1990; 2003; Wood, 2007).

In the context of special education and mainstream education, Keefe and Moore (2004) discuss how collaborative practice enhances learning prospects and opens up new horizons for all students. This is regardless of the students' level of educational needs, as it provides teachers with support in their field of teaching. If this proved to be a possibility, then students with disabilities could be educated in mainstream schools without the need being separated from their main class and ultimately providing them with a more inclusive educational experience.

Teachers should engage in collaborative work within inclusive contexts in order to consolidate the academic achievement of learners with special needs, leading to a bridging of the gap between high and low performing students (Smith & Leonard,

2005). It is may be possible to reach this goal by adopting various collaboration approaches, including co-teaching, collaborative consultation, collaborative problem solving and peer coaching (Lingo, Barton-Arwood & Jolivette, 2011). By way of illustration, a report by Thomson (2013) showed that the application of a collaborative problem-solving model (when educators work together face-to-face to solve problems) in New Zealand could potentially support educators and school officials in the development and upkeep of inclusive classrooms. By adopting this model of collaboration, it is possible for mainstream teachers to acquire new skills and techniques from the resource teachers and include these strategies in their teaching repertoires. Likewise, co-teaching is considered to be one of the most positive and supportive settings for both mainstream teachers and special education instructors, given the fact that the model encourages both groups to collaborate and engage in teamwork (Friend, 2007; Murawski & Lachner, 2010).

Pounder (1998) concluded that teachers who work in teams report a greater variety of skills and knowledge of student performance that, in turn, improve student outcomes. A study conducted by Goddard and Goddard (2007) found that 47 schools in a large urban school district were positively influenced by teacher collaboration. This study provided evidence of a direct link between teacher collaboration, school improvement and student achievement. Goddard, Goddard and Miller (2010) broadened this study, collecting data from 1600 teachers in 96 elementary schools. They found that in schools where the principal provided instructional leadership there were higher rates of teacher collaboration and the greater the students' learning. The advantages of collaboration arise from shared practices in a trusting and focused environment. The exchange of ideas, plans and resources allows for diverse perspectives within a group. In this respect, it can be said that teachers sharing ideas

during planning, and taking time to reflect on their application, can potentially enhance teaching by offering a platform for the generation of further ideas and strategies (Clement & Vandenberghe, 2000; Forbes, 2007).

Clement and Vandenberghe (2000) attempted to identify the relationship between elementary school teachers and their levels of collegiality, and its influence on professional development. It was proposed that having a balance of autonomy and collegiality can have a positive effect on the professional development of teachers. Improved instruction delivery for learners also resulted from this shared generation of teaching ideas and strategies (Clement & Vandenberghe, 2000).

Despite the benefits of collaboration between special and general education teachers, obstacles to collaboration between special and general teachers exist in mainstream schools. I discuss these in the next section.

2.11 Barriers to collaboration

Piercey (2010) argues that teacher collaboration is the main determinant of improvement for the mainstream school. Nevertheless, DuFour, (2011) points out that true collaboration is rare: there is a disjuncture between the idea and the implementation of collaborative practices. There is little doubt that collaboration is a vital part of educational practices, but barriers to the implementation of collaboration need to be addressed before the situation will change (DuFour, 2011; Tannock, 2009; Wilhoit, 2012). Lenord and Lenord (2001) developed and administered a survey to 96 school districts in Western Canada exploring teachers' values and what happen in actual circumstance regarding the collaboration. The questionnaire was completed by 565 randomly selected classroom teachers and their findings showed that teachers have several of limitations which lead to a lack of collaboration in school. I discuss these hindrances in this next section.

2.11.1 The effects of isolation

One of the most common barriers to collaboration is isolation (Leonard & Leonard, 2003; Friend & Cook, 2003; Ripley, 1997). According to Bakkenes, Comelis de Brabander and Jeroen (1999), isolation is defined as 'a situation in which a teacher is minimally influenced by and exerts minimal influence on other staff members' (p. 168). General education and special education teachers may find collaboration difficult, particularly when they are not accustomed to sharing the classroom or time with another teacher, or when they do not volunteer to collaborate in the first place. Friend & Cook (2003) & Leonard (2003) mentioned that there are factors that may increase isolation for general education and special education teachers include individualism, competitiveness and placement of classrooms (In addition, isolation might be due to personal choice and/or system factors).

Teachers have worked alone because the utilisation of collective approaches to impact on students' learning is a relatively recent phenomenon (Friend & Cook, 2003; Leonard, 2002; Leonard & Leonard, 2003). Scheduling, competitiveness and teachers' attitudes are additional factors contributing to teacher isolation (Cookson, 2005; Friend & Cook, 2003). It has become increasingly important for general education teachers to engage in collaborative work with special education teachers to meet the demands of the diverse student populations in mainstream education classrooms.

Tannock (2009) defines the concept of interdependence as general education and special education teachers becoming dependent on each other by way of collaboration in order to eliminate exclusion, indicating that all stakeholders must make a meticulous and conscious effort. Snyder, Garriott and Aylor (2001) pointed out an issue raised by the majority of mainstream and special education teachers: the fact that teaching practice is to some extent challenging, given the difficulty of working

closely in a collaborative or cooperative teaching environment with another adult. Isolation and exclusion as I mentioned above may be largely eradicated once schools ensure that supportive and productive professional learning communities are facilitated.

2.11.2 Attitudes towards collaboration

It is not possible to establish effective collaboration that embraces equal opportunities for all students if teachers hold different perceptions of children and learning and of teachers' duties with regard to students in both mainstream and special education. Inclusion is supported if both mainstream and special educators hold similar views in terms of perceiving learners from a diversity, rather than a deficit, perspective (Kim,2011).

Lilly (1989) asserted that teachers also need to have high expectations for all learners, regardless of their differences, and not lower their expectations of some. In addition, they should be committed to shared, rather than segregated, responsibility for students. Disregarding these challenging issues can result in unequal opportunities for some learners. According to Lilly (1989, p. 147), common, positive expectations and shared responsibility are the bases for schools in which 'all teachers would be expected to teach children and to assist each other in meeting the individual students' needs'.

However, some studies have asserted that general education teachers' negative attitudes toward working with students with special needs undermine the collaboration between general and special education teachers. For example, Al-Natour, Al-Zboon and Alkhamra (2015), who conducted a study in Jordan, communicated the findings of a mixed method study showing that special education teachers perceive the attitude of general education teachers toward collaborating with them as negative. Special

education teachers suggested many different reasons for this attitude. One common reason was that students with special needs, who they thought displayed slow progress and insignificant improvement over time, discouraged general education teachers from investing time in attempting to support them: the teachers see more value in spending time helping other students or doing other tasks. Therefore, general education teachers are unwilling to spend time collaborating with special education teachers in order to help students with special needs. This suggests that a positive attitude towards students with learning difficulties on the part of both types of teachers is important for the process of collaboration and ensuring successful inclusion.

2.11.3 Lack of planning time

The competence of educators to work in tandem to connect planning strategies and approaches for student success affects both student academic achievement and the professional environment within a school (Winter, 2007). However, the other factor for effective collaboration is a lack of planning time (Bouk, 2007; Leonard, 2001; Leonard & Leonard, 2003; Winn & Linda Blanton, 2005). For collaboration to be effective, teachers need to be provided with common planning time. The skills teachers acquire from common planning time contributes to 'powerful professional development' (Brownell, Adams, Sindelar, Waldron & Vanhover, 2006, p. 169).

As Raywid (1993) stated, 'collaborative time for teachers to undertake and sustain school improvement may be more important than equipment, facilities, or even staff development' (p. 52). Leonard and Leonard (2003) and Vaughn et al. (2003) reported that the most frequently voiced concern on the part of teachers was the need for joint planning time. Scheduling is one of the most critical factors in implementing collaborative teams in the school workplace. According to Rentffo (2007), collaborative partnerships require no less than one hour each week for collaborative planning

sessions. One of the major practical issues encountered by professionals or educators is lack of time. Preparing for meetings, sharing information, undertaking joint assessments, carrying out planning activities and conducting programme implementation are all aspects of collaboration that require time.

According to Lacey and Ouvry (1998), it is impossible to be a team without having time to talk. In fact, as reported by Wright (1994) and Kersner and Wright (1995), most of the respondents (special education teacher) in their survey research indicated that the amount of time required in order to render a joint working practice effective was one of the major drawbacks. For example, in Greece, even though it has been formally specified that this collaboration should be implemented, the Greek Education Ministry has not assigned time for joint assessment, planning and application (Tzivinikou, 2015). In addition, Mulholland and O'Connor (2016), found that the teachers in their study identified time constraints as a challenge to collaborative practice. This was both in relation to curriculum planning or access to professional development opportunities.

Encouraging staff to participate in planning collaboration may result in positive attitudes and more confidence, which in turn helps teachers to establish connectivity and make them feel they have a voice in the school culture (Leonard, 2002). Silverman (2007) found that positive collaboration experiences may significantly contribute to mainstream and special education teachers' development of positive attitudes and skills, which may in turn result in a sustained commitment to these practices. The creation of a positive climate necessitates the teachers' agreement of mutual planning goals and a system wherein they are accountable to one another for enabling the shift from merely positive responses to positive and proactive approaches to student learning.

2.11.4 Lack of administrative support (school principal)

In Saudi Arabia as in some other countries, the term administration refers to the leadership team which includes the head teachers and school principals. Friend and Cook (2007) and Smith and Leonard (2005), indicate that administrative leadership is the key factor underlying successful and effective inclusion and cooperation, since head teachers, school principals and administrators are responsible for assigning time and resources. As outlined by Wiggins and Damore (2006), it is the responsibility of administrators to maintain a school culture that views collaboration as one of its top priorities, and effective leadership leads to enhanced self-esteem among participants. Teacher collaboration may be supported by administrators of school in terms of supervision in classrooms, or introduction of professional development programmes (Bos and Vaughn, 2002).

Hines (2008) asserted that principals should provide assistance for teachers to recognise their own strengths and identify ways to complement each other. In the absence of well-informed leadership to help create an environment that nurtures collaboration, teachers may not be able to take part in an effective collaboration process. Effective management should also seek to support the creation of a pleasant work atmosphere and encourage other members to form collaborative partnerships and groups.

Unfortunately, schools may lack such leadership, which is beyond the control of the teaching staff. Due to this, teacher engagement in collaborative practice or even training in collaboration activities is not always feasible (Simmons & Magiera, 2007). According to Worrell (2008, p. 49), “A poor team of administrators makes the job of the instructional staff even more difficult, but even with fragile administration, there are

some band-aid solutions that will help teachers increase the effectiveness of including students with disabilities in the general education classroom".

2.11.5 Lack of knowledge and Absence of Training

Another major hurdle to collaborative practice is the lack of knowledge and a deficiency in training and professional development. Teachers consistently report the lack of specific training as a barrier to developing collaborative partnerships (Cramer, 2007; Leonard, 2002; Leonard & Leonard, 2003; Worrell, 2008). In several studies, a lack of knowledge has been identified as a hindrance to collaborative practices (Brownell et al., 2006; Worrell, 2008). Bergen, (1997) found that teachers who felt they had insufficient knowledge of special education hesitated in engaging with collaborative practices. Brownell et al. (2006) identified that, although general education teachers have a primary role in the teaching of students with disabilities, they frequently reported feelings of inadequacy in that role. Mastropieri and Scruggs (2000) found that, although general education teachers accommodated inclusive education, they had limited or no knowledge of it and lacked the training, skills and resources to enable them to accommodate students with disabilities.

On the other hand, teacher preparation programmes are often faulted for providing insufficient training in collaboration skills for special educators (Billingsley, 2004; Keefe & Moore, 2004; Keefe, Moore & Duff, 2004; Laframboise, Epanchin, Colucci & Hocutt, 2004; McKenzie, 2009; Otis-Wilborn, Winn, Griffin & Kilgore, 2005; Turner, 2003).

However, in a Greek study, Tzivinikou (2015) examined collaborative improvements made by mainstream and special education teachers working together in fifteen diverse classrooms. The study found that collaboration between teachers improved with the introduction of in-service training (on collaboration) and contributed

to meeting the students' needs through the use of the most effective strategies and procedures.

In light of this research study, there is a clear need to support the development of teachers' collaboration skills from the start of their career (Billingsley, 2004). Precisely, the proposed solutions for this dilemma included: (a) classes designed to teach collaboration skills (Arthaud et al., 2007; McKenzie, 2009); (b) co-teaching during practice or student teaching (Alvarez & Daniel, 2008; Van Laarhoven et al., 2007; Wilson Kamens, 2007).

On the other hand, in spite of recommendations for training in collaboration, it appears that there is a dearth of research relating to the pre-service special educators' perceptions of their collaboration skills whilst carrying out coursework and before joining the teaching profession (Bradley & Monda-Amaya, 2005; Gallagher, Vail & Monda-Amaya, 2008). If this knowledge is not established, it will be hard to gauge whether coursework, as a tool for the preparation of special education teachers to employ collaborative skills and knowledge, can enhance pre-service teachers' attitudes and beliefs

As discovered by Carlson, Brauen, Klein, Schroll and Willig (2002), those who recalled receiving training in collaboration accounted for only 53% of special education teachers and 29% of general education teachers. In addition, many general education teachers have not received training in how to instruct students with a variety of learning styles and needs; nor are they typically aware of how to choose 'scientifically validated curricula and academic programmes that address students' needs' (Fuchs et al., p. 58). Nevertheless, special educators and other specialised instructors require more specific training on working with varied learners and selecting valid instructional programmes with integrity. White and Mason (2006) mentioned that 54% of special

education teachers who had just started their teaching career required some help when collaborating with mainstream educators. Although there is evidence of training in collaboration, there is a lack of implementing what is learnt into practice.

Recommendations for teacher education programme improvements have been made, including the commonly held aim of establishing better collaboration skills, not only for special education teachers, but also for their mainstream counterparts. There have been recurrent calls from researchers for higher education to introduce changes or take unprecedented steps that could lead to effective collaboration skills (e.g., French & Chopra, 2006; Griffin & Pugach, 2007; Thousand, Villa & Nevin, 2006; Villa, Thousand & Chapple, 1996).

Teacher-preparation programmes can play a key role in changing teachers' perceptions and instilling the relevant skills of inclusion and collaboration. An argument was put forward by Hinders (1995) that teacher-preparation programmes should assume a leading role in the preparation of teachers to meet the needs of students with disabilities in the mainstream learning environment. However, it was shown in a national survey in USA of special education student teaching practices (Conderman, Morin & Stephens, 2005) that traditional paper-style assignments, such as lesson plans, top the list of student teaching requirements. In addition, less focus has been placed on activities that include collaboration or consultation skills, including parents' meetings or collaboration with mainstream educators.

2.11.6 Lack of clarity in teachers' roles

Vaughn et al. (2003) argued that for effective collaboration to take place, there should be a mutual respect for roles and responsibilities on the part of the individuals. Ripley (1997) stated that the collaborative model requires special and general education teachers to share their skills, training and perspectives while on the job (p.

3), which would eventually benefit both parties. While a general educator should be seen as the core content specialist, the special educator should be seen as the learning specialist for SEN students. Similarly, while the special education teachers' major focus is on meeting students' individual needs, the general education teachers deliver the school curriculum and focus on the entire class rather than individuals.

It should be pointed out, however, that the professionals' roles should be clearly defined in order for them to feel secure (Clough & Lindsay, 1991). As stated by Vaughn, Bos and Schumm (2000), there is a difference in the instructional roles of special and general education teachers, depending on the learning aims and specific requirements of the learners. A number of descriptive studies have nevertheless confirmed that clearly defined roles and responsibilities from which students and teachers can benefit have become a necessity (Dieker, 2001; Harbort et al., 2007; Weiss & LIoyd, 2002).

In a study by Walter-Thomas, Bryant and Land (1996), as an example, co-teachers reported some key prerequisites for sharing equal roles and responsibilities, including getting to know each other and sharing teaching skills, philosophies and perceptions. In the same way, as noted by Dieker (2001) in an observational study involving nine successful co-teaching teams, the responding teachers highlighted the importance of role clarification and emphasised the significance of role discussion.

Finally, in theory, the idea of collaboration between general and special education teachers is deeply entrenched in the uniqueness of the knowledge base and expertise of both types of teacher (Cook & Friend, 2006; Garderen et al., 2009). This process necessitates effort, diligence and training, as well as the sharing of resources, involvement in decision-making and being responsible for the outcomes (Carter et al., 2009). It cannot be achieved simply by two people deciding to work

together, enjoying each other's company or spending time on a joint activity (Robinson & Buly, 2007).

2.12 Models of disability views and discourse on collaboration:

Having reviewed the empirical literature on collaboration, I could argue that collaboration in schools is complex, involving factors that are personal or internal, and it is impacted by factors that are external or situational. Moving to more of a theoretical discussion on collaboration, it might also be argued that the dominant models of disability discussed above could shape GE and SE teachers' understandings of who is responsible in a collaborative model of supporting children with LD in the mainstream school. As well as other important questions such as: how collaboration is perceived by teachers and what should be the outcome of a collaborative teaching model in the SEN context? In the next section, I shall discuss these important questions and their possible link to models of disability in order to better contextualise the research focus in the broader history and discourse on the inclusion of children with SEND.

The medical model; for example, and how it conceptualises disability as a deficiency put the diagnostic authority in society (represented by scientists and doctors) in a "… position to lead discourses" of disability (Haegele, & Hodge, 2016, p.194; Bingham, Clarke, Michielsens, & Van De Meer, 2013; Palmer & Harley, 2012). According to Haegele, and Hodge (2016), the medical view has shaped several topics around disability including what is disability, access to treatments or services, targets of interventions, perceptions of individuals with disabilities and the cognitive authority. In this regard, the medical model has imposed a normative view towards individuals with disabilities by 'fixing' the disability as the target of intervention (Bingham et al., 2013; Haegele, and Hodge, 2016). This suggests that fixing the disability should be

undertaken by trained professionals in educational settings (Palmer & Harley, 2012). With the dominance of a medicalised view in disability discourses, it could be argued that this might shape GE and SE teachers of who is responsible on a collaborative model in mainstream schools. It might suggest that it is the responsibility of qualified teachers who are specifically trained in the characteristics of deficits that a certain type of child with LD will have such as SE teachers in the context of this study. Hence, a collaborative model between GE and SE might be impeded by the persistence of this view and might also be responsible for creating the barriers to collaboration. As discussed above, a salient barrier to collaboration is the lack of access to knowledge and resources needed for dealing with individuals with disabilities that are gatekept by the medical and specialist professionals (Humpage, 2007). Consequently, perceptions of who is the authority in a collaborative model in mainstream schools from a medicalized view then suggest that it is the trained teachers represented by the SE teachers in the context of mainstream schools.

In addition to discussions around who is the authority in relation to dealing with students with LD, perceptions of GE and SE on collaboration can equally be shaped by the medicalized view. As discussed earlier in this chapter, this view shapes the beliefs of society including teachers working with students with LD. (Fitzgerald, 2006; Grenier, 2007). Also, according to Brittain (2004), the medical view suggests that individuals with disability as 'faulty' and denies the impact of the sociocultural environment in addressing their needs. In this regard, empirical evidence on teachers' perceptions in a collaborative setting have already found that the medical view persist in shaping the views of GE and SE and their failure to recognize themselves as the agents of change in mainstream schools (Thomas, 2004; Strogilos, Tragoulia, Avramidis, Voulagka & Papanikolaou, 2017). Attitudinal teachers' literature supports

this and state that the medical model still prevails in affecting “teachers’ thoughts and mediates their preferences, as well as their dispositions” (Grenier, 2007; p. 303). To this end, collaboration as a sociocultural element in a society where the medicalized view leads discourse on disability might not be perceived as a strategy that could be employed by GE and SE teachers in mainstream schools when teaching students with LD (Haegele, & Hodge, 2016). Thus, the medical model creates a barrier to an inclusive model of education with students with LD in the mainstream classroom working alongside peers and with the GE teacher and that this impacts on collaboration including where any co-planning and co-teaching takes place.

Another topic that has been discussed widely in the disability literature is how the medicalised view affect what should be the outcome of working with individuals with disabilities (Brandon & Pritchard, 2011; Roush & Sharby, 2011). The medical model views disability as a ‘problem’ that needs to be cured for individuals with disabilities to function within society (Haegele, & Hodge, 2016; Strogilos *et al*., 2017). As discussed earlier in the chapter, this approach contributed to how this negative perception and labelling of disability can determine the identification of the needs of individuals with disabilities and the kind of services they should receive based on their diagnosis (Humpage, 2007). In this sense, it could be argued that the outcome of collaborative model as suggested by the medicalised model could be based on identifying individuals’ ‘problems’ and developing specialised programmes run by SE teachers.

On the other hand, from a social model perspective, the conceptualization of disability as a socio-cultural construct as opposed to an abnormal functioning of the body have shifted the focus from the individual to the social organization (Bingham et al., 2013; Goodley, 2001). In this regard, the social model avoids conclusions coming

from deficit views by acknowledging the discrimination perpetuated by the “social, economic, environmental and economic barriers” (O’Connor and McNabb, 2020) that a child with LD might face when in engaging with society. In that, the social model distinguish itself from the medical model by arguing that it is the society itself that disadvantage individuals with disabilities, but not their impairment (Barney, 2012; Haegele, & Hodge, 2016; Roush & Sharby, 2011). This distinction of placing the problem within society as opposed to seeing individuals with disabilities as ‘faulty’, have suggested a new recognized authority to contribute to the discourse on disability from doctors to academics and advocates (Haegele, & Hodge, 2016). The latter have advocated for the inclusion and full participation of individuals with disabilities by suggesting political and social change (Palmer & Harley, 2012). In the mainstream school then, and based on the social model, this argument suggest that both GE and SE teachers are responsible in a collaborative model to meet the needs of individuals with LD and to ensure receiving a parity of education compared to their peers in the mainstream classroom.

Additionally, the social model argues that individuals with disabilities should be recognized as agents who can offer a valuable and unique perspective to society (Roush & Sharby, 2011). In contrast with the medical view, it advocates for their inclusivity, instead of stigmatising them. In mainstream school settings, this view might be shaping GE and SE teachers on collaboration as an effective way to remove barriers and to better include students with disabilities in the classroom. It might also lead them to recognise the benefits of a collaborative model in the inclusion of students with LD in mainstream schools. This implies that children and their parents ought to be partners in a collaborative relationship with teachers that plans their education. According to Corker and Shakespeare (2004), the roles and responsibilities between

teachers in mainstream schools create the space for building inclusive actions and practices between teachers working with students with LD. Consequently, the social view might be more concerned with developing general inclusive practices jointly by GE and SE teachers (Gergen, 1994; Grenier, 2007). However, as discussed above, barriers to collaboration persist despite the advantages of the social model. In this sense, what the social model lacks is a clear-cut definition of collaboration, roles and procedures to inform collaborative practices between teachers.

Moving forward, the rights-based model as discussed above expand on the social model to address this limitation by suggesting that there should be a public policy, rules and laws to remove the barriers facing individuals with disabilities (Brittain, 2004; Buntinx and Schalock, 2010). This suggests introducing a legislative aspect as the top authority that is responsible on the rights of individuals with disabilities. In an educational setting, a rights-based approach might provide a transparent code of practice to collaboration between teachers in mainstream schools. In this regard, perceptions of collaboration by GE and SE teachers will be framed by the policies and code of practices that might draw a clear picture on what a collaborative process might look like. Hence, barriers to collaboration, as discussed above, resulting from the lack of knowledge on roles, responsibilities and procedures that govern a collaborative teaching model, or lack of awareness of the rights of the child with LD, might be reduced.

Gaps in research

The concept of collaboration between special education and mainstream teachers is promoted in a number of countries. For instance, in the US, most general and special education legislation emphasises collaboration between special education and mainstream teachers (Cook & Friend, 2006), additionally in the UK collaboration

between general education teachers and special educational needs coordinator (SENCO) is mandated (Cole, 2005).

There is a lack of literature on collaboration between special education teachers and general education teachers, or the effect of this collaboration on educational achievement. The literature that does exist in this area only highlights collaboration between special education teachers and associated service providers, rather than between the two types of teachers (general education and special education), or on student attainment (Friend & Cook, 2010; Malone & Gallagher, 2010).

In the Saudi Arabian context, Aldabas (2015) mentioned that, 'at present, it is hard to see collaboration between mainstream and special education systems in Saudi Arabia' (p. 1165). Furthermore, Alquraini (2011) argues on the importance of appropriate communication skills and expertise to facilitate collaboration for Saudi Arabian special education teachers. This recommendation points to the importance of developing training courses on how to collaborate and explore the models of collaboration in practice to ensure that Saudi special education and mainstream teachers have an effective collaborative working environment.

Very few studies have used qualitative research methods to explore collaborative practices between special education and mainstream teachers in a school environment (Arthaud et al., 2007), or quantitative studies (Goddard & Goddard, 2007; Pounder, 1998; Sawyer and Rimm-Kaufman, 2007).

Despite this lack of evidence, a meta-analysis of the literature related to co-teaching between general and special educators conducted by Murawski and Swanson (2001) showed that the greatest improvement for SEN was in reading, language and the arts. Even though there was a moderate overall improvement

through co-teaching, the researchers mentioned that this result must not be taken for granted and that it should be interpreted cautiously, given the very small number of studies containing the information.

On the other hand, a close look at the literature on collaboration confirms that the adoption of collaboration between teachers can accelerate student attainment for both special and mainstream education students. However, most of the studies took place at the secondary or high school levels, with very little research carried out in primary schools. Furthermore, little research has been conducted on the efficiency of collaboration, the way teachers deal with collaboration, their responses to the type of collaborative practices used or the collaborative rapport between special education and general education teachers (Brownell et al., 2006; Arthaud et al., 2007; Popp & Gerber, 2000). In addition, there are few studies concerning the impact of the collaboration between special education and mainstream education teachers (McMaster et al., 2005).

Despite the growing body of research, very little of it has shed light on the attitudes and the types of the interactions that facilitate and maintain collaboration and benefit learning and education reform (Horn & Little, 2010; Johnson, 2012). Moreover, few studies have conducted in-depth research on special and general education teachers' perspectives and the perceived circumstances of collaboration that take place in schools. While many studies stress the importance of investigating educators' perceptions as Norwich (1994) mentioned, few studies have explored educators' perspectives in Saudi Arabia (Alquraini, 2011). Therefore, we cannot yet determine if these perspectives will be the same in a country where there are significant religious and cultural differences from Western contexts. It is important to consider the values of society and how they affect public perceptions of students with disabilities.

Furthermore, research conducted in KSA has not focused on teachers' perceptions of collaboration (Alquraini, 2011; Aldabas, 2015).

To my knowledge, no study has focused on exploring the perspectives of special and general education teachers regarding their collaboration in mainstream school in Saudi Arabia. Hence, this gap needs to be explored; this study therefore used an explanatory sequential mixed methods design to examine teachers' experiences by asking them for their opinions, feelings and experiences about their collaboration. Teachers in KSA continue to face a range of issues when supporting students with LD, despite the religious stance which encourages education and literacy for all children and the existing provisions for students with LD. Some studies in Arab countries have demonstrated that teachers exclude students with LD from mainstream students due to their lack of attainment and difficulties in fulfilling sociocultural opportunities, which are seen as a burden to teacher (Elbaum and Vaughn, 2001; Al-Nahdi, 2007; Al-Ahmadi, 2009; Al-Mousa, 2010; Alquraini, 2011).

This study seeks to answer the following research questions:

1. What are female special and general education teachers' experiences of, and perspectives on, their collaboration in primary mainstream schools in Riyadh, Saudi Arabia?
2. Is there a difference in the personal beliefs and perceived actual circumstances of GE and SE teachers in mainstream elementary schools, in Riyadh in Saudi Arabia, regarding collaboration and collaborative relationships?
3. To what extent do GE and SE teachers in mainstream schools collaborate?

4. What constraints affect collaboration in mainstream schools in Riyadh, Saudi Arabia from the perspective of SE and GE teachers?

2.13 Summary of the Chapter

This chapter reviewed the literature related to the definition used throughout the history of inclusion internationally, the evolution of inclusion and importance of inclusion for all students and teachers. This was presented within a discussion on the background to different models of disability to better contextualise the current study within the literature. In addition, this chapter focussed on the elements that facilitate successful inclusion, which includes collaboration between teachers. This chapter further emphasises the concept of collaboration between general and special teacher as well as provided many of definitions and types the collaboration. The evidence stressing the importance of collaboration for both special and general education teachers was presented, including the benefits of collaboration for student with disabilities and mainstream students, as well as addressing the challenging aspects of collaboration. This review was concluded by a discussion on how the different models to disability might shape important topics such as; the authority responsible in a collaborative model for the education of disabled children in the mainstream school, teachers perceptions of collaboration and the outcome of a collaborative model. Finally, this chapter highlighted the rationale of the study and the research questions, presenting the need for further research to explore teachers' perceptions regarding their collaboration in primary mainstream school.

Chapter Three: Methodology

3.1 Introduction

The main aim of this study was to explore the concept of collaboration from the perspectives of female general education (GE) and special education (SE) teachers who worked with students with learning difficulties (LDs) in primary mainstream schools for girls in Riyadh, Saudi Arabia. Specifically, this study aimed to explore teachers' perspectives and experiences, examine the constraints that influenced their collaboration, and explore the extent to which they collaborated.

The main research questions used to guide this study were:

1. What are female SE and GE teachers' experiences of, and perspectives on, their collaboration in primary mainstream schools in Riyadh, Saudi Arabia?
2. Is there a difference in the personal beliefs and perceived experience of GE and SE teachers in mainstream elementary schools, in Riyadh, Saudi Arabia, regarding collaboration and collaborative relationships?
3. To what extent do GE and SE teachers in mainstream schools collaborate?
4. What constraints affect collaboration in mainstream schools in Riyadh, Saudi Arabia from the perspective of SE and GE teachers?

This study used an explanatory sequential mixed methods approach and was conducted in two main phases (survey, then interviews). This chapter begins by defining mixed methods research and presenting the theoretical assumptions and justifications for its use. Then it presents further detailed justifications and explanations for the chosen research design. The chapter discusses the collection and analysis of

the quantitative and qualitative data for each phase of the study. Finally, the chapter ends with an explanation of the ethical considerations that underpinned the study.

3.2 Mixed Methods Research

The identification, description, and assessment of the motives for using a particular method or methods are the aim of the methodology chapter in any publication (Wellington, 2000). Methodology can be referred to as the design, plan of action, process, and strategy that justifies the choice of specific approaches and connects them to the desired results (Crotty, 2003).

It is important to bear in mind that the methodology chosen by the researcher should be consistent with the type of issue being examined and the associated research questions. According to Robson (2002), the important element in the choice of a methodology is the suitability of the research strategy and the used techniques for addressing the questions that need to be answered. This section provides justification for using a mixed methods approach in this study and defines the approach.

This study adopted an explanatory sequential design, which is a form of mixed method research. This section clarifies the background and assumptions underpinning mixed methods research and its difference from other types of research, then introduces explanatory sequential design and provides further justifications for its use.

Mixed methods research has been defined as:

> A research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the directions of the collection and analysis and the mixture of qualitative and quantitative approaches. As a method, it typically focuses on collecting, analysing and mixing

both quantitative and qualitative data in a single study (Creswell and Clark, 2011, p. 5).

Furthermore, Tashakkori & Teddlie (2003) defined mixed methods research as:

A study [that] involves the collection or analysis of both quantitative and/or qualitative data in a single study in which data is collected concurrently or sequentially, are given a priority and involve the integration of the data at one or more stage in the process of research (p. 212).

According to these definitions, adopting a mixed methods research approach requires the researcher to make decisions regarding priority and implementation. In this study, mixed methods research was considered on both methodological and methods levels. On the methodological level, the mixed methods research in this study is built on pragmatist philosophical assumptions that are described further below. According to these assumptions, researchers can use qualitative and quantitative methodological approaches and take different positions in each phase.

At the methods level, this study integrated different qualitative and quantitative data collection methods and analyses. For example, the quantitative methods indicated why and how things occurred (Bryman, 2012). Qualitative methods are used to develop a deeper understanding of a social phenomenon, in this case the interviews allowed the participants to express how they perceived the situation from their personal perspectives (Cohen et al., 2000). Cohen et al. added that 'in this sense the interview is not simply concerned with collecting data about life: it is part of life itself, its human embeddedness is inescapable' (2000, p.267). According to Johnson & Onwuegbuzie (2004), researchers should take an eclectic approach to the method selection and the consideration and conduct of the research (p. 17).

A combination of various research methods might be more appropriate for responding to certain research questions. According to Ritchie (2003), the quality of a research study has more to do with selecting the correct research methods for the task than using methods that are confined to a specific tradition; thus, pragmatism was considered a suitable paradigm for the present study. According to Mackenzie and Knipe (2006), pragmatism does not relate to any specific system of philosophy, reality, or beliefs; rather, it relates to the research problem and the consideration of all possible methods of comprehending it. Similarly, Creswell (2003) noted that, for pragmatists, there is a close link between the selection of the research approach and the type and purpose of the research questions. In this paradigm, studies tend to be largely multi-purpose and employ the 'what works' approach, allowing researchers to tackle questions that may not be effectively answered if investigated from a completely qualitative or quantitative angle. In addition, 'pragmatism' is usually associated with 'practicality' and 'doing what works' (Rorty et al., 2004, p. 71).

Pragmatism 'advocates for the use of mixed methods in research and acknowledges that the values of the researcher play a large role in interpretation of results' (Tashakkori & Teddlie, 2003, p. 713). Johnson and Onwuegbuzie (2004, p.17) presented their opinion regarding the philosophy behind mixed methods research, stating that pragmatism offers 'a practical and outcome-oriented method of inquiry that is based on action and leads, iteratively, to further action and the elimination of doubt and it offers a method for selecting methodological mixes that can help researchers better answer many of their research questions.' Creswell (2008) explained that, in pragmatic research, a focus on the results of the study enhances the choice of methods that would best respond to the research aims in a given context; therefore, a focus on the practical implications of a study is implied by pragmatism (Creswell, 2007,

Rocco et al., 2003). As a key focus of the study included examining a broad understanding of how primary school teachers in Saudi Arabia perceive collaboration in mainstream schools, the most effective approach was to use a quantitative method. Whereas, in order to gain a deeper understanding into teachers' perceptions about collaboration in mainstream schools in Saudi Arabia, a different type of approach was needed (i.e: qualitative methods such as interviews to achieve the intended deeper understanding). As such, the researcher deemed it more appropriate to adopt a combined paradigm approach (positivist and interpretive) in the present study, thus applied a mixed-methodological approach within a pragmatic context.

It is crucial, in my opinion, that researchers consider the intricacy of the issue being examined, the research questions, and the study's aims, instead of focusing on the inconsistencies characterising various methodologies and philosophical suppositions. My values as a researcher are based on a pragmatic worldview.

3.3 Justification for the Use of a Mixed Methods Approach

In this study, the mixed methods approach is appropriate for several reasons. First, collaboration in mainstream schools between GE and SE teachers is a complex phenomenon involving many possible factors (social, religious, cultural, and educational) (Pandit, 2008) that may shape teachers' experiences, beliefs, and perspectives. Silverman (2013) points out the use of mixed methods can be very helpful for researchers in terms of conveying several different aspects of a research topic, while also allowing the research issue to be tackled from different perspectives.

This study aimed to explore SE and GE teachers' perceptions of their collaboration. These perceptions may be complex: previous research suggests there is no universally established explanation for this concept (Alquraini, 2011) and there is no commonly held understanding and experience of the same phenomena for all

participants. Crotty (2003) suggested that ‘meaning is not so much discovered as formed, and so it can be stated that individuals may differ in the meaning they assign to one particular event, and objects and subjects may be considered as associated in the generation of meaning’ (p. 8). To explore the GE and SE teachers’ perspectives, beliefs regarding collaboration, what collaboration meant from their perspectives, and what constraints hindered their collaboration, a methodology was required that could cover all these dimensions. ‘Many research questions and combinations of questions are best and most fully answered through mixed research solutions’ (Johnson & Onwuegbuzie, 2004, p.17), and providing adequate and extensive answers for all the research questions, regardless of the methods used, was vital.

Using different methods produces different types of data. The first phase of the research generated quantitative data, which enabled the researcher to examine the difference between the teachers’ beliefs and actual circumstances in Saudi primary mainstream schools and the extent to which GE and SE teachers collaborated. The statistical findings, although significant, necessitated further exploration in the second research phase.

I was keen to gather qualitative data in order to give more depth and value to the quantitative outcomes. Nevertheless, it is important to emphasise that the quantitative findings were very useful in terms of providing the focus for the qualitative phase. In addition, in the second phase, rich qualitative data was obtained, which enabled the researcher to investigate further both teachers’ views, as well as shed light on their experiences regarding collaboration; thus, it was possible to develop a more complex understanding and conceptualisation of the concept of collaboration through mixed methods research.

According to Ritchie et al. (2014), the use of quantitative surveys and qualitative interviews is suitable for gaining a comprehensive understanding of the studied phenomenon. They also produce more insightful findings (Johnson & Christensen, 2004) and strengthen the data analysis (Ernest, 1994), because combining quantitative and qualitative methods (Creswell, 2003) is a useful strategy for (a) dealing with an incomplete singular viewpoint, (b) overcoming the defects of partiality, and (c) utilising various features of the social occurrence under study in order to offer an articulated and informed understanding of it (Creswell, 2003).

The first phase provided quantitative data, which allowed me to examine the difference between the personal belief and the experience of both teachers regarding their collaboration and to explore how and to what extent both teachers' collaborate in the primary mainstem school. Some statistical findings might need further exploration. In the recent study, the first phase raised significant findings that needed to be explored in more depth during the second phase. In other words, I was interested in collecting qualitative data to add depth to the quantitative findings. Nevertheless, it cannot be ignored that the quantitative findings helped to provide that focus for the qualitative exploration. In this regard, the quantitative phase fed into the qualitative phase, particularly in constructing the themes and questions to be asked. For example, collaboration and types of collaboration were themes that I followed in the interviews because they were raised as important points for further discussion from the questionnaire findings. For example the statistics demonstrated that there was some sort of collaboration between teachers, which was reported to be absent in the Saudi context as mentioned in the literature review. Hence, this led me to develop questions around collaboration as a concept, the type of collaboration, teachers experiences of collaboration as well as their day to day picture of collaboration to further explore this

disparity between the literature and the quantitative phase findings. Furthermore, the second phase yielded rich qualitative data that allowed me to explore teachers' perspectives and experiences regarding their collaboration. Thus, a more complex understanding of collaboration was developed. Klassen (2012) suggested that quantitative and qualitative data can be joined to develop a more complete understanding of a problem; to develop a complementary picture.

3.4 Overall Research Design

This study employed a mixed methods explanatory sequential design. This design, in particular, consisted of, firstly, collecting quantitative data and, secondly, collecting qualitative data to help explain or elaborate on the quantitative findings.

In this study, both phases had equal weight and were given equal attention, because they covered different aspects of the context and helped to develop a better understanding of the collaboration phenomenon. The mixed methods explanatory sequential design comprised two separate phases: survey and interviews.

Research questions were answered primarily in one phase or the other. Specifically, during the first phase, I collected and analysed quantitative data, which mainly answered the following two research questions:

1. Is there a difference in the personal beliefs and perceived experience of GE and SE teachers in mainstream elementary schools, in Riyadh in Saudi Arabia, regarding collaboration and collaborative relationships?
2. To what extent do GE and SE teachers in mainstream schools collaborate?

During the second phase, I collected and analysed qualitative data which mainly answered the following research questions:

1. What are female SE and GE teachers' experiences of, and perspectives on, their collaboration in primary mainstream schools in Riyadh, Saudi Arabia?
2. What constraints affect collaboration in mainstream schools in Riyadh, Saudi Arabia from the perspective of SE and GE teachers?

The aim of the first phase was to obtain a breadth information from teachers regarding the collaboration phenomenon, explore the viewpoints of teachers concerning their beliefs and the existing collaboration in mainstream schools in Riyadh City, and understand to what extent both GE and SE teachers collaborated in mainstream schools. The aim of the second phase was to obtain deep understanding of teachers' experiences and perspectives regarding collaboration.

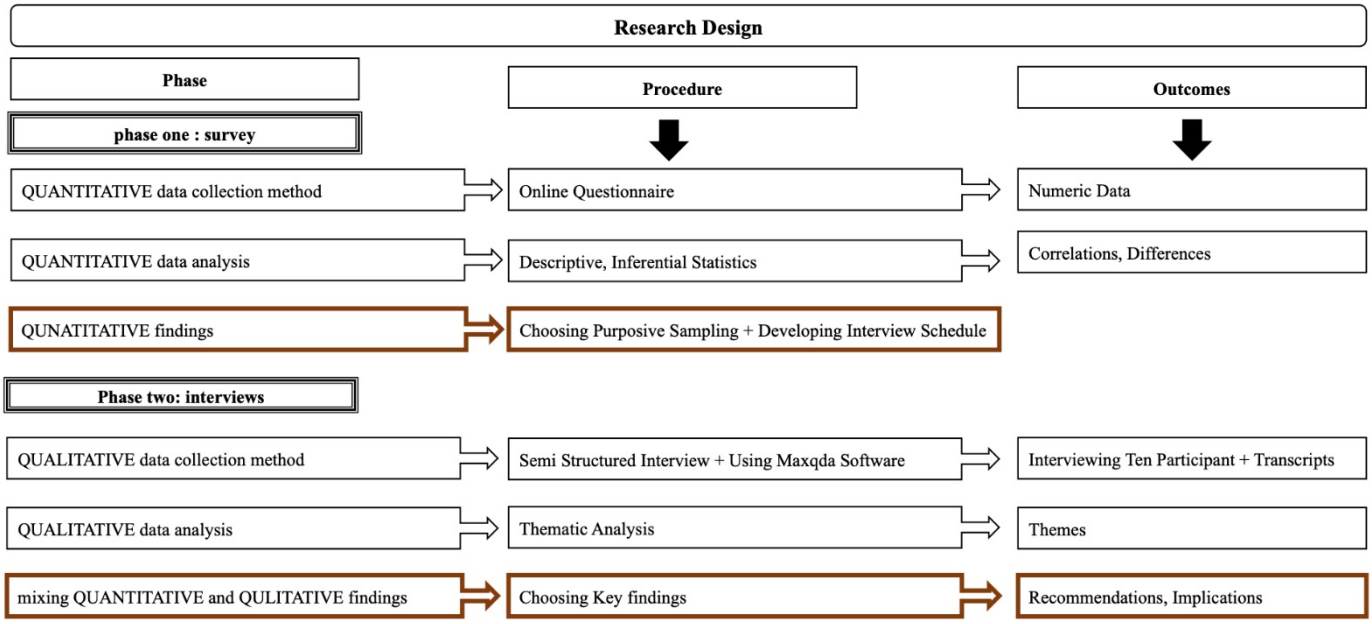

Figure 1 Explanatory sequential mixed methods research

Figure 1 clarifies the data collection method, analysis, procedure, and outcome of each phase. It also shows the connecting points between the quantitative and qualitative phases, the related outcomes, and the stage of the research process in

which the findings from both phases were integrated. Further details about each phase will be given below.

The decision to adopt the mixed methods explanatory sequential design was made for many reasons, First, this design is helpful to a researcher who wants to explore a phenomenon but also wants to expand on the quantitative findings (Creswell, Plano Clark, Gutmann, & Hanson, 2003). This design was appropriate to the phenomenon under examination. In the current study, examining and exploring collaboration from different angles sufficiently and gaining breadth of understanding as a first step.

Few studies have investigated collaboration from the perspectives of GE and SE teachers who deal with students with LDs on a daily basis. Adopting an explanatory sequential design and using quantitative data from a large number of participants allowed me to achieve these aims. Ivankova and Creswell (2006) explained that the justification of the explanatory sequential design is that the quantitative data and their subsequent analysis provide a general understanding regarding the research problem. In addition, this design allowed for richer exploration of the phenomenon in the next phase as well. According to Tashakkori and Teddlie (1998) and Creswell (2003), qualitative data and their analysis can both enhance and explain statistical results by exploring participants' views in more depth. In other word, using an explanatory sequential design thus permitted the collection of quantitative data for the identification, examination, and exploration of collaboration in the second phase.

From a different perspective, but addressing the Saudi context, Alzahrani (2005) observed that SE research in Saudi Arabia has largely depended on scientific positivism (i.e., quantitative research). However, this approach, on its own, may not adequately describe or illuminate multifaceted issues, including collaboration. It seems

that the explanatory sequential design has been under-utilised in SE research in Saudi Arabia, which also prompted me to use it in this research in order to gain further understanding and fill the gap of this study.

3.5 Implementation of the Explanatory Sequential Mixed Methods Approach

When conducting mixed methods studies, the researcher might face numerous critical considerations, which are implementation, priority, and integration (Creswell et al., 2003). In the following sections, I examine each and link it with the present study. This sequence was helpful for several reasons.

1. Using a questionnaire in the first phase supported me in reaching a large number of GE and SE teachers and allowed me to purposively select participants for the second phase. It provided a general understanding of the phenomenon and identification of the issues that required further examination and exploration in the interviews. In the second phase, I conducted semi-structured interviews to gather qualitative data, which facilitated exploration of both teachers' perspectives, experience and knowledge regarding their collaboration in mainstream primary schools, how they wished to be collaborated. It also explains why certain factors identified in the first phase were significant or not significant predictors of collaboration the Saudi context.

2. According to Creswell (2003), priority indicates deciding which phase has more weight throughout the data collection and analysis processes in the study. In the present study, both phases had equal weight and attention because they added different aspects that helped develop a better understanding of the collaboration phenomenon. Each phase had its own

methodological approach and justifications. In the first phase, questionnaires were used to collect and analyse quantitative data, aiming to gather broad information regarding collaboration. The data analysis employed two different statistical techniques: descriptive and inferential. Further information about these techniques will be given (see the next chapter). The second phase employed the semi-structured interview method to collect and analyse qualitative data. This method facilitated the acquisition of detailed information regarding the phenomenon. It focused on exploring teachers' perspectives and experiences regarding their collaboration and assisted the interpretation of the statistical results obtained during the first phase. The contribution of both phases to producing different types of information should not be underestimated.

3. According to Creswell (2003), integration combines two aspects of research (i.e., quantitative and qualitative) in one study at a given point of the investigation. It is possible for this to take place during the research question design, data collection, data analysis, and/or interpretation (the discussion stage).

For this study, the researcher integrated the findings of the first and second research phases into the discussion chapter, which contains further details regarding the integration of the findings from both phases.

3.6 Quantitative Methods

The first phase of the research design employed a survey strategy. Bryman (1988a) defined the survey as:

> A study approach involving the gathering of data on a number of units and commonly at one point in time with the aim of systematically gathering a large

> volume of data that can be quantified with regard to numerous variables, which are subsequently analysed with the aim of establishing association patterns and behaviours (p. 104).

One of the greatest advantages of employing surveys in research is that it requires less time to collect the data and the questions are typically exactly the same for all respondents.

This method offered flexibility for participants to complete the questionnaires whenever they chose (Bryman, 2012). In addition, questionnaires are considered to be low cost, according to Bryman (2012), who stated that 'the cheapness of the self-completed questionnaire is especially advantageous if you have a sample that is geographically dispersed' (p. 233). Riyadh is a large city, so using a questionnaire made it possible to reach teachers across a widely dispersed area; hence, the questionnaire was low cost compared to interviews. Interviewing a large sample would have demanded more time and money, so interviewing a large number of SE and GE teachers would have been very difficult to achieve.

This section provides a justification for the choice of using an online questionnaire method. As mentioned earlier, the first phase aimed to reach a large number of SE and GE teachers in mainstream primary schools who work with SLDs, in order to gain greater understanding of the collaboration phenomenon. The schools were located in different districts of Riyadh, thus the online method enabled a broad representative participant sample to be reached. Bryman (2012) states that "the cheapness of the self-completed questionnaire is especially advantageous if you have a sample that is geographically dispersed" (p. 233). Given that Riyadh is a geographically large city, using an online questionnaire made it possible to reach teachers in a more dispersed region. In addition, questionnaires can be distributed

in very large quantities to a large sample simultaneously enables statements to be supported by a large sample (Bryman 2012).

3.6.1 Questionnaire adaptation

The questionnaire for the current study was adapted from Leonard and Leonard, (2001) Collaborative Practices Instrument. The teacher survey identified educators' personal beliefs and perceived experience of collaborative practices within a school. Using this survey in this study enhanced the data collection, providing a broad understanding of teachers' perceptions regarding their beliefs and the actual circumstances, and initial information about the extent to which they collaborated.

This questionnaire includes closed-ended questions, - question types that ask respondents to choose from a distinct set of pre-defined responses, such as "yes/no" or among a set multiple choice question. In this questionnaire, using closed questions, because they are much easier and quicker for respondents to answer, in turn leading to a higher completion rate. In addition, closed questions allow researchers to deal with many different aspects of an issue within a specific timeframe. Oppenheim (1992) stated several benefits to the use of closed questions, such as saving time and money, no extended writing, easy to process, and facilitative group comparisons to be made in this study. Another benefit of this approach was the fact that the time and energy needed to analyse the data from closed-ended questions is less time-consuming than for open-ended questions (Cohen et al., 2011). It should, however, be pointed out that closed questions do not enable the respondents to provide comments or in-depth explanations (Cohen et al., 2011).

The questionnaire for the current study is adapted from one scale, which is the Leonard and Leonard (2001) Collaborative Practices Instrument (see Appendix Five). I selected this scale first, because is related to the research questions in this phase.

Leonard and Leonard (2001) focuses on if there different between what the teacher's belief and their experience about collaboration as well as to what extent both teachers collaborate. The original scale consisted of 52 items, 36 of which Likert-type response format with the remaining items addressing descriptive aspect. Likert scales are reported to be the most frequently used measure in the social sciences for collecting data on attitudes, perceptions, values, and beliefs (Jamieson, 2004).

Using this scale enhanced the collection of data to provide a breadth of understanding of teachers' perceptions regarding what they believe and their experience regarding their collaboration and provided initial information about the extent to which they were collaboration. Second, this scale includes closed questions, which suited the type of questions determined for this study. The final version of the questionnaire distributed to teachers (See Appendix 5) only used 23 questions from the original Leonard and Leonard (2001) model. Choosing these questions was based on considering which were of relevance to my research question and achieve my aim, and what is relevant in the Saudi context. In this regard, all items that were irrelevant to the Saudi context or research question were excluded from the questionnaire (e.g., the collaboration of SE and GE teachers in fundraising activities). I also eliminated questions that would be tackled in more depth in the interviews phase of the research, that is some of the questions were not needed as they would be addressed in more detail in the interview phase. This involved removing the open-ended questions from the questionnaire, because the original items, regarding teachers' perspectives, experiences, and other themes, were to be covered in the in-depth interviews in the second research phase; hence, the duplication of questions was unnecessary. Leonard and Leonard (2001) study did not include interviews as part of their investigation, hence their use of open-ended questions. These changes resulted in a

shorter questionnaire comprising 23 items 16 of which Likert-type response which had a Likert scale response format (ranging from 1 = strongly disagree to 5 = strongly agree) (see Appendix Five).

The remaining items of the Leonard & Leonard questionnaire addressed teachers' collaborative activities and demographic information. Changes were made after numerous discussions with my supervisors and experts in the Saudi context (e.g: colleagues who have already conducted their field work within the SEN context in Saudi schools).

3.6.2 Questionnaire Layout

The revised questionnaire included an information sheet explaining the aim of the study, the right of the participants to participate or to withdraw at any stage of the data collection process, and the significant contribution of their answers to the research outcomes. The information sheet also assured the participants that confidentiality and anonymity would be maintained, to encourage them to take part.

1. The questionnaire included two main sections, with clear instructions for completing each one. The first section asked seven demographic and multiple questions, which collected data regarding (a) whether the participant was an SE or GE teacher (b) the teacher's education level, (c) years of teaching experience, (d) types of collaborative activities, (e) amount of focused professional development the participant had received, and (f) collaboration/collaborative activities (yes or no question). This background information was important because it enabled me to identify the factors that may have shaped their experiences and influenced their perspectives and opinions regarding collaboration.

2. The second part included Likert- scale items, presented in pairs, with each pair addressing a relevant aspect. Teachers were asked to respond to the first paired item ‘in terms of your personal beliefs about collaborative teacher practice’ and the second paired item ‘in terms of how you perceive the actual conditions or circumstances at your school.’ Survey items 8–14 evaluated beliefs and perceived actual circumstances regarding the nature of collaboration and collaborative practices. Survey items 15–18 evaluated beliefs about opportunities and support for collaboration and the extent to which such conditions were prevalent in their schools. Survey items 19–23 evaluated the beliefs and perceived actual circumstances regarding the definition of collaboration (see Appendix Five).

3.6.3 Translation of the survey

Since the first language of most people in Saudi Arabia is Arabic, the English version of the survey was translated into Arabic for use in Saudi Arabia. The main concern of the translation was to provide an accurate parallel meaning (with less emphasis placed on a word-for-word match). In order to check the validity of the translation, assistance was sought from an English language lecturer in King Khalid University in Saudi Arabia, in the Department of Translation. As an initial step, I translated the survey into Arabic (see the Appendix six for a copy of the Arabic version), then I asked a friend who studying PHD in Exeter university in English to translate it back into English to enhance the validity of the questionnaire .

3.6.4 Piloting the questionnaire

I carried out a pilot study in order to develop the instruments’ questions, the suitability of their wording, and the time required to complete the questionnaire. Bell (1993) maintained that ‘all data-gathering instruments should be piloted to test how

long it takes recipients to complete them, to check that all questions and instructions are clear and to enable you to remove any items which do not yield usable data' (p. 84). The piloting was conducted to ensure that the questionnaire's written instructions were easy to comprehend by the participants. Cohen et al. (2011) asserted that ambiguous and confusing questions, emotional language, multiple questions, and biased questions should be avoided in a questionnaire.

The questionnaire was given to four teachers—two GE teachers and two SE teachers who were working with students with LDs—to obtain their feedback and suggestions. I contacted each teacher by phone individually and asked her to give her opinion. All teachers indicated that the questions were clear. The teachers also confirmed the time required to complete the questionnaire, which was 11 minutes, and assured the researcher that it was appropriate. Based on this, no changes were made to the questionnaire subsequent to the piloting. The final version of the questionnaire was also reviewed by my supervisors.

3.6.5 Sampling

The sample group for this study was located in Riyadh City in the Kingdom of Saudi Arabia. I chose Riyadh City as the research context because it is the largest city in Saudi Arabia (Saudi General Authority for Statistics, 2015) and it includes around 178 mainstream primary schools for girls with LDs. In addition, Riyadh is my home location, and it was therefore a convenient place for me to conduct the face-to-face interviews.

The study sample comprised two groups: female GE teachers in mainstream primary schools and female SE teachers in mainstream elementary schools, all of whom were working with SLDs. I chose only female participants in this study because in Saudi Arabia there is segregated education by gender, so access to male participants was challenging, as males and females are housed in different locations in all schools. Therefore, as a woman, I could not gain access to male participants, which meant that this study could only focus on female teachers.

In this study, there was no need to sample the population because it was possible to approach all eligible teachers in different five regions (north, east, west, south, and centre) of Riyadh. As previously mentioned, there were 178 schools, divided by five districts. In each region of Riyadh city, a supervisor is responsible for the mainstream primary schools in that region and has contact with each of the schools in their district.

3.6.6 Ethical issues and Procedures

Ethical approval was obtained from the Graduate School of Education Ethics Committee at Exeter University (see Appendix One). Thereafter, I submitted a letter to the Saudi Cultural Bureau in London to request permission from the Ministry of Education (MOE) in Saudi Arabia to conduct my study (see Appendix Two). Once I received approval, I contacted the Department of Special Education at the MOE in

Riyadh to obtain the names and telephone numbers of all supervisors of mainstream primary schools for girls with LDs, which included all LD programmes in the five districts of Riyadh. Those supervisors are responsible for the LD programs in mainstream school and monitoring the status of students and teachers in each school which is standard practice for Saudi Arabia.

The questionnaire was distributed online to all the GE & SE teachers via an email link, through the supervisor of each region of Riyadh city. The supervisors then distributed the anonymous online questionnaire via email to their schools. This questionnaire was electronic (SurveyMonkey) and was designed to take only 10 minutes to complete.

I selected SurveyMonkey software because it was suitable and could save time, since it could be sent to many participants very quickly via email. Sue and Ritter (2012) noted that, in online questionnaires, responses are typically received quickly, and data can be described and distributed via the software tool in real time. Moreover, SurveyMonkey allowed the researcher to link the participants' responses to analysis software. In this study, all the teachers' responses were transferred into, and immediately analysed using, SPSS software. The online questionnaire was sent to the participants through the Survey Monkey website and the account was secured by an appropriate password. Once I used the contact details to set up interviews, I keep them stored securely

3.6.7 Data analysis

The quantitative data was statistically processed, prepared, coded, and analysed using the SPSS software. Descriptive statistics (percentages and frequencies), T-tests and Mann Whitney U were used. Further clarification regarding the tests that were used to address the research questions is given in the quantitative Findings chapter.

3.6.8 Reliability and validity

The reliability and validity of a questionnaire are very important, because they establish the dependability of the data and may support the decision to use it for data collection in further research.

Pallant (2010, p.7) defined the validity of a questionnaire as 'the degree to which it measures what it is supposed to measure'. Reliability is defined as: "The extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable" (Joppe, 2000, p. 1).

In this study, the internal and external reliability were established. Internal reliability was determined using Cronbach's alpha (Pallant, 2010), followed by a pilot study with both GE and SE teachers to check the clarity, the time needed to answer the questions, and the reliability of the questionnaire.

In addition, in order to assess face validity (Bryman, 2012), my supervisors reviewed the questionnaire and sought to determine whether the questionnaire items measure the desired constructs of the study.

It should also be pointed out that the reliability and validity were enhanced by the adaptation of an existing questionnaire (Leonard, 2002).

3.7 Qualitative Design

The aim of this research phase was to gather rich, in-depth data regarding collaboration from the points of view of both GE and SE teachers who worked with SLDs. This phase was based on findings from the first phase that needed further exploration; it also answered other research questions.

3.7.1 Semi-Structured Interviews

The second phase of the study involved using the qualitative method of interviews. Interviews are instruments for encouraging individuals to discuss their views, perceptions, and interpretations in response to a particular situation or phenomenon. Interviewing lies at the heart of social research (Esterberg, 2002). It allows researchers to gain access to an individual's perceptions, intentions, experiences, and wishes, in participant's own words, rather than the investigator's (Rubin & Rubin, 2005). Interviews, in this case, also provided further insight into the claims made by the respondents to the survey, thus enriching the findings.

In terms of the interview structure, there are three types of interviews. Wellington (2000) and Alzaydi (2010) describe these three types as follows:

- The structured interview employs a set list of questions with fixed wording. Although similar to the questionnaire in terms of the fixed wording, it leaves the interviewee free to provide open answers.
- The unstructured interview — as a conversation, not governed by a fixed structure, which can go in any direction and evolve. The interviewer has complete freedom to discuss his or her area of interest, but with no list or order of questions.
- The third type is the semi-structured interview, which offers a compromise between structured and unstructured types and allows the researcher to overcome the shortcomings and issues associated with both the structured and unstructured variants.

A semi-structured interview method is appropriate when little is known about the phenomenon under study and extensive details are needed (Gill et al., 2008). Prior to

the current study, information about the collaboration between GE and SE teachers who work with students with LD in mainstream primary schools was limited. Using a semi-structured interview may enable both types of teachers who work with students with LDs to express their views and to state their concerns and opinions in much greater depth and detail in relation to the collaboration phenomenon. Mishler (1986) confirmed that semi-structured interviews can offer greater insight into interviewees' views and experiences, allowing them to voice their opinions and express their ideas in their own words.

In addition, it is important to note that, by choosing to use this type of interview the researcher was able to develop questions in an interview schedule or guide, which ensured that the broad themes that needed to be examined were not missed during the interview process (Qu & Dumay, 2011). According to Denscombe (2010, p. 176), the semi-structured interview method not only allows for a clear direction of themes and questions, but also ensures the flexibility to 'let the participant develop ideas and speak more widely on the issue raised by the researcher'.

Wellington (2015) further argues that the adoption of interviews helps to give a person or group a voice. As I mentioned earlier, there appears to be very limited information about collaboration between special education and mainstreams teachers in mainstream schools in Saudi Arabia. The selection of this method may offer these teachers the opportunity to voice their opinions and be heard.

3.7.2 Interview question design

To address the research questions, it was important to develop a guiding interview schedule, based on some vital objectives: to explore teachers' perspectives and experiences regarding their collaboration; to review and elaborate upon the results from phase 1; and to investigate the information that was unknown but needed in this

phase, rather than to reiterate what was discovered in the first phase. In view of these objectives, the guiding schedule was constructed in two stages.

In the first stage, after analysing and reviewing all the quantitative data gathered in phase 1, I developed questions about those issues that needed further exploration. In the second stage, the schedule was discussed with my supervisors, revised, and amended to ensure that the questions were unambiguous and unbiased. All repetitive questions were deleted, others were added, and the main concepts that needed to be covered were clearly determined. Additionally, for each concept, several questions were developed, starting with a general one and moving towards more specific ones (see Appended Nine).

3.7.3 Interview samples

The interview sample, which was chosen purposively by the researcher, included five female SE teachers and five female GE teachers. Teddlie (2007) stated that 'purposive sampling techniques are primarily used in qualitative studies and may be defined as selecting units (e.g., individuals, groups of individuals, institutions) based on specific purposes associated with answering a research study's questions' (p. 77).

Purposive sampling is suitable for gaining in-depth information about phenomena from representative individuals (Cohen et al., 2011). I chose this type of sample because it was appropriate, given the phase's aim of conducting an in-depth exploration of collaboration from the teachers' perspectives. The selection process for the interview participants started after I received the questionnaires. The last question in the questionnaire asked the participants if they were willing to be interviewed; if so, they provided their name, email address, and phone number. When the completed questionnaires were returned, I organised all the interview requests into GE and SE teacher groups (the same two groups were used as for the questionnaire). Next, I

organised each group according to level of experience and qualifications in order to cover a variety of perspectives.

Following the identification of the groups and subgroups, the interview sample was chosen purposefully, comprising five SE and five GE teachers. The participants were selected to represent the context of this research: they were purposefully selected from the five different regions of Riyadh and had various levels of education and experience. To ensure their anonymity, the participants were referred to by pseudonyms of their choice.

3.7.4 Pilot interviews

Pilot interviews were carried out with two female teachers—one SE teacher and one GE teacher—to ensure the suitability of the different sections of the interview schedule (e.g., the clarity of the interview questions and the time required for the interview).

Following those interviews, I asked both participants about the clarity of the questions and whether there were questions they thought should be added; both participants confirmed the questions were clear. Piloting identified the need to allow 45–50 minutes or more, for each interview, depending on the depth and richness of the data provided by each participant.

3.7.5 Procedures

Interviews were conducted individually and face-to-face, in Arabic—the participants' native language— to help them to clearly express themselves. At this point of the data collection process, all the SE and GE teachers who had indicated their willingness were interviewed. The researcher carried out the interviews in schools, after making appointments at times that were most convenient for the

participants and reserving a quiet room with the assistance of the school's head teacher.

All the interviews started with a friendly welcome in order to establish a rapport with the participants. I then explained the nature of the study, participant confidentiality, the interview recording process, and the participant's option to withdraw from the study at any time. Subsequently, I asked the participants to sign consent forms (see Appendix Three). The interviews were digitally recorded using audio recording, and most of the interviews took roughly 45–60 minutes to complete.

During the interviews, I reviewed participants' answers to the questionnaire before meeting with them; this helped me to understand each teacher's views according to her answers in the first phase. Reviewing participants' answers also helped me to clarify some points by asking further questions when they contradicted their questionnaire answers in the interviews. This was not easy; in fact, it was a demanding task because, as the researcher, I needed to listen very carefully to what all the participants said, then I needed to decide when I should ask prompting questions.

3.7.6 Data Analysis

Thematic analysis of the qualitative data was carried out. Thematic analysis is 'a method for identifying, analysing and reporting patterns (themes) within data' (Braun & Clarke, 2006, p.79). I followed Braun and Clarke's (2006) outline guide because it provided clear steps regarding qualitative analysis and easy-to-follow instructions.

According to Braun and Clarke (2006), the six detailed steps include researchers familiarising themselves with the data; creating initial codes; looking for themes;

revising of themes; giving definitions and names for the themes; and generating of a report. In the section below, I discuss each of these steps.

3.7.6.1 Step one: familiarising myself with the data

Familiarising myself with the data was an essential step. This step (familiarising) is vital in thematic analysis, is the first step in Braun and Clarke's guide (2006) and can be achieved through transcription. As defined by Creswell (2012, p. 239), transcription refers to "the process of converting audiotape recordings or field notes into text data". For the purposes of this study, the verbal data collected from the interviews was transcribed into written texts. In addition, I listened to the audio recorded interviews repeatedly in order to ensure the precision of the written information. As stated by Braun and Clarke (2006, p. 88), 'the time spent in transcription is not wasted, as it informs the early stages of analysis, and you will develop a far more thorough understanding of your data through having transcribed it'. While re-playing the audio recordings, I read each transcript to check words or sentences that might have been lost during the initial transcription. Next, I exported the transcripts into computer software. Different types of computer software, including NVivo and MAXQDA, can be used for qualitative data analysis and, for the purpose of this study, MAXQDA was the tool utilised during the data analysis process. The reason behind the selection of this software lay in its various features, which differ from those of other types of software. A major benefit of using MAXQDA was that it is not restricted to a specific language and it supported the language of my participants (Arabic). According to Vallance and Lee (2005, p. 2), 'working in the original language is methodologically advantageous and can increase the validity claims of the research outcomes'. In addition, this program allowed me to imagine and organise numerous codes and allowed me to build maps of themes (see Appendix Ten).

3.7.6.2 Step two: generating initial codes

Once the data had been read and the researcher became familiar with them, the information was then coded. According to Creswell (2012, p. 243), this term was defined as 'the process of segmenting and labelling text to form descriptions and broad themes in the data'. Given that the themes in the present research were determined by the data itself, the data was coded openly so that richer and fuller explorations and descriptions of the phenomenon studied could be gained. In other words, coding, which is the result of familiarity with the data, involves extracting keywords from the text for later identification (Kvale, 2008). In this second step, all the codes closely resembled the teachers' own words, but they were written in the English language.

Additionally, in this stage, the MAXQDA program provided a summary of all codes, which was helpful because, after reading all the codes, I could identify overlapping and redundant codes. In addition, decreasing the number of codes and linking ideas together allowed me to see similarities or differences between the codes (see Appendix Ten).

3.7.6.3 Step three: searching for themes

Once the researcher had established the initial codes, it was important to move to a wider spectrum of qualitative data analysis. This is the most significant part of qualitative data analysis; it seeks to re-examine the data at a more extensive and wide-ranging level than codes and it involves classifying the codes into larger topics or themes and subthemes.

As clearly shown by Braun and Clarke (2006), this stage pays attention to categorising all the various codes into one possible overarching theme and organising codes that appear to be linked or related to each other into recognisable themes or ideas (see Appendix Ten).

3.7.6.4 Step four: reviewing themes

After identifying a number of initial themes and subthemes, it was important to review such themes in the next stage, during which the researcher reviewed all the data, such as codes, coded extracts, subthemes, and major themes, to ensure that each one of these was meaningfully linked to others. This reviewing did not lead to any changes (see Appendix Ten).

3.7.6.5 Step five: defining and naming themes

The process in Step 5 starts with the definition and naming of the themes that need to be identified for the analysis (Braun & Clarke, 2006). At this stage, I embarked on defining and naming themes in order to arrive at the final version of my thematic map, identifying the meaning of each theme and arranging the themes into a coherent narrative.

As soon as I reached the end of this stage, I attempted to describe the range of each theme in a short sentence, while ensuring that the entire data set was a coherent and flowing story that gave me, as the researcher, a clear idea of the range of the themes and offered the readers the opportunity to understand what each theme concerned (see Appendix Ten)

3.7.6.6 Step six: producing the report

According to Braun and Clarke (2006, p.93), this step aims to 'tell the complicated story of your data in a way which convinces the reader of the merit and validity of your analysis'. I began the final analysis of the data and the write-up of the findings report when the final version of the thematic map was ready. During this stage, the arrangement of themes in the thematic map was altered, while some of the themes were reworded to enable me to enhance the narrative and to tell the intricate story of the findings (see Appendix Ten).

3.7.7 Quality and trustworthiness

In this present study, it was understood that quality can be realised once the credibility of the findings has been ensured, by paying due attention to the process and methods by which the data was collected, evaluated, and construed, and the way the research study was conceptualised (Lincoln & Guba, 1985; Silverman, 2000). According to several scholars (e.g., Lincoln & Guba, 1985; Tashakkori & Teddlie, 1998), there are four different benchmarks that can lead to trustworthiness: confirmability, credibility, dependability, and transferability. However, quantitative data where interested in reliability and validity, for qualitative data we are interested in these markers of trustworthiness

The first criteria— confirmability —refers to the principle that total objectivity in social research is unrealistic, even when it can be proved that the research was carried out in good faith. In other words, it should be evident that the researcher has no obvious control over the outcomes of the study and the collected data (Lincoln & Guba, 1985). In this research, to establish conformability, the interviews were conducted as open-endedly as possible, with a non-directive style of interaction to reduce researcher impact and to enable participants to express their opinions freely, providing further insight and accounts of their personal experience—so the credibility and dependability of the study could be maintained.

Regarding credibility, Lincoln and Guba (1985) indicated that it is vital to establish trustworthiness. For the researcher to achieve credibility and dependability, peer examination (also known as auditing) should be adopted. Auditing has become increasingly popular, since it enhances the general dependability and accuracy of qualitative research (Bryman, 2008). As I mentioned previously, in this study, peer review was used to ensure credibility. The interview transcripts were reviewed by two

peers at the Graduate School of Education at the University of Exeter. They provided suggestions on changing some terms, using more academic terms, and linking similar phrases together. Their feedback was considered and enabled me to develop the study, thereby increasing its credibility. This method was helpful in ensuring the absence of bias and that the translations were a clear reflection of the intended original questions

My supervisors, who were qualified faculty researchers, observed the research process and inspected the data collection, procedures, and data analysis. As the interviews were conducted in Arabic, one of the transcripts was translated into English, shared with the supervisors with the codes in order to demonstrate the analysis process. Part of their feedback also involved reviewing the data analysis, such as codes and themes.

I sought to implement the highly recommended member checking/respondent validation procedure, generally regarded as a valuable instrument for ensuring this criterion in qualitative research (e.g., Bryman, 2008; Guba & Lincoln, 1989; Holliday, 2002; Lincoln & Guba, 1985). In particular, member checking enabled the researcher to share data and summaries with the respondents during and after the interviews and to verify that these were a true reflection of the participants' views, practices, and emotions, which would ultimately increase the accuracy and credibility of the research (Creswell, 2007).

I was very keen to have a discussion with the interviewees after every meeting to ensure the clarity and unambiguousness of the meaning of their responses. In fact, Lincoln and Guba (1985) provided guidance for my adoption of this method by stating that member checking is viewed as the most important means of establishing trustworthiness. There was no additional feedback given from interviewees and this

contributed to the development and refinement of the study, which increased its credibility.

Dependability was achieved by clearly reporting the study's process, thus helping other researchers to repeat the work in different situations. Shenton (2004) stated that "such in-depth coverage also allows the reader to assess the extent to which proper research practices have been followed ... to enable readers of the research report to develop a thorough understanding of the methods and their effectiveness" (p. 71).

Finally, transferability refers to 'the extent to which the findings of one study can be applied to other situations' (Merriam, 1998, p. 208). As argued by several researchers, it may not be appropriate to make generalisations from the findings of qualitative studies, because they refer to particular contexts and participants (Krefting, 1991; Sandelowski, 1986).

Nevertheless, other researchers have had different views, claiming that the outcomes of a qualitative research study can, in fact, be generalised to other circumstances with similar features in terms of the research context and participants (e.g., Ritchie & Lewis, 2003; Schwandt, 2001).

In the current study, the participants generally had a similar cultural background, relating to the city where they were based. In fact, the entire population of Saudi Arabia shares the same Islamic and Arabic cultural background, and all mainstream schools in Saudi Arabia come under the governance of the Ministry of Education; therefore, they follow similar educational policies, so some findings might be transferrable to other mainstream schools in Saudi Arabia. Specifically, other SE and GE teachers who work with students with LD in other mainstream schools in Saudi Arabia (not only in Riyadh) might have similar experiences regarding collaboration. Nevertheless, it is

vital to highlight that other factors might influence teachers' collaboration and shape their experiences. On the other hand, this is up to a reader to consider the transferability to a similar setting.

3.8 Ethical Issues

Ethics are a significant concern that must be considered carefully by researchers when conducting research in general and that become even more important in educational research dealing with humans. According to Pring (2000, p.142), 'the "search for rules" is at least one important ethical dimension to any consideration of human behaviour'; thus, ethical concerns should be the priority of researchers during their research and should continue to be so throughout all the research stages (Wellington, 2000).

In addition, the ethical requirements of the University of Exeter were considered carefully before conducting the study and a Certificate of Ethical Approval was sought from the University of Exeter's Ethics Committee (see Appendix One) for the ethics application). In addition, approval from the Ministry of Education in Riyadh in Saudi Arabia was sought to gain access to schools in order to conduct the survey, interview the participants, and use the schools' resources.

The research objects and purposes should be clear to the participants who are taking part in the study (Glesne & Peshkin, 1992; Radnor, 2002). To ensure this was the case for my own study, before participants were interviewed, they were informed both verbally and in writing about the study's nature, the research subject, its aim, and the key issues to be investigated.

Ethical issues were considered carefully and taken into account throughout all the research stages, starting from basic principles, such as the anonymity and

confidentiality of participants, their right to withdraw at any phase of the research, their voluntary informed consent, and the other requirements of the British Education Research Association's ethical guidelines (BERA, 2004). In other word, I clarified to the participants that they had the right to decline participation in the study. In fact, they were reassured that their right to withdraw could still be claimed even if they had already started taking part, and they can do so at any point (Punch, 2005; Silverman, 2001; 2011). Prior to the start of the interviews, participants were asked to read, and complete the consent forms which included information about the goals of the study and ensured data confidentiality and anonymity of the information provided in the interviews(see Appendix Three and Four).

3.9 Summary of the Chapter

This chapter has provided a detailed description and justifications regarding mixed methods research and the adopted research design for this study (the explanatory sequential mixed methods design). Detailed descriptions have been given for each of the research phases, including the methods, rationale, the sampling and data collection procedures, validity and reliability, trustworthiness, and ethical issues. The next chapter presents the findings of the first phase of the study which is the questionnaire results.

Chapter Four: Quantitative Findings

4.1 Introduction

The goal of this chapter is to present the quantitative data analysis and findings to address the following two research questions:

1. Is there a difference in the personal beliefs and perceived actual circumstances relative to collaboration and collaborative relationships for mainstream education teachers and special education teachers in mainstream elementary schools in Riyadh in Saudi Arabia?
2. To what extent to general and special education teachers in mainstream school collaborate together?

This chapter begins by describing the data preparation and coding, testing the reliability and normality of distribution of dependent variables. Demographic information for the participants is presented, followed by presentation of all inferential statistics used to answer the first research question, as well as descriptive statistics used to address both research questions.

The quantitative data from the survey was uploaded into SPSS (Version 24 for Mac), with each variable labelled, coded and defined according to its level of data (nominal, ordinal, or scale). The total score was calculated for each subscale and because the data was not normally distributed a nonparametric test was used.

4.2 Reliability

The questionnaire was based on Leonard's survey on organizational culture (Leonard, 2002). Reliability of the items used in Leonard's survey achieved a Cronbach's alpha reliability coefficient estimate of .81 (Leonard, 2002). Running

reliability tests was important since such tests indicated whether items were measuring constructs consistently. This test was also used to identify inconsistent or unrelated items that should be excluded, resulting in a more reliable scale. In this study a Cronbach's alpha coefficient of .794 was obtained for the Likert-type scale items. This score very similar to reliability score that Leonard reported an none of the items were excluded

The Likert-type scale items are presented in paired sets. Teachers were asked to rate to the first paired item "in terms of your personal beliefs about collaborative teacher practice" and the second paired item "in terms of how you perceive actual conditions or circumstances at your school." Survey items 8-14 evaluated the beliefs and perceived actual circumstances about the nature of collaboration and collaborative practices. Survey items 15-18 evaluated the beliefs about opportunities and support for collaboration and the extent to which such conditions were prevalent in their schools. Survey items 19-23 evaluated the beliefs and perceived actual circumstances about the definition of collaboration. The value of Cronbach Alpha was determined for each scale to ensure its reliability, which demonstrated good reliability (ranging from .663 to .911). The values are shown in Table 2 below.

Table 2: Cronbach's Alpha for Each Subscale

Variables	Cronbach's alpha	Number of items
All Part As 'personal beliefs about collaborative teacher practice'	.835	16
Section 1 Part As personal beliefs about the nature of collaboration and collaborative practices	.835	7
Section 2 Part As beliefs about opportunities and support for collaboration and the extent to which such conditions were prevalent in their schools	.737	5
Section 3 Part As evaluated the beliefs and about the definition of collaboration.	.663	4
All Part Bs how you perceive actual conditions or circumstances at your school.	.704	16
Section 1 Part Bs actual circumstances about the nature of collaboration and collaborative practices	.911	7
Section 2 Part Bs actual circumstances about opportunities and support for collaboration	.895	5
Section 3 Part Bs actual circumstances about the definition of collaboration.	.723	4

4.3 Demographic Information

This section begins with a description of the demographic characteristics of the general and special education teachers who were involved in the study. To provide a clear description of the participants, descriptive statistics, including percentages and frequencies for nominal and ordinal variables, were used. For this study, 170 teachers completed the surveys, with 49% being general education teachers and 51% special education teachers.

Table 3 provides the information of the characteristics and educational background of the respondents. The majority of the general education teachers (46%) had undergraduate degrees, with 5 of the respondents having further degrees (2 had Masters degrees; 3 had PhDs). Less than half of special education teachers had undergraduate degrees (41%), with more having higher degrees (15 had Masters degrees; 2 had PhDs).

Regarding teaching experience, General Teachers are likely to have been teaching for longer as 17% have taught for more than 20 years. Few special education teachers have been teaching for more than 20 years (2%), however 18% have been teaching for 11-19 years. A lower number of general education teachers (6%) had the least amount of teaching experience (0 to 3 years), in comparison to special education teachers (14%). Over a quarter of all teachers (27%) reported that they received no professional development for collaborative practices, however most of all the teachers stated that they received between 0-3 hours of professional development in this area (40%). Only 15% of all teachers received over 10 hours of professional development to help in their collaborative practices.

Table 3: Demographic and background information of participants.

	General education teachers		Special education teachers	
	N	**%**	**N**	**%**
Teachers Completed the Surveys	**83**	**49%**	**87**	**51%**
Education level				
Undergraduate (Bachelors)	**78**	**46%**	**70**	**41%**
Masters	**2**	**1%**	**15**	**9%**
PhD	**3**	**2%**	**2**	**1%**
Years of teaching experience				
0-3	**11**	**6%**	**23**	**14%**
4-6	**12**	**7%**	**16**	**9%**
7-10	**14**	**8%**	**17**	**10%**
11-19	**17**	**10%**	**27**	**16%**
+20	**29**	**17%**	**4**	**2%**
The amount of Professional Development Collaboration				
None	**12**	**13%**	**13**	**14%**
0-3 hours	**16**	**17%**	**22**	**23%**
4-6 hours	**6**	**6%**	**9**	**10%**
7-9 hours	**1**	**1%**	**1**	**1%**
Over 10 hours	**7**	**7%**	**7**	**7%**

4.4 Collaboration Practice and Beliefs

Teachers were questioned about which collaborative activities regularly occurred in their school and classroom. The most frequent responses were mentoring, shared decision-making and sharing ideas (see Figure 2).

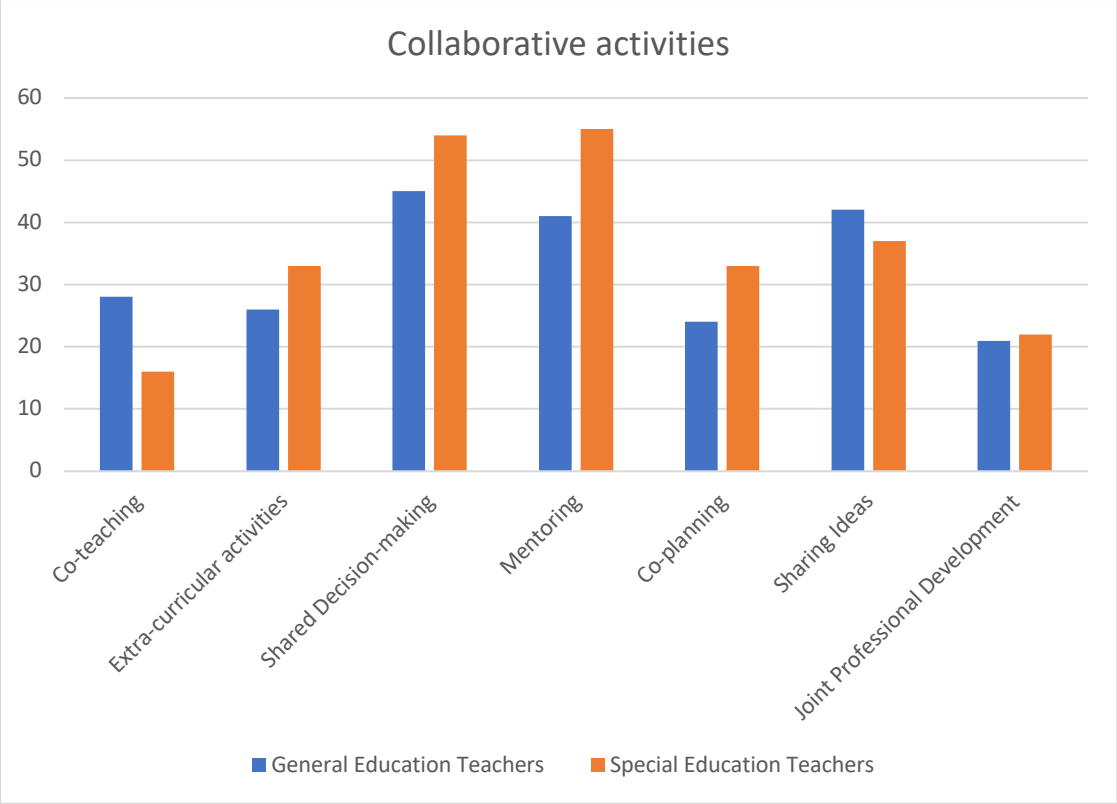

Figure 2: Types of collaborative activities teachers engaged in in their classroom and school

There were two questions that required a yes/no response. The first question asked teachers about whether or not they believed students were more likely to do better on standardized tests if their teachers were regularly involved in professional collaboration. The majority of the teachers (96%) believed that there were benefits to the students' academic attainment if their teachers were more involved in professional collaboration.

The second question asked teachers if they considered to be more regularly involved in collaborative practices in comparison to their colleagues. The majority of all teachers (75%) stated they were more regularly involved in collaborative practices in comparison to their colleague.

4.5 Inferential Statistics

To answer the research questions regarding the difference in the personal beliefs and perceived actual circumstances relative to collaboration and collaborative relationships and to what extent to general and special education teachers in mainstream school collaborate together, inferential statistics were used. To clarify, I was interested in knowing the difference between general and special education teachers' beliefs regarding collaboration, their reported actual circumstances in schools and differences in the extent to which they collaborate. Descriptive statistics were used to interpret any significant differences, as well as indicating areas of investigation for the second phase of the study.

4.5.1 Normality tests: Parametric tests and non-Parametric tests

In order to determine if the data is normally distributed and whether a nonparametric test should be used, a normality test should be conducted (Coolican, 2014). Normality tests were conducted for all questions to determine normal distribution. The Shapiro-Wilk test is one of seven tests that can be used and is the most powerful test in most situations. The Kolmogorov-Smirnov Test uses the sample mean and standard deviation to calculate the expected normal distribution. A variable is not normally distributed if the test of significance is greater than p=0.05. Table 4 presents the results of these tests on all the questions. When these were normally distributed, t-test were conducted for these dependent variables, and Mann-Whitney tests were conducted for the remaining dependent variables.

Table 4:Test of Normality

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mean all Part As of questions	.055	148	.200*	.969	148	.002
Mean Section 1 Part As	.131	148	.000	.912	148	.000
Mean Section 2 Part As	.084	148	.013	.961	148	.000
Mean Section 3 Part As	.087	148	.008	.943	148	.000
Mean all Part Bs of the questions	.065	148	.200*	.988	148	.251
Mean Section 1 Part Bs	.109	148	.000	.958	148	.000
Mean Section 2 Part Bs	.072	148	.058	.978	148	.016
Mean Section 3 Part Bs	.099	148	.001	.976	148	.010
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

4.5.2 Parametric tests

4.5.2.1 T-tests

To determine if there was a difference between special and general education teachers regarding personal beliefs and perceived actual circumstances about collaborative teacher practices, *t*-tests were conducted to determine if there was a statistically significant difference. Each question which had Likert-type scale responses were compared in paired sets.

In addition to the analysis of each question, there were three sections of the questionnaire focusing on different aspects of collaboration that were analysed. Table 5 presents which questions were related to these three sections. Survey questions 8 to 14 (Section 1) focused on the beliefs and perceived actual circumstances about the

nature of collaboration and collaborative practices. Questions 15 to 18 (Section 2) evaluated the beliefs and perceived actual circumstances about opportunities and support for collaboration and the extent to which such conditions were prevalent in their schools. The final 5 questions, Section 3, (19 to 23) evaluated the beliefs and perceived actual circumstances about the definition of collaboration.

Table 5: Questions under each of the three sections in the questionnaire

Sections	Question numbers	Questions
Section 1: Collaborative practice	8 (a)	Professional collaboration among special and general education teachers is highly desirable
	8 (b)	Special and general education teacher work in my school is highly collaborative.
	9 (a)	Schools should be characterized by high levels of participation in decision-making.
	9 (b)	My school is characterized by high levels of participation in decision-making.
	10 (a)	Special and general education teaching should be more about co-operation and teamwork than about competition and individualism.
	10 (b)	Special and general education teaching in my school is more about co-operation and teamwork than it is about competition and individualism.
	11 (a)	Maintaining a trusting and caring relationship is essential to collaborative practice between special and general education teachers.
	11 (b)	Collaborative practice between special and general education teachers in my school is characterized by trusting and caring relationships among the professional staff.
	12 (a)	Special and general education teachers collaborate better when they genuinely like each other.
	12 (b)	Special and general education teachers in my school collaborate well because they genuinely like each other.
	13 (a)	Schools function better when special and general education teachers have highly similar values and beliefs.
	13 (b)	Special and general education teachers in my school hold similar values and beliefs about schooling.
	14 (a)	Diversity of opinion and practice promotes the maintenance of a healthy school organization.
	14 (b)	Different opinions and practices are encouraged in my school.

Section 2: Opportunities and support for collaboration and prevalence in their schools	15 (a)	Special and general education teachers need sufficient time to effectively work together professionally.
	15 (b)	Special and general education teachers in my school have enough time to work together professionally.
	16 (a)	Frequent professional collaboration is an appropriate use of special and general education teachers' time.
	16 (b)	In my school, professional collaboration is considered to be an appropriate use of special and general education teachers' time.
	17 (a)	Expectations of collaborative practice strongly influence special and general education teachers' use of their time.
	17 (b)	Special and general education teachers in my school practice collaboration because it is expected of them.
	18 (a)	Effective special and general education teacher collaboration requires sufficient administrative support.
	18 (b)	There is sufficient administrative support in my school for effective special and general education teacher collaboration.
Section 3: Definition of collaboration	19 (a)	Special and general education teachers need to possess special skills to be effective professional collaborators.
	19 (b)	The special and general education teachers in my school need to learn more about how to be effective professional collaborators.
	20 (a)	Special and general education teachers should be considered co- equals in collaborative interactions.
	20 (b)	Special and general education teachers are co-equals in collaborative interactions.
	21 (a)	Special and general education teachers should work toward a common goal.
	21 (b)	Special and general education teachers work toward a common goal.
	22 (a)	Special and general education teachers should collaborate by co-teaching.
	22 (b)	Special and general education teachers do collaborate by co-teaching.
	23 (a)	Special and general education teachers should co-plan lessons.
	23 (b)	Special and general education teachers do co-plan lessons.

4.5.2.2 T-tests between questions and groups of teachers

An independent-sample t-test was conducted to compare the means of the Part A questions in all the sections "in terms of your personal beliefs about collaborative teacher practice'' score for general and special teachers. There was no significant

difference between general teachers (M=4.2416, SD=0.45) and special education teachers (M=4.1983, SD=0.47) for their personal beliefs regarding collaboration (t(146)=.566, p=.572)

An independent-sample t-test was conducted to compare the mean of all Part B questions in all of the sections. There was a significant difference between general teachers (M=3.71, SD=0.66) and special education teachers (M=3.41, SD=0.71) (t(146)=2.566, p=0.011) for the actual conditions or circumstances in schools in general. General teachers scored perceived their circumstances more positively in their school.

An independent-sample t-test was conducted to compare the answers between the two teacher groups on their perception of their school's opportunities and support for collaboration. An independent-sample t-test was conducted to compare the mean of all part b's of the questions 'in terms of how you perceive actual conditions or circumstances at school; section 2 opportunities and support for collaboration and the extent to which such conditions were prevalent in their schools' score for general and special teachers. There was no significant difference for general teachers (M=3.86, SD=0.48) and special education teachers (M=3.48, SD=0.70) (t(146)=1.656, p=.100) regarding the actual conditions at school from the opportunities and support for collaboration (see appendix Seven).

4.5.3 Non-parametric test

4.5.3.1 Mann Whitney Test

In this section, a Mann Whitney test was conducted to compare teacher groups for the dependent variables where the data was not normally distributed. The mean ranks were compared for Section 1 part As, personal belief about the nature of collaboration and collaborative practices; Section 2 Part As, personal beliefs about

opportunities and support for collaboration and the extent to which such conditions were prevalent in their schools; Section 3 Part As personal beliefs about the definition of collaboration; as well as Section 1 Part Bs, actual circumstances about the nature of collaboration and collaborative practices; and Section 3 Part Bs, actual circumstances about the definition of collaboration for general and special education teachers.

There were no significant differences between the teacher groups for Section 1 Part As (U = 2.204, p = .545), part 2 Q1s (U= 2.500, p =.409), and Section 3 Part As (U *2,835,* p=.637) thus, the null hypothesis was retained for these questions.

However, significant differences were found for Section 1 Part Bs (U= 1.982, P=.005), and Section 3 Part Bs (U= *2,204,* p = .049). For both questions the general education teachers scored significantly more positive in their perceptions than special education teachers (see appendix Eight).

4.5.3.2 Correlations

Correlational analysis was performed on dependent variables that were interval or scale level of data. This went beyond the research questions set and was conducted in case any relationships revealed could inform questioning for phase two of the study.

Correlation tests were used to examine what type of associations (positive or negative) existed between the dependent variables tested, whether they were statistically significant, and the strengths of these relationships (Pallant, 2013). The most suitable test to use for this correlation is non-parametric (Spearman) test because the demographic variables were ordinal level data.

Correlations were conducted to examine the relationship between means for each part of the Likert scales with the level of education for both groups of teachers.

Higher level of education was positively associated with a higher score on all the Part As in all sections relating to their more positive personal beliefs [rho=.251, n=148, p=.002].

The relationship between the highest level of education and the mean for all Part Bs in all sections (actual circumstance) was investigated using spearman's rho correlation coefficient. There was no correlation between the two variables [rho= -.054, n=148, p=.515]. For further information see Table 6.

Further correlations were conducted to see if there was any relationship between all the means of subscales and the years of teaching experience for both types of teacher. The relationship between the years of experience and the means of all As in all sections (personal belief of both teachers) was investigated using spearman's rho correlation coefficient. There was a significant correlation between two variables [rho=.168, n=148, p=.042] showing that years of experience was positively associated with score on the mean for all Part As. This indicates that the more experience teachers had the more they favoured professional collaboration.

The relationship between the years of experience and means of the all Bs in all sections (actual circumstance in school) was investigated using spearman's rho correlation coefficient. There was positive significant correlation between two variables [rho=.167, n=148, p=.043] showing that years of experience was positively associated with more agreement that schools should be characterized by high levels of collaborative activities. For further information see Table 6.

Table 6: Correlation matrix for all questions

	Degree of teachers	***Experience***
All Part As	.251	.168
Section 1 Part As	.106	.056
Section 2 Part As	.257	.363
Section 3 Part As	.214	.101
All Part Bs	-.054	.167
Section 1 Part Bs	.269	.111
Section 2 Part Bs	.626	.072
Section 3 Part Bs	.808	.066

4.6 Summary of the Chapter

In this chapter the quantitative analysis of the survey results were presented. The demographic information in the first part of the survey showed the most of both teachers have undergraduate (Bachelors) degree. However, regarding teaching experience, general teachers had been teaching longer than special education teachers. Most of the teachers reported that they received no professional development for collaborative practices. In addition, the quantitative analysis showed that collaborative activity like mentoring, shared decision-making and sharing ideas were the most frequently reported types of collaboration across the sample of teachers. Most teachers believed that there were benefits to the students' academic attainment if their teachers were more involved in professional collaboration. Also, most teachers stated that they were regularly more involved in collaborative practices in comparison to their colleague.

The second half of the survey included Likert scale questions about personal beliefs and perceived actual circumstances relative to collaboration and collaborative relationships and to what extent general and special education teachers in mainstream school collaborate together. Inferential statistics were used to investigate the difference between both teachers' beliefs regarding collaboration and actual circumstances regarding collaboration in their schools.

There was no difference in the way both groups of teachers perceived collaborative practice in general, however when asked about their own practice in their schools there was a difference in the groups of teachers. Those teachers who had more positive personal beliefs about collaborative practice were more likely to have higher levels of education, indicating an influence of education on their belief system. However, education level did not seem to have an impact on actual circumstances in schools with relation to teacher collaborative practice. In addition, it was apparent that the more experience teachers had, the more positive they were to the belief of collaborative practice.

General teachers took a more positive stance in the way they perceived their circumstances in their school in comparison to special education teachers. However, there was no difference between groups of teachers in the opportunities and support they received in their schools for collaborative practice. Despite this, general teachers were overall more positive with respect to collaborative practice in general in comparison to special education teachers.

To sum up, the first phase of this study obtained a breadth of information from teachers regarding the collaboration phenomenon. It explored the viewpoints of teachers concerning their beliefs about collaboration and the existing collaboration in mainstream schools in Riyadh City, and explored to what extent both general education and special education teachers collaborated in mainstream schools.

Chapter Five: Qualitative Findings

5.1 Introduction

This chapter presents the results obtained from the qualitative phase (second stage) of the study. These findings analyse the data collected from interviews conducted with a sample of 10 teachers (five special education teachers and five general education teachers) who had completed the survey in the first stage of the study. As I mentioned in methodology chapter, I followed Braun and Clarke's (2006) procedure as it provides clear steps for qualitative analysis and easy-to-follow instructions. The details of how the analysis was conducted, along with examples for each step, can be found in Appendix Ten. This chapter addresses the following research questions:

Q1- How do Saudi Arabian female special education and general teachers perceive their collaboration practices in mainstream elementary schools?

Q2- What constraints affect collaboration in mainstream schools in Riyadh, Saudi Arabia from the perspective of SE and GE teachers?

In this chapter, the teachers' perceptions are analysed through the data derived from semi-structured interviews. The interviews were fully transcribed and analysed in relation to the research questions and the emergent themes, as described in chapter 3. The information supplied by both types of teachers was organised into three main themes: teachers' perceptions about collaboration, factors that affect collaboration and implications and future of collaboration (Table 7).

Table 7: Themes, sub-themes and sub-sub-themes of teacher interviews

Theme	Sub-theme	Sub-sub-theme
Teachers perceptions of collaboration	Views and understanding of collaboration	Understanding of the concept of collaboration
		Current collaboration practices in mainstream primary schools
		Goals of collaboration
		Variation in collaboration
	Importance of collaboration	Positive views
		Negative views
Factors affecting collaboration	Responsibility	
	Time	
	Attitude	
	Knowledge	
	Lack of Policy	
	School principal	
Implications and Future of collaboration	School staff	• Principal • Teachers
	Ministerial policies	

5.2 Teachers' Perceptions about Collaboration

The theme of teachers' perceptions about collaboration covered two main sub-themes. The first subtheme is about views and understanding of collaboration in mainstream schools. It includes the teachers' views and understanding of the collaboration concept, their current collaboration practices, the goal of collaboration and variations in the amount of collaboration. The second subtheme addresses the

teachers' perceptions of the importance of collaboration and includes their positive and negative views (See Figure 3).

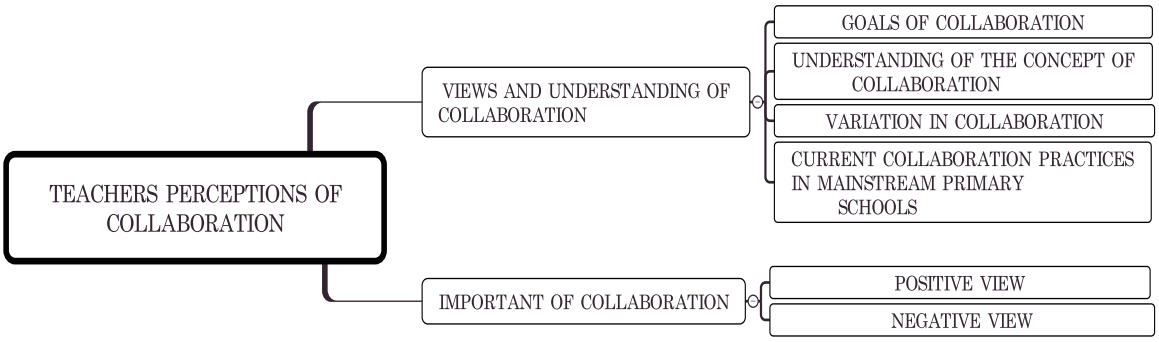

Figure 3: Teachers' perceptions about nature collaboration

5.2.1 Views and Understanding of Collaboration

In the first sub-theme the findings described in this section indicate how special and general education teachers perceive collaboration in mainstream schools. These perceptions can be broadly divided into four sub- sub-themes: views and understanding of the collaboration concept, current collaboration practices, the goal of collaboration and variations in the degrees of collaboration.

5.2.1.1 Understanding of the concept of collaboration

The teachers' responses about the way they perceive and understand the collaboration concept did not vary widely. Most teachers' strongly share the idea that collaboration involves agreement and understanding of what needs to be achieved. This view was exemplified by the following response from GE1: 'It is a process that begins with an agreement and understanding of what is required to achieve a common end goal, and this process has clear guidelines.'

In addition, some of the teachers indicated that collaboration involves two individuals expressing opinions and it as an exchange between two individuals.

According to the teacher identified as GE1, ‘Collaboration is about expressing opinions in an open dialogue and its relationship with a certain goal’. Another teacher, SE4, said simply, ‘Collaboration is an exchange between two parties’.

Furthermore, most of the teachers viewed collaboration as an equal act between teachers, in some ways complementing each other in achieving a particular goal. Both groups of teachers viewed collaboration as a facilitator to achieve the same intended goal. SE4 states that collaboration is ‘two teachers – or more if more parties are involved – making equal contributions and taking the initiative’, whilst GE2, asserted, ‘When I put my hand in my colleague’s hand, we become one interconnected loop. This means we complement each other with the aim of achieving a clear and specific goal, and our cooperation helps us to facilitate the task and make it easier for both parties’.

Additionally, some of teachers felt that collaboration is a process that requires effort from both teachers, indicated by the following responses: ‘It requires the efforts of a group of people’ (GE1) and another teacher said, ‘It must be an organized effort’ (SE5).

When the teachers were asked to describe the concept of collaboration, some stated that collaboration is goal orientated which is done in partnership between different individuals: ‘Collaboration should be done in a partnership with an exchange of experiences and assistance provided by the two parties [GE and SE teachers] that teachers seem to view it is important when the goals are specific. One hand cannot clap’ (GE2).

5.2.1.2 Current collaboration practices in mainstream primary schools

Most teachers said that current collaboration in their mainstream school were mainly general discussions between both teachers regarding the students with LD. They illustrated this common view by saying: ‘There are many discussions about the status of students in the inclusion classroom and the extent of their progress or decline, and I sometimes tell the special education teacher about the difficulties that students with LD have in the classroom’ (GE4); ‘Often, there is strong collaboration in the form of discussions and enquiries about the status of a student, but it does not go beyond this’ (SE3). Another teacher stated that ‘Collaboration involves discussions about the students with learning difficulties’ continues that ‘Collaboration is focused on basic consultations’ (SE4).

Some interviewees seemed to share the belief that ‘collaboration is very simple’ (SE2). It was not only special education teachers who held this belief, for example one general education teacher stated, ‘our collaboration is very simple’ (GE4). Simple, in Arabic, is interpreted as something that is not consistent and does not often happen. A more informal form of collaboration was evident among most of the teachers, as articulated by GE2, who said simply, ‘Our cooperation is informal’. According to two of the other teachers, ‘Most of the time, we collaborate in an informal way about the needs of the students’ (GE5), and ‘We meet in a friendly way if there is time’ (GE1).

The teachers above mentioned that collaboration is about these informal communications and therefore most teachers did not recognise different types of collaboration. When asked about the types of collaboration (co-teaching, co-planning, extracurricular activities and collaboration about the development of individual education plan (IEPs)) and which type of collaboration was currently being used, all the teachers indicated that they did not use any single type of collaboration. In other

words, there was no co-teaching, no co-planning, no collaboration on extracurricular activities and no collaboration around the development of IEPs. One of the teachers, GE4, said, ‘There are no types of collaboration other than discussions and enquiries about the status of students’. This indicated that these types of collaboration activities were not formally or regularly carried out, rather it was done on an adhoc and individual basis. As there was limited evidence of these types of collaborations happening, this seemed to be a limiting factor to how teachers developed and delivered lessons, GE3‘There are no types of collaboration, so there is no planning for lessons, and the development of individual plans is not shared with us’.

When teachers were asked about how both general education and special education teachers collaborate to teach students with learning difficulties (LD), all the teachers concurred that there was no collaboration between them in teaching students with LD. All the general education teachers taught and helped students with LD in the general classrooms, whilst the special education teachers taught and helped these students in the resource room. This was clarified by SE4, ‘Of course, in the inclusion classroom, they will be with the general education teacher’ and SE5, ‘The student is taken on the basis of an agreement between the teacher of general education and the special education teacher and is taught individually in the resource room. After that, the student with LD returns to her classroom’. Both groups of teachers teach in separate classrooms, which does not support collaboration activities and have different goals for their students.

While teachers gave examples of collaboration taking place between the two groups of teachers at times, for example limited and informal, other teachers reported that the ‘collaboration is virtually non-existent’ (SE4) between the groups of teachers and that ‘there is no clear cooperation with the teachers’ (GE5).

5.2.1.3 Goals of collaboration

When teachers were asked about the main goal of their current collaboration, this was linked to students with students with LD rather than immediate collaboration. Some of the teachers said that the goal of their collaboration was to offer psychological support to students with LD. In addition, some teachers stated that they collaborated to raise the self-esteem and confidence of student with LDs. As GE2 said, 'we give them (student with LD) freedom and the belief that there is no difference between them and the rest of the students until they feel confident. We try to respond like our other colleagues and win the student's safety'. SE2 affirmed, 'I cooperated with his general education teacher, and we encouraged and boosted his confidence', while SE4 reported: 'We cooperate to make them stronger'.

Some of the teachers stated that the goal of their current collaboration in the mainstream schools was to help students with LD with family problems and to contact their mothers in an effort to understand the problem and how to deal with it at school. One teacher said: 'I help students with LD with any family problems that they may be facing' (SE4). GE2 took the matters a bit further: 'I communicate with the mother to learn more about the student and her relationship with her mum at home'.

The main goal of collaboration among the teachers who are currently collaborating was to modify the curriculum in an effort to make it more suitable for students with LD. When I asked the teachers whether they collaborated to modify the curriculum, one responded, 'Yes, the reason we do this is to facilitate their learning so that it suits them and is linked to reality' (SE4) while others, like SE1, indicated that they collaborate to evaluate the students with LD fairly by accommodating for their needs during exam periods at the end of the year.

5.2.1.4 Variations in the amount of collaboration

The schools in which the teachers work may differ in terms of how they run as some of the teachers asserted that the degree of collaboration varies due to the school's requirements, as indicated by SE4 who stated, 'Collaboration differs from one school to another and from one educational district to another. Each of the Riyadh districts is different from the next and in accordance with the requirements of the district and school administration'. SE5 confirmed this: 'There are schools where collaboration between teachers exists and schools where it does not. I have already taught in a region of Riyadh where there was no collaboration'. SE4's response was similar: 'in some regions of Riyadh, they have simple of collaboration between the teachers, this is happen because support and assistance from the administration; however, this is in contrast to some other regions'.

5.2.2 Importance of Collaboration in Mainstream Schools

The findings described in this sub-theme address the teachers' views regarding the importance of collaboration in mainstream schools. The teacher's views were varied, with some special and general education teachers having positive views and others having negative views.

5.2.2.1 Positive views

Many teachers agreed that collaboration between general and special education teachers was very important in the educational process in mainstream school. One of teachers (SE3) said, **'**It is very important. Another teacher, GE2, concurred: 'Of course, I encourage collaboration and feel that it is very important'.

Some of the teachers felt that collaboration was a positive and useful activity, which has a positive event on their students. Said SE4, 'It can reflect positively on the students with LD.' On the other hand, there was also a feeling that collaboration is

important because it can help teachers understand the nature of LD, as indicated by GE3: ‘The collaboration between the GE and SE teachers helped me understand the nature of the students’ difficulties in the class, even when developing activities for them’.

In terms of the effect on the mothers of the students with LD, collaboration enabled clearer communication to the mothers about their children: ‘It helps convey the opinions of the teachers to the mothers. Collaboration also involves the transfer of any opinions from the mothers to the teachers. For example, if a mother comes to me with a specific complaint, I will tell the special education teacher about that, and vice versa’. The ideas above suggest that collaboration is important and that it can benefit the child, GE teacher and mothers. All the teachers agreed that the success of inclusive schooling depends on collaboration and co-teaching. One teacher, SE4, said, ‘The success of inclusion is dependent on the application of collaboration and co-teaching’. For other teachers such as SE3, ‘The basis of integration is collaboration. It is the most important element’. GE5 added, ‘Collaboration between teachers is important in integration schools’. It was mentioned above that the teachers said about their current collaboration being informal and no specific type of established collaboration happens. It seems then that teacher’s say how important collaboration between both teachers in inclusion school and the teachers’ belief that collaboration is vital, conflicts with their view about the current collaboration in their schools.

Some teachers noted that collaboration between teachers was important for students with LD too and led to help among the students with LD in the classroom. This was confirmed by GE4: ‘I felt that, when I started collaborating with the special education teacher the students with LD they improved greatly’. A further positive outcome of collaboration reported by the teachers was that the level of attainment of

the students with LD increases, as well as their self-confidence. According to GE3, ‘Raise the level of education and it raises the level of the female students, not only in terms of academic performance, but also by raising their levels of self-confidence’. Other teachers shared similar views: ‘It is important for the student. It may raise their level of academic achievement and increases their motivation to learn’ (SE1); ‘Raising the students’ self-confidence is important because, if a student is confident, she will be strong academically as well’ (SE4). Some of the teachers also indicated that collaboration helped students with LD make progress: ‘If we cooperate to achieve the desired goals, it will help the students with LD to make progress, not move backwards’ (GE2).

Several teachers mentioned that effective collaboration not only helped the students with LD, but also the teachers because it facilitated their work and made it more beneficial for the students with LD. In addition, it was felt that the teachers complemented each other, and there was not more pressure on one teacher than another. SE4 stated, ‘Collaboration can help facilitate certain tasks, and no one should ignore or underestimate the role of the other party’.

5.2.2.2 Negative views

Notwithstanding their positive assessments of collaboration, there was a mixture of both positive and negative perceptions for the special and general education teachers in this study regarding the importance of collaboration between each other. Some of the special and general education teachers mentioned that each had their own work and plans, so, since they worked separately, there was no need for collaboration. GE1 noted, ‘Because each teacher has her own work and her own plan within a specific programme, they have made their decisions’. According to GE4, ‘Each teacher has their own method and curriculum, which they develop and teach alone’.

Another teacher, who thought that collaboration is not needed, suggested that SLDs should be taught in separate classrooms by the special education teachers not in her classroom: ‘It is proposed that all students with difficulties be placed in a separate classroom. The teachers of special education will be able to teach them better that way’ (GE1). She continued, ‘It is hard to focus on students with LD in the classroom with large numbers of students. Of course, there is great pressure on us as general education teachers. If there fewer students in the classroom, inclusion would be successful. With the current setup, it is difficult to focus on all the students and to evaluate them’.

Another reason given by the general education teachers was that it was their role to manage the classroom and go through the curriculum, and no more than that. According to GE1, ‘I cannot help students with LD during basic lessons because I need to explain and evaluate all the students within the specific and very short time of 45 minutes. GE2 agreed, saying ‘my role is to manage the classroom and go through the curriculum from start to finish’.

Overall, the results showed that the occurrence of collaboration between the teachers is either an informal meeting or very limited or is not happening at all. Despite the lack of collaboration in actual practices, both teachers have a positive view regarding the importance of collaboration, thus showing a disconnect from their beliefs and practice in terms of collaboration. Indeed, there are various constraints that underlie the weakness of this collaboration as the next theme will reveal.

5.3 Factors that Affect Collaboration

The second theme examines the factors that affect collaboration. Teachers agreed that the workload assigned to them and the lack of time allocated for collaboration were the biggest constraints toward achieving collaboration, along with

negative attitudes towards collaboration, lack of awareness and responsibility of teachers. The lack of school principal support within the school system were identified as another constraint toward achieving collaboration. This theme includes these six sub themes (see Figure 4).

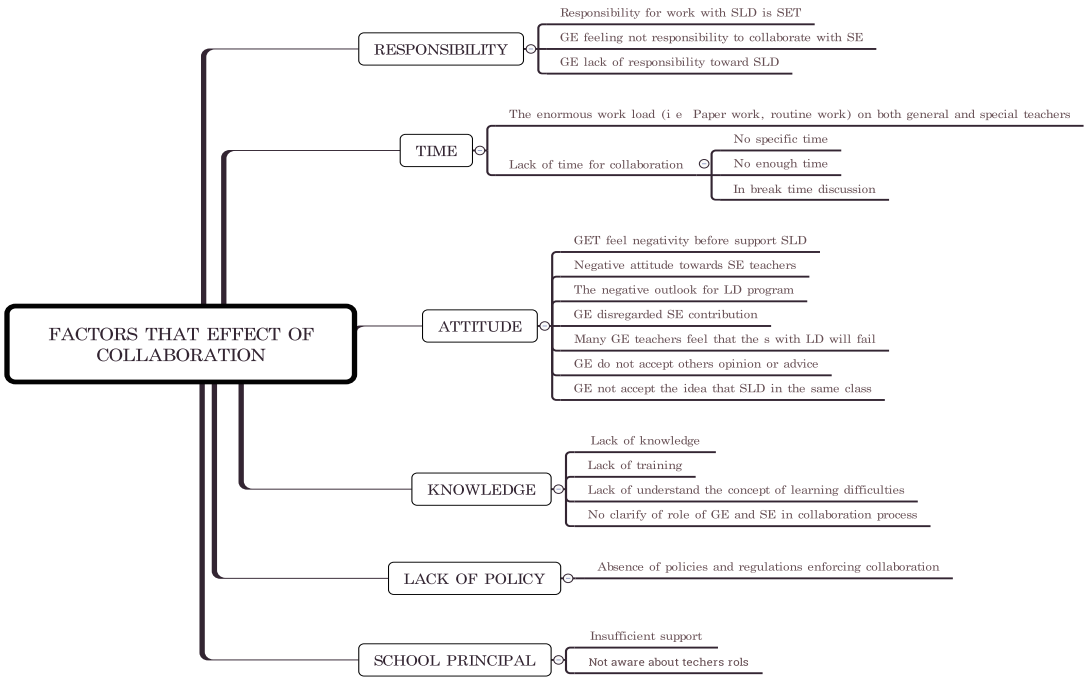

Figure 4: Factors that affect collaboration

5.3.1 Time

Most teachers said that there was no time for collaboration. SE4 said, 'There is no specific time for collaboration, and this can be annoying sometimes'. Due to their busy schedules, finding time to discuss students with LD was difficult, SE5 said, 'If I want to take certain information about a student, and if I want to talk to her teachers, sometimes I make a great effort and time to meet the teachers individually.' When they are able to get some time with teachers, they are mindful not to take too much time from their colleagues due to their busy schedules as SE1 s asserted that, 'We do not take a long time, only 10 minutes, when talking about the students with LD.' As there is no dedicated time allocated to collaborative activities, teachers have to find any time

during school hours or after to collaborate with other teachers, as GE1 asserted that there was 'no time for meeting. If I need anything, I go to the teacher in break time or lunch time.' Another teacher mentioned, 'I meet with the SE teacher if she is free or contact her through WhatsApp. I communicate with her according to my needs.' (GE3)

Teachers asserted that there was no specific time for formal meetings together as (GE3) mentioned 'no certain times in our schedule for meeting'. The teachers also suggested that the reason for the lack of time for collaboration is the enormous workload (i.e. paperwork, routine work) for both general and special education teachers. GE4 stated that 'work pressures and paperwork are the main reasons for the lack of opportunities for cooperation.' Another teacher said that the reasons were 'busy schedules and heavy workloads. This overpressure makes the teacher unwilling to cooperate.'

Another teacher mentioned that GE teachers are always busy and said that she has 40 students in class and does not have enough time (SE1). Another teacher said that 'the number of students per classroom in my school ranges between 40 and 50 usually, which disenables me from following all the students up, and giving the required attention to those students who need extra or individual help. This also reduces the time available to collaborate with the SE teacher in order to help the students with learning difficulties in my class.' (GE3)

5.3.2 Attitude

Another factor that affects collaboration is teacher attitude towards students with LD, as attitudes between the two groups of teachers differ. One common reason is the belief that students with LD show slow progress and insignificant improvement over time, which discourage GE teachers to invest time and effort in those students, as they see helping other students or dealing with other issues more worth their time.

Accordingly, GE teachers are reluctant to spend time collaborating with SE teachers in order to help students with LDs. Some teachers mentioned that GE's attitude towards weak students leads to an unwillingness to deal with students with LD. Other teachers said GE teachers feel negativity toward students with LD before offering any support: 'Many teachers feel that the students with LD will fail from the beginning.' (SE1).

Some SE teachers state that the negative attitude leads to 'some GE teachers trying to get rid of the students with LD through the conversion of the student to an LD programme and throw the responsibility of students with LDs onto the SE teacher.' (SE4)

GE teachers demonstrate a similar view to the GE teachers about their attitude to students with LD. For example: GE1 asserted that 'the classroom teacher does not have the motivation to work with the students with learning difficulties because of the repeated bad experience she has with them. As you know, these students do not show reasonable progress in a reasonable time, which makes the classroom teacher thinks that they do not improve at all and they need a lot of time and effort. Of course, this generates feelings of disappointment and makes the teacher hesitant to work with the student and with me.'

Furthermore, SE3 said, 'Some GE teachers do not even welcome the idea of students with LD in mainstream schools.'

Also, SE4 asserted that 'GE teachers do not accept the idea of students with LD in the same class as GE students.' Some of the SE teachers said that GE teachers do not accept the LD programme. However, SE2 said, 'They see the LD program as a waste of time and think that students with LD waste their time without any avail.' This

view means that (as SE 3 said) ‘Obviously, not all general education teachers are willing to collaborate.’

SE teachers also reported a negative attitude that was felt towards GE teachers. SE4 said, ‘The general education teachers are not very comfortable with the idea of collaboration with special education teachers.’ Moreover, SE3 reported that ‘general education teachers have negative attitudes towards special education teachers. For example, they claim you have to be more experienced. Also, they do not accept others’ opinion or advice.’

One potential outcome from the negative attitudes felt by GE teachers towards the SE teachers is a disregard of their contribution, SE4 mentions, ‘They [GE teachers] are not grateful in the sense that they just completely nullified my role and disregarded my contribution and help, which reflects on my administration assessment.’ Another teacher asserted that ‘the teachers of general education do not want to make you one of the reasons for the improvement of the student, they want to be the one that did.’ (SE2).

5.3.3 Lack of Knowledge

The third factor that may affect collaboration across both the GE and SE teachers is lack of knowledge in three specific areas: students with LD, staff roles with regard to students with LD and finally a lack of knowledge of what collaboration is for this student population. The first area is the lack of knowledge in what learning difficulties mean, SE4 stated that ‘There are teachers and school principals who do not understand the concept of learning difficulties and still think are the same as mental disabilities.’ This is not only the case within schools, but also a wider issue extending to the community. There is a lack of understanding more generally in the community as to what it means to have a learning difficulty. SE5 asserted that ‘there is a lack of

awareness of the concept of learning difficulties from all society and people still do not know the meaning of learning difficulties.'

This lack of understanding of learning difficulties has compelled special education teachers to take matters into their own hands with regards to decision-making. SE4 said, 'Sometimes I make decisions of myself because I feel that the teachers of general education do not understand students with LD needs.'

The second area is the lack of knowledge or understanding on the roles of teachers with regard to students with LDs, which can undermine the importance of an SE teacher. A SE teacher said that 'GE teachers do not understand the nature of my work as a special education teacher, and they feel that I am a personal tutor for weak students. They have a misconception about what our work is and also the parents feel that our job is to act as an assistant to the GE teacher. At the moment, there is no awareness about our job.' (SE2).

These two areas lead to a lack of knowledge on what collaboration is needed with regard to students with LDs, as there is no training in this area. As SE4 said, 'There is a lack of knowledge for both teachers in the concept of collaboration.' This is linked to the amount of training that teachers have with regard to educating them in collaborative practice. All the teachers mentioned the lack of training concerning collaboration. SE1 mentioned that there was 'limited availability of courses and workshops for us as special education teachers, and even for the mainstream teachers'.

5.3.4 Responsibility

The next factor that impacts collaboration is responsibilities. When I asked the teachers, who was responsible for students with LD in mainstream schools and who

was responsible for collaboration, all SE asserted that some GE teachers do not respond to collaboration and feel it is not their responsibility. One SE teacher said, 'Of course, the general education teachers assume that it is our duty as special education teachers to do everything ourselves, and that we should not collaborate with the general education teachers in everything related to students with learning difficulties. For example, if we asked for help from a general education teacher, she would say that is your job, not my job, even if that task is collaborative in nature'.

In addition, some of both teachers mentioned that GE teachers lack responsibility toward students with LD. Some SE teachers asserted that because there is no sense of responsibility towards students with LD this has led to a lack of collaboration between the teachers. On the other hand, some GE teachers discuss how SE teachers do not share their teaching plans or files on their students with LD with them. GE3 said 'that some SE teachers do not want to know their plans and feel that we are interfering in their privacy'. Some teachers asserted that the reason for lack of responsibility could be because of lack of clarification of roles between GE and SE teachers.

5.3.5 Lack of policy

Another factor that may leads to lack of collaboration, is the lack of policy from ministry of education. As SE2 said, 'there is a lack of policy.' Furthermore, if there was a clear guidance document at a school level to provide a rationale for collaboration between GE and SE teachers this would enable them to foster a better collaborative working practice. SE5 said, 'If there is a policy that is clear enough, school staff would be understand the nature of collaboration between general and special education teachers.'

There was a clear need to have a policy in place from a higher level in order to educate all teachers on their role with regard to collaboration and working with

students with LDs. If policies were in place which clearly sets out a guideline on activities related to collaboration, then teachers would more likely adopt the practice, SE4 said, 'If these policies existed and collaborative methods had been clearly set [to begin with], they would have then been adopted.'

5.3.6 School principal

Furthermore, some GE and SE teachers place the blame on the school principal for their insufficient support to the teachers and their job requirements. SE3: 'the school principal forms a big obstacle for us from being able to collaborate. For example, they do not arrange any official meetings for us to discuss issues related to our work. Also, the school principal is not aware of the job roles for each of us, and that one of the things we should do is to collaborate in order to become more effective teachers.'

In summary, teachers in both groups suggest that collaboration is constrained by different factors. These constraints do not seem to be limited to the relationship between teachers but also adversely affect the students whose needs cannot be met without the collaboration of their GE and SE teachers.

The final theme is about the opinions of both teachers for how to improve collaboration in mainstream schools in the future.

5.4 Implications and Future of Collaboration

This theme of implications and future of collaboration was derived from the interviews with the teachers and covered two main sub-themes. The first sub-theme is the role of school staff in improving the collaboration, which includes the school principal and teachers. The second sub-theme addresses policy and involvement of

the Ministry of Education (MOE), including creating a Policy of Collaboration, guidelines and providing training courses (see Figure 5).

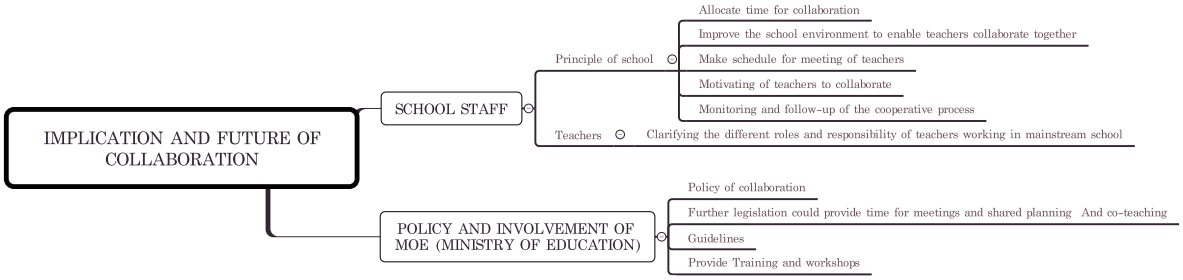

Figure 5 Implication and future of collaboration

5.4.1 School staff

This sub-theme includes both teachers and school principals as the key school staff mentioned by participants. Most teachers from both the SE and GE groups said that the school principal has an influential role in motivating the teacher for collaboration. SE4 said, ‘a supportive school principal can help increase the opportunities for collaboration’ and GE1 said, ‘the school principal has a significant role to play in encouraging collaboration between teachers’.

Some GE teachers said that the school principal needs to ‘give us time to collaborate with SE’. Another teacher (GE2) said that ‘providing time for collaboration and organization by the school principal will help inclusion’. SE5 asserted that ‘when the school principal collaborates and provides assistance to teachers and finds a specific time for collaboration and meetings between the teachers, that will affect and raise the level of collaboration’.

The role of the principal can include both allowing time in the schedule for collaboration and monitoring of teachers' action plans following collaborative meetings.SE1 asserted that 'there should be well-structured and scheduled meetings to ensure regular communication and interaction with general education teachers. Such action plans should be monitored by the school principal.'

Moreover, both general and special education teachers need clarification of their different roles and to understand their responsibilities as teachers working in mainstream school**.**

5.4.2 Policy and involvement of the Ministry of Education

Most teachers asserted that they need the decisions of higher authorities to encourage collaboration in order for this to happen. SE1 said that 'the MOE needs to focus on collaboration and develop a policy for it'. Another teacher said, 'I assert the importance of raising awareness and passing policy in favour of collaboration, in order to achieve successful integration.'

As mentioned previously, clear guidance on why and how to collaboration should occur is needed in order for this to be adopted in practice. 'If these policies are introduced and are clear enough, people will understand the nature of collaboration between general and special education teachers' (SE4). In addition, some teachers said 'we need a guide to clarify the tasks of each teacher so that it is easy to help SLD'. Likewise, SE4 said, 'There ought to be a published manual explaining what collaboration means.'

Similarly, all the teachers asserted that it is important for the MOE to provide training courses. As SE4 said, 'Workshops and courses should also be provided for both general and special education teachers'. GE2 said that the MOE should 'create

courses in this topic, even if only annually', whilst SE3 stated, 'if the courses and workshop are indeed linked to the policy, they will achieve great successes in the field of collaboration and inclusion.'

An outcome of these training courses would mean that teachers are more equipped with the skills and knowledge to collaborate more effectively. SE4 suggests that 'We can even call on the Ministry of Education to change existing policies related to the preparation of special and general education teachers in how to collaborate with each other.''

5.5 Summary of the Chapter

This chapter was organised around three main themes exploring teachers' perceptions of collaboration, the factors that affected collaboration, and the implications and future of collaboration. Teachers generally shared the same understanding of what current collaboration looked like. They believed that collaboration facilitated both groups of teachers in achieving a shared outcome. Although they believed in collaboration, this was rarely translated into practice. Both the special education and general education teachers had interpreted that collaboration was something that was done informally, this impacted on how often collaboration occurred. This also had wider implications on how teachers collaborated on how to help students with LDs. Those who thought they were collaborating about students with LD focused on providing this group of students with support (psychological as well as education). The variation in which collaboration occurred was partly due to how schools were managed. In addition, it was dependent on whether there was allocated time to engage in collaborative activities. The reluctance from GE teachers due to their negative perception of students with LD affected the level of collaboration that occurred in schools. The negative views about collaboration

in relation to students with LD may be due to the lack of understanding of students with LD and what this means. Despite the existence of students with LD in mainstream schools, GE teachers still appear to have limited knowledge about what is needed. The lack of knowledge in understanding what learning difficulties were, the roles of staff, and what collaboration looked like for students with LD also seems to have impacted on collaboration.

Following on from the lack of knowledge is the lack of understanding as to whose responsibility it was to support students with LD in mainstream schools. This may be due to no policies in place in schools to provide guidance to teachers on these factors. In order to improve collaboration in the future there was a need to put policies in place at a higher level (i.e. ministerial as well as school management) in order to make an impact on collaborative practice on the ground. This suggests at both a school and policy level there is a lack of training and clear guidance on the activities needed for collaboration.

Chapter Six: Discussion

6.1 Introduction

This study was conducted to explore female Saudi Arabian special education (SE) and general education (GE) teachers' perceptions regarding their collaboration in mainstream primary schools. To achieve the aims of this study, I used a mixed methods study design (questionnaires and interviews) to collect data regarding the SE and GE teachers' perceptions of collaboration in mainstream primary schools in Riyadh in Saudi Arabia.

The study produced numerous findings, as presented in Chapters Four and Five. However, some key findings were chosen for integration and discussion in this chapter, and the rationale for selecting these findings is described below**Error! Reference source not found.**. It is worth noting that, because certain research questions were relevant to either the quantitative or the qualitative phase, the findings discussed in relation to the research questions in this chapter often related to one phase more than the other.

Both phases helped to generate a different kind of knowledge which should not be underestimated, thus provided a rationale for integrating both phase findings. Creswell (2003), stated that integration combines two aspects of research (i.e., quantitative and qualitative) in one study at a given point of the investigation. Given the setup of this study, it was possible for integration to take place during the research question design, data collection, data analysis, and/or interpretation (the discussion stage).

The process of choosing and integrating findings involved several steps. Firstly, I created a table that portrayed quantitative and qualitative findings. Secondly, I

identified themes and links between findings in both phases. Thirdly, I established a mind map to portray these links and identify overarching concepts that captured the key findings. Based on this process, one main concept emerged from the synthesised findings. The main concept concerned teachers' perceptions of collaboration, involving further discussion about personal beliefs and actual experiences of collaboration. I identified personal beliefs and experiences of collaboration as concepts based on the implicit and explicit findings from both research phases, which are discussed in detail later in this chapter.

The first concept, concerning personal beliefs, included (1) the beliefs of teachers regarding the concept and definition of collaboration and (2) the beliefs of teachers regarding the importance of collaboration. The second concept, concerning experiences of collaboration, included factors such as time, lack of training, lack of knowledge, and the unwillingness of teachers.

6.2 Teachers' Perceptions of Collaboration

In this section, I will discuss teachers' personal beliefs regarding collaboration and their reported experiences of the collaboration process. Regarding teachers' personal beliefs, I will consider different factors, including the definitions of collaboration, the importance of collaboration, and the benefits of collaboration from the viewpoint of teachers. Concerning actual experiences, I will discuss the current collaboration between teachers in mainstream primary schools in Riyadh in Saudi Arabia.

6.3 Personal Beliefs

In this study, I examined the personal beliefs of both GE and SE teachers who work with students with learning difficulties (LD). Goodenough (1963) described beliefs as propositions that are held to be true and are 'accepted as guides for assessing the

future, are cited in support of decisions, or are referred to in passing judgment on the behaviour of others' (p. 151).

As shown in the literature review, the importance of teachers' beliefs for conceptual change in many different knowledge domains rests on the assumption that personal beliefs form the basis of, and filter, new knowledge (Posner, Strike, Hewson, & Gertzog, 1982). Additionally, some of the personal beliefs an individual brings to a learning situation (the 'anchors') facilitate learning, because they match the new knowledge to be learned. However, other ('brittle') beliefs hinder learning, because they not aligned with the knowledge to be gained (Clement, Brown, & Zietman, 1989).

The key element in the successful implementation of a policy is the views of the personnel who have the major responsibility for implementing it; that is, the teachers. As Norwich, (1994) argued, teachers' beliefs and attitudes are critical in ensuring the success of inclusive practices, since teachers' acceptance of an inclusion policy is likely to affect their commitment to implementing it.

In the following, I discuss the beliefs of teachers in the current study regarding (1) collaboration as a concept and (2) the importance of collaboration for students with LD and teachers.

6.3.1 Beliefs of teachers regarding the concept and definition of collaboration

The concept of collaboration has intrigued me for a decade and I often ask myself what collaboration really means to teachers in Saudi public schools. In this study, I found that different beliefs exist concerning the concept and meaning of collaboration among both GE and SE teachers. In the second phase of this study, some of the teachers mentioned that collaboration involved the sharing of ideas, and necessitated agreement and understanding regarding the objectives to be achieved. However,

some of both teachers indicated that collaboration involves two parties expressing opinions and is an exchange between those two parties. Furthermore, when the teachers were asked to describe the concept of collaboration, some stated that collaboration is an effort to achieve a common goal and that goals must be shared, but teachers seemed to consider it important for the goals to be specific.

Several definitions of collaboration are provided in the literature, which match with the results of this study. These different definitions and concepts of collaboration may have led to the misunderstanding of some of the Saudi teachers regarding collaboration, given that collaboration was loosely defined and not clearly understood (Cook and Friend, 1991). Furthermore, Little (1990) referred to the concept of teacher collaboration as 'conceptually amorphous' (p. 509). My study shows this is still the case today in SA, which is consistent with the literature.

This study showed that there is a need for a clear, common definition of collaboration in education. Some of the teachers mentioned that the concept of collaboration was unclear, and others said that it has many meanings. Although the literature has provided a variety of definitions of collaboration in education, these definitions were usually very broad and left to interpretation by educational practitioners as mentioned in the literature review. This might have led to the lack of understanding of the meaning and concept of collaboration with teachers in my study and how they practice. This also may be the reason for the lack of clarity of this concept at a higher level, the education authority and Ministry of Education in Saudi Arabia. To my knowledge, there is no direct, clear, and recent collaboration policy that assures or emphasises the rights of students with LD in the Saudi education system. This may not be surprising since RSEPI policy (Saudi policy) does not seem to emphasise the roles of teachers with regard to collaboration in mainstream school. Further discussion

regarding the absence of the role of ministry of education can be found later in the barriers of collaboration section.

Collaboration is a frequently misused term in education, but it has most commonly been used to describe the interaction between two individuals working together to plan lessons. As asserted by several researchers (Friend and Cook 2003; Murawski and Hughes, 2009; Paulsen, 2008), it is essential to establish a clear definition of cooperation within an educational context so that all teachers are able to gain better insight into the significance of collaboration and implement it effectively in the school.

6.3.2 Beliefs of teachers regarding the importance of collaboration

According to the findings from both phases of the research, most of the SE and GE teachers had positive beliefs about collaboration thus believed that collaboration is important in the educational process in mainstream primary schools. Some of the SE and GE teachers mentioned that collaboration between teachers is a positive and useful activity, and the beliefs of these teachers were in line with the findings of many other studies (Beaton, 2007; Bauwens & Hourcade, 1996; Blanton & Pugach, 2007; Sledge & Pazey, 2013; Sokal & Sharma, 2014; Tzivinikou & Papoutsaki, 2014; Vlachou, Didaskalou, & Mpeliou, 2004; Strogilos et al., 2011).

Some special education teachers, as well as some of general education teachers, believed that collaboration was important, especially in mainstream schools. In addition, both SE and GE teachers asserted that collaboration between teachers is important for dealing with the diversity of students in the classroom, which requires that all students' needs are met. This implies the impact of views that fit the social model of disability. It demonstrates what was discussed in the literature review, that such attitudes may be helpful for both SE and GE teachers to work towards an

inclusive model of education. The growing diversity of the student population attending Saudi mainstream schools has posed challenges for general education programming. Collaboration became necessary for teachers due to the need to differentiate instruction, so that all students, including those with varying abilities, can learn, achieve, and perform at high levels.

In phase two of the research, most of the teachers identified the importance of collaboration in helping students with LDs to raise the level of their academic achievement and increase their motivation to learn within mainstream classrooms alongside their peers. These findings is supported by the literature, where the significance of collaboration between SE and GE teachers is highlighted as an essential and crucial way to provide more effective education for all students, regardless of their abilities and disabilities (Strogilos & Tragoulia, 2013; Beaton, 2007; Bauwens & Hourcade, 1996; Blanton & Pugach, 2007; Sledge & Pazey, 2013; Sokal & Sharma, 2014; Tzivinikou & Papoutsaki, 2014; Vlachou et al., 2004).

Additionally, in Phase 2 of this study, some of both teachers revealed that some of the students with LD experienced low self-esteem and self-confidence, but that collaboration between teachers might be of benefit to them. This is in keeping with Klinger et al. (1998), who stated that self-esteem and feelings of self-worth of students with LD would increase when they are not identified as ‘slow’ or stigmatised by their peers. Students with LDs’ feelings are improved when the teacher’s collaboration to help students with LD occurs within the classroom, rather than sending them outside of the classroom to the resource room. According to Rea, McLaughlin, and Walther-Thomas (2011) students with LD have better attendance and performed better academically in class when the teachers helped them inside the classroom. In addition, Young (2011), found that when students with LD are separated from the

general population, there is a likelihood of them being stigmatised, which may encourage others to place them within a different student subgroup or category. This reflects the medical model of disability and a deficit view of a student's needs, so collaboration, and keeping the child in class demonstrates a move to more social model (and rights based) understandings. However, I assume the teachers' beliefs in these studies were in response to wanting to improve the students with LD confidence.

On the other hand, some teachers have a negative view regarding the importance of collaboration, and this is perhaps due to social prejudice. Alquraini (2011) states that Saudi society discriminates against people with disabilities, which can be observed in how they are ignored in public and prevented from exercising their rights. As I mentioned previously, although the views on inclusion at the school described by Alanazi were generally positive, the attitudes of parents and teachers towards children with cognitive impairments are less positive which still implies a deficit/medical model (Alanazi, 2012). It is therefore important to stress the fact that collaboration between GE and SE teachers might be a crucial step towards guaranteeing a successful diverse experience for all student populations in today's schools.

A 2013 survey conducted by the National Center for Literacy Education (NCLE), found that 77% of educators believed that collaboration in the classroom was critical to student success, which reinforces my findings. The findings of (NCLE) study confirmed that collaboration not only raised academic performance for students with LDs, but also raised their levels of self-confidence, because the teachers knew the needs of their students and helped them, both inside and outside the classroom. When students with disabilities no longer feel stigmatised and have a sense of similarity with

their typical peers which fits the rights-based model of disability, they may begin to perform at a higher level, both behaviourally and academically.

Teachers commented on the overall benefits of collaboration on both students with disabilities but also on others within the classroom. As learning is improved through collaborative partnerships in special education, it leads to a greater ability for special educators to provide appropriate support for all their students. This instruction from special educators can be beneficial to all students (Keefe & Moore, 2004).

This idea of supporting diversity aligns with a large body of literature that has encouraged collaborative practices between or among teachers as a means to improving education for the diverse body of students as suggested by the rights based model (Beaton, 2007; Bauwens & Hourcade, 1996; Blanton & Pugach, 2007; Sledge & Pazey, 2013; Sokal & Sharma, 2014). Many researchers (Ripley 1997; Murawski and Hughes 2009; Conderman and Johnston-Rodriguez 2009) indicated that the purpose of collaboration is to combine the expertise of the special and general educators, in order to meet the needs of all learners.

In the phase two findings of this study showed that some of the teachers claimed that collaboration not only helped the students, but also helped both types of teachers, because collaboration facilitated their work and made it more beneficial for students with LDs.

Collaboration rarely occurs between general and special educators in my study. As the dynamics of education continue to change, and more students with disabilities are mainstreamed into the general education classroom, staff within schools and policy makers must consider the role that collaboration plays within the education system. Collaboration can be a way for these two types of educators to work together

to meet the needs of their diverse learners. In collaborating, they may able to help one another with regard to all aspects of classroom functioning and, ultimately, benefit from two or more professionals' thoughts and ideas concerning the education of all students. In addition, several scholars (e.g. Englert & Tarrant, 1995; Fullan, 2001; Little, 1990; Skrtic, 1991) asserted that there are a number of key factors in terms of student learning, including classroom structure, teaching strategy, methods, and approaches, which require teachers to become agents of change.

Collaborative activities empowered the teachers to nurture a culture of task interdependence and contributed to the creation of a professional community. Furthermore, by being engaged in collaborative problem-solving groups, the teachers moved away from placing blame on the students and their families towards more constructive discussions and solutions, which suggest a move from medical/deficit view to practice that fits a model of collaboration predicted by the social model of disability, with a range of different partners planning education, not just teachers. In addition, some teachers in this study felt that, in collaboration, their skills complemented each other, and there was no greater pressure on one teacher than another, matching the findings of Clement and Vandenberghe (2000). This is in line with what Forbes (2007) asserted in stating that 'individual teacher competencies increase in a collaborative professional community' (p. 112).

Some teachers mentioned that collaboration may be useful because it reduces their feeling of isolation, which was also referred to as the 'sink or swim' reality encountered by certain teachers as reported in Lortie (1975, p. 60). It is important to note that recurrent, consistent, and continuing teacher collaboration can be effective and can contribute to decreasing the attrition rate in special or general education. As shown by Englert & Tarrant (1995) and Fullan (1993), teachers who engage in

frequent collaborative work are more inclined to take action to support student achievement and each other.

On the other hand, not all the SE and GE teachers in this study had positive beliefs regarding the importance of collaboration. Some also had negative views and expressed that collaboration between SE and GE teachers was not important, because they had their own work and plans and, since they worked separately, there was no need for collaboration. It might be that there are reasons for these negative views, which could be related to the experiences of teachers or their knowledge or attitudes. Eisenhart, Shrum, Harding, and Cuthbert (1988) said that 'a belief is a way to describe a relationship between a task, an action, an event, or another person and an attitude of a person toward it' (p. 53); however, there could have been different reasons, as I discuss below.

6.4 Experiences of Collaboration

In this part of the chapter, I discuss the current collaboration in mainstream Saudi schools and how the teachers' practiced collaboration in mainstream primary schools. As I mentioned previously, the beliefs of teachers are important as a filter and foundation of new knowledge. The results of this study showed that some teachers had positive beliefs regarding collaboration with other teachers, while others had negative beliefs. The question now is whether the beliefs of teachers are sufficient enough to ensure successful collaboration.

Successful collaboration only occurs when SE and GE teachers have a clear understanding of what collaboration is and what is expected of collaborative practices. It is hard to carry out a task, even if expectations are established, when there is a lack of understanding of the task. As confirmed by Buehl (2011), in addition to interconnected beliefs, contextual and practical considerations must also be

considered. He claimed that contextual factors, such as the school culture/environment, school-wide relationships, resources, and similar, mediate teachers' beliefs, which has resulted, at times, in a mismatch between expressed beliefs and actual classroom practice.

In this section, I discuss actual experiences in mainstream schools which include (current collaboration and the barriers of collaboration) regarding practices of collaboration between SE and GE teachers reported by participants.

6.4.1 Current collaboration

In both research phases, some teachers said that the current collaboration between teachers is very limited. However, for those where collaboration did occur, it took the form of informal conversations between both types of teachers. Some of these results aligned with the findings of Strogilos and Tragoulia (2013) and Alnatour et al. (2015), who found that collaboration was arbitrary, limited, and occurred at a low level in Jordanian mainstream primary schools.

In addition, some teachers in this study said that collaboration was virtually non-existent in their schools. This coincides with research conducted by Aldabas (2015), who stated that it was difficult to see any collaboration between mainstream and special education systems within Saudi Arabia. In the second research phase, all the teachers said that there was no single type of collaboration in lesson planning or sharing of development plans between the groups of teachers.

Despite existing research demonstrating the existence of various types of collaboration (Friend and Cook 2003; Gable & Manning, 1997; Adams, Sindelar, Waldron & van Hover, 2006), in my study there was confusion the different types of collaboration. Some teachers state that there are no types of collaboration, however

go on to state that there are discussions and enquiries about the status of students. This is contradictory, indicating a lack of understanding of what defines a collaboration activity. This finding is in line with Little (1990) and Friend and Cook (2003) where they acknowledge that the synonymous and simultaneous use of these terms in the research literature makes teacher collaboration a complex and sometimes misunderstood phenomenon.

In addition, in the second phase of the research, I found no clear views concerning the goal of collaboration, with both the SE and GE teachers working towards different goals for students with LD, which conflicted with the main objective of collaboration which involves both people working together toward a shared goal. This aligned with Strogilos et al. (2011), who found the same issue, claiming that collaboration was unclear and irregular, and that the informal sharing of information did not guarantee good organisation or planning; instead, it might provide only poor collaborative practice. Collaboration, then, may require both SE and GE teachers to reach an agreement, and work towards the same goals and specific plans, in order to achieve the needs of students with LDs in a formal way.

In the traditional educational, organisational structure in KSA, teachers are used to working individually and privately and engage in limited or no collaborative practices. Early researchers of the socialisation of teachers in the workplace inferred that teachers learn about their work randomly, with no sense of shared community, common communicative system, or common goals (Lortie, 1975; Rosenholtz, 1989).

Findings from my current study reinforces previous research which highlighted the difficulty implementing collaborative practice given the lack of familiarity with the concepts of collaborative learning and co-teaching (Tzivinikou, 2015; Tzivinikou & Papoutsaki, 2014; Vlachou et al., 2004).

I argue that, without a clear picture or a common framework, implemented collaboration will be imperfect or remain non-existent. There may be adverse effects, or constraints, resulting from the lack of collaboration between GE and SE teachers in mainstream Saudi schools, such as the unsuccessful inclusion of students with LDs. Based on the current collaboration in this study's findings, I discuss the barriers to collaboration.

6.4.2 Lack of Time

The findings of the second phase illustrated that most of the GE and SE teachers said that there was both no time for collaboration in their workload and there was a lack of time allocated for collaboration. This result matched the findings of other authors who said that time is a barrier to effective collaboration (Keefe & Moore, 2006; Trent, 1998), and that the most frequently voiced concern of teachers was the need for planning time (Leonard and Leonard 2003; Vaughn et al. 2003).

Participants in my study report they did not have a set time for collaboration, they mentioned that they had to collaborate in the moment and during any free time (e.g., before/after school, during a prep period or lunch, at the weekend), and by whatever means necessary (e.g., by email or telephone) for short periods of time which can limit communication. Many previous researchers have asserted that lack of time is one of barriers to collaboration and that, without time, there can be no collaboration (Wright, 1994; Kersner and Wright, 1995; Mulholland and O'Connor, 2016). This is what Lacey and Ouvry (1998) meant when they asserted that it is impossible to be a team without having time to talk. A major practical problem faced by all professionals trying to work together is time.

Collaboration requires time for meetings, sharing of information, joint assessments, planning, and programme implementation. Furthermore, the amount of

time required to make joint working practice effective was indicated as one of the major drawbacks (Wright 1994; Kersner and Wright 1995). In other words, scheduling of time is one of the most critical factors in implementing collaborative teams in the school workplace. Additionally, Raywid (1993) stated that 'collaborative time for teachers to undertake and sustain school improvement may be more important than equipment, facilities, or even staff development' (p. 52).

The second research phase showed that both types of teachers mentioned the lack of time, giving specific reasons such as the enormous workload of teaching, which required both types of teachers to focus on their work. This is might because some teachers feel that collaboration is seen as another workload. In addition, a lack of time and limited focus on students with learning difficulties for GE teachers may be other reasons for a lack of collaboration between teachers.

On the other hand, some teachers mentioned that there was no time for collaboration, because the high numbers of students in classrooms, regardless of whether they were mainstream students or student with LDs, led to a lack of time for collaboration, led to enormous pressure for both types of teachers. Some of teachers in this study found that the numbers of students in classrooms were too high, which prevented them from providing sufficient attention to those needing extra help. According to Al-Musudi (2008), the average class size in Saudi Arabia is 45 students, while the average class size in the US is 15 students, in France it is 14 students, and in both Japan and Germany it is 16 students. The larger classroom sizes adds additional limitations to the amount of time teachers can focus on the needs of their students.

All of these reasons may relate to the school climate, influencing the motivation of teachers. Dubis (2015) states that a poor school climate may influence how

motivated teachers are to adequately perform, for example in collaborative activities. A poor school climate can not only influence the motivation of teachers, but also impact on their job performance, attitudes and also beliefs towards the concept of collaboration.

The number of students in a classroom is possibly related to teachers' perspectives regarding inclusive education and a decrease in the number of students in the classroom to 20 students facilitated the inclusion effort (Scruggs & Mastropiere, 1996). Other studies concluded that, when general education classrooms have a large number of students, teachers may have more negative perspectives regarding the inclusion of students with disabilities (Buysse, Wesley, & Keyes, 1998; Wesley, Buysse, & Tyndall, 1999). It may be that teachers' time was insufficient for following up on so many students; therefore, designating time to work with students with special needs was hardly possible for those teachers. In addition, the full and lengthy curriculum which requires to be fully covered by the Ministry of Education, can be a limiting factor.

The lack of time prevents time for collaboration between teachers in order to assist students with learning difficulties, thus it is important to allow teachers the time to talk about their problems with teaching practice, and the time to explore those problems, and share materials, students' work, and solutions (Little, 2003).

Most of the teachers in this study stated that allocating time for collaboration was not the responsibility of GE and SE teachers, rather it is the responsibility of those in higher positions, such as the school principal. This result matched the findings of some authors who said that principals and administrators influence school culture and allocate time and resources (Friend & Cook, 2007; Smith & Leonard, 2005). In a small study of two teachers participating in co-teaching, the need for administrative support

of collaborative time was reiterated when that collaborative time was withdrawn (Bouck, 2007). For collaborative planning to work, school administrators must be facilitators of a collaborative vision for the programme (Smith, & Leonard, 2005).

On the other hand, one of the teachers mentioned that there is a lack of administrative support for collaboration in the school system. The role of the school principal is not only to help in allocating time, but also to extend the time allocated, as the previous studies mentioned regarding the important role of school principals in collaboration. Friend and Cook (2007) and Smith and Leonard (2005), indicated that administrative leadership is the key factor underlying successful and effective inclusion and cooperation, since head teachers, school principals, and administrators are responsible for assigning time and resources.

In view of this difficulty, providing extra time for teachers to communicate with each other is a need that should be considered by the authorities. Further details are provided in the recommendations section. Lack of time was one result from this study; however, another result from this study was the lack of collaboration between GE and SE teachers.

6.4.3 Unwillingness

In this result of study, there are two types of unwillingness arising from internal or external causes. Phase 2 of the research identified teachers who chose not to collaborate with other teachers or the school. Their unwillingness might have related to internal factors, such as their own beliefs regarding their roles and others' roles (e.g. teachers' and schools'). It could also be linked with external factors, such as not fully understanding collaboration. According to Knackendoffel (2007), 'if there is one obstacle to successful collaboration that will derail even the best developed plan, it is forcing collaboration between unwilling teachers' (p. 3). In addition, an unwillingness

to participate in collaborative work has been shown to negatively affect student success in an inclusive setting (Austin, 2001; Smith & Smith, 2000).

Teachers may be unwilling to collaborate because they fear dealing with other teachers. Harkins (2012) stated that, while collaboration necessitates considerable change, it is common for participants to still feel vulnerable and fear the unknown. In addition, it can also be difficult to navigate collegial relationships, since they may be fraught with issues such as sensitivity and misunderstanding.

Developing a trustworthy relationship can be useful in terms of dealing with these anxieties (Harkins, 2012). According to Lencioni (2005), there is no quality or trait more significant among a group's members than having a trusting relationship. While engaging in a collaborative task, it is important for each member to be totally dedicated and fully responsible for all decisions, since lack of trust may make it impossible to carry out the task.

As well as establishing a trusting relationship among participants, educators and teachers must acknowledge the disparities and differences among their colleagues (Drago-Severson, 2009). It is important for teachers to work together to identify specific ways to support themselves and other teachers with diverse levels of development and experience. Finding ways to work with colleagues can be difficult when they try to navigate their roles and responsibilities collectively.

One of the reasons that might lead to the unwillingness of special education teachers to collaborate with general education teachers is that they feel marginalised by general education teachers and school principals. The special education teachers discussed how they were segregated, and less importance was placed on them in comparison to general education teachers. The norms and values of the Saudi culture

may be an influential factor in this marginalisation. In each culture, there are a set of individuals who have the power to set the norms and values which are then imposed on others (Becker, 1963). Those who do not adhere to these norms would eventually be considered and treated as outsiders or deviants (Becker, 1963). In terms of the Saudi context, it could be suggested that special education teachers may be considered outsiders who do not fit norms set by the ministry of education or school management team. Perhaps, in Saudi culture, being perceived as outsiders may be related to disabilities and it may be related to societal discrimination. Discrimination may lead to special education teachers of these individuals (e.g., students with LD) being perceived as outsiders and exclude them from school society. This links to the discussion of stigma and a medicalised view of disability considered in the literature review chapter. The medical model and how it views disability as a deficit, may explain the views of general education teachers and the stigma placed on special education teachers. It may lead to prejudice and stereotypes, isolation, status loss, discrimination, powerlessness and oppression (Link & Phelan, 2001). All of which might create barriers to collaboration between GE and SE teachers in mainstream school, which in turn would negatively influence children with LD.

Additionally, teachers' unwillingness may be related to external factors (to some extent), such as their previous experiences with teachers and students. Phase 2 of the research revealed that most teachers who had negative experiences with other teachers reported that they no longer wished to communicate with them and became apathetic. Some teachers mentioned that GEs' attitudes towards weak students led to an unwillingness to deal with students with LD, thus did not attempt to support them.

This appeared to lead to 'some GE teachers trying to get rid of the students with LD through the conversion of the students to an LD programme and throwing the

responsibility for students with LD onto the SE teacher' (SE4). Despite the apparent conflict between the roles of GE and SE teachers, GE teachers showed a complementary viewpoint to the SE teachers, asserting that there is a lack of motivation from the classroom teacher (GE) to work with students with LD due to previous negative experience. The tension between special and general education teacher might affect their collaboration in their mainstream school due to this negative perception of the roles of both teachers. GE teachers state that SE teacher's claim they need to be more experienced to work with students with LD and do not accept each other's opinion or advice. In addition, SE teachers felt that GE teachers disregarded their contribution, thus the perceptions and attitudes felt between these groups of teachers must have an impact on collaboration. Not only is there tension with regard to the roles of the teachers, but also in the area of inclusion (Norwich, 2013).

According to Bender et al. (1995), GE teachers have historically not favoured the mainstreaming of students with disabilities into the general education setting. This may be one reason that some of the teachers in this study generally felt overloaded and that they needed to learn more about teaching students with LDs and changing their traditional teaching methods. Research conducted by Cochran (1998) reported that many GE teachers are unwilling and hesitant to change their ways of teaching. Collaboration may also be a challenge when teachers are not comfortable with sharing their space, planning time, or who is to congratulate for the success of students (Cookson, 2005). Scheduling, competitiveness, and teachers' attitudes are additional factors contributing to teachers' isolation.

Many GE teachers feel that they are not qualified to undertake such responsibilities teaching students with LDs (Bender & et al., 1995; Gokdere, 2012).

SE teachers in my study stated that there was a lack of knowledge from other teachers and principals on what the needs are of students with LD. Bender (1995) noted that this resistance typically stems from apprehension about the quality of academic work that children with disabilities will be able to produce, as well as the possibility of behavioural disruption in the classroom. This reluctance was also found by GE teachers in my study, where they expressed a negative attitude to the progress of students with LD discouraging them to invest time to them. In a study by Gokdere (2012), GE teachers reported an unwillingness to participate in the inclusive model because the new teaching model had been forced upon them. GE teachers also reported an unwillingness to participate due to the increased workload that inclusive education requires. On the other hand, the 'readiness' of teachers in particular is often claimed to be lacking. As one member of the public noted in a research study, 'It is absurd to plan inclusion of students with significant disabilities in overcrowded classrooms where the teacher has received no more than a crash course in special education' (Puddington, 1998, p.16). The lack of knowledge and understanding of GE teachers in my study of the needs of students with LD could impact on the likelihood of including them in their classrooms.

Some researchers have shown that SE teachers often believe that GE teachers do not have the skills or knowledge to meet the unique needs of students with disabilities (Jordan, Schwartz, & McGhie-Richmond, 2009), and that GE teachers are often reluctant to take responsibility for students with disabilities in their classroom (Buell, Hallam, & Gamel-McCormick, 1999; Soodak & Podell, 1994). This is echoed in the attitudes and lack of knowledge of GE teachers in my study. According to Duke (2004), the key to successful collaboration is helping the others involved to develop tolerance for diverse perspectives.

My findings and previous research may suggest that there is an unwillingness from GE teachers to see their work with students with LD as their core role in the school. This links to the discussion of the social barriers suggested by the social view of disability as discussed in the literature. The social model and how it views disability as a 'form of social oppression', may explain the views of general education teachers and their unwillingness to collaborate with special education teachers. It may lead to the reluctance and the negative attitudes towards collaboration as discussed above. Again, this might create barriers to collaboration between GE and SE teachers in mainstream school, which in turn would negatively influence children with LD.

Additionally, in light of the findings generated throughout this study, I argue that the unwillingness of some of both teacher participants, and their negative attitudes, could also be related to other causes, such as lack of knowledge and training which I discuss below.

6.4.4 Knowledge

In the second phase of the research, most of the teachers interviewed felt a lack of knowledge regarding collaboration and felt that it was a new concept with little background guidance on how to do it. This may be one cause of the lack of collaboration in Saudi mainstream schools; furthermore, this result matched that of other researchers who acknowledged lack of knowledge as a barrier to collaborative practices (Worrell, 2008; Brownell, et al., 2006; Winn et al., 2005; Leonard 2002; and Bergen 1997).

Some of GE teachers did not have knowledge of certain concepts, such as the difference between learning difficulties and mental disabilities. Due to this lack of knowledge, SE teachers feel the need to take the initiative in making decisions about students with learning difficulties without consulting GE teachers. In addition, a

reported ‘lack of understanding of the nature of special education for general and specific learning difficulties’ was cited as a cause. Some of the GE and SE teachers mentioned that they desired collaboration but did not have adequate knowledge about how to actually collaborate.

Although GE teachers favoured inclusive education, they expressed concerns with the lack of adequate training, skills, and resources to accommodate students with LD (Mastropieri and Scruggs, 2000). If teachers are unaware of the critical elements of authentic collaboration, they may ultimately share information about their learners, instead of planning instructional adaptations for all students (Carter, Prater, Jackson, & Marchant, 2009). This lack of knowledge may affect both types of teachers and lead to the isolation of teachers. As the authors mentioned, teachers who feel that they have insufficient knowledge of special education are hesitant or concerned about entering into collaborative practices (Bergen, 1997).

The second research phase illustrated that two of the GE teachers felt comfortable without collaboration with special education teachers, because they both worked individually. This might also have been because of limited knowledge of collaboration and inclusion. It should be noted that GE teachers have a crucial role to play in the education of students with disabilities; however, research has shown that they often stated how inadequate they felt when assuming such a role (Brownell et al., 2006).

The lack of knowledge of teachers may affect their self-efficacy. Teacher efficacy was identified by Hoy and Woolfolk, as stated by Bandura (1977), as a kind of self-efficacy and ‘a cognitive process in which people construct beliefs about their capacity to perform at a given level of attainment.’ Teachers felt it had to teach students when they were not prepared enough and feared their students would fail because of their

lack of preparedness. This is what many researchers have asserted: that teachers' sense of efficacy is associated with student achievement (Bandura, 1997; Goddard & Goddard, 2001; Tschannen-Moran & Woolfolk-Hoy, 1998, 2001). In a Saudi context, a mixed methods study conducted by Alkhateeb (2014) used both interviews and surveys to collect data from school principals regarding teachers' knowledge. Alkhateeb's study showed that teachers' responses indicated an overall lack of self-efficacy and confidence in teaching students with learning disabilities, and these low expectations about teachers' abilities may affect the collaboration between them. Efficacy has an impact on the level of effort people exert, how long they will persevere in the face of challenges, the extent to which they are robust enough in coping with failures, and how much pressure or depression they may experience in overcoming challenging circumstances (Bandura, 1997). When teachers have knowledge and high efficacy, they are more likely to collaborate to help student with LD. Some of the teachers in this study stated that they did not have the necessary ability to meet the needs of their students with LD.

Collaboration among educators is a complex activity that needs a variety of skills which go beyond knowledge of how to collaborate and knowledge of their students with LD (Keefe & Moore, 2004; Scruggs et al., 2007; Fishbaugh, 1997). Learning how to effectively collaborate with colleagues, as well as determining best practices within one's own learning environment, can be quite challenging (Keefe & Moore, 2004). According to Skrtic (1987), general education and special education have historically been treated as different systems within public schools, and many teachers find it hard to recognise their roles within the collaborative relationship.

In addition, it is possible that the lack of awareness and knowledge of the role of each teacher in the collaborative process will diminish efficacy and lead to conflict

between SE teachers and GE teachers. According to GE teachers, some SE teachers do not want others to check their plans and feel that their autonomy is being compromised, which may be explained by the fact that there was no clarification of the roles of the GE and SE teachers. SE teachers feel that their work is not understood by GE teachers and parents view them as an assistant to GE teachers, demonstrating a lack of awareness of their job role.

The literature stated that SE teachers' expectations and perceptions of job responsibilities differ from those of regular education teachers and administrators. The lack of clarity in their roles may increase the levels of frustration and stress experienced by special education teachers. Piotrowski and Plash (2006) cited Embich (2001), indicating that role conflict contributes to exhaustion by placing inconsistent, incompatible, or inappropriate demands on instructors. Unclear expectations, goals, and responsibilities contribute to emotional exhaustion, job dissatisfaction, and stress (Billingsley 2004; Buckley, Schneider & Shang 2005; Gersten 2001; Inman & Marlow 2004; Plash & Piotrowski, 2006).

Teachers in Saudi Arabia tend to have little knowledge of inclusion in general and little preparation for it, which may have led to a lack of collaboration. A study conducted in Saudi Arabia by Althabet (2002) indicated that special education teachers felt they were not well-prepared. It may be argued that lack of awareness of the terms 'special education' and 'learning difficulties' may hinder cooperation between teachers. Despite this study being conducted in 2002, their findings match with the lack of preparedness shown by the teachers in my study.

Overall, many SE and GE teachers did not feel prepared for the demands of mainstreaming students with LD (Scruggs & Mastropieri, 1996), which coincides with my study. Special education teachers often wished they had more preparation for

general education courses and specific content pedagogy, while general education teachers felt unprepared to work with children who required specific support and accommodation (Keefe & Moore, 2004). Miscommunication between partners has been identified as a common obstacle that teachers face (Scruggs et al., 2007).

Regarding the limitations of teachers' knowledge and understanding of collaboration, most of both types of teachers in Phase 2 emphasised the importance of training teachers and raising awareness among them regarding collaboration.

6.4.5 Training of Teachers

Teacher training programmes have a great influence on developing teachers' skills, which are essential for them to work effectively together. Teacher preparation programmes must ensure that future teachers learn the skills and knowledge needed to collaborate in the workplace (Griffin, Kilgore, Winn, Otis-Wilborn, & Hou, 2009; Hobbs & Westling, 2002; Stang & Lyons, 2008; Titone, 2005). The need for teacher training in co-teaching in inclusive classrooms is a common theme mentioned in the research. Scruggs et al. (2007) reported on Vesay's 2004 study, indicating the need to 'promote learning, more flexible thinking, strategies and practical skill development, different teaching models, use of technology, characteristics of disabilities, collaborative consultation skills, group interpersonal skills, and communicating more effectively' (p. 404).

The findings in Phase 2 of my study revealed limitations in teachers' understanding of their roles and responsibilities, and a lack of knowledge regarding collaboration. This finding indicated that teachers might need more training, which may not be surprising in light of the literature (see Teachers' Preparation) indicating a dissatisfaction amongst Saudi teachers with the Saudi teacher training programmes. In the second research phase, all the teachers asserted that it is important and

necessary for them to have training and workshops regarding collaboration in mainstream primary schools for both general and special education teachers. Other teachers mentioned that they needed both preparatory training and in-service training, which is in line with previous research (Cramer 2007; Leonard 2002; Leonard and Leonard 2003; Worrell 2008). Inadequate teacher preparation on collaboration between GE and SE teachers has been seen as a barrier to successful collaboration. When teacher preparation programmes do not include collaboration opportunities for GE and SE teachers, the practice of collaboration within schools becomes challenging for beginning educators (Villa, Thousand, Nevin, & Malgeri, 1996). This finding was confirmed by previous literature showing that special educators are not trained in collaboration as part of their pre-service education. This difference in the knowledge base between GE and SE teachers may lead to teachers not perceiving themselves as equals (Nolet & Tindal, 1994) and may result in a lack of confidence amongst teachers.

In the Saudi context, there is a lack of training in collaboration for both types of teachers, because as far as I can ascertain, no preparation programmes for teachers in universities encourage teachers to work together or provide the trainee teachers with an opportunity to collaborate. Similarly, a number of research studies in Saudi Arabia have shown that some of teachers seem to be completely dissatisfied with their training. According to Hussain (2009), Saudi SE teachers thought that several elements in their teaching were not adequately dealt with in the relevant curricular programmes of their University's Department of Special Education. One of these elements is collaboration where some researchers asserted the importance of collaboration between teachers in mainstream school (Alquraini, 2011).

Another study by Alnahdi (2014) found that some SE teachers had poor lesson planning and inadequate classroom management skills. Saudi SE teachers highlighted the significance of providing additional information regarding the promotion of IEPs, along with the promotion of cooperation between school administrators and mainstream teachers. Furthermore, another study demonstrated a lack of sufficient knowledge, expertise and self-assurance using various assessment tools in the classroom demonstrating a lack of teacher preparation prior to teaching students (Nassif 2007).

Another reason for the lack of training of both types of teachers is the absence of a policy regarding collaboration in Saudi Arabia. In this study, both types of teachers asserted that it is necessary for higher authorities to impose cooperation and therefore the need for training. In order to achieve successful integration of students with LDs there is a need for a policy from the government to raise awareness as well as the importance of collaboration. This would increase the understanding of SE teachers roles within mainstream schools. Finally, teachers mentioned that 'there is no clear cooperation process'. This result matched some of the results of a study undertaken by Al-Natour, Alkhamra and Al-Zboon (2015), regarding the absence of policies and regulations enforcing collaboration; hence, policies and legislation are vital for promoting changes relating to equity in public education, which requires teacher collaboration (Gamm & Hehir, 1999).

To my knowledge, there are no direct, clear, or recent policies regarding collaboration between GE and SE teachers in mainstream schools in the Saudi context. Although there are Saudi Regulations of Special Education Programs and Institutes (RSEPI), they do not mention anything relating to collaboration between teachers. From a theoretical perspective, this links to the discussion of the importance

of rules and laws suggested by the rights-based view of disability as discussed in the literature. The rights-based model and how it advocates for the rights of people with disabilities (Degener, 2016), may explain the gap existing in the current context of the study. In this regard, the total absence of a solid legislative infrastructure; starting from of the policies, regulations, procedures and training programs that clarifies the process of collaboration between general and special education teachers suggest that the rights-based model is not successfully translated into practice. All of which might lead to poor collaborative practices and confusion towards responsibilities and roles in collaboration between GE and SE teachers, which in turn might negative affect students with LD.

6.4.6 Beliefs and Practices

The relationship between beliefs and practices is neither linear nor unequivocal; beliefs can compete with each other and, sometimes, act as contradictory discourses which (in) form and, at times, impede effective practice. For Fives and Buehl (2011, 479), teachers' beliefs acted as filters for both information and experience, framing situations and problems, and guiding intentions and subsequent action. According to some researchers when confronted with the task of reflection, teachers often feel unable to reconcile their own beliefs with what they have experienced during their teaching practice (Sugrue 1997; Edwards and Collison 1996; LaBoskey 1997). They often feel trapped (Campbell & Kane, 1998) in an ill-contrived situation that causes them to believe that their own personally held beliefs are not appropriate or coherent enough to cope with the demands of reality.

In my study, most of the teachers believe in collaboration and are positive about it; however, they are unable to do it in practice. Thus, their beliefs conflict with their actual practice due to the various limitations, as illustrated when I discussed the

current state of collaboration in mainstream primary schools, finding that that collaboration between special and general educators did not occur consistently. There are many reasons for the lack of collaboration in practice; for example, lack of time, the unwillingness of teachers, lack of knowledge, and lack of training. Together, all these factors and perceptions potentially limit collaboration between teachers; however, increasing the training of teachers, enhancing preparation programmes, and making changes to policy, may lead to better informed and more highly skilled practitioners.

6.5 Researcher self-reflection

In this section, I shall provide the reader with a reflection on my position as an "insider" researcher to the context when this research took place. This is particularly important given my previous practitioner experiences in shaping my research focus and the interpretations of findings. That said, my experiences were not only influenced by my beliefs, but also by my attempt to answer the questions that I had as a practitioner, as well as my participants, in relation to collaboration between GE and SE teachers in mainstream schools. Additionally, given that the educational system is situated in the broader context of Islamic values in KSA as explained in the context section (pg. 14), it might have shaped how my participants perceived their practices. For example, the positive beliefs of some teachers regarding the importance of collaboration might have been related to their Islamic values, which call for collaboration in all areas of their lives, as explicitly stated in the Holy Book (Al Quran). In addition, Islam requires people with disabilities to be provided with a conducive environment that enables them to achieve their highest aspirations. In Islam, people with disabilities should, firstly, be seen as human beings, and secondly, as disabled people who have the right to enjoy life and participate as members of their

communities. This may be the reason why teachers believed that collaboration is important between teachers in mainstream schools, and for students with learning difficulties (LDs). This is also reflected in Alanazi (2012) who stated, in Saudi Arabia, that the understanding and the implementation of inclusion was heavily influenced by cultural traditions and Islamic precepts concerning equality and difference, which reinforces findings in my study. On reflection, despite these positive views on collaboration and how it was framed within the Islamic values discourse, the findings of this study showed that there is a disparity between teachers' perceptions and practice regarding collaboration, which needs further attention from the responsible authorities. The latter will be detailed, and more explanation will be offered in the conclusion chapter.

As per my own view of collaboration, as a practicing Muslim I also believed the Islamic values of collaboration. However, as a practitioner in the SEN context before conducting this research, what I saw was a total absence of collaboration between teachers which engendered a contradiction between what I valued and what I experienced. This eventually became the impetus behind this research. My research journey including the conversations I had with the teachers and my in-depth analysis of their experiences have enlightened me to see the reasons behind the absence of collaboration and what could be done to bridge the gap between the value and practice in promoting collaboration. Moving forward as a practitioner, my approach to collaboration will be informed by the lessons learned about what hinder collaboration and what could be done to change the conditions for collaboration between teachers in mainstream schools.

6.6 Summary of the Chapter

In this chapter, I discussed the main concepts that came from the data and linked this with existing literature. In this regard, it is important to acknowledge that these concepts generated from the analysis of the data mirrors the universal findings on issues around supporting children with SEN in mainstream schools such as barriers to collaboration, discrimination and exclusion (e.g; Leonard and Leonard, 2001; Anatour et al, 2015; Young, 2011, Rizvi, 2018). However, some findings such as the lack of relevant policies to enhance the concept of collaboration between GE and SE teachers in mainstream schools may be more specific to the KSA context. The data was also added to the theoretical understanding of the topic area of collaboration and inclusion of students with LD by both teacher groups. The main concepts – personal beliefs and actual experiences – demonstrated a disconnect from their beliefs of collaboration and actual practice within schools. The barriers to collaborative practice in schools appear to be due to practical issues (e.g., lack of time), an unwillingness to collaborate and a lack of knowledge (including lack of training) in this area. Based on the discussion in this chapter, both phases of the research showed that both GE and SE teachers often had positive beliefs, perspectives, and perceptions regarding the importance of collaboration; however, some of both types of teacher participants held negative views and beliefs about collaboration between teachers, with the positive beliefs of teachers being insufficient to ensure the practice of collaboration. This study has contributed to existing knowledge and has provided many implications and recommendations, as explained in greater detail below.

Chapter Seven: Conclusion

This chapter describes the study's contributions to knowledge, how it addresses some gaps in the literature as well as its methodological contributions. The chapter also presents the implications of this study and provides recommendations for stakeholders, including school principals, policymakers, and researchers. It concludes by identifying the strengths and limitations of this study and summarising the entire thesis.

7.1 Contribution to Knowledge

This section will explain how the current study contributes to existing knowledge. The specific contributions of this study are listed below.

1. Nationally, in Saudi Arabia, and internationally, few studies have explored collaboration from the perspectives of general education teachers (GE) and special education teachers (SE) in mainstream schools. This study examined the views and perceptions of both types of teachers regarding their collaboration, which has addressed this gap in knowledge. In addition, this study has contributed to the literature by examining and exploring collaboration between GE and SE teachers in mainstream Saudi primary schools (specifically, girls' schools).
2. This study looked in-depth at two key areas - personal beliefs and reported experiences—from the viewpoint of teachers regarding collaboration in mainstream primary schools in Riyadh, Saudi Arabia. While most of both types of teachers held positive views and beliefs about collaboration between teachers, actual collaboration between special and general educators did not

occur consistently. Thus, the beliefs of teachers are insufficient to ensure the practice of collaboration.

3. This study also found collaboration to be virtually non-existent in the schools my participants worked in. This study reinforces existing knowledge reported by Aldabas in 2015, as it demonstrates that collaboration between general and special education teachers is limited and therefore may not have improved since then.

7.2 Methodological Contribution

Internationally, most research on collaboration in special education uses quantitative methods (e.g., surveys); little qualitative research has been done in this area. Therefore, the current study offers a new contribution to existing knowledge due to its unique design and methods. To my knowledge, this is the first explanatory mixed-method study that uses a questionnaire and semi-structured interviews to explore collaboration among teachers in mainstream primary schools in Riyadh, Saudi Arabia.

Nationally, besides the limitation in research regarding collaboration I indicated above, most research on special education in Saudi Arabia uses questionnaires as a data collection method (Al-Wabli, 2000; Al-Khashrami, 2001 and Hanafi, 2005). This study has contributed to knowledge through its design and methods. The use of mixed methods can address the limitations of strictly quantitative or qualitative studies. This mixed methods approach has the potential to become a source of valuable data regarding the current status of teacher collaboration in mainstream primary schools in Riyadh city. The mixed methodology offers a broader and deeper understanding of participants' views regarding this complex phenomenon.

Additional studies using this questionnaire, or variations of it, are needed to add to in the understanding of collaboration between general and special education teachers in SEN. The validity and reliability of this adapted questionnaire was checked and can be recommended for use in a Saudi educational context and provides researchers a range of questions around collaboration within an educational setting.

7.3 Implications and recommendations

This study provides data on the perspectives of SE and GE teachers in mainstream primary schools in Riyadh on collaboration. It includes details of teachers' collaborative experiences, the factors that limit their collaboration, and their needs regarding collaboration. Therefore, this study raises implications and recommendations for several stakeholders, including school principals, GE and SE teachers, policymakers, and researchers. These implications and recommendations may help stakeholders design initiatives, tools, and actions to encourage effective collaboration in mainstream schools in Riyadh, Saudi Arabia.

The findings of this study suggest areas that need improvement in order to improve teachers' collaboration in Saudi Arabia. Both general and special education teachers recognized the lack of policy as an issue. They stated that specific policy for collaboration would make a difference in collaborative practice within schools. However, given that some of the teachers had negative attitudes towards collaboration, there is a question as to how much of an impact a policy on collaboration would have in their practice within schools.

Thus, the Saudi Ministry of Education (MOE) might consider developing a clear, specific policy on collaboration. Such a policy could highlight the importance of collaboration and clarify teachers' roles in the collaborative process; this would expand collaboration in Saudi Arabia beyond the casual, informal collaboration that currently

occurs when it is needed. It was clear in both phases of this study that teacher collaboration in mainstream primary schools in Riyadh is limited. It is recommended that the MOE create a new policy on collaboration or include it in the Saudi Regulations of Special Education Programs and Institutes (RSEP) policy. The rationale behind this is that collaboration can improve educational outcomes for students with LD, and provide a more inclusive environment for students with LD to learn in. In addition, this may help them to feel more equal with their peers in mainstream schools. It would also help both types of teachers to share the role of meeting the needs of students with LD, if their roles and responsibilities were defined in this policy with regard to collaboration. Finally, the inclusion of collaboration in this policy would strengthen their skills and knowledge early on in their pre-service training.

In the second phase of this research, both types of teachers mentioned a lack of time as a factor limiting collaboration. They gave specific reasons, such as large workloads that force both types of teachers to focus on their teaching. Schools as organisations and the leaders who make administrative decisions must take this issue seriously. School principals can promote collaboration by organising schedules and protecting the time teachers need to collaborate. This may be the strongest mechanism to improve students with LD in mainstream schools so that can experience high levels of success

The second phase also demonstrated limitations in teachers' knowledge on collaboration. The MOE could include a module on collaboration at the university level, which would increase teachers' knowledge and understanding of collaboration. These programmes could also emphasise the value of collaboration in mainstream schools. Collaboration needs to be clearly defined at the policy level, providing further guidance on what is meant by this concept and what the roles of teachers are. At the school

level, the activities that are involved in collaboration need to be defined so that teachers can operationalise the concept.

GE and SE teachers can better understand how to collaborate if their university instructors train them in collaborative skills through modelling and direct instruction (Hobbs & Westling, 2002; Kilgore & Griffin, 2003). School leaders and teachers need the skills and knowledge to work collaboratively, as well as an understanding of how to do so. Collaboration involves accepting differing viewpoints, negotiating, and solving conflicts.

At the college and university level, instructors could model co-teaching and collaboration in undergraduate and graduate courses. Many teachers mentioned that all types of teachers need to learn together from the start, meaning this should begin during their time at university. Universities could consider running modules whereby students training to be GE or SE teachers could be given the opportunity to work together.

In order to standardise collaborative skills, it could be considered that administrators and school principals should take courses to improve their competency in collaboration skills. In addition, it is crucial to implement creating collaborative cultures in schools. Teachers and school principals and administrators must understand the nature of collaboration, as well as how to model and teach collaborative skills to staff members. As DuFour (2010) argues, collaborative skills are an essential element of professional practice (p. 15).

This study has potential implications for the new Vision 2030 in Saudi Arabia, as it identifies limitations to collaborative practice in mainstream schools. Two main factors are the absence of a policy on collaboration and of teacher training for

collaboration, as mentioned above. There is a clear sense that underpinning future policy may help the collaboration between GE and SE teachers through this study.

7.4 Further Research

This study might establish the groundwork for more thorough and continuing study of collaboration by GE and SE teachers in mainstream primary schools in the same context and wider contexts. The findings of this study suggest that there is a need for more research on the numerous factors that influence teachers' collaboration in the Saudi context. Specific areas for further research are described in the following paragraphs.

More research could be carried out to explore how school principals perceive, engage in, and support collaboration. An examination of positive, sustained co-teaching partnerships and collaborations at all levels of schooling might help both practitioners and researchers understand and promote collaboration in public schools. Therefore, future studies should investigate school principals' perspectives on, experiences with, and beliefs about collaboration in Saudi mainstream primary schools. It is important to consider their perspectives and address their needs and concerns as well.

Although there is broad agreement on the indirect link between teacher collaboration and improved student outcomes (DuFour, Eaker, & DuFour, 2005; Friend & Cook, 2003; Fullan, 2001; Goddard, Goddard, & Tschannen, 2007; Marzano, 2003; Skrtic, 1991), more evaluative research on this topic may help to create a clearer picture of the relationship between collaboration and the achievement and confidence of students with LD. In addition, the effects of collaboration on other SEN students is needed to consider whether collaborative practice may be particular to students with LD, rather than other SEN categories. More research is also needed on how teachers

experience collaboration in order to promote effective ways to nurture and support high levels of collaborative work in schools (Keefe & Moore, 2004; Mastropieri & Scruggs, 2001).

The current study only examined female Saudi teachers in Riyadh city. Further research should include samples of both types of teachers, as well as male teachers, in other Saudi cities and towns. Other studies might yield interesting findings regarding the differences and similarities between teachers' perspectives of and experiences with collaboration in different Saudi cities. It might also help identify other teacher needs that the Saudi authorities should take into consideration. In addition, this study was conducted in public mainstream primary schools. Such a study might reveal different perspectives on collaboration. If there are differences between the views of teachers in public and private mainstream schools, this could lead to important insights that could be used to encourage collaboration. In addition to participants' views, such a study could also examine the actual practice of collaboration by observing collaborative relationships and how they function during teaching.

This study focused on the perspectives and experiences of GE and SE teachers. However, only examining one side of the story (teachers' perspectives) may be insufficient. Further research could include the views of the children themselves (students with LD) about their teachers' collaboration. Examining the lived experience of students rather than those of adults (e.g., teachers) regarding teacher collaboration may also lead to important insights on collaboration in mainstream schools. In addition, research focusing on SEN would be a useful comparison to examine any differences or similarities experienced around collaboration.

A comparative study of collaboration and co-teaching in Saudi Arabia and a country with a more established tradition of teacher collaboration would be highly

recommended, for example the USA. The findings of such a study could be used to improve current collaborative practices in Saudi Arabia. This kind of comparison would highlight the structural gaps in Saudi teacher collaboration and would allow Saudi Arabia to learn from the other country's successes.

Although this study helps fill some gaps in the Saudi literature, more research about collaboration from the perspective of both type of teachers may be required. This topic is complex and overlaps with many aspects of the education system, and additional research could support the Saudi educational community by encouraging the development of collaboration.

7.5 Strengths and Limitations

As described earlier in this chapter, this study contributes to existing knowledge by addressing some gaps in the literature; it also offers important methodological contribution to the field of special education on the topic of teacher collaboration. In addition, the study had a relatively large sample size for the first phase of the study which is useful to draw some meaningful conclusions. The study also used an established tool, adapted and tested its validity and reliability in Arabic making it applicable for Arabic speaking countries. An additional methodological contribution to the study was the mixed methods design, providing further insight into the perceptions and practice of collaboration using the qualitative design. Although there are multiple strengths to this study, there are some limitations and challenges which should be acknowledged.

This study aimed to obtain deeper insights into collaboration among GE and SE teachers in mainstream Saudi primary schools. However, this study did not aim for generalisation for two reasons. First, pragmatic research focuses on what works in practice, and this often changes over time. That is, what works now may not work in

the future. Second, it may not be possible to generalise the qualitative results obtained in the second phase of this study because of the limited number of respondents. However, as mentioned in the methodology chapter, the findings may offer transferability to the same context or a context with similar norms and policies. In this case, all mainstream schools in Saudi Arabia are governed by the Ministry of Education. Therefore, they follow comparable educational rules, so some results could be generalised to other mainstream schools in Saudi Arabia.

Specifically, teachers in other mainstream schools in Saudi Arabia (not only in Riyadh) might face some of the same factors limiting collaboration. However, other factors influence their collaboration and shape their experiences as well. Thus, the findings of similar studies in different cities could vary considerably depending on the sociodemographic of the schools involved (e.g., rurality, economic status of school).

In addition, this study only examines the perspectives of SE and GE teachers in mainstream primary schools for girls in Riyadh city, which although is a strength in the study it also poses a limitation. It would be valuable to include the perspectives of other stakeholders (e.g., school principals) as well. Including more stakeholders would likely provide a better understanding of the phenomenon of collaboration and would have allowed a more in-depth exploration of the different groups.

Furthermore, the educational system in Saudi Arabia separates schools by gender, so the author was unable to extend this study to boy's mainstream primary schools in Riyadh.

Another limitation of this study is methodological. The first phase of the study involved an online questionnaire. The sample size in this study was sufficiently large enough to establish an understanding of the beliefs and practice of collaboration.

However, there was some missing data in the questionnaires which needs to be acknowledged when considering the results.

In addition, limitations imposed by the language used in the questionnaire must be considered. The questionnaire used in this study was translated from English to Arabic, so it is possible that some words and/or notions may have been difficult to translate. Furthermore, the online questionnaire was self-reported, as described in the methodology chapter. While the instructions for the questionnaire highlighted the importance of responding honestly there is still a possibility that the participants may not have been completely truthful when filling in the questionnaire.

The second phase of the study experienced some methodological challenge. Scheduling interviews with the teachers within the time limit for this study required much time and effort. In addition, some teachers refused to be interviewed after initially agreeing to it in the online survey. Perhaps these teachers were worried about expressing their views and perceptions in a paper which might be read by the Saudi authorities. Thus, those who took part in the interviews may not be a representative sample of the GE and SE teachers in the area.

7.6 Concluding Remarks

This study has explored SE and GE teachers' perceptions of and beliefs about collaboration in mainstream primary schools, as well as teachers' views regarding the importance of collaboration. This study provided extensive data on the perspectives of SE and GE teachers in mainstream primary schools in Riyadh on teacher collaboration. It included many details of teachers' experiences of collaboration, factors they thought limited their collaboration, and their needs regarding collaboration.

The findings of this study showed that there is a strong belief from both teachers about the importance of collaboration for students with LD. On the other hand, there is a lack of collaboration in primary mainstream school in Riyadh. Some SE and GE teachers believed that collaboration is important, especially in mainstream schools. Most teachers identified the importance of collaboration in helping students with LDs to improve their academic achievement and increase their motivation to learn in mainstream classrooms alongside their peers. Likewise, some teachers claimed that collaboration helped not only the students, but also both types of teachers, because collaboration facilitated their work and helped to support student with LDs.

On the other hand, not all the SE and GE teachers in this study had positive beliefs about the importance of collaboration, and some also held negative views toward it. Furthermore, most participants of both types indicated that collaboration was virtually non-existent in their schools and that there were no clear guidance regarding collaboration. This study has identified constraints underpinning the lack of collaboration between GE and SE teachers in mainstream Saudi schools. A lack of collaboration could mean that both types of teachers are unable to support students with LDs in mainstream schools.

This study concludes that there is a lack of collaboration between teachers in mainstream schools in Riyadh. In light of the Ministry of Education's Vision 2030, these findings should be taken into consideration to improve support services that enhance collaborative practices. This could provide both types of teachers with a clearer framework for their collaborative relationships. In addition, it could be suggested that teachers be allocated extra time in the curriculum for mutual planning, offering training on collaboration and preparing teachers to collaborate and familiarise themselves with the concepts and mechanics of collaboration.

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Appendix One: Ethics and Consent Forms

Ref (for office use only)

D/17/18/34

COLLEGE OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

When completing this form please remember that the purpose of the document is to clearly explain the ethical considerations of the research being undertaken. As a generic form it has been constructed to cover a wide-range of different projects so some sections may not seem relevant to you. Please include the information which addresses any ethical considerations for your particular project which will be needed by the SSIS Ethics Committee to approve your proposal. In completing this form please make full use of the guidance and resources available at **http://intranet.exeter.ac.uk/socialsciences/ethics/**

All staff and students within SSIS should use this form to apply for ethical approval and then send it to one of the following email addresses:

ssis-ethics@exeter.ac.uk This email should be used by staff and students in Egenis, the Institute for Arab and Islamic Studies, Law, Politics, the Strategy & Security Institute, and Sociology, Philosophy, Anthropology.

ssis-gseethics@exeter.ac.uk This email should be used by staff and students in the Graduate School of Education.

Applicant details	
Name	**Hind Nasser Almutairi**
Department	**Graduate School of Education**
UoE email address	**Ha349 @ exeter.ac.uk**

Duration for which permission is required		
You should request approval for the entire period of your research activity. The start date should be at least one month from the date that you submit this form. Students should use the anticipated date of completion of their course as the end date of their work. Please note that retrospective ethical approval will never be given.		
Start date:15/5/2018	**End date:30/10/2019**	**Date submitted:28/03/2018**

Students only	
All students must discuss their research intentions with their supervisor/tutor prior to submitting an application for ethical approval. The discussion may be face to face or via email. Prior to submitting your application in its final form to the SSIS Ethics Committee it should be approved by your first and second supervisor / dissertation supervisor/tutor. You should submit evidence of their approval with your application, e.g. a copy of their email approval.	
Student number	**650050322**
Programme of study	Special Needs and Inclusive Education - Doctor of Education
Name of Supervisor(s)/tutors or Dissertation Tutor	**Dr. Alison Black** **Dr. Darren Moore**
Have you attended any ethics training that is available to students?	Yes, I have taken part in ethics training at the University of Exeter For example: 1) the Research Integrity Ethics and Governance workshop: http://as.exeter.ac.uk/rdp/postgraduateresearchers 2) Ethics training received on master's courses.

	3)I have had ethical approval from Exeter for the EDD modules where I had to complete a mini research project. 4)I have completed the online course and ethics exam in ELE

Certification for all submissions

I hereby certify that I will abide by the details given in this application and that I undertake in my research to respect the dignity and privacy of those participating in this research. I confirm that if my research plans change I will contact the Committee before research takes place and submit a request for amendment or, if necessary, complete a further ethics proposal form. I confirm that any that document translations have been done by a competent person with no significant changes to the original meaning.

Hind Nasser Almutairi

Double click this box to confirm certification ☒

Submission of this ethics proposal form confirms your acceptance of the above.

TITLE OF YOUR PROJECT

Perspectives of Female Special Education and General Teachers Who Work with Students with Learning Difficulties Regarding Their Collaboration in Mainstream Primary Schools in Riyadh, Kingdom of Saudi Arabia (KSA)

ETHICAL REVIEW BY AN EXTERNAL COMMITTEE

No, my research is not funded by, or doesn't use data from, either the NHS or Ministry of Defence

MENTAL CAPACITY ACT 2005

No, my project does not involve participants aged 16 or over who are unable to give informed consent (e.g. people with learning disabilities.

SYNOPSIS OF THE RESEARCH PROJECT

Maximum of 750 words.

The concept of collaboration between special education and general teachers has been promoted in developed countries. For instance, in the US, most general and special education legislation emphasises collaboration between special education and general teachers. In addition, according to Gamm and Hehir (1999), policies and legislation responsible for promoting changes and upholding equity in public education necessitate teacher collaboration. Moreover, as stated by Skrtic (1991), it is important that teachers and other professionals work in collaborative teams and to be change leaders, problem solvers and makers of new knowledge.

A close look at the literature on collaboration confirms that the adoption of collaboration between teachers can accelerate student attainment for both special and general education students. Nevertheless, little research has been conducted on the efficiency of collaboration, the way teachers deal with collaboration, their responses to the type of collaborative practices used and the collaborative rapport between special education and general education teachers (Brownell et al., 2006; Arthaud et al., 2007; Popp & Gerber, 2000).

While there seems to be a large body of research focusing on the positive impacts of collaborative practices, few studies have conducted in-depth, mixed methods research on special and general education teachers' perspectives and the perceived actual circumstances of collaboration that take place in schools (Arthaud et al., 2007). In the existing literature on teacher collaboration, little attention has been given to student teachers', beginning teachers' or veteran teachers' views of collaborative practices in the workplace (De Lima, 2003).

This study will explore how Saudi female general and special education teachers who work with students with learning difficulties perceive collaboration in primary mainstream schools in Riyadh, Saudi Arabia. With respect to gender, the study will focus on female teachers in the same mainstream school due to gender segregation in Saudi Arabia.

A mixed-method design has been adopted to collect survey and interview data and employ quantitative and qualitative analysis techniques. Applying these techniques provides an opportunity to obtain information about the teachers' knowledge, beliefs, and perceptions towards collaboration in mainstream schools. The main questions of this study will be:

Q1- Is there a difference in the personal beliefs and perceived actual circumstances relative to collaboration and collaborative relationships for female general education teachers and special education teachers who work with students with learning difficulties in mainstream elementary schools in Riyadh in Saudi Arabia?

Q2-What is the concept of collaboration among female special education and general primary school teachers and what is the role of each of them in this collaboration?

Q3- how do these female special education and general teachers perceive their collaboration in mainstream elementary schools?

Q4-What are female general teachers' and special needs teachers' attitudes towards collaboration in the primary mainstream school?

Q5-What are the experiences and concerns of Saudi primary teachers regarding collaboration?

Q6-What factors affect the collaboration between the special and general teachers?

To answer these questions, the study will be carried out through a mixed methods design (exploratory sequential design). In the first phase, a questionnaire, yielding quantitative data, will be used to provide a broad and general picture about the perspective of teachers regarding collaboration. In the second phase, semi-structured interviews, yielding qualitative data, will be used to gain a deeper understanding and gather more specific and in-depth data regarding the collaboration from teacher' point of views.

INTERNATIONAL RESEARCH

This study will be conducted in Saudi Arabia, specifically in primary mainstream female schools in Riyadh. In order to conduct the study, I will be submitting a request to the Ministry of Education in Saudi Arabia which is required before collecting the data. Once their approval to carry out the study is received, I will approach the principals of all Primary mainstream schools with female teachers in Riyadh informing them about the approval and asking them to facilitate the study. All ethical aspects applied at the University of Exeter will be considered carefully during the research stages.

The following sections require an assessment of possible ethical consideration in your research project. If particular sections do not seem relevant to your project please indicate this and clarify why.

RESEARCH METHODS

Mixed methods will be used to conduct this study.

Questionnaire: A questionnaire for both general and special education teachers who work with students with learning difficulties designed for the purpose of this study will be used to collect quantitative data from the participants. This questionnaire will be adapted from Leonard (2001), with the addition and deletion of some questions to fit the purpose of the study and the Saudi context. Likewise, after a pilot study

some items may be amended or deleted. The questionnaire aims to give a broad picture regarding collaboration between teachers in the Saudi context and identify issues that need to be studied in more depth through the interviews. Collecting quantitative data from a large sample (100+ responses) of the participants in mainstream schools in Riyadh using teachers' questionnaire as the first phase of the study. The questionnaire will be electronic (SurveyMonkey) and will take only 10 minutes to complete. The existing scale (Leonard ,2001) to be used consisted of 32 items, 19 of which used a Likert-type response format ranging from 1 = strongly disagree to 5 = strongly agree, with the remaining items addressing teacher collaborative activities, their definitions of collaboration, short-answer questions, and demographic information.

Interviews: Semi-structured interviews will be used in this study in order to obtain qualitative data (from a smaller number of the participants who will be chosen from those who indicate in the questionnaire that they would like to participate in the interviews) which will provide me with valuable information about perspectives of female general and special education teachers who work with students with learning difficulties about their collaboration in mainstream schools in Saudi Arabia. Adopting semi-structured interviews to collect qualitative data will enable me to probe for further detailed information and allow the participants to express their own views freely and in more in-depth. The interview will be conducted in the primary mainstream school's teachers work in. I will contact teachers, provide information about the research project and arrange the time of interview and a quiet space for the interview. I will inform teachers that the interview will be around 45 minutes in length and ask permission to record audio. Confidentiality and anonymity will be applied, and participants will have the right to withdraw at any stage without giving any reason.

PARTICIPANTS

In this study, two types of sampling will be undertaken: firstly, I will write to all principals of female primary schools in Riyadh (178 schools) introducing the project using the information sheet provided with this ethics form and asking them to send the link to the questionnaire to relevant staff – special and mainstream teachers who work with students with learning difficulties. I hope this will lead to 100 responses. This sampling will be used for the first phase of data collection, which is the quantitative questionnaire. The second

sampling method is purposive sampling, which will provide the qualitative data for the study by applying semi-structured interview. From this sample, 8-10 teachers will be chosen purposively (a minimum of 4 general teachers and 4 special teachers) from those who indicate in the questionnaire that they would like to participate in the interviews. I will choose the teachers using their questionnaire responses to ensure diversity in their demographic background and responses regarding collaboration.

THE VOLUNTARY NATURE OF PARTICIPATION

The participants will be both special and general teachers who will be informed clearly that their participation is optional. This will be mentioned in the first page of the questionnaire. The questionnaire will be send to primary mainstream schools in Riyadh. This questionnaire will be sent online via the schools' principals to all special and general teachers who work with students with learning difficulties. I will also mention to principals that the questionnaire is optional for teachers, so there is no pressure for teachers to complete the questionnaire.

The interview sample will be chosen from the questionnaire participants who indicate that they would like to participate in the interviews (they will be asked to provide name and contact number if they are willing to be interviewed) and are thus indicating voluntary participation. I will check again that they wish to volunteer when I contact them about the interview, as they may have changed their mind. I will make clear that participation in the interview is completely optional and the participants' right to withdraw is maintained throughout.

An information sheet and consent form will also inform participants about the confidentiality and anonymity of their data and their right to withdraw at any stage of the research without giving reasons.

SPECIAL ARRANGEMENTS

There is no need for any special arrangement in this study.

THE INFORMED NATURE OF PARTICIPATION

The information sheet will be sent to primary mainstream schools' principals to inform them about the study. This will be passed along with the link to the questionnaire to general and special teachers who work with students with learning difficulties. The information sheet will provide the purpose of research

and what participants are asked to do in this study. This sheet will also explain the data collection methods and inform participants clearly about their rights such as optional participation, refusing to answer any question, the confidentiality of their data, and right to withdraw at any stage of the study. The information sheet will provide detail about both the questionnaire and the interviews. Questionnaires will be distributed using a link to the Survey Monkey form that principals will send to teachers. The information sheet will also appear on the first page of the questionnaire, as well as the consent form which participants will be asked to respond to indicate their informed consent.

Participation in the questionnaire is optional for teachers. At the end of the electronic questionnaire, participants will be asked about their willingness to participate in the next stage of the study (interview phase). They will be asked to provide their name and phone number if they will consider being interviewed. Consent forms will also be given to teachers who are willing to participate in interviews, which they will sign before beginning interviews. Information sheets and consent forms will be provided in Arabic. Arabic translation of the consent form/information sheet has been carried out by myself and I am adequate proficiency in Arabic and English.

ASSESSMENT OF POSSIBLE HARM

It is not anticipated that there will be harm or stress caused by participation for the participants or the researcher. However, participants may have had negative experiences regarding collaboration that the interview will make them consider. In this case I will remind them about the goal of the research, my interest in learning about their experiences and their right to not answer questions or withdraw their data if they wish.

The rights of the participants such as confidentiality and anonymity of their data and their right to withdraw at any stage of the study without giving reasons will be explained to the participants.

DATA PROTECTION AND STORAGE

The online questionnaire will be sent to the participants through the Survey Monkey website and the account will be secured by an appropriate password. Once I have used the contact details to set up interviews successfully, I will remove contact details from questionnaires, but I will keep them stored securely.

The data will not be shared with any outside parties. The data collected will only be used for the purpose of this study. I will apply full confidentiality and anonymity. The interviews will be recorded digitally, then immediately transferred to the researcher's password-protected lap top and deleted from the recorder. Only I as researcher will have access to the recording. Transcripts which may be shared with my supervisors will be anonymised.

Data will be recorded on a digital audio recorded. The recording will be transferred to a password protected computer as soon as possible and then the data delete from the recorder. No unsecured devices will be used to save data from this study.

The interview participants' names and all participants' information will be kept completely confidential. Interview participants will be given pseudonyms.

All the information and data collected from the participants such as interview transcripts, audio recordings and all computer files will be kept on the university U drive and deleted 12 months after the completion of my thesis. Also, all interview transcripts, audio recordings and all computer files will be kept in a password protected flash memory as back-up which will be kept in locked in a drawer in my office at the University.

DECLARATION OF INTERESTS

There are no interests to declare. This is an independent doctoral study with no funding from any specific parties.

USER ENGAGEMENT AND FEEDBACK

Interview participants will be informed about the findings of the study after the analysis stage if they are interested in receiving this information. The consent form will provide contact details that participants may use to request feedback on the study.

INFORMATION SHEET

The information sheet will be translated into Arabic, which is the participants' first language.

This information sheet is for principals and teachers. This sheet informs them about all aspects of the study as follows:

Perspectives of female special and general teachers who working with students with learning difficulties regarding their collaboration in mainstream primary school in Riyadh Saudi Arabia

Dear/ Principals, Special and general teachers:

My name is Hind Almutairi. I am a doctoral student at the University of Exeter in the United Kingdom. I am conducting a research study on the perspectives of female special and general teachers who work with students with learning difficulties regarding their collaboration in mainstream primary school in Riyadh Saudi Arabia of as part of my doctoral studies. Both special and general education teachers who work with students with learning difficulties are asked to voluntarily participate by completing a questionnaire and around 10 teachers will be invited to participate in interviews on perceptions of collaboration. If teachers participate their names will be kept confidential and all results will be anonymized. The results of the research may be published, but this will not identify any individual participants. Participation will involve filling out a questionnaire online. The purpose of this questionnaire is to gain knowledge about the perspectives of special and general teachers who work with students with learning difficulties regarding collaboration in mainstream primary schools. The questionnaire will take about 10 minutes to complete. Your participation in this study is voluntary.

If you wish to participate in the interviews in the next stage of the study, please provide your name and contact telephone number at the end of the questionnaire. I will ask for your permission to record the interview on an audio recording device. The approximate time of interviews will be 45 minutes. Interviews will be held at a convenient time and location at participants' school in Riyadh.

I very much appreciate your participation in this study. If you have any concerns about the study that you would like to discuss, please do not hesitate to contact me.

The researcher
Hind Almutairi
Email address: ha349@exeter.ac.uk

Alternative contacts:
First supervisor: Dr. Alison Black
Email address: A.E.Black@exeter.ac.uk

Second supervisor: Dr. Darren Moore
Email address: D.Moore@exeter.ac.uk

CONSENT FORM

Consent forms will form part of the first page of the questionnaire, with a question for participants to confirm their consent. Consent forms will also be provided, and signatures acquired for the interview part of the research. The consent form is attached with this application.

SUBMISSION PROCEDURE

Staff and students should follow the procedure below.

Post Graduate Taught Students (Graduate School of Education): Please submit your completed application to your first supervisor. Please see the submission flowchart for further information on the process.

All other students should discuss their application with their supervisor(s) / dissertation tutor / tutor and gain their approval prior to submission. Students should submit evidence of approval with their application, e.g. a copy of the supervisors email approval.

All staff should submit their application to the appropriate email address below.

This application form and examples of your consent form, information sheet and translations of any documents which are not written in English should be submitted by email to the SSIS Ethics Secretary via one of the following email addresses:

ssis-ethics@exeter.ac.uk This email should be used by staff and students in Egenis, the Institute for Arab and Islamic Studies, Law, Politics, the Strategy & Security Institute, and Sociology, Philosophy, Anthropology.

ssis-gseethics@exeter.ac.uk This email should be used by staff and students in the Graduate School of Education.

Please note that applicants will be required to submit a new application if ethics approval has not been granted within 1 year of first submission.

UNIVERSITY OF EXETER

GRADUATE SCHOOL OF EDUCATION

St Luke's Campus
Heavitree Road
Exeter UK EX1 2LU

http://socialsciences.exeter.ac.uk/education/

CERTIFICATE OF ETHICAL APPROVAL

Title of Project: Perspectives of Female Special Education and General Teachers Who Work with Students with Learning Difficulties Regarding Their Collaboration in Mainstream Primary Schools in Riyadh, Kingdom of Saudi Arabia (KSA)

Researcher(s) name: Hind Nasser Almutairi

Supervisor(s): Dr Alison Black
Dr Darren Moore

This project has been approved for the period

From: 15/05/2018
To: 30/10/2019

Ethics Committee approval reference: D/17/18/34

Signature: Date: 03/04/2018
(Dr Christopher Boyle, Graduate School of Education Ethics Officer)

CONSENT FORM

Perspectives of female Special Education and General Teachers Regarding Their Collaboration in Mainstream Primary Schools in Riyadh, Kingdom of Saudi Arabia (KSA)

I have been fully informed about the aims and purposes of the project. I understand that:

1- There is no compulsion for me to participate in this research project.
2- If I do choose to participate, I may at any stage withdraw my participation and may also request that my data be destroyed.
3- I have the right to refuse permission for the publication of any information about me.
4- Any information which I give will be used solely for the purposes of this research project, which may include publications or academic conference or seminar presentations.
5- All information I give will be treated as confidential.
6- The researcher will make every effort to preserve my anonymity.

.....……..
.....

(Signature of participant) (Date)

…….

(Printed name of participant)

For further information or inquiries, contact me at:

Hind Almutairi

Ha349@exeter.ac.uk

Or contact my supervisors

First supervisor: Dr. Alison Black

Email address: A.E.Black@exeter.ac.uk

Second supervisor: Dr. Darren Moore

Email address: D.Moore@exeter.ac.uk

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

Name: Hind Almutairi

I confirm that I have adequate proficiency in Arabic and English, and that the Arabic versions of the information sheets and consent forms are faithful translations of their corresponding English forms.

Signed:

Date:23/3/2018

Appendix Two: Saudi Cultural Bureau permission

ROYAL EMBASSY OF SAUDI ARABIA
CULTURAL BUREAU
LONDON

سفارة المملكة العربية السعودية
الملحقية الثقافية
لندن

التاريخ : 1439/07/26هـ

إفـــادة

تفيد الملحقية الثقافية بسفارة المملكة العربية السعودية لدى المملكة المتحدة بأن / هند ناصر هزاع المطيري (سجل مدني رقم 1069104782)، مبتعثة من قـبل جامعة الأميرة نورة بنت عبدالرحمن اعتباراً من 1437/03/17هـ وحتى 1441/05/01هـ لدراسة الدكتوراه بجامعة Exeter بتخصص Special Needs & Inclusive Education.

وقد منحت هذه الإفـادة بناء على طلبها لتقديمها الى من يهمه الامر دون أدنى مسؤولية على الملحقية الثقافية.

والله ولي التوفيق،،،

الملحق الثقافي بسفارة
المملكة العربية السعودية لدى المملكة المتحدة
د. عبدالعزيز بن علي المقوشي

الرقم: ..... التاريخ: ..... الموافق: ..... المرفقات: .....
630 Chiswick High Road, London W4 5RY Tel: +44 (0) 20 3249 7000 Fax: +44 (0) 20 3249 7001 E-mail: sacbuk@uksacb.org
www.uksacb.org

Appendix Three: Arabic Consent Form

عنوان البحث: تصوركلا من معلمة التربية الخاصة والمعلمة العامة عن التعاون بينهما في فصول الدمج في المدارس السعودية

استمارة الموافقة:

.لقد علم تام بشأن أهداف وأغراض المشروع

ليس هناك إكراه بالنسبة لي للمشاركة في هذا المشروع البحثي، وإذا كنت قد اخترت لمشاركة، لي في أي مرحلة سحب مشاركتي ولي أن أطلب أيضا أن يتم تدمير البيانات الخاصة بي

لدي الحق في رفض الإذن لنشر أية معلومات عني

أي معلومات أعطي سوف تستخدم فقط لأغراض هذا المشروع البحثي، والتي قد تشمل المنشورات أو مؤتمر أكاديمي أو العروض ندوة.

من الممكن مشاركة المعلومات التي أقدمها من

.سيتم التعامل مع كل المعلومات التي أقدمها على أنها سرية

.فإن الباحث سيبذل كل جهد ممكن للحفاظ على هويتي وعدم الكشف عنها

....

(توقيع مشارك) (التاريخ)

.....

(اسم المشارك)

سيتم الاحتفاظ نسخة واحدة من هذا النموذج من قبل المشاركين. سيتم الاحتفاظ نسخة ثانية من قبل الباحث (ق)

هند المطيري

Ha349@exeter.ac.uk

او الاتصال بالمشرفين

بلاك اليسون A.E.Black@exeter.ac.uk

دارن مور D.Moore@exeter.ac.uk

قانون حماية البيانات: جامعة إكستر هو جمع البيانات وتسجيلها مع مكتب مفوض حماية البيانات كما هو مطلوب القيام به بموجب قانون حماية البيانات لعام 1998. وسيتم استخدام المعلومات التي تقدمها للأغراض البحثية وسيتم معالجتها وفقا مع تسجيل للجامعة والتشريعات الحالية لحماية البيانات. ستكون البيانات السرية للباحث (ق) ولن يتم الكشف عنها لأي طرف ثالث غير مصرح بها دون مزيد من الاتفاقية من قبل المشاركين. سوف تكون التقارير استنادا إلى البيانات في شكل مجهول المصدر.

Appendix Four: participant information sheet (Arabic)

(Information sheet)معلومات عن الدراسة

راي معلمات التربية الخاصة والمعلمات العاديات حول التعاون بينهم في مدارس الدمج

عزيزاتي مديرات المدارس, معلمات التربية الخاصة والمعلمات العامات:

اسمي هند المطيري. أنا طالب دكتوراه في جامعة إكستر في المملكة المتحدة. أقوم بإجراء هذه الدراسة لوجهات النظر الخاصة بالمعلمات الخاصات والمعلمات العامات فيما يتعلق بتعاونهم في المدرسة الإبتدائية الرئيسية في الرياض المملكة العربية السعودية كجزء من دراسات الدكتوراه. الهدف من الدراسة هو استكشاف كيفية فهم معلمي التربية الخاصة والعامة لتعاونهم في المدارس الابتدائية الرئيسية في المملكة العربية السعودية. يُطلب من معلمي التربية الخاصة والتعليم العام المشاركة طوعًا من خلال المشاركة في الاستبيانات والمقابلات حول تصورات تعاون المعلمين. سيتم الحفاظ على سرية أسماءك وستكون جميع النتائج مجهولة المصدر. قد يتم نشر نتائج البحث ، ولكن لن يتم استخدام الأسماء الخاصة بك. سوف تشمل مشاركتك ملء استبيان على الإنترنت. الغرض من هذا الاستبيان هو اكتساب المعرفة حول منظور المعلمين الخاصين والعامة فيما يتعلق بالتعاون في المدرسة الرئيسية الابتدائية. سيستغرق ملء الاستبيان حوالي 10 دقائق. مشاركتك فى هذا البحث مخير. إذا كنت ترغب في المشاركة ، يرجى البدء في ملء الاستبيان أدناه.

إذا كنت ترغب في المشاركة في المقابلات في المرحلة التالية من الدراسة ، فيرجى توضيح أنه في نهاية الاستبيان. سأطلب إذنك لتسجيل المقابلة على جهاز تسجيل صوتي. سيكون الوقت التقريبي للمقابلات 45 دقيقة. ستعقد المقابلات في إحدى الغرف الخاصة في المدرسة الرئيسية في الرياض.

أنا أقدر بشدة مشاركتك في هذه الدراسة. إذا كانت لديك أية مخاوف بشأن الدراسة التي ترغب في مناقشتها ، فيرجى عدم التردد في الاتصال بي.

هند المطيري

التلفون: UK 00447402159177… Saudi 00966557777939

الايميل: ha349@exeter.ac.uk

المشرفين:

المشرف الاول: Dr. Alison Black

الايميل: A.E.Black@exeter.ac.uk

المشرف الثاني: Dr. Darren Moore

الايميل: D.Moore@exeter.ac.uk

Appendix Five Teacher Survey (English)

Collaborative Practices Leonard & Leonard (2001)

This questionnaire is intended for special education and general teachers who work with students with learning difficulties in female primary mainstream schools in Riyadh in Saudi Arabia.

PART one: Please respond to the following questions.

1. Are you a:

   special education teacher for students with learning difficulties____

   general education teacher who has student/s with learning difficulties in the classroom____.

2. Your highest completed level of education:

   Bachelor's Degree ____.

   Master's Degree____.

   PhD's Degree ____.

3. Your number of years teaching experience is:

   1-3 ____

   4-6____

   7-10 ____

   11-19 ___

   20+ ___

4. Please indicate the types of collaborative activities involving teachers working together which regularly occur in your school/classroom.

Co-teaching ____

Extracurricular activities ____

Shared decision-making ____

Mentoring ___

Co-planning ____

Sharing ideas____

Joint professional development ___

5. Do you believe that students are likely to do better on standardized tests if their teachers are regularly involved in professional collaboration? Yes____ No____

6. Generally speaking, do you consider that you are more regularly involved in collaborative practices than most of your fellow teachers? Yes____ No____

7.The amount of focused Professional Development you have received in Collaboration/Collaborative Planning is:

10+ hours ____. 6-9 hours ____. Less than 6 ____. none ____.

PART TWO: Please answer the first of each of the following pairs of statements in terms of your personal opinions and the second in terms of the perceived actual circumstances at your school

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	Professional collaboration among special and general education teachers is highly desirable	1	2	3	4	5
	Special and general education teacher work in my school is highly collaborative.	1	2	3	4	5
2.	Schools should be characterized by high levels of participation in decision-making.	1	2	3	4	5
	My school is characterized by high levels of participation in decision-making.	1	2	3	4	5
3.	Special and general education teaching should be more about co-operation and teamwork than about competition and individualism.	1	2	3	4	5
	Special and general education teaching in my school is more about co-operation and teamwork than it is about competition and individualism. L SEP	1	2	3	4	5
4.	Maintaining a trusting and caring relationship is essential to collaborative practice between special and general education teachers.	1	2	3	4	5
	Collaborative practice between special and general education teachers in my school is characterized by trusting and caring relationships among the professional staff.	1	2	3	4	5
5.	Special and general education teachers collaborate better when they genuinely like	1	2	3	4	5

	each other.					
	Special and general education teachers in my school collaborate well because they genuinely like each other.	1	2	3	4	5
6.	Schools function better when special and general education teachers have highly similar values and beliefs.	1	2	3	4	5
	Special and general education teachers in my school hold similar values and beliefs about schooling.	1	2	3	4	5
7.	Diversity of opinion and practice promotes the maintenance of a healthy school organization.	1	2	3	4	5
	Different opinions and practices are encouraged in my school.	1	2	3	4	5
8.	Special and general education teachers need sufficient time to effectively work together professionally.	1	2	3	4	5
	Special and general education teachers in my school have enough time to work together professionally.	1	2	3	4	5
9.	Frequent professional collaboration is an appropriate use of special and general education teachers' time.	1	2	3	4	5
	In my school, professional collaboration is considered to be an appropriate use of special and general education teachers' time.	1	2	3	4	5
10.	Expectations of collaborative practice strongly influence special and general education teachers' use of their time.	1	2	3	4	5
	Special and general education teachers in my school practice collaboration because it is expected of them.	1	2	3	4	5
11.	Effective special and general education teacher collaboration requires sufficient administrative support.	1	2	3	4	5
	There is sufficient administrative support in my school for effective special and general education teacher collaboration.	1	2	3	4	5
12.	Special and general education teachers need to possess special skills to be effective	1	2	3	4	5

	professional collaborators.					
	The special and general education teachers in my school need to learn more about how to be effective professional collaborators.	1	2	3	4	5
13.	Special and general education teachers should be considered co- equals in collaborative interactions.	1	2	3	4	5
	Special and general education teachers are co-equals in collaborative interactions.	1	2	3	4	5
14.	Special and general education teachers should work toward a common goal.	1	2	3	4	5
	Special and general education teachers work toward a common goal.	1	2	3	4	5
15.	Special and general education teachers should collaborate by co-teaching.	1	2	3	4	5
	Special and general education teachers do collaborate by co-teaching.	1	2	3	4	5
16.	Special and general education teachers should co-plan lessons.	1	2	3	4	5
	Special and general education teachers do co-plan lesson.	1	2	3	4	5

Thank You

Appendix Six Teacher Survey (Arabic)

استبيان للمعلمات: الممارسات التعاونية

وُضع هذا الاستبيان لمعلمات التعليم العام ومعلمات ذوي الاحتياجات الخاصة اللاتي يعملن مع طالبات لديهن صعوبات تعلم في مدارس الدمج الابتدائية للبنات في الرياض بالمملكة العربية السعودية.

الجزء الأول:

رجاءً أجب على الأسئلة الآتية:

1. هل أنت:
   - معلمة (ذوي احتياجات الخاصة) لطالبات لديهن صعوبات تعلم _____
   - او معلمة تعليم عام لديك طالبات لديهن صعوبات تعلم في الفصل_____

2. أعلى مستوى تعليمي أكملته:
   - درجة البكالوريوس _____
   - درجةالماجستير _____
   - درجة الدكتوراة _____

3. عدد سنوات الخبرة في التدريس:
   - 3-1 _____
   - 4-6 _____
   - 10-7 _____
   - 19-11 _____
   - أكثر من 20 _____

4. رجاءا وضحي الأنشطة التعاونية التي تجمع المدرسات معا (المعلمة العامة ومعلمة ذوي الاحتياجات الخاصة(صعوبات التعلم) والتي تحدث في مدرستك/فصلك (اختياري)
   - التدريس المشترك داخل الفصل الدراسي_____
   - لأنشطة من خارج المنهج _____
   - اتخاذ القرار بشكل مشترك(فيما يتلعق بالطالبات ذوات صعوبات التعلم) _____
   - التوجيه ومتابعة الطالبات ذوات صعوبات التعلم_____
   - التخطيط المشترك للمواد الدراسية التي سوف تقدم للطالبات ذوات صعوبات التعلم داخل الفصل او في غرفة المصادر_____
   - مشاركة الأفكار والآراء بين معلمة التربية الخاصة و معلمة التعليم العام_____
   - التطوير المهني المشترك ____

5. هل تعتقد أن الطالبات ذوات صعوبات التعلم من الأرجح أن يكونوا أفضل مع استخدام الاختبارات القياسية إذا كان أساتذتهم يشتركون بشكل منتظم في التعاون المهني؟
   نعم_____ لا_____

6. بشكل عام، هل ترى أنك تشترك في الممارسات التعاونية بشكل منتظم أكثر من معظم زملائك من الأساتذة؟
   نعم_____ لا_____

7. مقدار التطوير المهني المركز الذي تلقيته في في العمل التعاوني او التخطيط التعاوني هو:
   أكثر من 10 ساعات _____ 7-9 ساعاتة _____ 4-6 ساعات _____ 1-3 ساعات _____ لا يوجد ____

الجزء الثاني:

رجاءً أجب على كل زوجين من العبارات التالية من حيث رأيك الشخصي ومن حيث الظروف الواقعية المدركة في مدرستك

		أختلف بشدة	أختلف	محايد	أوافق	أوافق بشدة
1-	التعاون المهني بين معلمات التعليم العام ومعلمات ذوي الاحتياجات الخاصة أمر مستحسن جدًا.	1	2	3	4	5
	يعمل معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة في مدرستي بشكل تعاوني للغاية.	1	2	3	4	5
2-	يجب أن تتميز المدارس بمستويات عالية من المشاركة في صنع القرار.	1	2	3	4	5
	تتميز مدرستي بمستويات عالية من المشاركة في صنع القرار.	1	2	3	4	5
3-	ينبغي أن يركزن المعلمات في التعليم العام و ومعلمات ذوي الاحتياجات الخاصة على التعاون والعمل كفريق أكثر من المنافسة والفردية.	1	2	3	4	5
	معلمات التعليم العام ومعلمات ذوي الاحتياجات الخاصة في مدرستي يركز على التعاون والعمل كا فريق أكثر من المنافسة والفردية.	1	2	3	4	5
4-	بناء علاقة من الثقة والاهتمام أمر جوهري في الممارسة التعاونية بين مدرسات التعليم العام ومعلمات ذوي الاحتياجات الخاصة.	1	2	3	4	5
	تتميز الممارسة التعاونية بين مدرسات التعليم العام ومعلمات ذوي الاحتياجات الخاصة في مدرستي بأنها قايمة على علاقات من الثقة والاهتمام تجمع الفريق المهني.	1	2	3	4	5
5-	يتعاون معلمات التعليم العام و ذوي الاحتياجات الخاصة بشكل أفضل عندما يتفاهمون مع بعضهم البعض.	1	2	3	4	5
	يتعاون معلمات التعليم العام ومعلمات ذوي الاحتاجات الخاصة في مدرستي بشكل جيد لأنهم متفاهمين مع بعضهم بشكل حقيقي.	1	2	3	4	5
6-	تؤدي المدارس دورها بشكل أفضل عندما تتمتع معلمات التعليم العام ومعلمات ذوي الاحتياجات الخاصة بقيم ومعتقدات شديدة التشابه.	1	2	3	4	5
	تتمتع معلمات التعليم العام ومعلمات ذوي الاحتياجات الخاصة في مدرستي بقيم ومعتقدات متشابهة حول التعليم.	1	2	3	4	5
7-	يشجع تنوع الآراء والممارسات على الحفاظ على منظمة مدرسية متماسكة وقوية.	1	2	3	4	5
	تلقى الآراء والممارسات المختلفة التشجيع في مدرستي.	1	2	3	4	5
8-	معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة بحاجة لوقت كافٍ حتى يعملوا معًا بكفاءة على الصعيد المهني.	1	2	3	4	5

	معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة في مدرستي لديهم وقت كافٍ حتى يعملوا معًا على الصعيد المهني.	1	2	3	4	5
9-	يعد التعاون المهني المتكرر استخدامًا مناسبًا لوقت معلمات التعليم العام ومعلمات ذوي الاحتياجات الخاصة.	1	2	3	4	5
	في مدرستي ، يعتبر التعاون المهني استخدامًا مناسبًا لوقت معلمات التعليم العام ومعلمات ذوي الاحتيادات الخاصة.	1	2	3	4	5
10-	تتوقع معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة ان التعاون بينهم سوف يوثرعلى وقتهم الخاص .	1	2	3	4	5
	تمارس معلمات التعليم العام ومعلمات ذوي الاحتياجات الخاصة في مدرستي التعاون لأن هذا متوقع منهم.	1	2	3	4	5
11	يتطلب التعاون الجاد لمعلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة دعمًا إداريًا كافيًا.	1	2	3	4	5
	هناك دعم إداري كافٍ في مدرستي لتمكين التعاون الجاد لمعلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة.	1	2	3	4	5
12	معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة بحاجة لمهارات معينة حتى يحققوا التعاون الجاد على المستوى المهني.	1	2	3	4	5
	معلمات التعليم العام ومعلمات ذوي الاحتياجات الخاصة في مدرستي بحاجة لأن يعرفوا المزيد عن كيفية تحقيق التعاون الجاد على المستوى المهني.	1	2	3	4	5
13	ينبغي ان تكون معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة متساويات في تقديم المشاركات التعاونية .	1	2	3	4	5
	معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة متساويات في المشاركات التعاونية في مدرستي.	1	2	3	4	5
14	ينبغي أن تعمل معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة نحو هدف مشترك.	1	2	3	4	5
	يعمل معلمات التعليم العام والخاص نحو هدف مشترك في مدرستي .	1	2	3	4	5
15	ينبغي أن يتعاون معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة عن طريق التدريس المشترك داخل الفصل العادي.	1	2	3	4	5
	تتعاون معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة عن طريق التدريس المشترك داخل الفصل العادي في مدرستي .	1	2	3	4	5
16	ينبغي أن تتعاون معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة في تخطيط او اعداد الدروس.	1	2	3	4	5
	تتعاون معلمات التعليم العام و ومعلمات ذوي الاحتياجات الخاصة في تخطيط او اعداد الدروس في مدرستي.	1	2	3	4	5

Appendix Seven: Parametric Tests

T-tests

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
MeanAllQ1s	Equal variances assumed	.021	.885	.566	146	.572	.04330	.07652	-.10793	.19454
	Equal variances not assumed			.568	142.958	.571	.04330	.07619	-.10731	.19391
MeanAllQ2s	Equal variances assumed	.219	.640	2.566	146	.011	.29448	.11475	.06769	.52127
	Equal variances not assumed			2.585	144.051	.011	.29448	.11394	.06927	.51968
MeanPt2Q2s	Equal variances assumed	1.313	.254	1.656	146	.100	.19912	.12026	-.03856	.43679
	Equal variances not assumed			1.644	136.477	.102	.19912	.12111	-.04037	.43860

Double-click to activate

Appendix Eight: Non-Parametric Test

Mann Whitney Test

Hypothesis Test Summary

	N	Test	Sig.	Decision
1	The distribution of MeanPart1Q1s is the same across categories of 1. Are you a: .	Independent-Samples Mann-Whitney U Test	.545	Retain the null hypothesis.
2	The distribution of MeanPart2Q1s is the same across categories of 1. Are you a: .	Independent-Samples Mann-Whitney U Test	.409	Retain the null hypothesis.
3	The distribution of MeanPart3Q1s is the same across categories of 1. Are you a: .	Independent-Samples Mann-Whitney U Test	.637	Retain the null hypothesis.
4	The distribution of MeanPt1Q2s is the same across categories of 1. Are you a: .	Independent-Samples Mann-Whitney U Test	.005	Reject the null hypothesis.
5	The distribution of MeanPt3Q2s is the same across categories of 1. Are you a: .	Independent-Samples Mann-Whitney U Test	.049	Reject the null hypothesis.

Double-click to activate

Asymptotic significances are displayed. The significance level is .05.

Appendix Nine: Interview Questions

Introduction:

1. The interview will be conducted in the primary mainstream school's teachers work in.
2. I will contact teachers, provide information about the research project and arrange the time of interview and a quiet space for the interview.
3. Before I start the interview, I will thank you the teachers for participant in the interview and I will explain for her the aim of this interview.
4. I will inform teacher that the interview will be around 45 to 60 minutes in length and ask permission to record audio.
5. Confidentiality and anonymity will be applied, and participants will have the right to withdraw at any stage without giving any reason.

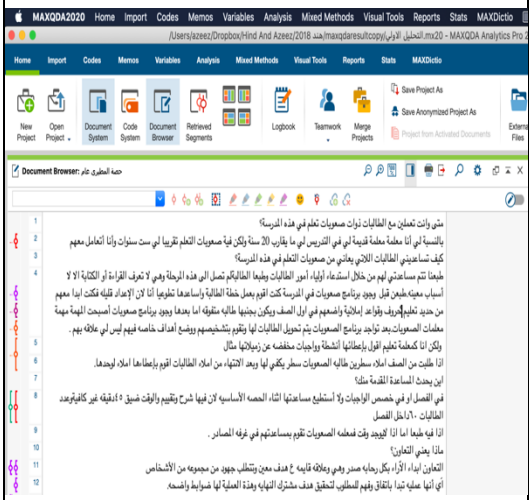
Concepts	Actual Questions
1. Introduction	1. How long have been teaching student s with learning difficulties in this school? 2. How do you assist the learning difficulties students in this school? 3. (Prompts Q**)** Can you explain more? Where does this take place? (Probes Q) Can you give example?
2. Concept of collaboration	1- From your perspective what does the collaboration means? 2- (Prompts Q) Can you explain more? Can you tell me about any times you have collaborated with a colleague to help teach students with LD? 3- (Prompts Q) Can you explain more? 4- From your experience, what collaboration occurs in your school? 5- (Prompts Q) can you describe that for me? What kinds of collaboration? 6- How important do you think collaboration between Special and general teachers is?

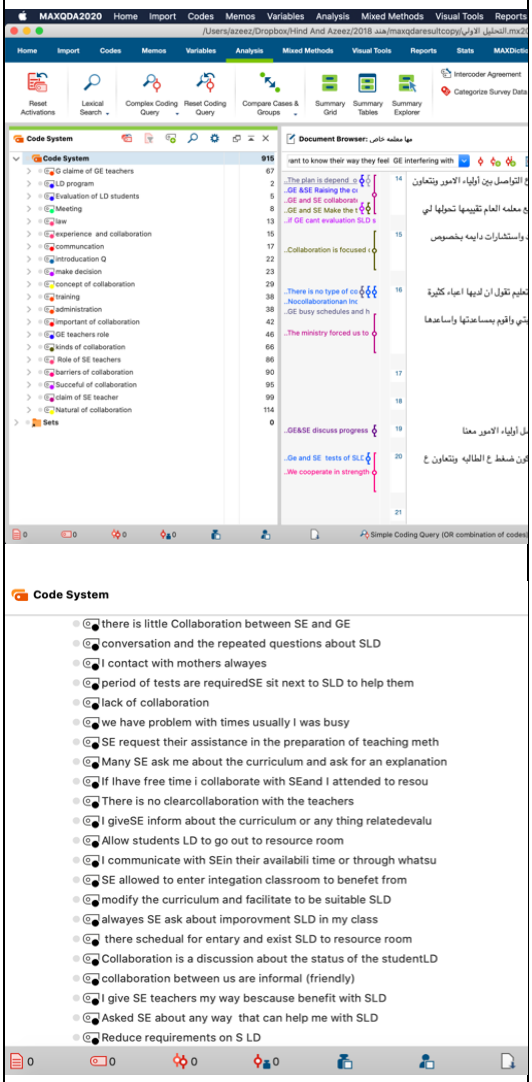
3. Collaboration practice	1. Describe the collaboration that takes place between you and the general education teacher in you school? 2. (Prompts Q) Who decides how and when you collaborate? (Prompts Q) can you explain more? 3. Tell me about your role as special education teacher or general education teachers in collaboration? 4. How often do you collaborate with the general education teacher for students with LD? (Prompts Q) Can you give an example of the last time you collaborated with a general education teacher. 5. In this Cooperative process Who normally makes the final decision regarding student with LD? (Prompts Q) Can you give me an example of a time when you collaborated to make a decision for a student with LD? (Prompts Q) Can you describe a time when it was difficult to make a decision with the general education teacher. 6. Do you think that experience of the teacher may help the teacher to be more collaborative in mainstream school? (Prompts Q) Why is that?
4. Types of collaboration	1- From your experience, do you collaborate in developing lesson plans? 2- (Probe Q If YES) Can you describe your role when you collaborate in lesson planning. (Prompts Q) How are curriculum objectives modified for the special education students? 3- From your experience do you collaborate with general education teachers in the development and review of Individualized Education Plan (IEP) for the learning difficulties student?

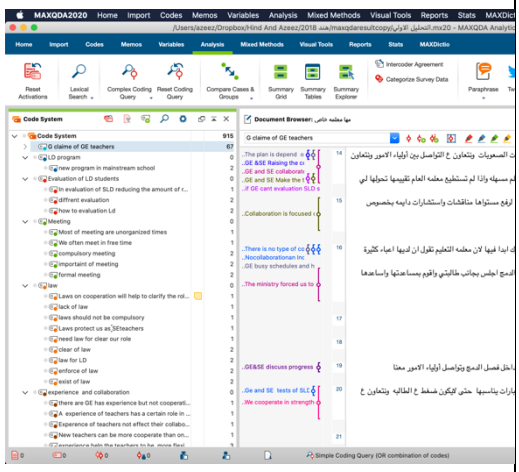
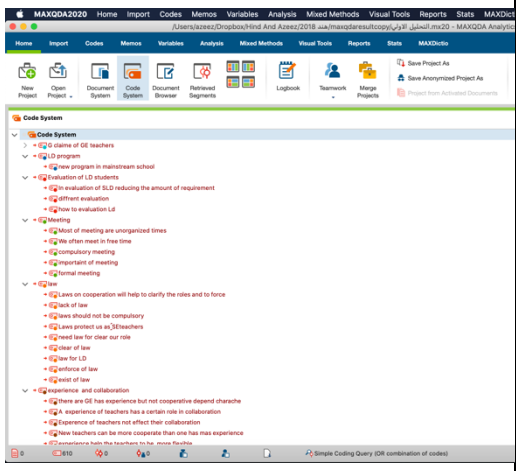
	(Probe Q if YES) Can you describe your role when you collaborate in IEP work. 4- How are resources shared between teachers? (Resources are time, availability, knowledge of a teaching technique or skill). (Probes Q) can you give an example? 7- Prompt Q: What is your role in sharing resources? do other teachers share with you? 8- Do you co-teach with the general education teacher? (Probe if YES): Can you give an example of how you co-teach? Prompt: How do you work with the other teacher? 9- Do you do any of Extracurricular with the general education teacher? (Probe if YES): Can you give an example of any Extracurricular you had before? Prompt: How do you work with the other teacher? 10-Do you Mentoring students with learning difficulties with the general education teacher? (Probe if YES): Can you give an example of how you Mentoring? Prompt: How do you work with the other teacher?
5. School administration	1- How does school administration help the collaboration between you and general or special education? (Probes Q) Can you give an example? 2- Are there any ways that the school hinders collaboration? Can you give any examples? 3- How the decisions and policies of the school impact collaboration? (Prompts Q) What helps and what hinders
6. Training of teachers	1- Can you tell me about any training you have received regarding collaboration? 2- Can you give an example? Who is responsible for providing this training? 3- What additional training do you think would be helpful? 4- Prompt: What would that training involve? 5- Prompt: Do you think it would be helpful to do that training as Joint Professional development with general education teachers?

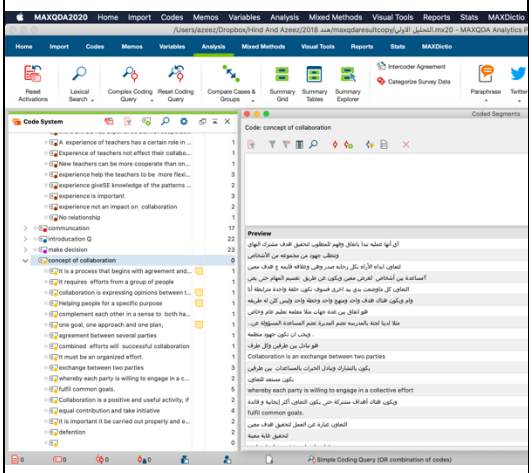
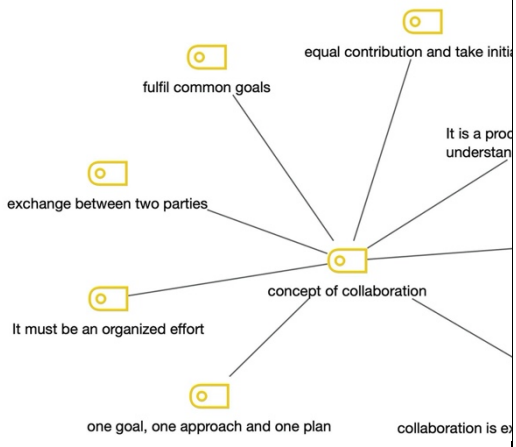
7. successful collaboration	1- What the important things that leads to successful the collaboration?
8. Barriers of collaboration	1- Can you discuss any barriers that you feel may inhibit effective collaboration now? 2- Can you give an example?
9. Further comments/suggestions	1- Do you have anything else that you want to add on the topic of collaboration? 2- Is there any other information that you think would be useful to know for my research?

Appendix Ten: Interview analysis

Interview analysis process table		
Stage name	**Description of what I did**	**Sample of initial codes, memos, and mind maps used in the analysis process**
First stage: Transcriptions + Familiarisation with data	The Arabic language was the language that the interviews were transcribed from. It was important to have transcripts in order to inform the initial phases of analysis and gaining more comprehensive insights into the data. Shown in the screenshot in the right side are all the participants' transcripts after being imported into the MAXQDA program. A pseudonym name was assigned to each participant. In the left side of the screenshot, there is a transcript. I read the Arabic transcripts multiple times in order to get used to the data and gain some familiarity with the "depth and breadth of the content" (Braun & Clarke, 2006). This phase was essential prior to coding since it contributed to developing the early viewpoints and identifying provisional patterns. Whilst reading, it was important for me to listen to the interviews (audio tapes) to ensure there were no missing words and to gain extra insights into the interviewing experience.	

Second stage: Generating initial codes	According to the screenshot, initial codes were assigned to each participant's transcript during this stage. While some codes were only one word, a few others were a short sentence. As far as these initial codes were concerned, they were very close to the data (through the frequent use of the participants' own words without making any additional interpretations or comments). While I was attempting to code the content of the entire data set (Braun & Clarke, 2006), initial codes at such stage were data-driven (Braun & Clarke, ibid). The total number of initial codes at this stage was1200. I printed the list of initial codes as a hardcopy in the following stage, which helped me visualise all initial codes from all respondents. Through the hard copy, I was able to review and revisit the pages as I was thinking and writing. I then combined repetitive codes with other related codes, which resulted in a modified set of 915 codes.	

Third Stage: Searching for a theme	I created a new project within the MAXQDA program, with the amended editions of the initial codes included. During this phase, it was important to start arranging codes and initial themes, which can be seen in the screenshots. According to Braun and Clarke (2006), it may be useful at this phase to use visual representations to enable one to arrange the various codes into themes, which may include tables, or mind maps […] and then trying out certain ways to sort them into theme piles. In addition, as shown in the next screenshot, codes were grouped or categorised together under initial themes. At this stage, comments, re-reading of the codes' extracts, memos, and mind maps were called upon. It should be pointed out that the names of the themes at this stage were not similar to those used at the end. As mentioned by Braun and Clarke (2006), the researcher should be focused on classifying the various codes into potential themes at this stage, along with collecting all the appropriate coded data extracts within the found themes. At this point, the process of interpreting and analysing my data was more evident, in-depth and comprehensive than during the initial stage. By the end of this phase, I was able to classify numerous themes and subthemes, which are displayed in the next screenshot. However, these were just early themes and subthemes that could be altered, joined, or removed. Attempting to improve the next stage, I adhered to Braun and Clarke's (2006) advice: "do not abandon anything at this stage, as without looking at all the extracts in detail (the next phase) it is uncertain whether the themes hold as they are, or whether some need to be combined, refined and separated, or discarded"(pp. 90–91).	 

Fourth stage: Reviewing themes	During this phase, and as well as re-reading all found themes, subthemes, and codes, I also re-read extracts for each code to ensure they were linked. Braun and Clarke (2006) asserted, "This phase involves two levels of reviewing and refining your themes. Level one involves reviewing at the level of the coded data extracts. This means you need to read all the collated extracts for each theme and consider whether they appear to form a coherent pattern" (p. 91). Also, it was important to revisit each theme separately in order to make sure that each theme was related to the entire data set. As indicated by Braun and Clarke (2006), at this level, the validity of individual themes in relation to the data set should be considered. At this point, as displayed in the next screenshot, I utilised MAXQDA mind maps to see each code with its extracts.	 
Fifth stage: Defining and naming themes	Names of each theme were decided during this stage. In so doing, I had to ensure that the meaning of each theme was clearly explained. Braun and Clarke (2006) indicated that by "'define and refine', we mean identifying the 'essence' of what each theme is about (as well as the themes overall), and determining what aspect of the data each theme captures" (p. 92). As presented in the next screenshot, a table to visualise all themes and subthemes was created. While the green colour is related to themes, the blue colour refers to subthemes. As for the grey colour, it is about sub-subthemes.	**Factors that effect of collaboration** Time The enormous work load (i.e. paper work, routine work) general and special teachers. NO time for collaboration There is no specific time for meeting to collaboration. Attuited GE attitude towards the weak S lead to unwilling to deal GE do not accept the LD program. GET feel negativity before support. Negative attitude towards SE teachers. The negative outlook for LD program. GE disregarded SE contribution Many GE teachers feel that the s with LD will fail. GE not accept the idea that LD S in the same class Knowledge No awareness for important of collaboration. no awareness for nature SE job lack of awareness for GE teachers not understand the concept of learning difficulties. Lack of understanding of the nature of special education no clarify of role of GE and SE

Sixth stage: Producing the report	At the end, as shown in the qualitative findings chapter, I aimed to provide a clear and well-explained story for all themes and subthemes, in addition to clear examples of each data extract, based on the recommendations of Braun and Clarke (2006). According to Braun & Clarke, 2006 explained, “Your write-up must provide sufficient evidence of the themes within the data, i.e., enough data extracts to demonstrate the prevalence of the theme. Choose particularly vivid examples, or extracts which capture the essence of the point you are demonstrating […]. Extracts need to be embedded within an analytic narrative that compellingly illustrates the story you are telling about your data, and your analytic narrative needs to go beyond description of the data, and make an argument in relation to your research question” (p. 93).	Part of the map