



The issues of implementing inclusion for students
with Learning Difficulties in mainstream primary
schools in Saudi Arabia

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Abstract

Saudi Arabia is one of earliest Arab countries to have implemented the integration of students with Special Educational Needs (SEN) (Almosa, 2008, 2010). Recently, the Ministry of Education (MoE), through the King Abdullah Public Education Development Programme, began preparing to introduce inclusion for students with SEN in practice. Thus, the current study explores potential barriers that could challenge the implementation of inclusion for male students with Learning Difficulties (LD) in mainstream primary schools. This research is timely as the issues involved with implementing inclusion remain unclear in Saudi Arabia. The issues were investigated by examining the understanding of teachers regarding the term 'inclusion' and exploring the factors that could challenge the implementation of inclusion from the perspective of teachers as well as through an analysis of the current practice of educating students with LD and general education students in mainstream primary schools in the Saudi context. Adopting the interpretivist paradigm, qualitative data was collected in five mainstream primary schools taken as a single case study, through interviews with thirteen teachers from a group of special education teachers and eleven teachers from a group of general education teachers. Moreover, observations of classrooms and schools and an analysis of legislative documents were used as supportive data collection methods. Thematic analysis was employed to analyse the data. The findings showed that the majority of teachers had an understanding of the term inclusion, although a few teachers indicated their lack of knowledge and understanding of this term. Moreover, teacher preparation, in-service training, competence of teachers, teachers' views, relationships between students, relationships between parents and teachers, human support, curriculum, teaching strategies, assessment, resources, legislations, administrative matters, number of students in classroom and infrastructure were identified as factors that could act as barriers to implementing inclusion effectively.

The results of the analysis led to some recommendations for future practice; these include how to support teachers' readiness for inclusion, improve the practice of teachers in mainstream classrooms, improve the relationships between students with and without LD, the relationships between parents and schools, and improve environmental factors, in order to make inclusion work effectively. This study contributes to knowledge of inclusive education by exploring the issues surrounding the implementation of students with learning difficulties in the Saudi context.

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Dedication

To my parents for their love and support

To my wife for her patience and support

To my lovely daughter for her laughter and hugging me every day

To my brother, Osama Alhammad, who has passed away; I miss him so much

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Abbreviations

AAIDD	American Association on Intellectual and Developmental Disabilities
ADHD	Attention Deficit Hyperactivity Disorder
BCODP	British Council of Organisations of Disabled People
CAQDAS	Computer Assisted Qualitative Data Analysis Software
GAER	General Administration of Education in Riyadh
GCC	Gulf Cooperation Council
GRPSEPS	General Rules for the Provision of Special Education Programmes and Services
IEP	Individual Education Plan
IDEA	Individuals with Disabilities Education Act
IQ	Intelligence quotient
ICF-CY	International classification of functioning, disability, and health: Children and youth version
LD	Learning Difficulties
MoE	Ministry of Education
NCERI	National Centre on Educational Restructuring and Inclusion
Ofsted	Office for Standards in Education, Children's Services and Skills
OECD	Organisation for Economic Co-Operation and Development
UPIAS	Union of Physical Impairment against Segregation
UAE	United Arab Emirates
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America
WHO	World Health Organization

Chapter One: Introduction to the Research

1.1 Introduction

This thesis explores the issues involved in the implementation of inclusion of male students with LD in mainstream primary schools in Saudi Arabia. In the context of the current study inclusion refers to the education of students with SEN in neighbourhood schools, in a mainstream class, with involvement in all facilities that accommodate and facilitate their learning acceptance.

As an introduction to the study, this chapter begins by explaining the background of the study, after that, the rationale for conducting the study is presented. Subsequently, the aims and research questions for the study are introduced and the importance of the study discussed. Finally, an overview of the structure of the thesis is presented.

1.2 Background of the study

Perspectives on the education of students with SEN have shifted over time from views which proposed that students with SEN should be educated in a segregated setting or not have any education at all, to favouring a more inclusive approach to teaching children with SEN in mainstream schools (Osgood, 2008). There are a number of factors that support the importance of inclusive education. Firstly, implementing inclusion could help communities enhance equality and justice for all individuals in society as inclusion would overcome discrimination between individuals within society (Foreman and Arthur-Kelly, 2008; Booth and Ainscow, 2011). Research based evidence also highlights that when inclusive education is successfully implemented, the effect on the social and academic development of students with SEN in general (Ruijs and Peetsma, 2009; Avramidis, 2013; Avramidis, 2010) and students with LD (Dessementet et al., 2012; Freeman and Alkin, 2000; Peetsma, 2001) specifically is equally or more beneficial when compared to educating them in special classrooms or special schools. For example, Dessementet et al. (2012) conducted a quasi-experimental study to compare the academic achievement and adaptive behaviour of students with LD studying in mainstream classrooms and special schools over two years in Switzerland. Generally, the researchers found that students with LD who were studying in mainstream classrooms progressed well in literacy skills compared to students with LD who were studying in special schools. However, the researchers did not find any difference in mathematics skills and

adaptive behaviour between students with LD studying in special schools and in mainstream classrooms. Dessementet et al. (2012) concluded from their study that inclusion in mainstream classrooms is an appropriate placement for students with LD.

On the other hand, separate education for students with SEN has been critiqued on human rights grounds; by being refused equal education, children with SEN are being discriminated against and students with SEN would not benefit from separate education (United Nations Educational, Scientific and Cultural Organization (UNESCO), 2005). Moreover, students without SEN could benefit from the implementation of inclusion as they could benefit from the physical and human support provided for students with LD (Kurth et al., 2015). Thus, it is proposed in the literature that all children could benefit from inclusion. Some teachers and policymakers argue that the inclusion of children with SEN can impact on the attainment of mainstream students; however, research has demonstrated that the inclusion of students with SEN (Ruijs et al., 2010) and students with LD in mainstream classrooms does not negatively influence the achievement of students without LD (Dessementet and Bless, 2013; Kalambouka et al., 2007). Therefore, despite concerns that inclusion can disadvantage some children, the evidence appears to suggest that this approach is advantageous for all and that it helps to overcome some of the discrimination currently evident in educational environments.

The journey towards inclusive education becoming an important part of a global agenda has been a long one (Rieser, 2012). There have been several initiatives and declarations calling for the promotion of the rights of persons with disabilities, including the right to education. For example, the Universal Declaration of Human Rights (1948) was one of the earliest declarations that demanded the right of all children to have a free and compulsory education. Moreover, The World Declaration on Education for All (1990) called for the provision of education for all children, including students with SEN. Further, the Salamanca Statement and Framework for Action on Special Needs Education (1994) introduced the principle of inclusion and inclusive education and called on countries to endorse inclusion for students with SEN. Another initiative that calls for inclusion is the Convention on the Rights of Persons with Disabilities (2006). From the discussion above, it can be noticed that it has taken many years, and the introduction of a considerable number of initiatives, for inclusive education to become an international tendency (Sebba and Ainscow, 1996).

Saudi Arabia is one of the state parties that ratified the Convention on the Rights of Persons with Disabilities (2006) and its optional protocol. The Convention requests signatories to recognise inclusive education for persons with disabilities without any discrimination. Inclusive education for students with SEN is also included in the Saudi National Strategy Project for Developing Public Education (Ministry of Education and Tatweer, undated), although at this time the policy has yet to change in order to support these initiatives.

1.3 Rationale and justification for the study

In Saudi Arabia, inclusive education is not implemented for all students with SEN. Some students with SEN study in special classrooms in mainstream schools. This kind of provision applies to students with LD. Students with LD represent a high percentage of the students with SEN that study in mainstream schools, albeit in special classrooms. As Alkhashrami (2004) indicates, 40% of students with SEN who study in mainstream schools in special classrooms in Saudi Arabia are students with LD. For these reasons, the current study chooses to focus on exploring the issues surrounding the implementation of inclusion for students with LD in mainstream primary schools. Although there may be similar barriers to inclusion between students with LD and other students with SEN, there are, however, different needs among students with SEN; thus, it was decided to focus on one type of SEN, namely, students with LD because they represent a high number of students with SEN in mainstream schools.

Referring to the current practice of educating students with LD in mainstream schools in Saudi Arabia, it can be noted that when mainstream schools implement integration for students with LD, such students are separated from general Education Students. Students with LD have their own special classroom, their own curriculum and their own teachers, all of which are different from those of their peers (general education students). The only occasions when students with LD interact and are included with their peers are at morning assembly, break times (although it should be noted that some schools apply separation at break times for some students with LD if the students are hyperactive or prone to misbehaviour), school trips and school festivals. Thus, Alnahdi (2014) who conducted qualitative research in mainstream schools in Saudi Arabia observed that the education of students with LD in mainstream schools in Saudi is a kind of segregation rather than integration or even inclusion.

Since Saudi Arabia ratified the Convention on the Rights of Persons with Disabilities (2006), inclusive education has become one of the kingdom's educational strategies for developing

public education (Ministry of Education and Tatweer, undated). However, it is not clear what challenges the implementation of inclusive education practice would need to overcome, with which students and in which specific contexts; an understanding of such factors is needed, since effective inclusive education is a complex phenomenon (Hassanein, 2015). In Saudi Arabia, there is now an opportunity to learn about what may present challenges to inclusion, in order to prepare more effectively for inclusion as the policy progresses. Such research is important and supported in the work of Ainscow et al. (2006) who argue that to implement inclusion effectively, the challenges to implementing inclusion should be addressed.

Although there are a number of studies on what is effective for inclusion of students with SEN in a range of international contexts (Giangreco, 1997; National Centre on Educational Restructuring and Inclusion (NCERI), 1994; Morley et al., 2005), for countries such as Saudi Arabia to implement inclusive practices in primary schools, educators, policymakers and others need to learn about the challenges in that specific cultural context in order to overcome them (Gyimah et al., 2009; Hassanein, 2015).

1.4 The aim of the study

The aim of the current study is to explore the issues of implementing inclusion for students with LD from the schools' level in all aspects of school life in mainstream primary schools in Saudi Arabia, without discrimination or separation. This aim is pursued through a number of objectives, as follows:

- To explore the understanding of the term 'inclusion' from the perspective of a group of general education teachers [general education teachers, art education teachers and physical education teachers] and a group of special education teachers [special education teachers for students with LD, art education teachers for students with LD and physical education teachers for students with LD] and to explore how these understandings compare to teachers' definitions of integration.
- To explore the factors that could act as barriers for implementing inclusion for students with LD from an examination of the current practice of education of students with LD and general education students in mainstream schools and from the perspective of a group of general education teachers and a group of special education teachers.

- To develop recommendations that would support the effective implementation of inclusion for students with LD in mainstream primary schools in Saudi Arabia, as this may influence whether inclusive practice is possible at this time.

1.5 Research questions

In order to achieve the research aims and objectives, two research questions will be addressed in this study, as follows:

- How do teachers define inclusion in mainstream primary schools in Saudi Arabia?
- What are the factors that act as barriers to implementing inclusion for students with LD in mainstream primary schools in Saudi Arabia?

1.6 The importance of the study

The issues of implementing inclusion for students with LD in the Saudi context are not clear and no research, to the best of the researcher's knowledge, has been conducted in the Saudi context to explore issues surrounding the possibility of implementation of inclusion for students with LD. This represents a clear research gap. By narrowing this gap, this study can help to inform the MoE and other policymakers in Saudi Arabia about challenges that could face the effective implementation of inclusion in the Saudi context. However, exploring the issues surrounding the implementation of inclusion is not an easy task; Hassanein (2015, 150) argues that inclusion "is a very complicated issue that encompasses too many inter-correlated contextual factors that should be addressed very carefully, in order to implement inclusion effectively".

Further, the study will make a theoretical contribution to inclusive education research in the Saudi context, as inclusion has not been explored in depth in the Saudi context, nor indeed in Arab countries more generally (Alkhateeb et al., 2016), including the Gulf Cooperation Countries (GCC) (Ashencaen Crabtree and Williams, 2010, 2013; Weber, 2012; Gaad, 2015), although it is attracting growing interest. Therefore, it is proposed that researchers in Saudi Arabia could benefit from the current study and use these findings in order to explore the issues of implementing inclusion for students with other types of SEN. In addition, the current study could aid other researchers and readers from non-Arabic speaking countries to explore the issues of implementing inclusion in the Saudi context, as the research about inclusion in Saudi Arabia in English is limited (Ashencaen Crabtree and Williams, 2010).

Moreover, it is hoped that the study will become a basis for further research in inclusive education for students with LD in Saudi Arabia . For example, it is suggested that researchers could use the findings of the current study as a foundation for developing and conducting a large-scale survey, in order to enable generalisation in the Saudi context.

1.7 Thesis structure

This thesis consists of eight chapters. The first chapter is the introduction, which provides a general overview of the thesis in terms of the rationale for conducting the study, research aims and questions, and the importance of the study. The second chapter focuses on the educational context in Saudi Arabia. Chapter Three reviews the literature that is central to this thesis in order to provide the background for the research. Specifically, Chapter Three reviews the literature about SEN, LD, models of disabilities, and inclusive education, factors that would affect implementing inclusion effectively. The fourth chapter presents the methodology that was applied in this study, including underpinning the philosophical considerations adopted by the researcher. Chapters Five and Six discuss the analysis of the data and present the findings of the study in the light of the research questions introduced previously in this chapter. Chapter Seven is a discussion chapter, which synthesises the overall findings of the study with the literature review. The eighth and final chapter draws conclusions from the data, providing a summary of the findings, the contribution of the study, recommendations, discussion of the limitations of the study, and suggestions for further research.

Chapter Two: The Saudi Context

2.1 Introduction

In order to provide background to the research contained in this thesis, this chapter provides an overview of Saudi Arabia and its culture and education system. It starts by providing some information about Saudi Arabia as a country. After this, an overview of primary education in general education and special education is presented. The background to special education and the approach taken to implement integration in Saudi Arabia is then highlighted. Finally, a discussion of how Saudi Arabia's plan to implement inclusion is presented.

2.2 The background of Saudi Arabia and its culture and educational system

Saudi Arabia an Arab county located in south-western Asia. The area of Saudi Arabia is about two million square kilometres. The population is around 31 million people. Riyadh is the capital city of Saudi Arabia and has a large population of about 6 million (General Authority for Statistics, 2014).

Saudi Arabia is a Muslim country and is considered to be one of the most important Muslim countries, as Islam began in the area in which Saudi Arabia is now located. In addition, the two holy mosques, the most sacred sites in Islam, with connections to key periods in the life of prophet Mohammed, are located in Saudi Arabia, in Mecca and Medina (Fandy, 2007; Algamdi and Abduljawad, 2002). Islam, the religion of Saudi Arabia, pervades most aspects of life and influences its culture (Al-Sadan, 2000). Therefore, the education system is based on the Islamic view (Ministry of Education, 2008). For example, the first article in the Saudi education policy (1995, 2) indicates 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) argue that the religion of Islam is one of the most influential forces that shape the education system in Saudi Arabia.

In addition, Islam asserts the rights of individuals with disabilities to equality, participation in society, protection, education, rehabilitation and social care (Hamza,1993 cited in Hassanein,2015). Moreover, disabilities in Islam are not seen as a cause for discrimination (Ashencaen Crabtree and 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 indicates a goal of *"special education and caring of mental and physical disabilities students."*

In accordance with the guidance of Islam that makes education truly sharing among all the sons of the nation” (Ministry of Education, 1995, 8). Thus, this policy supports both the religious belief and the rights of students with SEN.

Another influence of Islam on the education system in Saudi Arabia is the separation between male and female students 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. It is necessary to mention that the separation between boys’ and girls’ schools is not seen in Saudi Arabia as a negative form of discrimination. Sharia law requires that there be no interaction between males and females unless there is a family relationship between them, such as father, mother, brother, sister, son, daughter, uncle, aunt, nephew, wife or husband. Therefore, it does not allow men to access girls’ schools. This important factor has had a significant influence on the current study, as it means that the research focus has been on schools which educate boys.

Education in Saudi Arabia in public schools is free of charge for all students, including citizens and residents. The education system in Saudi Arabia is centralised; the MoE acts as its headquarters and is responsible for education in terms of administrative and operational issues. There are also thirteen General Administrations of Education and twenty-nine provincial education administrations that supervise schools across Saudi Arabia (UNESCO, 2011; Ministry of Education, 2008), all of which operate under the supervision of the MoE.

The education system in Saudi Arabia consists of a number of stages, beginning with kindergarten, starting from age three to five years. Primary education starts from age six and consists of six grades. Intermediate education consists of three grades, starting after students successfully complete primary education. Secondary education consists of three grades and students start secondary education after completing intermediate education (Saudi Arabian Cultural Mission, 2006).

As the current study concentrates on primary education, the next section will provide details about the primary education setting in both general education and special education, in order to clarify the setting under study.

2.3 Primary education in the Saudi context

2.3.1 General primary education

Primary education starts at age six. Students must undergo a health check before they enrol in school (Ministry of Education, 2016) and the health check includes a medical history and physical examinations. The physical examinations include checking the body functions and general appearance of students; there is also a senses check, which includes speech, hearing, vision and mental status. The health check aims to explore whether these functions are within the normal parameters for the child's age (Ministry of Education, undated) and has a significant impact on the type of education that the child will receive.

The health check can result in one of three decisions. The first is that a student is deemed suitable to enrol in general education. The second is that a student is deemed suitable to enrol in general education, but his or her acceptance is deferred subject to further health checks for some conditions, which the examiners will decide on. The third case is that a student is considered not suitable for enrolling in general education (Ministry of Education, undated). Thus, the result of the health check could have a negative influence on the enrolment of students in general education with their peers. This means that, if students have disabilities, these could prevent their being educated in general education alongside their peers.

The primary education system consists of six grades and a student must pass each grade in order to move on to the next. The education of students in primary education is based on the centralised curriculum provided by the MoE. Teachers must follow the curriculum provided, and are not allowed to add new curriculum items or use textbooks that are not authorised by the MoE. In addition, teachers have to teach all of the curriculum provided and are not officially given the opportunity to adapt the curriculum. The assessment of students is based on ongoing educational assessments which address each level of the curriculum taught. A variety of assessment techniques are used with the aim of improving education outcomes to reach the goals set (Ministry of Education, 1999, 2014 a, 2015a).

The duration of the school day is at least 6 hours and it starts at 6:30am. The first fifteen minutes is allocated for the morning assembly, during which students stand in rows according to their classes, in one of the sports playgrounds in the school. At the beginning of morning assembly, students sing the national anthem of Saudi Arabia. After that, one of the physical education teachers provides some exercises for all students. Then, groups of students give a

school broadcast to all students and teachers in the school. The students then move to their respective classrooms and the first lesson begins immediately after the assembly. Each lesson lasts 45 minutes. There are two break times during the school day, lasting a total of thirty minutes (Ministry of Education, 1999, 2015a).

The staff in general primary education schools consist of a head teacher, deputy head teacher, counsellor, teachers, resources room teacher, laboratory arranger, school activities arranger, administrative assistant, information registrar, head teacher's secretary, service worker and gatekeeper. The number of staff and the availability of all the above-mentioned staff are based on the number of students in the school (Ministry of Education, 2015b).

2.3.2 Special education in primary education

Students with SEN start primary education either in special schools or in mainstream schools at the age of six. Students must have the same health check before enrolling as mentioned previously. Each student with SEN must also have a diagnosis of their disabilities from a multi-disciplinary team or from a competent certified health professional (Ministry of Education, 2016).

The typical school day of students with SEN in mainstream schools is the same as the school day of general education students described above. The MoE provides the curriculum for all students with SEN in mainstream schools and special schools. However, the teacher is allowed to adapt it according to students' abilities. In addition, the assessment of students with SEN is based on ongoing assessment of their knowledge of the curriculum. This approach encourages teachers to use assessment methods that are suitable for the abilities of students (Ministry of Education, 2015d, 2014a, 2002).

Staff concerned with education of SEN students, whether in special schools or in mainstream schools are: head teacher, deputy head teacher, counsellor, residential supervisor (one of the special education teachers is appointed as a supervisor in schools), General education teachers, special education teachers, special education teachers for resources room, laboratory arranger, school activities arranger, teacher-consultant, itinerant teacher, teachers' assistant, natural therapies specialist, occupational therapy specialist, vocational training specialist, audiometry specialist, optician, orientation and mobility teachers, speech therapists, behaviours psychologists, administrative assistant, information registrar, head teacher's secretary, service worker and gatekeeper (Ministry of Education, 2015c). The

number and availability of the staff mentioned above is based on the number of students and the types of additional needs that the students have. Moreover, in practice, some of the staff mentioned above are not available in every special or mainstream school because the MoE does not recruit them, e.g. teachers' assistants in mainstream schools.

2.4 Background of special education and integration in Saudi Arabia

There are two approaches to the education of students with SEN in Saudi Arabia. The first is educating students with SEN in special schools and the second is educating them in mainstream schools either in special classrooms or mainstream classrooms (Ministry of Education, 2002). Eligibility for study in special schools or in mainstream schools is based on a number of variables such as the severity of the disabilities, the nature of the disabilities and the educational needs of students with SEN who require more attention. This means that students with moderate to severe disabilities study in special schools, whereas students with mild to moderate disabilities study in mainstream schools either in special classrooms or mainstream classrooms (Ministry of Education, 2002; Almosa, 2008).

A number of conditions must be met in order to enrol each type of student with SEN in mainstream schools or in special schools. This thesis will focus on students with LD. Therefore, the current discussion will focus on the conditions applicable to such students.

The integration of students with LD in mainstream schools is called the Intellectual Education Programme. There are a number of conditions that must be met for enrolment in this programme. The first condition is related to an Intelligence quotient (IQ) test, either the Stanford-Binet Intelligence Scale, on which the student must obtain a score between 52 to 73, or the Wechsler intelligence scale, on which students must score between 55 and 75, or any equivalent IQ test (the score ranges mentioned above represent mild LD). In addition, it is required that students have low functions in two areas of adaptive behaviour, as assessed officially or unofficially by a specialist committee. Moreover, the diagnosis of the student must be completed by a team that includes a special education teacher, a psychologist, the parents of the student with SEN and any other person whose attendance is considered important for the diagnosis. Students must not have any other disabilities that would make it difficult for them to benefit from the educational programme provided (Ministry of Education, 2002; Specialized Advisory Group for Mental Retardation, 2005).

The criterion for enrolment in special schools, in addition to the conditions mentioned above, is a score of 36-51 on the Stanford-Binet Intelligence Scales, or between 40 and 54 on the Wechsler intelligence scale, or the equivalent on any equivalent IQ test (these IQ test scores represent moderate to severe LD) (Ministry of Education, 2002; Specialized Advisory Group for Mental Retardation, 2005).

Students with LD whose IQ score is below the scores mentioned above are not officially allowed to be enrolled in special schools. The Regulation of Special Education Institutes and Programmes (2002) states that education of students with LD in mainstream schools or special schools is limited to educable students with LD (mild LD) and trainable students with LD (moderate LD). However, there is no mention of students who have profound LD being enrolled. Such students go to a Comprehensive Rehabilitation Centre supervised by the Ministry of Labour and Social Affairs.

After clarifying the conditions for enrolling students with LD in special schools and mainstream schools, the next discussion will provide more detail about special education and how integration is being implemented in the Saudi context.

Special schools in Saudi Arabia are provided for deaf students, blind students, students with LD, students with autism, and students with multi-disabilities, whereas those with other types of disabilities, such as specific LD and Attention Deficit Hyperactivity Disorder (ADHD) study in mainstream schools. In addition, special schools are divided according to the type of SEN; for example, there are special schools solely for blind students, called Alnoor Institutes and special schools specifically catering for deaf students, called Alamal Institutes. Students with LD and those with autism study in special schools, called Intellectual Education Institutes. Students with multi-disabilities can study in any of these special schools, according to the nature of their disability; for example, students who are blind and have other physical disabilities study in Alnoor Institutes and so on (Japan International Cooperation Agency, 2002; Algamdi and Abduljawad, 2002, Al-Sunbol, 2008). However, this study is more concerned with the way in which students with SEN are educated in mainstream schools through a process of integration, which is discussed next.

Saudi Arabia was one of the first Arab countries to implement integration (Almosa, 2008, 2010). Almosa (2010) argues that the regulations in Saudi Arabia are formulated in a way that emphasises integration. For example, the General Education Regulation (1999), and the

Regulation of Special Education Institutes and Programmes (2002) both support the implementation of integration for students with SEN; for example, Article 3.18 in the Regulation of Special Education Institutes and Programmes (2002,15) indicates that *“The regular school is the natural environment educationally, socially and psychologically for students with special educational needs”*.

The first attempt to implement integration was made in 1984 in one school in the city of Alhafouf. For the next few years, the number of general schools implementing integration across Saudi Arabia increased slowly. However, in 1996 the number of general schools implementing integration increased dramatically; this occurred because the MoE put special education strategies into practice and prompted greater engagement with this process. The first strategy was to enhance the ability of mainstream schools to accommodate students with SEN by increasing the number of special classrooms, creating more resources rooms and recruiting teacher-consultants and itinerant teachers who visit general schools (Almosa, 2010, 2008). Almosa (2008) reported that the number of integration programmes (in Saudi Arabia implementing integration in general schools is called an integration programme) for male and female students with SEN across Saudi Arabia increased dramatically from twelve in 1996 to 3,171 in 2007. Moreover, Almosa (2008) noted that integration programmes had started to open up in small towns and villages, suggesting a much wider reach of the programme.

The implementation of integration in Saudi schools takes two forms: partial and full integration (Almosa, 2010, 2008). However, there is some inconsistency in terminology; Gaad (2010) uses the terms partial inclusion and full inclusion. The inconsistency in the terminology used suggests that at this time there is a lack of differentiation between whether the approach is proposed to facilitate integration or inclusion, as there is confusion in Gulf countries between the meaning of the terms inclusion and integration (Weber, 2012).

The first form, partial integration or partial inclusion, refers to including students with SEN in a special classroom in mainstream schools. This means that students with SEN study in special classrooms with their own teachers, although some students with SEN interact with their peers in curricular activities such as physical education and art education and in non-curricular activities, such as morning assembly, break times, school trips and school festivals (Almosa, 2010, 2008; Gaad, 2010). Partial integration is implemented for students with LD, hard-of-

hearing students, deaf students, blind students, students with autism and those with multi-disabilities (Almosa, 2008, 2010).

On the other hand, full integration, or full inclusion, refers to including some students with SEN in the mainstream classroom alongside their peers for most of the school day, providing them with special educational services such as a resource room, itinerant teachers, and teacher-consultants. The students with SEN can be withdrawn when necessary; for example, if students with SEN cannot be taught by General education teachers in the mainstream classroom and need more support (Almosa, 2008, 2010; Gaad, 2010). Full integration is implemented for students with specific LD, students with low vision, students with physical disabilities, and those with emotional and behavioural disorders, ADHD, and speech disorders (Almosa, 2008, 2010; Ministry of Education, 2015d).

2.5 Inclusive education in Saudi Arabia

Recently, the MoE has begun to prepare for the introduction of inclusion for all students with SEN in practice, as reflected by a number of indicators.

The first indicator is the MoE's including implementing inclusion in the development of special education in the King Abdullah ibn Abdulaziz Public Education Development Project (Tatweer). The plan for developing special education is to be implemented through providing equal education and support services for all students, without consideration of gender, disabilities, or social and financial background, which will be achieved through implementing the principle of inclusive education. The plan aims to implement inclusion for students with SEN in the mainstream classroom. It also includes the preparation of teachers and therapists with high quality training for implementing inclusion effectively, as well as the provision of an educational environment that takes into account the individual differences between all students (Tatweer a, b, undated; Ministry of Education and Tatweer, undated).

Another indicator is that the MoE through Tatweer is cooperating with a Western university that has experience in the area of inclusive education. Tatweer is cooperating with the College of Education at the University of Oregon in the United States of America (USA), by taking advice from them about implementing inclusion. A number of teachers have been sent to the College of Education for training in inclusive education, as well as to visit schools that have a partnership with the university, and which are implementing inclusion (Pinkston, 2014).

Moreover, the Tatweer plan involves implementing inclusion in a number of schools in Riyadh, as an experimental model. The plan aims to provide the requirements, such as supplies, adaptation of school buildings to be suitable for students with SEN, a sufficient number of staff in schools, procedural guidance about implementing inclusion in schools, and the preparation of General education teachers, special education teachers and school administrative staff through training courses in inclusive education, in order to assist the effective implementation of inclusion. In addition, under the Tatweer plan, some special education teachers are being prepared to become therapists in inclusive education and special education. It is planned to introduce the concept of inclusive education widely in the media and hold a conference on inclusive education (Tatweer c, d, undated). Taken as a whole this evidence suggests that educational provision for students with SEN is currently evolving and there is movement from integration of students towards inclusion; this suggests that the current research will be timely as it may offer some support to this process.

2.6 Summary

This chapter began by providing an overview of Saudi Arabia in terms of location, area, population and educational system. After this, detailed information was provided about general education and special education in primary education in the Saudi context. The conditions of enrolment of general education students and students with SEN were discussed, including the curriculum provided, the approaches to assessment, an overview of the school day and the types of staff available in schools. Then, the discussion moved on to provide information about how special education and integration are currently supported in the Saudi context. The discussion illustrated how students with SEN study in the Saudi context and highlighted the conditions for enrolling students with LD in special schools and in mainstream schools. Subsequently, an overview of special education and integration in the Saudi context was provided. Finally, the chapter described how Saudi Arabia is planning to implement inclusion for students with SEN.

The next chapter will review the literature that focuses on special education, LD, models of disabilities, and the factors that influence the implementation of inclusion.

Chapter Three: Literature Review

3.1 Introduction

This chapter will review the literature regarding SEN and inclusive education. It will begin by discussing how SEN has been defined and conceptualised in various contexts. Following this, issues surrounding the categorisation of SEN will be highlighted. Further, the literature on LD, as the type of SEN this study will focus on, will be discussed. Models of disabilities will then be reviewed in order to reflect on the impact that these may have on the practice and approaches to support that are provided to children with SEN. The chapter will then move on to review the definitions of inclusion drawn from the research literature and the differences between the concepts of inclusion and integration. This chapter will conclude with a discussion of the Index for inclusion and the factors that affect the implementation of inclusion.

3.2 Understandings of SEN

The term SEN was first introduced in the Warnock Report in the UK (DES, 1978; Norwich, 1999). Whilst this term appears to categorise and therefore segregate this group of children who need additional educational support, it is proposed that there are a number of benefits to be noted about the use of the term SEN. For example, Williams et al. (2009) and Norwich (1999) state that the term SEN helps to facilitate learning opportunities and the provision of support of learning for students who are identified as having SEN. Similarly, Wearmouth (2009) suggests that using the term SEN with such students helps to provide children with SEN with additional resources, and may therefore help to overcome any difficulties in learning that arise through the provision of specialist methods. It can be inferred that the importance of using the term SEN is that it helps in providing appropriate education for students with SEN, and with facilitating suitable provision for them according to their abilities.

A number of definitions have been proposed in different national contexts and in different historical periods to define the term SEN (even though the term is relatively new, the category related to children who have needs under this umbrella term has been evident in discussions for a long time), and the variations in these and the way in which they may affect the way disability is viewed can be attributed to cultural differences. In Saudi Arabia, the term 'SEN' is not used in legislation; rather the term 'abnormal student' is used. The Regulation for Special Education Institutes and Programs (2002, 8) defines 'abnormal students' as "*students who are*

different in their abilities in a number of different contexts, such as in regard to intellect, senses, physical aspects, behaviours, emotions, communication, academics, all of which require the provision of special education". This definition was influenced by the medical model (Oliver, 1990, 2009), in that it differentiates students with SEN from other students and notes that students with SEN need more provision to be made for them as they do not fit with mainstream society.

In contrast, the UK, together with many other Western countries, has a long history of addressing disabilities and, as previously highlighted, it was in the UK that the term 'SEN' was introduced. The definition proposed in The Education Act (1996, 178) indicates the differences between the contexts of Saudi Arabia and the UK in terms of defining SEN. SEN is defined in the UK as *"a learning difficulty which calls for special educational provision to be made for [the child]"*. Learning difficulties are defined in the same Act (1996, 178) thus:

a child has a "learning difficulty" if (a) he has a significantly greater difficulty in learning than the majority of children of his age, (b) he has a disability which either prevents or hinders him from making use of educational facilities of a kind generally provided for children of his age in schools within the area of the local education authority, or (c) he is under the age of five and is, or would be if special educational provision were not made for him, likely to fall within paragraph (a) or (b) when or over that age.

The two definitions given reflect the different views of students with SEN in the two countries. In Saudi Arabia, the focus is on differentiation between students without SEN and those with SEN based on the kind of disabilities that require special education provision, whereas in the UK the emphasis is on disabilities and difficulties in learning that require special education provision.

Although the term 'SEN' has a number of benefits, as mentioned above, it is viewed unfavourably by some. These negative views can be attributed to two factors, the first of which is that it could lead to stereotyping such students (Tassoni, 2003), such as by leading to thinking that their abilities and achievements are low, which may result in lower expectations of them (Farrell, 2001). The other factor is that the use of the term 'SEN' could be seen as a type of discrimination (Solity, 1991). In this respect, Corbett (1996) argues that the term 'SEN' reflects a type of prejudice. However, generally, using this term could assist in understanding the difficulties of such students and being aware of how they learn. Moreover, the individual

needs of students with SEN may not be met if the term is not used to describe such students (Norwich, 1999).

Another issue related to the argument of SEN concerns categorisations. It can be suggested that such categorisation is important as it can help to develop a clear picture of the child so that their teachers and parents can know more about their strengths and needs, as well as which teaching strategy is most suitable for them (Norwich, 2014), thus allowing access to resources and any planning strategy that schools have prepared for them (Ellis et al., 2008). Norwich (1999; 2014) discusses the issue of categories, and considers that they are related to policy decisions as to who needs additional support and provisions. In addition, if categories did not exist, there would be a struggle to recognise different kinds of difficulty, which could lead to there being no appropriate policy to address the additional resources and provisions for students with SEN. Differences in the categorisation of students with SEN can also be seen in legislation in a number of countries such as Saudi Arabia and the UK.

Saudi Arabia has similar categories of SEN to those used in the USA, reflected in the US Individuals with Disabilities Education Act (IDEA) (2004). The Regulation for Special Education Institutes and Programs (2002) gives ten categories, which are as follows: intellectual disabilities (mental retardation), Hearing impairments (including deafness), Visual impairments (including blindness), Autism, Speech or language impairments, Multiple disabilities, Specific LD, Physical and health disabilities, Behaviour and emotional disabilities, and Gifted and talented.

In the UK, the Special Educational Needs and Disabilities Code of Practice: 0 to 25 years (2014) emphasises the absence of categories of students with SEN. However, the Code of Practice (2014, 97) provides four general categories which are called “broad areas of need”. The first area is communication and interaction – this includes children and people with speech, language and communication needs and those with Autism spectrum disorder. The second area is cognition and learning – this includes children and people with LD, comprising moderate LD, severe LD, profound and multiple LD and Specific LD. The third area is social, emotional and mental health difficulties – this area includes children and people with social and emotional difficulties, mental health difficulties, attention deficit disorder, ADHD or attachment disorder. The fourth area is sensory and/or physical needs – this includes children

and young people with visual impairment, hearing impairment, multi-sensory impairment or a physical disability.

The Code of Practice (2014) argues that these areas of needs provide a general view of needs to aid schools in ascertaining the most appropriate action that the school should take to support learners. In addition, the Code of Practice (2014) states that a person may have a number of needs at the same time or that their needs may differ after a certain time. Thus, the Code of Practice (2014) emphasises identifying the needs of individuals in order to try to meet these needs. Norwich and Kelly (2005) suggest that recent legislation in the UK about SEN has been influenced by the debate against the use of categories, with a focus placed on the needs of the child rather than any specific characteristics of impairment.

It can be proposed that the categorisation approach applied in SEN legislation in the UK is based on a social model (Hardie and Tilly, 2012) or an interactive model (Shakespeare, 2009) of disabilities which acknowledges the disabilities of the individual and aims to remove the barriers that would limit individual learning through providing appropriate support for them in schools without separation according to the disability of the individual. Thus, the approach in the UK appears to contrast with that observed in Saudi Arabia, where categorisation is based on the medical model (Oliver, 1990, 2009) as students with SEN are divided in terms of their disabilities.

As the current study is carried out in Saudi Arabia, where the education system of SEN is based on categorisation of disability rather than needs, it was decided to focus on one type of SEN: LD. As mentioned in Chapter One, students with LD represent the highest proportion of students with SEN who study in mainstream schools in Saudi Arabia (Alkhashrami, 2004); the study therefore focuses specifically on the challenges that would face the implementation of inclusion for this special category. The next section discussed students with LD in detail.

3.3 Understanding Learning Difficulties

There are some similarities and differences across contexts in terms of the understanding of the term LD. Those applied in Saudi Arabia need to be clarified in order to understand what is meant by LD in the current study and a number of issues will be discussed in this section to give greater clarity to this understanding.

The first issue to be discussed is the difference between countries in terms of the terminology used to describe students with LD. The World Health Organization (WHO) (2007a) points out that the terms used to describe individuals with LD are different from one country to the next, and even within the same country, although the meanings are frequently the same; for example, in the UK, it can be seen that in the Code of Practice (2014), the term 'learning difficulties' is used, whereas the Department of Health uses the term 'learning disabilities' (DOH, 2001). In the USA, the IDEA (2004) uses the term 'mental retardation'. However, with the introduction in the USA of Rosa's Law (2010), the term was replaced, across all legislation in the USA, with the term 'intellectual disabilities'. In Saudi Arabia, in the Regulation for Special Education Institutes and Programmes (2002), the term 'mental retardation' is used. However, the Organizational Manual for Special Education (2015c) issued by the MoE in Saudi Arabia recently used the term 'intellectual disabilities'.

In fact, the term 'mental retardation' has become outdated and has been replaced with the term 'intellectual disabilities' on an international scale (Schalock et al., 2007; Kerr, 2007). This is because the term 'mental retardation' reflects a negative image of individuals with LD; thus, the term has been changed to reduce such stigma (Gates, 1997). The American Association on Intellectual and Developmental Disabilities (AAIDD), one of the largest and oldest associations in the world concerned with individuals with intellectual disabilities, was previously the American Association of Mental Retardation (AAIDD, undated).

From the discussion above it can be proposed that the terms intellectual disabilities, learning difficulties and learning disabilities are used interchangeably with differences in the terminology used between countries, which need to be considered in the current study. Beirnes-Smith et al. (2006) point out that the term 'intellectual disabilities' is used internationally and Mansell (2010) states that 'intellectual disabilities' refers to learning difficulties in the context of the UK.

This study uses the term 'learning difficulties' rather than the term 'mental retardation' or 'intellectual disabilities', despite the fact that this study was carried out in Saudi Arabia, where the term 'intellectual disabilities' is used. This is because the term 'learning difficulties' is used in the UK, where this study was written; thus, the terminology is used to support readers to develop a clear picture about the children that form the study focus.

After discussing the terminology that is used to describe individuals with LD, the meaning of LD or intellectual disabilities will be discussed next. In fact, there are similarities in the way the meaning of LD is understood across cultures (Saudi Arabia, UK, USA).

In Saudi Arabia, the Regulation for Special Education Institutes and Programs (2002, 7) utilises the term 'mental retardation', which is defined as

deficiencies of functionality of the individual, characterised by the performance of lower than average mental ability are clearly correlated with deficiencies in two or more areas of adaptive behaviour such as: communication, self-care, home life, social skills, the use of sources of community, self-direction, health and safety, functional academic skills, leisure time and work skills. The mental retardation appears before the age of eighteen.

In the UK, the Special Educational Needs and Disabilities Code of Practice (2014) does not provide a clear definition about LD; however, the Department of Health defines learning disabilities in its White Paper, entitled 'A new strategy for learning disabilities for the 21st Century' (2001,14), as

the presence of: a significantly reduced ability to understand new or complex information, to learn new skills (impaired intelligence), with; a reduced ability to cope independently (impaired social functioning); which started before adulthood, with a lasting effect on development.

In the USA, the AAIDD defines intellectual disability as:

a disability characterised by significant limitation both in intellectual function and in adaptive behaviour, which cover many everyday social and practical skills. This disability originated before the age of 18 (Schalock et al., 2010,1).

From the definitions quoted above, it can be observed that they regard an individual as having a learning difficulty if he/she has two features: low intellectual function and low adaptive behaviour, and these two features appear before the age of eighteen (WHO, 2007a). It seems that these definitions are related to the medical model of disabilities (Hardie and Tilly, 2012) as they imply that the individual is deficient when compared to the mainstream population and this may have implications for the way that individuals who are defined as having LD are perceived.

The American Psychiatric Association (2013,33) discusses in depth the meaning of these features in relation to individuals with LD. Low intellectual function refers to difficulty in

“reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience”. Low intellectual function can be established in two ways: by clinical judgement or through the application of standardised intelligence tests. Moreover, low adaptive behaviour refers to a person’s *“failure to meet developmental and socio-cultural standards for personal independence and social responsibility”*. Beirnes-Smith et al. (2006) suggest that low adaptive behaviour appears in individuals' learning, social accommodation and maturation. There are three elements of adaptive behaviour: a) conceptual skills, such as understanding the concept of money; b) social skills, such as following rules and having self-esteem; and c) practical skills, such as self-help and life skills. In addition, LD appear during the developmental period (Smith and Tyler, 2010).

However, Schalock et al. (2010,14) argue that there are five dimensions that should be considered which are related to human functioning and which help practitioners to understand LD. These five dimensions are intellectual abilities, adaptive behaviour, health, participation and context. Therefore, limitations of all of these dimensions are found in individuals with LD.

It is important to mention that in the UK, the term ‘learning difficulties’ includes specific LD such as dyslexia or dyspraxia. It also includes moderate, severe or profound LD. In contrast, the term ‘specific learning disabilities’ does not come under the definitions of intellectual disabilities in the USA or Saudi Arabia, but is instead recognised as a separate category. As such, it is important to state that, in this study, the term ‘LD’ does not include specific LD. This is because this study was conducted within the Saudi Arabian context, where there are two categories – LD (intellectual disabilities) – and specific LD.

The level of severity of LD varies from one child to the next and some classifications differ among contexts. A number of classifications are suggested across cultures to determine the levels of severity of LD which need to be considered in the current study. Table 1 shows difference in classifications of individuals with LD across contexts (The International Statistical Classification of Diseases and Related Health Problems (ICD-10),2016; The American Psychiatric Association (DSM 5), 2013; and the Department for Education and Department of Health, 2014 in UK) and Table 2 shows the classifications of individuals with LD in the Saudi context.

Table 1 Difference in classifications of individuals with LD across context

Context	Severity level							
	Mild		Moderate		severe		profound	
UK			Attainments well below expected levels in all or most areas of the curriculum, despite appropriate interventions. Their needs will not be able to be met by normal differentiation and the flexibilities of the National Curriculum.		Pupils with severe learning difficulties have significant intellectual or cognitive impairments. This has a major effect on their ability to participate in the school curriculum without support. They may also have associated difficulties in mobility and co-ordination, communication and perception and the acquisition of self-help skills		Pupils with profound and multiple learning difficulties have severe and complex learning needs, in addition they have other significant difficulties, such as physical disabilities or a sensory impairment. Pupils require a high level of adult support, both for their learning needs and also for personal care. They are likely to need sensory stimulation and a curriculum broken down into very small steps	
(ICD-10)	An IQ of between 50 and 69		An IQ of between 35 and 49		An IQ of between 20 and 34		An IQ under 20	
DSM-5	Conceptual domain	There are difficulties in learning academic skills involving reading, writing, arithmetic, time or money, with	Conceptual domain	Conceptual skills lag markedly behind those of their peers. In school age individual progress in	Conceptual domain	Attainment of conceptual skills is limited. The individuals generally have little understanding of writing language	Conceptual domain	Conceptual skills generally involve the physical word rather than symbolic processes. Individual use

		support needed in one or more areas to meet age-related expectations.		reading, mathematics and understanding of time and money occurs slowly across the school years and is markedly limited compared to that of peers.		or of concepts involving numbers quantity, time and money. Caretakers provide extensive support for problem solving throughout life.		of objects in goal directed fashion self-care work and recreation.
	Social domain	The individual is immature in social interaction, communication, conversation, and language and social judgement. There are difficulties in accurately perceiving peers' social cues, regulating emotion and behaviour in an age appropriate fashion, limited understanding of	Social domain	Individuals show marked differences from peers in social and communicative behaviour across development. Individuals do not perceive social cues accurately. Limitation of social judgement and decision making abilities; thus caretaker must assist the	Social domain	Spoken language is quite limited in term of vocabulary and grammar. Speech may be single words or phrases and may be supplemented through augmentative means. Speech and communication are forced on the here and now with everyday living. Language is used for social communication	Social domain	Individuals have very limited understanding of symbolic communication in speech or gesture. They express desires and emotions largely through nonverbal, non-symbolic communication.

		risk in social situations.		person for life decisions.		more than for explication. Individuals understand simple speech and gestural communication.		
	Practical domain	Individuals need some support with complex daily living tasks in comparison to peers. However, their recreational skills and personal care resemble those of same-age peers.	Practical domain	Individual need extended period of teaching, time and reminder, additional and ongoing support to make the individuals independent.	Practical domain	Individuals require support for all activities of daily living, require supervision at all times, cannot make responsible decisions regarding well-being of self or others.	Practical domain	Individuals are dependent on others for all aspects of daily physical care, health and safety. High level of ongoing support needed to participate in activities.

Sources: DSM-5 (2013,34-36); ICD-10 (2016); Department for Education and Department of Health (2014) and DfES, (2005,6-7).

Table 2 The classifications of individuals with LD in the Saudi context.

Classification of individuals with LD	IQ test
Education- able	Test score in the Stanford-Binet Intelligence Scale between 52 and 73, or in the Wechsler Intelligence Scale between 55 and 75, or the equivalent on any other recognised IQ test
Trainable (able to be trained).	Test score in the Stanford-Binet Intelligence Scale between 36 and 51, or in the Wechsler Intelligence Scale between 40 and 54, or the equivalent on any other recognised IQ test
dependent	Test score in the Stanford-Binet Intelligence Scale 36 or below, or in the Wechsler Intelligence scale 40 or below, or the equivalent on any other recognised IQ test

Source: Ministry of Education (2002).

From Tables 1 and 2, it can be inferred that the classifications of individuals with LD are based on different approaches. Some classifications are based on the severity (mild, moderate, severe and profound) of the difficulties, such as the classification that is suggested in the UK Code of Practice (2014), DSM-5 (2013) and the ICD-10 (2016). In addition, the classification that is given by the Regulation for Special Education Institutes and Programmes (2002) in Saudi Arabia is based on the intellectual abilities of students with LD and their education potential. Moreover, it can be observed that ICD-10 (2016) and the Regulation for Special Education Institutes and Programmes (2002) define the different types of LD based on IQ results. The DSM-5 (2013) differs in terms of the differences between individuals based on adaptive behaviour, whereas the Code of Practice (2014) defines each type based on the difficulties that students have. Moreover, it is noted that the term 'mild LD' is not used in the UK context, whereas the term 'moderate LD' is used (Norwich and Kelly, 2005). Thus, the categorisation of students with LD in Saudi Arabia contrasts with other categorisations illustrated above.

This study focuses on students with mild LD. This is because the Regulation for Special Education Institutes and Programmes (2002) specify that educable students with LD (mild LD) is the only category that can study in mainstream schools, whereas the other categories of LD (moderate) can study either in special schools or benefit from the special education program in mainstream schools.

There are some characteristics that are noticeable in individuals with mild LD that indicate that the student has LD. It is necessary to call attention to the fact that the majority of students with mild LD are not identified as having LD until they start school. Students with LD show difficulties in their academic performance and behaviour and some students with mild LD who have difficulties in speech and communication withdraw from interaction with other students (Beirne-Smith et al., 2006).

In addition, Beirne-Smith et al. (2006) and UNESCO (2003, 2015) indicated a number of characteristics that students with LD have, such as difficulties in their attention abilities; this means that students with LD have a limited attention span, difficulties in focusing and selective attention. In addition, students with LD have difficulties with their short-term memory. Generalisation of learning to a new situation or task is one of the difficulties that is typically discussed in the literature. In addition, motivational and socio-behavioural considerations for students with LD are low, whilst some students face difficulties in cognitive, language and academic development.

However, the methods of identifying students with LD differ across contexts. For example, in Saudi Arabia, in the Document Regulation for Special Education Institutes and Programs (2002), students with LD are identified through a combination of using standardised tests, such as the Wechsler Adult Intelligence Scale (WAIS) or Stanford-Binet Intelligence Scales, and tests for adaptive behaviour, either official or unofficial.

On the other hand, in the UK, IQ testing is not officially used in identifying SEN in general or LD specifically (Norwich and Kelly, 2005). Evidence of this approach can be found in the Special Educational Needs and Disabilities Code of Practice (2014), which makes no mention of any intelligence test for the identification of SEN. Moreover, from Table (1) IQ does seem to be one of the considerations made alongside the areas of need.

The practice of identification of students with SEN in the UK differs depending on the local authority (Office for Standards in Education, Children's Services and Skills (Ofsted), 2010; Norwich and Kelly, 2005). Ofsted (2010) found that a number of schools in the UK base identification of students with LD on low attainment and slow progression. With more severe SEN, including severe and profound LD, identification is usually carried out at an early age by

doctors, family and educational psychologists before children begin school (Smith and Tyler, 2010).

So far, a number of issues relating to SEN have been reviewed; these discussions have included consideration of the definitions and categories applied, and it was noted that in this study greater focus is placed on learning difficulties as a specific category. At this point, it is important to direct attention to models of disabilities that inform different approaches and attitudes towards working with children who have SEN.

3.4 Models of disabilities

There are various models that are applied in order to make sense of disabilities and facilitate an understanding of what it means to be disabled or have SEN. Models of disabilities aim to explain the phenomenon of disability and how this manifests itself in the real world (Llewellyn and Hogan, 2000). However, in this study, the focus will be directed towards two predominant models that are commonly mentioned in the literature: the medical model and the social model (Areheart, 2008). In addition, the interactive model will be discussed as this model combines the positive aspects of the social model and medical model (Shakespeare, 2009).

3.4.1 Medical model

Essentially, the medical model is based on the view that individuals are ill or divergent from the mainstream population (Hardie and Tilly, 2012), disability problems relate to individuals (Oliver, 1990, 2009), the problems associated with disability need to be treated by specialists (Llewellyn and Hogan, 2000), and medical terms are used to explain the individuals' problems (Croft, 2010). In other words, the disabilities that individuals have are seen as their deficiencies when compared to the rest of the population. As such, within the medical model, the focus is on "treating" those who have disabilities in order to make them fit into the society in which they live (Mason and Rieser, 1994; Skidmore, 2004). Educationally, the perspective that is influenced by the medical model sees students with SEN as students that need an appropriate concentration of remedial efforts (Low, 2007). Also, the medical model has negative influences on students with LD; these include their placement in special classrooms or special schools and the design of a special curriculum for them (Shogren et al., 2017). In Saudi Arabia, one form of identification of students with LD is the use of standardised measures, which compare performance to normal functioning in the mainstream population. Thus, the medical model influences the legislation regarding the identification of students with LD in the Saudi context.

The medical model is rooted in the views of the past, although until now, in some of the legislation reliance has been placed on the medical model (Marks, 1999). One of the documents that formerly used this model was the International Classification of Impairments, Disabilities, and Handicaps (1980, 27-29), which defined disability, impairment and handicap as follows:

Disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.

Impairment is any loss or abnormality of psychological, physiological, or anatomical structure or function.

Handicap is a disadvantage for a given individual, resulting from an impairment or a disability that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual

The medical model also influenced legislation in terms of the definition of disabilities. For example, in the UK, which has a long history of addressing disabilities, in part 1(6) of the Equality Act (2010), 'disability' is defined as follows:

A person (P) has a disability if (a) P has a physical or mental impairment, and (b) the impairment has a substantial and long-term adverse effect on P's ability to carry out normal day-to-day activities.

These definitions imply that disabilities are perceived as the deficiency of an individual in terms of interacting in society. When analysing the definitions, it can be suggested that they are clearly linked to the medical view of disability, which ignores other factors that may influence disabled people's functioning, such as environmental factors. Similarities to this definition of disabilities that relies on the view of the medical model can be seen in the definition applied in Saudi Arabia. The Disabilities Code (2000, 20) in Saudi Arabia defines disability as follows:

Every person suffering partial or total impairment substantially in his or her physical, sensory, communication, intellectual, education and psychological ability to the extent that reduces the possibility of meeting his or her regular requirements compared with his or her peers who are not disabled.

Wearmouth (2009) considers that the definition of SEN and disabilities in legislation supports the view of the medical model, which centres on the difficulties children face in learning as a result of their deficiency. Skidmore (2004) argues that the literature about learning difficulties is commonly related to the medical model.

To some extent, the medical model acts as a tool for deciding what kind of education individuals should obtain according to their abilities (Mason and Rieser, 1994). This often means that it is considered better for the child to go to an integrated or special school. Dyson (1997) suggests that special schools and categories of SEN are based on the medical model. Similarly, Llewellyn and Hogan (2000) point out that identification of students with LD based on standardised measures is related to medical model thinking. Basing LD on standardised measures leads to highlighting the weakness and the problems of the individual. In Saudi Arabia, one form of identification of students with LD is the use of standardised measures, thus, the medical model influences the legislation on the identification of students with LD in the Saudi context. Gross (2002) considers that the medical model influences teachers' thinking about the difficulties in terms of the characteristics of individuals. In actual fact, the medical model focuses on the impairments individuals have, rather than the needs requiring fulfilment (Mason and Rieser, 1994). Moreover, Lindsay (2003) considers that the medical model takes into account the view of medical doctors, and ignores the view of educators with regard to teaching students with SEN; in addition, it does not view environmental factors as a reason for disability.

It can be argued that the medical model may negatively influence people and their attitudes towards working with children with SEN, including staff in schools with regard to the inclusion of students with SEN in mainstream schools. It fosters a deficit view of students with SEN, who are regarded as different from other students who do not have a disability (The British Council of Organisations of Disabled People (BCODP), 1997). Hart (1996) is of the opinion that the term 'learning difficulties' implies some kind of differentiation, as this group is seen to be different from other students, and may raise concerns amongst teachers about students with LD, affecting teachers' views on their ability to teach them. Such perceptions will be examined further in the analysis of teacher's views collected in this project.

3.4.2 Social model

In the 1970s, the idea of the social model was introduced as a result of the Union of Physical Impairment against Segregation (UPIAS) (Shakespeare and Watson, 2002). The social model views the disabilities that individuals have as being caused or created by society (UPIAS and Disability Alliance, 1976; Oliver, 1990, 2009). The difference between these two models is that the medical model focuses on individuals' deficits, whereas the social model focuses on

the society that has induced the disability (Rieser, 2012). Marks (1999) explains that the basic view of the social model is that individuals experience disabilities as a result of the discrimination of the social environment in which they live. The barriers that society has produced in terms of making individuals disabled refer to structural, environmental and attitudinal contexts (Hardie and Tilly, 2012).

UPIAS and Disability Alliance (1975, 4) defines impairment and disability as follows:

Impairment as lacking part of or all of a limb, or having a defective limb, organ or mechanism of the body.

Disability as the disadvantage or restriction of activity caused by social relationships which take no or little account of people who have physical impairments.

It is clear that both models are similar in some ways, such as with regard to the meaning of impairment, which is a limitation in physical function. However, the difference between the social model and the medical model is the definition of disability and how this is perceived. The medical model relies on discussions of the deficiencies of the individual in terms of taking part in the society in which he or she lives. In the social model, deficiencies are perceived to stem from society, which does not take impairment into account. Shakespeare and Watson (2002) propose that disability within the social model is redefined, as it rejects the view that disability is located in the deficit of the individual. It thus opposes the medical model, which focuses on the physical function only and how this is limited as a result of the disability, ignoring the environmental factor (Lindsay, 2003).

The social model has had a significant influence in the field of research on SEN (Gross, 2002). Dyson (1997) considers that inclusive education has become widely implemented as a result of the ideas around the social model. Similarly, Lindsay (2003) argues that the implementation of inclusion avoids discrimination, and advocates the use of the social model as a force against it.

Hence, there are a number of researchers who argue that the difficulties students in general, and especially students with SEN, face are the result of the school environment. For example, Booth and Ainscow (1998) consider the difficulties that students with SEN face in classrooms, but believe these do not refer only to these individuals; they are a result of the tasks provided and the availability of resources that help to support learning. Moreover, Hart (1996) argues

that if teachers were more effective in their teaching, the students' results and achievement would improve. Furthermore, Hart (1996) argues that SEN does not refer to the characteristics of the child, but rather to a lack of provision of sufficient learning opportunities. It is clear that Booth and Ainscow (1998) and Hart (1996) support the ideas of the social model, which views the difficulties in learning not as being due to the disability that students have, the focus of the medical model, but rather, emphasis is placed on the environment around the child, such as teachers and resources and other factors that may cause difficulties in learning.

It is important to mention that the social model has influenced policy in terms of introducing various strategies that relate to views about disability, such as the removal of the barriers to learning (Shakespeare and Watson, 2002). This view can be seen in the Index for Inclusion (2011,41), which uses the term 'barriers to play, learning and participation' instead of 'SEN'. It is apparent that the former term supports the social model, whereas the latter supports the medical model. Moreover, the International Classification of Functioning, Disability and Health (ICF-CY) (2007b) has been introduced as a revision of the previous International Classification of Impairments, Disabilities, and Handicaps (1980): the former is known to have focused on the medical model, whereas the latter takes into account the social model of disability, although with a continuing focus on some aspects of the medical model (particularly those related to diagnosis of conditions). As a result, some terms have been removed and replaced with others; for example, 'handicap' was replaced with the term 'participation restriction' whilst the term 'disability', which was adopted in the 1980 publication, has been replaced with the term 'activity limitation'. Within the ICF-CY (2007b, 233), disability is regarded as *"an umbrella term for impairments, activity limitations and participation restrictions"*.

As the medical model does not take environmental factors into account and the social model does not take into account physical bodily functions, the Interactive model, which draws from both the medical and social models was proposed (Wedll, 1978, cited in Lindsay, 2007). The next section will discuss the interactive model.

3.4.3 Interactive model

The Interactive model of disabilities sees disabilities as the "outcome of the interactions between individual and contextual factors – which includes impairment, personality, individual attitudes, environment, policy and culture" (Shakespeare, 2009, 187).

Norwich (2004) argues that the apparent dichotomy between the medical model and the social model is false, as the perspective of disabilities can be both medical and social, depending on the focus. If the focus is on the identification of specific additional provision for a child, the medical model will be used, whereas if the focus is on planning a curriculum that takes into account the diversity of students, the social model is used. Norwich (2004) sees a connection between the medical and social models when planning the implementation of inclusion. Accordingly, if a child has LD, this refers to the strengths and weaknesses he or she has, as well as the environmental factors surrounding the child, such as teachers, curriculum and teaching methods, amongst others (Lindsay, 2003).

The ICF-CY (2007b) adopted the interactive model in the last version of the document. It uses the term “biopsychosocial” model. The ICF-CY (2007b, 19) stresses that the aim of the document is to focus on the integration between the social and medical models to *“achieve a synthesis, in order to provide a coherent view of different perspectives of health from a biological, individual and social perspective”*. Also, WHO (2011) takes into account the two models (medical and social) in its world report of disabilities.

As a result of these recent developments and the strength that can be drawn from a combination of models, the interactive model can be helpful in the inclusion of students with LD. This is because this model takes into account not only the difficulties that students with SEN have, but also the environmental issues that result in students with SEN having difficulty accessing mainstream schools.

As discussed previously, this study focuses on issues related to SEN, the categorisation of SEN and LD as specific categories. The issues surrounding associated models of disabilities have also been highlighted. The discussion now turns to the area of inclusive education.

3.5 Understanding inclusion

Every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning.

Above is one of the statements of the Salamanca Statement (1994, viii), which illustrates the basic view of inclusion, which is that schools are for all children, and that schools facilitate learning for all children to obtain an appropriate education.

Inclusion is a term that appears frequently in the field of education and inclusion is a major issue that education systems should address (Ainscow, 2005). However, as with most definitions in education, there is no consensus as to the definition of inclusion and this term has aroused controversy among writers around the world (Harrington, 1997).

The definition of inclusion can be broadly categorised into three perspectives. The first perspective sees inclusion as a way of involving all children in one educational system without consideration of any reason for excluding them. One example representing this view is the definition provided by UNESCO (2005, 13), which is as follows:

a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children.

The same view can be seen in the context of the UK, where inclusion is defined as

equal opportunities for all pupils, whatever their age, gender, ethnicity, attainment and background. It pays particular attention to the provision made for and the achievement of different groups of pupils within a school (Ofsted, 2000,4).

These definitions focus on the right of all students to be included in mainstream schools without make any discriminations between them and provide appropriate support for all students to help them to participate effectively.

The second view of inclusion can be seen as a political approach which reflects on human rights and social justice. For example, Puri and Abraham (2004, 25) define inclusion as follows:

A political strategy based on human rights and democratic principles that confronts all forms of discrimination, as part of a concern to develop an inclusive society and to ensure that some students receive additional resources and are not ignored or neglected.

This definition highlighted the broad view of inclusion, based on a political agenda that aims to make society equal and inclusive without making any discrimination.

The third view associates inclusion with students with SEN, and does not mention other students who may be excluded from mainstream schools. For example, in the United Arab

Emirates (UAE), the General Rules for the Provision of Special Education Programs and Services (GRPSEPS) (2010, 62) define inclusion as *“refer[ring] to the education of students with special needs in a regular classroom with their same-age peers who do not have disabilities”*. Similarly, Kibria (2005,4) defines inclusion as *“the policy of placing children with disabilities in general education classrooms for instruction with appropriate supports to meet their educational needs”*.

In the USA, inclusion could be seen as the least restrictive environment which is emphasised in the No Child Left Behind Act 2001 and IDEA 2004 legislation. In IDEA, (2004, 2677), the least restrictive environment associated with students with SEN is defined as follows:

To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

As discussed above, there are different ways in which the understanding of inclusion can vary according to context. Ainscow et al. (2006), following a review of definitions of inclusion in the literature, identified six ways in which the term inclusion may be used. Firstly, inclusion is associated with SEN. Secondly, inclusion is considered as a response to exclusion and inclusion can be associated with all students who may be excluded from schools. Inclusion begins as schools for all. Inclusion should be seen as education for all. Finally, inclusion should be a standard for society and education.

It can be noticed from the definitions illustrated above that one definition of inclusion associated with inclusion of students with SEN has been criticised on the grounds that it ignores other children who may be excluded in mainstream schools (Ainscow et al.,2006). One explanation for this tendency is that in some countries inclusion is associated with SEN, thus suggesting that context may be important (Ainscow and Sandill, 2010). One reason that may support the idea of associating the term inclusion only with students with SEN is that previously these students have commonly been excluded from mainstream society and educational provision and educated in special schools, with some of these students still

studying in special schools. Accordingly, these students are the main category of students facing exclusion. Moreover, Mitchell (2005) argues that the main ideas raised by discussions on inclusion for students with SEN may be applied to other students who may also be marginalised. This situation is applied in this study in terms of linking inclusion with SEN, because students with SEN in the Saudi context are the only type of students that face exclusion from mainstream schools.

Another issue related to understanding of inclusion is that inclusion is not associated only with access and placements in mainstream schools (Tutt, 2007). Mitchell (2005; 2014) states that there are two principal features of inclusion: 1) the right to become members of mainstream classrooms in mainstream schools, and receive suitable aids and support service, and 2) providing individualised programmes, further making the curriculum, teaching methods and assessment suitable for all students. In other words, inclusion requires multiple elements. Moreover, Allen and Cowdery (2014) see inclusion as concerning the acceptance of diversity among all students. Support is provided to students and their families when it is necessary, which can help them to engage in schools successfully. Moreover, Ainscow (2005) illustrates four principles of inclusion, stating that inclusion can be seen as a process that is never-ending, and that explores better ways of educating all students in one setting. In addition, inclusion is associated with recognising and removing obstacles, is centred on attendance, and is about all students being able to achieve. Finally, inclusion concentrates on those students who may be excluded from neighbourhood schools (Ainscow, 2005).

Inclusion is concerned with students having the right to involvement in mainstream schools. As this study focuses on students with SEN in general and students with LD specifically, for the purpose of the current research inclusion may be defined as referring to the education of students with SEN in neighbourhood schools, in a mainstream class, with involvement in all facilities that accommodate and facilitate their learning acceptance.

The concept of inclusion is new in Arab countries, including Saudi Arabia, owing to the fact that the term 'inclusion' is a Western concept (Brown, 2005). Brown (2005) argues that when the term is translated and used in another culture, it is possible to implement it in a different way from that originally intended. For example, Brown (2005) illustrates that, in Kuwait, a GCC country, – inclusion is interpreted as moving children from special schools to mainstream schools, where they then study in a special class. This is different from the

general idea of inclusion, which refers to students with SEN studying with their peers in the same class with adaptation of the environment, curriculum, and teaching strategies to be suitable for all students (Mitchell, 2014).

In Saudi Arabia, the term inclusion has not been explored well, as there is a shortage of studies that explored the understanding of inclusion in the Saudi context. This may be ascribed to the current practice of educating students with SEN, which focuses on integration (discussion about integration will be addressed later) rather than inclusion. Thus, one aim of the current study is to explore the understanding that teachers have of the term inclusion. There are a number of studies in the Saudi context that explored the understanding of the term inclusion; for example, Albanyan (2011) and Alothman (2014) reported that the majority of teachers in their studies expressed their understanding of inclusion. Generally, inclusion was defined in these studies as access to the mainstream classroom and students with SEN (hearing impairments) studying alongside their peers. However, there are some teachers in Saudi Arabia who confuse the terms inclusion and integration. For example, in Alshahrani's (2014) study, which included interviews with hearing impairment teachers, he indicated that the definition of inclusion that was given to him by teachers would more generally be regarded as integration. In addition, Alanazi (2012) who interviewed female general education teachers and special education teachers found there was confusion around the definition of inclusion; under half of the teachers defined inclusion, whereas the rest defined inclusion using what would in western literature be considered to be a definition of integration.

Inclusion seems to be a complex concept to define. The complexity associated with defining inclusion may relate to several different ways of understanding the concept of inclusion (Black-Hawkins et al., 2007); for example, Acedo et al. (2009) ascribe the complexity of defining inclusion to the broad scope of this term. Bowie (2009) states that the meaning of inclusion differs from one country to the next. Black-Hawkins et al. (2007, 16) attribute the differences in defining inclusion to three sets of factors: "historical, geographical and theoretical". Clough and Corbett (2000) in line with Black-Hawkins et al. (2007), agree that there are a number of meanings of the term 'inclusion', which may lead to confusion.

The confusion between integration and inclusion may give rise to difficulty in understanding inclusion, as some educators use these two terms synonymously (Mittler, 2000). In addition,

in some contexts such as GCC countries, Weber (2012) argues that the terms 'inclusion' and 'integration' are used synonymously. Indeed, some writers argue that the two terms are similar to each other in that:

both terms are being used to express comparable processes and outcomes, emphasising particularly that there are wider notions of integration that are coming close to the concept of inclusion (Pijl et al., 1997,2).

As there is a difference between inclusion and integration reported in literature, it is necessary to start by defining integration and then discuss the differences between these two terms. Stephens *et al.* (1988,12) define integration as:

the process of educational decision making and planning for students with a handicapping condition in the least restrictive environment and it is based on the philosophy of equal educational opportunity that is implemented through individual planning to promote appropriate learning achievement, and social normalization.

In Saudi Arabia, the term 'integration' is used particularly in the Regulation of Special Education Institutes and Programmes (2002, 8), integration is defined as *"educating children with SEN in ordinary schools while providing them with the services of Special Education"*. The methods of implementing integration in Saudi Arabia are similar to those proposed in the Warnock Report (1978,100-101) in the context of the UK. Integration is divided into three types, the first is locational integration, which refers to when *"special units or classes are set up in ordinary schools. It also exists where a special school and an ordinary school share the same site"*. The second is social integration, which refers to students *"attending a special class or unit [to] eat, play and consort with other children, and possibly share organised out-of-classroom activities with them"*. The third is functional integration, which refers to when *"children with special needs join, part-time or full-time, the regular classes of the school, and make a full contribution to the activity of the school"*.

For the purpose of the current research it is proposed that integration means educating students with SEN in mainstream schools in special classrooms and providing them with appropriate opportunities to interact with other students in activities during the school day, e.g. at break times and on school trips (Farrell, 2000). As mentioned above, some confusion between inclusion and integration has been reported. Thus, the following paragraphs will discuss the difference between these two terms.

The first difference between inclusion and integration can be reflected in placement. For example, with integration, students with SEN move from special schools to local schools (Vislie, 2003; Thomas, 1997) and are in a special classroom to study for part of the school day (Jenkinson, 1997; Thomazet, 2009) or are visitors to the mainstream classroom (Antia et al., 2002). In contrast, with inclusion, students with SEN become full and unconditional members of mainstream classrooms (Jenkinson, 1997; Thomazet, 2009; Antia et al., 2002).

Another differentiation between integration and inclusion can be seen in the systemic change that schools undertake to accommodate students with SEN. In the integrated setting, no changes are necessary to accommodate students with SEN (Thomas, 1997; Loreman et al., 2005). Similarly, Mittler (2000) argues that in integration, it is not necessary for schools to change to accommodate diversity amongst students. However, with inclusion, schools should be reformed in order to take into account the diversity among all students. In this respect, Ainscow (1995) and Mushoriwa (2001) stress the necessity of school reform to take into account the diversity among all students.

Moreover, the difference between inclusion and integration can be seen in the practice in mainstream schools, for example, with integration, students try to follow the mainstream curriculum as far as possible (Phadraig, 2007), whereas with inclusion, there are a number of factors that should be put into practice, including the development of curricula to meet every student's needs, modification in the approaches taken to assessment in order to ensure that these are suitable and just for all students, a change to grouping students in terms of their diversity in ability in classrooms, and a change in the pedagogy so that it can reach all students in order for all students to be welcomed in schools (Vislie, 2003; Phadraig, 2007; Mittler, 2000).

In addition, Mitchell (2005) distinguishes between inclusion and integration in terms of the educational system. In inclusion, there is one educational system for all students. In integration, there are two educational systems: one for students without SEN, and the other for students with SEN, who may also fall under a separate administration. The situation is similar in Saudi Arabia, as there is regulation for students with SEN and regulation for general education students.

The difference between integration and inclusion could also refer to the models of disabilities; integration can be perceived as related to the medical model (Ainscow, 1995), whereas inclusion can be related to the social (Pearson, 2009) and the interactive models (Norwich, 2004).

The integration of students with SEN has been criticised for some time, as can be observed in the education literature. Jenkinson (1997) argues that, although, in general, students with SEN have benefited socially, it can also be suggested that integration is, in some ways, a form of segregation when students with SEN study in special classrooms. Furthermore, he argues that some schools appear to integrate students with SEN in mainstream programmes but ultimately minimise the disruption to mainstream classrooms by putting SEN students in a separate building or classroom. Following the criticism of integration, some educators have advocated involving students with SEN more fully with their peers in mainstream schools, and giving them more equal opportunities in order to offer the chance for students with SEN to benefit academically and socially (Ruijs and Peetsma, 2009).

This situation highlights the need for the present study to identify the challenges facing the inclusion of students with LD in mainstream classrooms; these students currently study in special classes. Overall, the literature reviewed thus far would suggest that better outcomes could be achieved for all students if inclusion were fully implemented (Dessementet et al., 2012; Freeman and Alkin, 2000; Peetsma, 2001). In the Western context, a framework for understanding and addressing such challenges is provided by the Index for Inclusion (Booth and Ainscow, 2011), which is discussed in the following section.

3.6 Index for Inclusion

The Index for Inclusion is a set of materials that aid schools to overcome any challenges that might impact on all students when participating and learning in mainstream schools (House of Commons: Education and Skills Committee, 2006b; Messiou, 2017). The index also helps when developing inclusive education effectively in mainstream schools (Briggs, 2005). Alborn and Gaad (2014) used the Index for Inclusion in their qualitative study in the context of the UAE, which has a similar culture to Saudi Arabia and a similar initiative for implementing inclusion. Alborn and Gaad (2014,232) argue that *“The Index was chosen [in their study] because it provides a flexible and adaptable framework for developing and evaluating*

inclusive schools"; thus, the index was helpful for assessing the current practice of implementing inclusion in the schools where Alborn and Gaad's (2014) study was conducted to capture what is needed to develop inclusion effectively.

Booth and Ainscow (2011, 13-46) proposed three dimensions that are interconnected, and which help to develop inclusive education. Each dimension is divided into two sections for greater focus on what is important to follow in order to ensure it is undertaken in schools. Moreover, under each section there are a number of indicators that raise important aspects in each section and a number of questions that help to make the indicator clearer. The first dimension is creating inclusive cultures, which refers to *"creating a secure, accepting, collaborating, stimulating community, in which everyone is valued"*. The creating inclusive cultures dimension is divided into two sections, building community and establishing inclusive values. The second dimension is producing inclusive policies that help to implement the strategies that schools aim to reach. Producing inclusive policies aims to *"ensure that inclusion permeates all plans for the school and involves everyone"*. Producing inclusive policies is divided into developing the school for all and organising support for diversity. The third dimension is evolving inclusive practices, which refers to *"developing what is taught and learnt, and how it is taught and learnt, so that it reflects inclusive values and policies"*. Evolving inclusive practices is divided between constructing curricula for all and orchestrating learning.

The Index for Inclusion is used in this study as a theoretical guide that helps in exploring the challenges involved in implementing inclusion for students with LD in mainstream schools in Saudi Arabia. Hence, the next section will discuss some of the issues that arise when inclusion is implemented.

3.7 Issues regarding the inclusion of students with SEN

Throughout the literature on inclusion there are a number of studies that report issues that arise when inclusion is implemented. In other words, there are factors that influence inclusive practice in mainstream schools being implemented successfully (Giangreco, 1997; Scruggs and Mastropieri, 1996). For example, NCERI (1994, 16-23) conducted a large-scale survey study in 1000 schools across the US to identify factors that have a positive influence on the implementation of inclusion effectively. The factors NCERI found are: "visionary leadership,

collaboration, refocused use of assessment, support of staff and students, appropriate funding levels, parental involvement, models and classroom practices that support inclusion”.

There are similarities and differences between countries in the factors that make inclusion successful, as each country has its own cultural context and philosophy that are different from those of other countries. This diversity increases the importance of exploring the Saudi context, as the researcher did not find any study exploring the issues of implementing inclusion for students with LD in the Saudi context. Researchers stress the necessity of exploring the factors that aid such a system to implement inclusion effectively. Koutrouba et al. (2006) argue that the importance of exploring the factors that affect the implementation of inclusion lies in their use by policy makers in developing and formulating strategies that promote the positive effects and overcome the negative issues. According to Gal and Yeger (2010) and Ahmmed et al. (2012) the importance of exploring the factors that influence the implementation of inclusion is that this helps to develop strategies for implementing inclusion that are suitable for their context.

The following section will discuss common issues that arise in the literature about the factors that influence the effective implementation of inclusion across cultures, with reference to the Saudi context if available.

3.7.1 Teachers' attitudes

Before discussing the issues relating to teachers' attitudes towards inclusion, it is important to consider what the term “attitude” refers to. “Attitude” is used by individuals to show their perceptions towards a particular situation (Oskamp and Schults, 2005). Allport (1985 cited in Oskamp and Schults, 2005, 8) defines attitude as *“a mental or neural state of readiness organized through experience, exerting a directive or dynamic influence upon an individual's response to all the objects and situations with which it is related”*. In terms of inclusion, this definition may be related to whether factors surrounding teachers have a positive or negative influence on their attitudes.

Attitude can also be used to describe an emotional state that provides an inclination to an action (Triandis, 1971). The importance of attitudes is that they drive the behaviour of individuals. What individuals believe and how they feel about an action are likely to have an

impact on what they do and how they expect to do it (Vash, 2001). Thus, the positive attitudes of teachers could impact positively on their practice in implementing inclusion.

Teachers are key members of staff in schools in leading to the successful implementation of inclusion. There are a number of studies that have stressed the importance of teachers in implementing inclusion, for example, Secer (2010) in Turkey, Gal and Yeger (2010) in Israel, Avramidis and Norwich (2002) and Monsen and Frederickson (2004) in New Zealand, and Ainscow (2007) in the UK. Stanovich and Jordan (2002) argue that implementing inclusion relies mainly on teachers. This is because the learning opportunity is provided by teachers and teachers remove any obstacles that impact on the students learning. In general, teachers are responsible for the classroom.

In referring to studies that have been conducted to investigate teachers' attitudes towards the inclusion of students with SEN, it was revealed that there are variations in the findings across countries between positive attitudes and negative attitudes.

On the one hand, there are a number of studies that reveal that teachers have positive attitudes towards the inclusion of students with SEN; for example, Avramidis et al. (2000) in the UK; a study of special education teachers and General education teachers working in inclusive classrooms by Minke et al. (1996) in the USA; and studies of regular teachers by Lampropoulou and Padellade (1997) and Avramidis and Kalyva (2007) in Greece, Gal and Yeger (2010) in Israel, Cornoldi et al. (1998) in Italy, Subban and Sharma (2006) in Australia, Haider (2008) in Pakistan, Gyimah et al. (2009) in Ghana, Ross-Hill (2009) in the USA, and Astha et al. (2012) in India. On the other hand, a number of studies found that teachers had negative attitudes towards inclusion, for example, regular teachers in studies by Minke et al. (1996) in the USA, Agbenyega (2007) in Ghana, Gaad and Khan (2007) in Dubai in the UAE, Kalyva et al. (2007) in Serbia, Fakolade et al. (2009) in Nigeria, Shadreck (2012) in Zimbabwe, Chhabra et al. (2010) in Botswana and Coutsocostas and Alborz (2010) in Greece.

The studies mentioned above all explored the attitudes of teachers for all categories of students with SEN. However, it is proposed that the type of diagnosis and nature of the students with SEN is an important factor in influencing teachers' attitudes towards inclusion (De Boer et al., 2011). Avramidis and Norwich (2002) argue that both positive and negative attitudes towards inclusion are based largely on the nature of the students with SEN. Teachers

appear to have positive attitudes towards the inclusion of students with mild SEN, such as students with physical disabilities (Gaad and Khan, 2007; Gyimah et al., 2009), whereas teachers tend to have negative attitudes regarding students with more severe SEN, such as students with LD (Lifshitz et al., 2004; Abdelhameed 2015 in Egypt; Alghazo and Gaad, 2004 in the UAE). Critically, although these studies indicated that teachers have negative attitudes towards the inclusion of students with LD, other studies have indicated that teachers have positive attitudes towards inclusion of students with LD (Balboni and Pedrabissi, 2000 in Italy; Dukmak, 2013 in the UAE; Memisevic and Hodzic, 2011 in Bosnia and Herzegovina). These findings indicated that the attitudes towards students with LD are not usually negative, as teachers across cultures have different attitudes towards inclusion, formed by their experience in teaching students with LD, the knowledge they have regarding students with LD (Dessementet et al., 2014), or the teachers' beliefs (Memisevic and Hodzic, 2011).

In Saudi Arabia, the findings are also mixed between positive and negative attitudes towards inclusion. However, there are some limitations that should be considered in Saudi studies, which are related to the gender of the sample, the type of teachers, the type of students with SEN that these studies focused on and the type of research methods. For example, Alanazi (2012) looked at the attitudes of female special education teachers and General education teachers towards inclusion of students with Specific LD, using structured interviews, and found that teachers have positive attitudes towards inclusion. In addition, Alhudaithi (2015) surveyed 497 female special education teachers for students with LD and autism teachers in mainstream and special schools about their attitudes towards inclusion of female students with autism. Generally, the majority of these female teachers expressed positive attitudes towards the inclusion of students with autism. Alothman (2014) who conducted interviews with male teachers of students who were deaf indicated that these teachers had positive attitudes towards inclusion. Similarly, Alqahtani (2003) surveyed 141 male teachers of students who were visually impaired and found them to have positive attitudes towards the inclusion of students with visual impairment with their peers. In contrast, Alquraini (2011), who surveyed 303 male and female special education teachers and General education teachers in Riyadh, found that teachers had negative attitudes towards the inclusion of students with severe LD. Moreover, Alnahdi (2014) indicated that from his experience as special education teacher for students with learning difficulties, General education teachers

have negative attitudes regarding inclusion of students with LD. More recently, Assery (2016) surveyed 196 male and female General education teachers and special education teachers about their attitudes towards inclusion of deaf and hard of hearing students in mainstream classrooms. The findings showed that teachers had negative attitudes towards inclusion.

The positive attitudes of teachers towards inclusion could relate to teachers' experience of implementing inclusion (Cornoldi et al., 1998), to their having received in-service training (Gaad and Khan, 2007) or to their belief that inclusion is the right of students with SEN and that these students would benefit academically and socially from inclusion (Avramidis and Kalyva, 2007). In the Saudi context, Alanazi (2012) reported the positive attitudes of some teachers towards inclusion from the Islamic perspective, which requires people to help others who need help. Furthermore, Lampropoulou and Padellade (1997) ascribed the positive attitude of General education teachers in their study to two reasons, which were humanitarian grounds or a misunderstanding of the meaning of inclusion, as to some teachers it meant teaching students with SEN in special classrooms and not in inclusive classrooms. It has been suggested that the positive attitudes of teachers could reflect positively on teachers' commitment to inclusion (Stanovich and Jordan, 2002).

In contrast, the negative attitudes of teachers towards the inclusion of students with SEN could be related to the teachers feeling that inclusion requires much more work to meet the needs of students with SEN (Gaad and Khan, 2007 in Dubai; Minke et al., 1996 in the USA), the increase in the amount of pressure upon them (Stanovich and Jordan, 2002; Mullick et al., 2012 in Bangladesh), lack of clarity about their role within an inclusive setting (Gaad and Khan, 2007), lack of teacher preparation either in university or through in-service training, which leads teachers to feel a lack of confidence as they have no knowledge and skills in working with students with SEN in inclusive settings (Shadreck, 2012; Fakolade et al., 2009; Secer, 2010 in Turkey; Chhabra et al., 2010 in Botswana), lack of support, the need for more resources (Secer, 2010 in Turkey) and pressure to teach and finish the syllabus in the required time (Agbenyega, 2007 in Ghana). In addition, in the Saudi context, the negative attitudes could be related to the social stigma that surrounds students with SEN (Hadidi and Alkhateeb, 2015; Ashencaen Crabtree and Williams, 2013), teachers' belief that special classrooms are suitable places for students with severe LD to develop socially and behaviourally (Alquraini, 2011), workload (Alshammari, 2014), and the financial incentive that is only provided to special

education teachers and not to general education teachers (Alkhaldi,2014). Thus, Alfahili (2009) suggests providing financial and non-financial incentives such as training courses and reducing the duties for general education teachers in order to encourage them to participate in making integration (the same principles could be applied to inclusion) work effectively.

Positive attitudes of teachers towards the inclusion of students with mild SEN may relate to a view that these students will not be problematic (Avramidis and Kalyva, 2007). In contrast, negative attitudes of teachers towards the inclusion of students with severe SEN may relate to limited knowledge about teaching them (Lifshitz et al., 2004), challenging behaviour that can accompany such needs (Gal and Yeger, 2010), requiring a modified programme (Subban and Sharma, 2006), or the teachers feeling that including these students cannot be achieved in an inclusive classroom (Chhabra et al., 2010). Gal and Yeger (2010) found in Israel that teachers expressed different requirements for different types of students with SEN.

Generally, some of the factors that influence teachers' attitudes negatively, mentioned above, are contrary to one indicator for inclusion that is mentioned in the Index for Inclusion (2011, 14), which is "expectations are high for all children".

3.7.2 Teacher training

The training, either pre- or in-service, that teachers receive is proposed to have a significant role in the implementation of inclusion. Avramidis and Norwich (2002) argue that training, either pre- or in-service, should be taken into account by policymakers when implementing inclusion as any attempts to include students with SEN in inclusive classrooms without comprehensive training about students with SEN would be difficult.

The following sub-sections will discuss the influence of pre- and in-service training on implementing inclusion.

3.7.2.1 Pre-service training

The pre-service training that teachers obtain from universities or institutes related to special education and inclusion has a positive role when implementing inclusion in terms of influencing teachers' attitudes towards inclusion positively (Campbell et al., 2003; Bradshaw and Mundia,2006). Moreover, Coutsocostas and Alborz (2010) maintain that to enable teachers to have positive attitudes towards inclusion, courses in university about SEN should be provided for those who will become teachers. By such means, Alshahrani (2014) suggests,

pre-service training has a role to play in making inclusion acceptable for teachers. In addition, pre-service has an influence on confidence of teachers in implementing inclusion, for example, Brady and Woolfson (2008) state that pre- and in-service training that includes issues about inclusion has a role in influencing teachers' willingness to implement inclusion and their self-efficacy. In addition, Ahmmed et al. (2012) see the importance of pre-service training in promoting the feeling of success in teaching students with SEN. Furthermore, Avramidis and Kalyva (2007) discuss the importance of pre-service training in Greece for supporting teachers to be effective in implementing inclusion and providing them with information about the possible challenges that they may experience, as well as strategies that can be used to overcome them.

However, it is argued that the pre-service training that teachers have does not prepare them for implementing inclusion effectively, as courses in universities do not focus on issues related to inclusion and SEN (Scruggs and Mastropieri, 1996; Shadreck, 2012; Murry and Alqahtani, 2015 in Saudi Arabia; Alhudaithi, 2015 in Saudi Arabia; Amr, 2011 in Jordan) or else these courses are not adequate to prepare them to teach in an inclusive setting (Morley et al., 2005; Ahmmed et al., 2012). Gaad and Khan (2007) argue that teachers who do not have pre-service training in special education see themselves as not being qualified for implementing inclusion.

As indicated above, it is proposed that universities do not prepare teachers for inclusion. Suggestions can be seen in the literature about what pre-service training should cover in order to help teachers to implement inclusion effectively, for example, Bradshaw and Mundia (2006) suggested that universities should provide teachers during their pre-service training with knowledge for educating students in inclusive classrooms. Similarly, Morley et al. (2005) in the UK proposed including in the pre-service training a module that includes basic knowledge for understanding students with SEN. Moreover, Subban and Sharma (2006) suggested providing teachers in pre- and in-service training with strategies for implementing inclusion effectively, as this will aid them in supporting inclusive classrooms. Avramidis and Kalyva (2007) proposed providing some skills and knowledge in making individual education plans (IEPs), the assessment of progress in academic achievement, differentiation in the curriculum, and how teachers can cooperate with colleagues. Moreover, it is suggested that it is important to include the practical with the theoretical in teachers' preparation (Subban and Sharma, 2006), as the practical aspects will help teachers to interact and gain experience

(Elhoweris and Alsheikh, 2006), as the pre-service training that teachers receive usually focuses on the theoretical and there is no consideration of the practical aspects (Morley et al., 2005).

In the Saudi context, some researchers stress the importance of including some modules that focus on SEN in teachers' preparation, so that teachers would be ready to teach students with SEN and are familiar with approaches to supporting these groups of learners (Biawir, 2010; Aldabas, 2015). Moreover, Alquraini (2015) proposed reconsidering the preparation of special education teachers and General education teachers, in terms of introducing new modules on how to ensure students with LD get access to the general curriculum and how to ensure cooperation between special education teachers and General education teachers in order to help students with LD to access the general curriculum.

As a result, Koutrouba et al. (2006) in Cyprus have suggested establishing a department in universities that provide pre- and in-service training for teachers to overcome their concerns about inclusion. In addition, Gaad and Khan (2007) proposed that the special education and general education departments in universities should work cooperatively to design modules for teaching all abilities of students and provide teachers with the skills and knowledge to teach students with SEN.

3.7.2.2 In-service training

In addition to the importance of pre-service training in promoting inclusion, it has been found that in-service training is necessary for implementing inclusion successfully (Scruggs and Mastropieri, 1996; Florian, 2012). Hodkinson and Devarakonda (2009) argued that to deliver inclusion effectively, a clear and consistent policy for teacher training should be created. Moreover, Booth and Ainscow (2011, 15) in the Index for Inclusion, stated that one of the indicators for inclusion is that "professional development activities help staff respond to diversity".

A number of advantages have been proposed in the literature that show the influence of in-service training on teachers, for example, an influence of in-service training on teachers' attitudes towards inclusion has been found, indicating that teachers who have in-service training have more positive attitudes compared to teachers who have little or no such training (Avramidis et al., 2000; Avramidis and Kalyva, 2007).

It has also been found that in-service training has an influence on changing teachers' attitudes to become positive. Lifshitz et al. (2004) found that after an intervention programme was provided for teachers in Israel and Palestine their attitude towards the inclusion of students with SEN was different, especially for Palestinian teachers whose attitudes had been negative initially. After the programme, teachers' sense of self-efficacy was also different and had significantly increased. In addition, in-service training has a role in promoting the confidence of teachers to teach in inclusive classrooms. Moreover, in the Saudi context, Alshammari (2014) found that providing a training course for General education teachers helped to change their attitudes towards integration to being more positive.

In addition, in-service training has a role in enhancing teachers' confidence for implementing inclusion. Allison (2012) argued that in-service training helped teachers to increase their confidence for teaching students with SEN and to feel that they are prepared for working in inclusive settings. Moreover, Avramidis et al. (2000) observe that teachers who have core training in SEN have more confidence in dealing with IEPs. Sari (2007) indicated other benefits of in-service training in raising teachers' awareness of the benefits of inclusion for students with SEN and decreasing their concern about the failure of implementing inclusion, as well as providing ways for resolving any challenges that the teachers may face in an inclusive classroom. Furthermore, in-service training provides skills and knowledge for teachers in a way that prepares them for teaching effectively in inclusive classrooms (Chhabra et al., 2010; Shadreck, 2012). Thus, teachers in the study of Dessemontet et al. (2014) emphasised the importance of providing in-service training related to LD when students with LD are included in mainstream classrooms.

In contrast, not attending in-service training has a negative influence on teachers when implementing inclusion. For example, Agbenyega (2007) demonstrated that teachers who have not received training to work with students with SEN appeared to feel an inability to teach in inclusive settings and did not feel ready to implement inclusion. Moreover, head teachers in the study of Mullick et al. (2012) in Bangladesh noticed that the professional development provided for teachers is limited, which reflects negatively on teachers' confidence, knowledge and skills for teaching students with SEN.

In the Saudi context, there are some obstacles to attending in-service training, for example, Alothman (2014) and Alhudaithi (2015) indicated that no training courses were provided

which focused on inclusive education. In addition, Alotaibi (2012) found a number of obstacles experienced by art education teachers for students with learning difficulties when they attended in-service training in general, including too few training courses (some training centres provide only one per semester), no rewards for attending a training course, lack of practice in the training courses provided, an old-fashioned manner of presenting the training courses, training content that did not match their needs, and difficulties of translating what is learnt in the training course to the classroom. Alkhaldi (2014) found that mainstream teachers of students with visual impairment lacked skills in Braille because there was no training provided for them.

Whilst some studies have focused on what pre-service training should cover, as discussed above, teachers in a number of studies suggested that in-service training should include several aspects that could help to implement inclusion effectively. For example, Gyimah et al. (2009) and Gaad and Khan (2007) emphasise the importance of providing information about the nature, causes and characteristics of students with SEN, whereas teachers in Avramidis et al.'s (2000) study stated that training should focus on working with students with SEN, and managing their classroom behaviour. Moreover, Avramidis and Kalyva (2007) and Gaad and Khan (2007) focused on providing teachers with knowledge about modifying their teaching in a way that helped to meet the needs of all students with SEN, which included using IEP. In addition, Gyimah et al. (2009) and Morley et al. (2005) indicated that in-service training should provide teachers with knowledge about strategies that aid the inclusion of students with SEN in curricular activities and making the curriculum accessible for students with SEN. Moreover, it is suggested that practical in-service training should be included to make inclusion work effectively (Gaad and Khan, 2007; Hassanein, 2015).

3.7.3 Competence

The competence of teachers has been seen as one challenge that influences the implementation of inclusion, because if teachers are not competent in teaching students with SEN, including students with LD, in inclusive classrooms they may feel frustrated and inadequate and be worried about failure (Bradshaw and Mundia, 2006; Memisevic and Hodzic, 2011; Assery, 2016). In contrast, Brady and Woolfson (2008) and Dessemontet et al. (2014) found that teachers who feel more competent in their ability are more comfortable in teaching students with SEN including students with LD in inclusive classrooms. The knowledge

and skills that teachers have about students with SEN and inclusion may influence their competence. Minke et al. (1996) found that a higher competence appeared in SEN teachers than inclusive education teachers and regular teachers as SEN teachers know more about the learning styles of students with SEN and are more patient when dealing with their behavioural and academic problems. In addition, SEN teachers are willing to adapt instruction in order to support any academic difficulties. Similarly, Aldossari (2013) highlighted that teachers of students with LD have good knowledge about the needs and characteristics of such students, how to work with and teach them, and how to cooperate with other staff in the school.

Generally, the knowledge and skills that teachers have in educating students with SEN influence the attitudes of teachers towards inclusion (Avramidis et al., 2000); teachers become confident about implementing inclusion (Huang and Diamond, 2009) and they may become more effective and supportive in implementing inclusion (Avramidis and Kalyva, 2007). It was also found that there is a strong relationship between the limited knowledge and skills that teachers have and their negative attitudes (Gyimah et al., 2009) and concerns about inclusion (Agbenyega, 2007). This finding could be attributed to teachers feeling that their skills and professional knowledge about teaching students with SEN in inclusive classrooms are inadequate (Agbenyega, 2007). In addition, Cook et al. (1999) argued that one challenge that influences the implementation of inclusion is that General education teachers do not have the instructional skills that would help teachers to support the academic needs of students with SEN.

The knowledge and skills that teachers have about students with SEN and inclusion would help them to use better interventions that are more suitable for such students (Gyimah et al., 2009). Hodgkinson and Devarakonda (2009) argued that teachers should gain knowledge about how inclusion is operationalised in order to become more effective regarding inclusion. Sari (2007) found that increasing teachers' knowledge and skills about students with SEN would raise their understanding of the differences among these students. Secer (2010) suggested that one way to improve the knowledge and skills of teachers would be to provide in-service training.

Teachers stress the need to increase their knowledge and skills about teaching students with SEN. For example, the participants in the study of Huang (2007) in Taiwan claimed that they wanted to learn about how to make effective activities in mainstream classrooms that would

be suitable for all students. Teachers wanted to learn techniques to deal with learning and behavioural difficulties for students with SEN in a way that did not influence any students without SEN. Teachers also wanted to learn how to assess students and how to motivate them. Moreover, in Saudi Arabia, Biawzir (2010) found that art education teachers for students with learning difficulties expressed their need to know about the characteristics and needs of students with LD, the methods of teaching and working with students with LD, how to make an IEP, how to assess students with LD in an appropriate way and how to cooperate with special education teachers.

3.7.4 Support

Throughout the literature, it was found that support for teachers during the implementation of inclusion is necessary to make the process successful (Gyimah et al., 2008). Moreover, Avramidis and Kalyva (2007) see support as an important variable in successful inclusion.

There are different types of support. Avramidis and Norwich (2002) divide the support needed in inclusive settings into two kinds: physical support, which includes materials and resources, and human support, which includes support from therapists, special education teachers, teaching assistants and so on. The discussion of support will, therefore, be divided into physical support and human support in the following sub-sections.

3.7.4.1 Physical support

The importance of material resources in aiding teachers in their teaching in inclusive classrooms has been reported in many studies (Scruggs and Mastropieri, 1996; Cook et al., 1999; Avramidis et al., 2000; Haider 2008; Ashencaen Crabtree and Williams, 2010). Avramidis and Kalyva (2007) argued that successful inclusion depends on extra resources. Moreover, resources are mentioned in the Index for Inclusion (2011, 15) as one of the indicators, *“Staff develop shared resources to support learning”*, that help to implement inclusion effectively.

Gyimah et al. (2009) express the importance of teaching materials and resources, as these reflect positively on the learning of students and the teaching practices adopted, as the existence of resources makes the adaptation of instructions easier (Minke et al., 1996), such as materials to fulfil the needs of the curriculum and other equipment that facilitates the learning of students with SEN (Avramidis et al., 2000). Moreover, Avramidis and Norwich (2002) and Sari (2007) suggest providing appropriate support through an allocation of

resources for educators in schools to overcome any concerns and difficulties about implementing inclusion. Avramidis and Norwich (2002) also argued that as teachers receive more resources, their attitudes will become more positive. Moreover, Stanovich and Jordan (2002) indicated that the resources that teachers receive in their classroom reflect on the teachers in terms of experiencing success in educating students with SEN in inclusive classrooms and increasing their efficacy for teaching these students. Moreover, using resources could have a positive influence on students' achievement, as Almurshid (2014) in Saudi Arabia found that using an electronic blackboard reflected positively on the academic achievement of students with LD in science subjects.

In contrast, research has found that there are negative effects to the limited provision of material resources when implementing inclusion. For example, Cornoldi et al. (1998) and Scruggs and Mastropieri (1996) indicated that the existence of only a few resources in the classroom influenced the attitudes of teachers towards inclusion negatively. Minke et al. (1996) indicated that the needs of students with SEN cannot be met in a classroom that does not have sufficient resources whilst Fakolade et al. (2009) argued that one challenge that faces the implementation of inclusion in Nigeria is the limited amount of technological equipment provided to students with SEN, especially special equipment. Agbenyega (2007) and Subban and Sharma (2006) found that one concern that teachers raised in implementing inclusion was related to resources; they found that a limited supply of adequate resources and special materials had a negative impact on implementing inclusion successfully. Overall, teachers perceived that without sufficient resources, inclusion would not work effectively.

In the Saudi context, inadequacy of resources in mainstream schools was seen as one of the obstacles that influenced negatively the process of integration (Alotaibi, 2011; Rajeh, 2013; Alibrahim, 2003). The lack of availability of resources in schools could also negatively influence the process of teaching. Alqahtani (2009) indicates that this lack of resources could stop teachers from using different teaching methods in the classroom because the resources that are needed are not available; whereas using resources could positively influence students' achievement, as Almurshid (2014) found, for example, that using an electronic blackboard had a positive impact on the academic achievement of students with LD in science subjects, as mentioned previously. Thus, Alshahrani (2014) notes that one factor that makes inclusion work effectively is providing high-quality resources.

3.7.4.2 Human support

The availability of human support has been found to be an important factor needed in implementing inclusion; a number of studies report that teachers express their need to obtain support from specialists as this helps them to implement inclusion effectively (Scruggs and Mastropieri 1996; Avramidis et al., 2000 in UK; Coutsocostas and Alborz, 2010 in Greece; Agbenyega, 2007; Ahmmed et al., 2012 in Bangladesh; Haider, 2008 in Pakistan).

Human support can be seen in terms of building a support team and cooperation between staff. Building a support team and cooperation between staff could reflect positively on implementing inclusion (Ahmmed et al., 2012) and help to remove barriers to implementing inclusion (Chopra, 2008). The benefit of building a support team and cooperation between staff is that it is helpful in providing advice for teachers concerned about teaching students with SEN; this support team could help teachers discuss with other colleagues any challenges that they face when teaching students with SEN (Allison, 2012; Gyimah et al., 2009; Avramidis and Norwich, 2002) or assist in activity adaptation (Gal and Yeger, 2010). Gyimah et al. (2009) see the importance of cooperation and teamwork, such as between staff in schools, health and social services, psychology and counselling, and parents as prerequisites for implementing inclusion, because this type of cooperation helps to meet the needs of the child. In addition, in the Index for Inclusion (2011, 14), there are two indicators that stress cooperation between staff in schools, “Staff co-operate” and “Staff plan, teach and review together”.

Some studies stress the importance of cooperation between general education teachers and special education teachers. Haider (2008) and Allison (2012) indicated the importance of cooperative work between special education teachers and general education teachers, as this reflects positively on inclusion, develops respect between General education teachers and special education teachers, and raises the confidence of general education teachers in teaching students with SEN. Moreover, Alquraini (2015) in Saudi Arabia argues that cooperation between special education teachers and General education teachers helps students with LD to access the general curriculum.

Another means of human support can be seen in terms of the existence of additional staff in mainstream schools. The existence of additional staff is necessary to support the implementation of inclusion; for example, Zoniou-Sideri and Vlachou (2006) found that the

teachers in their study believed that students with SEN needed a social worker to help students with SEN as students with SEN cannot cater for themselves. Similarly, Koutrouba et al. (2006) propose the importance of specialist staff such as social workers, child psychologists and child psychiatrists when implementing inclusion.

Generally, providing human support would help the inclusion of students with LD in the mainstream classroom; Kurth et al. (2015) observed that inclusion works effectively for students with LD because of support provided to teachers from personnel. However, a lack of human support has been found to be an important challenge facing the implementation of inclusion. Cook et al. (1999) argued that without support provided in an inclusive setting, the effort and cost of applying inclusion would be useless, there would be no benefit from inclusion and frustration would be felt. In addition, teachers in a study by Agbenyega (2007) expressed that without support, inclusion would be difficult. Gaad and Khan (2007) found that the teachers in their study saw that inclusion would not work if there was no support from special education teachers.

Moreover, Huang (2007) in Taiwan found that one barrier to implementing inclusion is the absence of cooperation between SEN teachers and general education teachers. Huang (2007) proposed that inadequate cooperation between SEN teachers and general education teachers referred to a number of factors: that general education teachers have no time to spend on instruction strategies as teachers have a high workload – thus, teachers do not have time to cooperate with special education teachers to design effective instructions strategies; moreover, some general education teachers would prefer not to implement co-teaching with SEN teachers. In addition, general education teachers and special education teachers do not have any knowledge about how inclusion works, so they do not exchange such knowledge between them. Huang (2007) argued that a lack of collaboration reflects negatively on students with SEN as they will not benefit from inclusion and they feel that they are behind their peers in terms of progress. Moreover, Alanazi (2012) found that there was a lack of collaboration between special education teachers and general education teachers in the Saudi context.

3.7.5 Administrative

Support from the principal and administrators has been found to be a necessary factor for successful inclusion (Praisner, 2003; Fakolade et al., 2009). Booth and Ainscow (2011, 14)

pointed out “The school has an inclusive approach to leadership” as one indicator for inclusion. Furthermore, Hassanein (2015) argued that a lack of effective leadership in mainstream schools in Egypt was one of the factors that could act as a barrier to implementing inclusion, whereas in Rayner’s (2007) view, staff in mainstream schools could be motivated towards inclusion with support from head teachers. This is because principals are leaders in implementing inclusion and they have a supervisory role in its implementation, as well as controlling the allocation of resources. Furthermore, principals can make the class sizes smaller, form plans for collaboration between teachers, and plan teaching time (Cook et al., 1999).

To make head teachers an active part when implementing inclusion, Alfahili (2009) proposed that head teachers of mainstream schools should have training courses in the administration of mainstream schools before becoming head teachers, to encourage positive attitudes towards integration. Moreover, Alddaydan (2006) asserted the importance of providing head teachers with training courses in order to work effectively with students with SEN.

However, the lack of power for head teachers in their schools would challenge the effective implementation of inclusion. Mullick et al. (2012) report that, due to the centralised management system in Bangladesh, head teachers in their study felt that one of the challenges of implementing inclusion was their lack of authority. Head teachers in the study of Mullick et al. (2012) indicated that they did not have the right to be involved in the development of policy, recruiting the teachers or setting in-service training for teachers; all of these matters were decided by higher authorities.

Similarly, in the context of this study there is a lack of power for head teachers in educational management, which is centralised; the role of head teachers in Saudi Arabia is to supervise and follow up staff and students in their schools and ensure that there are no issues with school buildings during school days. (Ministry of Education, 2015b). Head teachers are also required to write to their local educational administrators regarding any important needs that they have, such as additional teachers or opening new classrooms.

In general, Mullick et al. (2012) argued that a management system based on administrative control and managerial accountability would reduce the capacity of head teachers to address the challenges that face the implementation of inclusion. Thus, one of the strategies that head

teachers in the study of Mullick et al. (2012) proposed was that head teachers should be given the power and authority to reform activities and should be involved in developing inclusion.

3.7.6 Organisation of schools and classrooms

Another important issue that relates to implementing inclusion that should be discussed is the organisation of the schools and classrooms because these have an influence on students' learning (Evans, 2007). Avramidis and Norwich (2002) and Alquraini (2011) in Saudi Arabia argue that the environment of schools should be restructured before students with SEN attend mainstream schools. In addition, Avramidis et al. (2000) stressed the importance of the restructuring of schools and classrooms to meet the needs of students with SEN. This restructuring includes reorganising the chairs and tables in the classrooms and making access to classrooms easier, either by lifts or stairs. Similarly, Huang and Diamond (2009) argue that when implementing inclusion is considered, adaptations to the classrooms are necessary.

The World Health Organisation (WHO, 2001) stressed the importance of providing an equal physical environment that will enable students with SEN to participate in school activities. In addition, Booth and Ainscow (2011, 14) stated that *"the school is made physically accessible to all people"* and *"the buildings and grounds are developed to support the participation of all"* are indicators for inclusion.

Inappropriate organisation of schools and classrooms are seen as a challenge to implementing inclusion, for example, Agbenyega (2007) reports that in Ghana teachers expressed their concerns about inclusion in terms of inappropriate infrastructure of schools, such as inaccessible classrooms for students with physical disabilities. In addition, teachers in a study by Gal and Yeger (2010) stated that inaccessible schools may limit the participation of students with SEN in mainstream schools. Koutrouba et al. (2006) recognised the importance of improving the infrastructure in schools through providing the necessary equipment, such as ramps and lifts for students with physical disabilities. Moreover, the head teachers participating in the study of Mullick et al. (2012) in Bangladesh argued that the absence of modifications for schools to make them suitable for all students would have a negative impact on the quality of teaching.

In the Saudi context, there are a number of studies reporting that mainstream schools and classrooms in mainstream schools are not appropriate for implementing integration

(Alldaydan, 2006; Allbrahim, 2003; Rajeh, 2013), thus it can be further proposed that these may make inclusion more problematic. Almosa (1999) stated that general schools need to take into account the needs and characteristics of students with SEN when the schools are designed. In addition, Rajeh (2013) indicated that mainstream schools lack safety features, while Alhusayn (2004) and Almuqran (2009) proposed that mainstream schools should take into account the safety of students with LD when implementing integration and that schools and classrooms should be organised in a way that is suitable for students with LD.

3.7.7 Size of classes

The number of students in mainstream classrooms is seen in the literature as a factor that should be considered when implementing inclusion (Gaad and Khan, 2007; Gal and Yeger, 2010; Secer, 2010; Memisevic and Hodzic, 2011). It is suggested that large class sizes are a major challenge to implementing inclusion effectively (Agbenyega, 2007; Alkhateeb et al., 2016; Alkhaldi, 2014).

Researchers stress the importance of reducing the number of students in mainstream classrooms to make inclusion work effectively (Hassanein, 2015). For example, in their meta-analysis of studies that focus on inclusion and integration, Scruggs and Mastropieri (1996); Cornoldi et al. (1998) and Short and Martin (2005) in the USA point out that teachers highlight that the number of students in a mainstream class should be fewer than 20. A large number of students in mainstream classes may influence teachers not to use different teaching methods (Alqahtani, 2009), have a negative influence on students with LD in accessing the general curriculum (Alquraini, 2015), and make management of classrooms more difficult (Alhudaithi, 2015; Hassanein, 2015). Thus, Alquraini (2011) suggested reducing the number of students in mainstream classrooms to enable teachers to teach effectively. However, Huber et al. (2001) found that the number of students with SEN in mainstream classrooms did not influence the achievement of general education students, therefore it is suggested that the proportion of students with SEN in mainstream classes does not have a negative effect on the achievement of other children despite criticisms and concerns that may suggest otherwise.

3.7.8 Policy

Policy can facilitate the implementation of inclusion in terms of providing guidelines for implementing inclusion successfully, such as the number of classrooms there should be and

the competence of the teachers (Agbenyega, 2007). In addition, Gyimah et al. (2009) in Ghana found that a policy change was needed to facilitate the implementation of inclusion. Chopra (2008) suggested that policy should be framed in a way that allows students with SEN to access mainstream schools. Whilst Agbenyega (2007) argued that to make inclusive education work well, it should be developed separately from any other policy. Thus, Booth and Ainscow (2011, 15) note that one of the indicators for inclusion is that *“the school ensures that policies about ‘special educational needs’ support inclusion”*.

Moreover, Hassanein (2015) proposes that one of the serious barriers for implementing inclusion in Egypt is a lack of legislation that supports inclusion. Similarly, Alkhateeb et al. (2016) argued that in Arab countries, the non-availability of legislation to support inclusion is one of the barriers to implementing inclusion.

3.7.9 Instruction in teaching students in mainstream classrooms

Teaching students with SEN and without SEN is one factor that should be considered, as this would reflect on implementing inclusion effectively. Allison (2012) argues that to make inclusive education successful, teachers should be prepared in the use of a variety of instructional strategies when teaching in an inclusive setting. Stanovich and Jordan (2002) argued that teachers should deliver instruction efficiently, become responsible for all the students in the classroom and employ the knowledge of the curriculum they have to make the instruction accessible for all students.

Using effective instruction is positively reflected in the learning of students in inclusive classrooms. Stanovich and Jordan (2002) argued that lessons provided to students should be designed in a way that stimulates the students and attracts them to learning. Thus, if the lesson is not designed in a good way, the students might not learn. Moreover, Ashencaen Crabtree and Williams (2010, 210) argued that *“traditional and inflexible teaching styles that serve to inhibit educational inclusion need to be replaced by more effective forms of pedagogy”*. Similarly, Rose and Howley (2007) proposed that there is no one teaching strategy that is suitable for all students, so teachers should provide a teaching strategy that meets the learning style of each student. Thus, teachers can use a specific strategy for a specific student to meet his or her needs. However, Huang (2007) found that instruction strategies that do not take into account the difference in abilities between students with and without SEN is one of the barriers to inclusion. Addressing the issues of feasibility of adapting teaching styles,

Koutrouba et al. (2006) found that the teaching process would not be disturbed when teachers use a variety of teaching methods in the inclusive classroom.

One way to enhance the knowledge and skills for teachers in their teaching practice is to provide a theoretical perspective for teachers in order to help them to understand how to deliver the lesson effectively in the mainstream classroom for all students. One of the theories that helps teachers to understand how to teach all students effectively is social learning theory, proposed by Albert Bandura (1977). Social learning theory is based on the idea that the performance of an individual is the result of interaction between three factors: cognitive perceptions and action that is influenced by internal thought and behaviour, and the environment that surrounds the individual (Bandura, 1977; Reynolds and Fletcher-Janzen, 2007). Observational learning is one of the key features of social learning theory (Bandura, 1977; Reynolds and Fletcher-Janzen, 2007). In the field of inclusive education, social learning theory could inform and support teachers in developing ideas about how they could use this approach to support their work in the classroom, students with LD could see their peers and their teachers as models, which could reflect positively on their academic performance and their behaviour (Lampert et al., 2012).

Moreover, Vygotsky's social constructivist theory (1978) could aid teachers in teaching in the mainstream classroom. The basic idea of Vygotsky's approach is that child development is influenced by mediation when the child interacts with the environment (Kozulin et al., 2003). Mediation can occur through interaction with other individuals or with the mental structure of the individuals (Vygotsky, 1978). Moreover, Vygotsky (1978) introduced the zone of proximal development to explain the differences between the real level of development the child can attain independently; and the potential level of development he or she can attain with support from adults or peers. Educationally, Vygotsky's theory proposes that children learn better when assisted by peers or adults than on their own (Gindis, 1999). Wang (2009) notes the implications of Vygotsky's theory for special education are that it should focus on what students with SEN can actually do rather the preconceived assumptions about ability. In addition, teachers should involve students with SEN with peers and adults, as without sufficient interaction, students with SEN would face difficulties in mainstream classrooms.

Peer tutoring is a teaching strategy that could increase the interaction between students with SEN and general education students in mainstream classrooms, consistent with Vygotsky's

theory. Peer tutoring refers to *“an instructional method in which one child tutors another in material on which the tutor is an ‘expert’ and the tutee is a ‘novice’”* (Gordon, 2005, 1). It has been reported that peer tutoring has an influence on the academic achievement for students with SEN (McDonnell et al., 2001). Moreover, one of the indicators for inclusion proposed by Booth and Ainscow (2011, 14,15) emphasises the importance of collaboration between students in learning, asserting that in an inclusive setting *“Children learn from each other”* and *“Teaching and learning groups are arranged fairly to support all children’s learning”*. Therefore, peer tutoring should be considered by teachers when implementing inclusion.

Regarding teaching students with LD in mainstream classrooms, Soukup et al. (2007) argued that students with LD would access the general curriculum effectively in the mainstream classroom if teaching was provided in small groups such as one on one strategy. Furthermore, Kurth et al. (2015), based on observation of mainstream classrooms that included students with LD, concluded that individualised teaching strategies based on support from teachers’ assistants and peer tutoring can be used in mainstream classrooms and this strategy did not need be taught in a special classroom. The findings of these studies implementing Vygotsky’s theory could aid teachers to teach students with LD in mainstream classrooms.

Another teaching instruction that is suggested as being effective in an inclusive classroom is co-operative teaching (Meijer, 2001). Co-operative teaching is defined as *“the pairing of a special education teacher and a general education teacher in an inclusive general education classroom for the purpose of providing high-level instruction to meet the diverse needs of a wide range of students”* (Wilson and Blednick, 2011, 6). Scruggs et al. (2007), after reviewing a number of studies using co-operative teaching, concluded that using co-operative teaching would reflect positively on the academic achievement and social interaction of students with and without SEN. A similar finding was found for students with LD in the study of Kurth et al. (2015).

In fact, Norwich and Lewis (2001, 326) proposed that there are no specific teaching methods for students with SEN; general teaching methods could be used with students with SEN. For example, students with LD in the mainstream classroom have no need for specific teaching methods – for them rather it is proposed that they need *“more practice to achieve mastery, more examples to learn concepts, more experience of transfer, and more careful checking for preparedness for next stage of learning”*.

3.7.10 Teachers' assistants

The availability of teachers' assistants is one of the factors that should be considered when implementing inclusion, as teaching assistants are seen as one of the factors that support implementing inclusion for all learners (Groom, 2006; Moran and Abbott, 2002; Crawford and Porter, 2004 in Canada). In addition, Subban and Sharma (2006) in Australia indicated that a lack of teachers' assistants is one concern expressed about inclusion by teachers. Gaad (2015, 61) argued that *"the teacher assistant programme is no longer a luxury or a choice; it is a necessity. To have a comprehensive programme that supports the inclusive policy is commendable"*. Moreover, Booth and Ainscow (2011, 15) claimed that *"Teaching assistants support the learning and participation of all children"* and view this as one indicator for inclusion.

Generally, the role of a teacher's assistant is to provide help for the teachers in the classroom to support the needs of children with SEN under the teacher's instructions. Therefore, teachers' assistants play a vital role in this sense as they cooperate with teachers to promote students' learning and engagement, planning lessons and activities and assessing students' performance (Farrell et al., 1999, UK). In addition, Groom and Rose (2005) in the UK indicated that the supervision role of the teaching assistant can be crucial in assisting the development and implementation of appropriate behaviour management across individuals or small groups in class. For instance, the teacher's assistant may help teachers in monitoring students' behaviour and could contribute to the students' evaluation in order to identify obstacles and objectives, as well as to maintain students' engagement. However, Alqahtani (2009) in Saudi Arabia indicated that the lack of teachers' assistants negatively affects special education teachers for students with LD practice in the special classroom by inhibiting them from using different teaching methods. Alshahrani (2014) indicated that with more students in the mainstream classroom the presence of a teacher's assistant is important to reduce the teachers' workload (Alnahdi, 2014). Thus, Alquraini (2011) proposed that the MoE in Saudi Arabia should provide teaching assistants when implementing inclusion.

3.7.11 Curriculum

The curriculum is defined as *"the construction of knowledge and experience systematically developed under auspices of the school to enable the learner to increase his/her control of knowledge and experience"* (Tanner and Tanner, 1975, 38).

One of the factors that should be considered when implementing inclusion is the curriculum (Ashencaen Crabtree and Williams, 2010), because most general curricula are provided in general schools without consideration of the difference in ability between students (UNESCO, 2005). Hence, teachers have a challenge to provide a curriculum that is suitable for all students (Noble, 2004). Thus, the inflexibility of the curriculum is found to be one of the factors that challenges the effective implementation of inclusion (Peters, 2004). UNESCO (2005) emphasises that flexibility and accessibility of the curriculum is the main feature that supports inclusion. Thus, flexibility of the curriculum would help teachers to adapt the curriculum in such a way as to aid the teachers in meeting the needs of all students. Similarly, Booth and Ainscow (2011, 15) observed that *“constructing curricula for all”* is one factor involved in evolving an inclusive practices dimension.

To ensure access to the general curriculum for students with SEN in the same way as for students without SEN, modification of the curriculum is required, because students with SEN progress more academically when modification of the curriculum is made (Lee et al., 2010). Wehmeyer et al. (2001) suggested a model that helps students with LD to access the general curriculum. Their Curriculum Decision-Making Model (Wehmeyer et al., 2001) was based on three types of curricular modifications. The first type is curriculum adaptation. Wehmeyer et al. (2001, 335) defined curriculum adaptation as *“efforts to modify the representation or presentation of the curriculum or to modify the student’s engagement with the curriculum”*. The second type is curriculum augmentation, defined as *“efforts to augment or expand the curriculum to provide students with additional skills or strategies that enable them to succeed within the general curriculum”* (Lee et al., 2006, 200). Lee et al. (2006) argued that augmentations of the curriculum helps students with SEN to access the general curriculum. The third type is Curriculum alteration, which is based on *“the addition of content specific to a student’s needs, including functional skills or life skills not found in the general curriculum”* (Lee et al., 2006, 200). Generally, teachers would use these types of adaptations to aid the students with LD to access the general curriculum and thus support the children by meeting their specific learning needs (Wehmeyer et al., 2001).

Another way of implementing modification of the curriculum is by taking small steps until the students with SEN attain the target (Fletcher-Campbell, 2005; Lee et al., 2006). In addition, using IEPs is another approach to modifying the curriculum and helping students with SEN to

access the general curriculum (Wolfe and Hall, 2003). Eason and Whitbread (2006, 25) defined an IEP as *“an individualized document, written for each student, memorializing the educational program that is designed to meet each child’s unique needs”*. Thus, teachers should provide the coursework and content of the curriculum based on the IEP objectives (Wolfe and Hall, 2003).

Similarly, UNESCO (2004) suggested using curriculum differentiation to take into account the diversity among students in mainstream classrooms. Curriculum differentiation is based on the idea that every student engages in lessons determined at each student’s own level, which leads to their achieving meaningful outcomes. It also involves using different teaching methods to help to meet the needs of each student. UNESCO (2004) claimed that using curriculum differentiation helps to reduce the chance of students not taking part in classroom activities and lessons. It also helps to limit the need to put some students in separate classrooms. In the same way, Universal Design for Learning (UDL) provide the flexibility for curriculum to take into account all learners (Rapp, 2014). UDL is defined as *“a set of principles for curriculum development that give all individuals equal opportunities to learn”* (National Center On Universal Design for Learning, undated).

In the Saudi context, researchers report that the curriculum that is provided for students with SEN is not suitable for their abilities (Almuslim, 2015; Aleumri, 2009; Alsyd, 2009). For example, Alddihan (2013) explored the issue of curriculums that are provided for students with LD in Saudi Arabia from the perspectives of female teachers (177) and supervisors (6), the researchers used questionnaires with teachers and interviews with supervisors. Alddihan (2013) found that participants perceived that the curriculum provided for students with LD does not take into account the different abilities among students with LD themselves, because the curriculum was not designed for students with LD; in fact, it was designed for general education students. These results suggest that at this time the curriculum in Saudi Arabian is not readily adaptable in order to suit the needs of the learners. Although it is important to note that the sample was female, the results could provide an indicator about the curriculum provided for students with LD as the situations with the curricula provided for boys and girls in Saudi Arabia are similar.

In addition, Alotaibi (2011) found that the units in curricula provided for students with hearing impairment are not suitable for their needs and do not take into account the different abilities

among students. Moreover, Alshahrani (2014) suggested that the existence of a separate curriculum intended for deaf and hard of hearing students makes inclusion difficult to implement, as it does not take into consideration their abilities or their specific learning needs. Moreover, Almosa (2013) noted that adaptation of the curriculum is necessary for making inclusion successful, as an adapted curriculum can cater for all students with different abilities and overcome the disadvantages of the current centralised curriculum, which does not take account of the differences in abilities between students. This adaptation would aid students with LD to access the general curriculum (Alquraini, 2015). Moreover, Alnahdi (2014) suggested providing the freedom for teachers to adapt the curriculum in a way that is suitable for the needs for each student.

3.7.12 Assessment

Implementing an appropriate assessment method that takes into account the diversity between students is one of the factors that support inclusion (UNESCO, 2005; Mitchell 2005; Mittler 2000; NCERI, 1994 in USA). In this regard, Booth and Ainscow in the Index for Inclusion (2011, 15) express one indicator for inclusion that is related to assessment, *“assessment encourages the achievements of all children”*.

Assessment is an important factor in education that teachers use to explore students' progress. Assessment can be either formative assessment or summative assessment (Harlen, 2007). Formative assessment is an approach in which *“teachers make frequent, interactive assessments of student understanding. This enables them to adjust their teaching to meet individual student needs, and to better help all students to reach high standards.”* (Organisation for Economic Co-Operation and Development (OECD), 2005,1). Formative assessment could be completed informally through teachers' questions and observation (Burke, 2010; Hargrove, 2001) or formally through written assessment (Caffrey, 2009). Caffrey (2009) proposed that formative assessment helps teachers to identify the students' knowledge level and can inform their choice of teaching methods to increase students' knowledge levels. Formative assessment also helps teachers to adapt methods of assessment in a way that is suitable for all students' abilities.

In contrast, summative assessment refers to *“tests given at the end of a lesson, semester or school year to determine what has been learned”* (Caffrey, 2009, 6). Summative assessment is conducted formally, such as through oral exams or writing, practice and so on (Burke, 2010).

Summative assessment is often viewed as high stakes (Caffrey, 2009), because important decisions may depend on the outcome.

Generally, there are differences between formative assessment and summative assessment. Looney (2011) argued that formative assessment could be seen as assessment for learning. In contrast, summative assessment could be seen as assessment of learning. In addition, Burke (2010) distinguished between formative assessment and summative assessment in terms of purpose and timing. Burke (2010) perceived formative assessment as an informal assessment that aims to provide ongoing information about each student's situation, to help the teachers to improve the learning, whereas Burke (2010) perceived summative assessment as a formal assessment that aims to evaluate the knowledge of students to improve learning. In terms of timing, formative assessment is conducted during learning, whereas summative assessment is conducted at the end of learning. However, there is an argument in the literature about using the two types of assessment together in order to help all learners to achieve their goals (Caffrey, 2009).

In Saudi Arabia, formative assessment is used for assessing all students, either in general education classrooms or in special classrooms in primary schools (Ministry of Education, 2014a). In Saudi Arabia, formative assessment is referred to as on-going assessment (Ministry of Education, 2014a). In a study by Alshahrani (2014) in Saudi Arabia, teachers indicated that on-going assessment is an effective way of assessing students with hearing impairments in an inclusive setting. Moreover, Aleumri (2009), Alotaibi (2011) and Alsud (2009) suggested providing training for teachers about the assessment of students with SEN in a way that is suitable for their abilities.

Further, formative assessment is used in Europe. In a project completed in 23 European countries about assessment in inclusive settings, Watkins (2007) found that all countries used formative assessments in inclusive settings to assess the learning of all students. Watkins (2007) calls formative assessment "on-going formative assessment" and in Watkins' (2007) view, it is not necessary to use summative assessment along with formative assessment in inclusive settings. Watkins (2007) also highlighted that using formative assessment is effective in mainstream classrooms. Thus, Watkins (2007) suggested using inclusive assessment in inclusive settings. The aim of inclusive assessment is to support the learning of all students and take into account the needs of students with SEN through the use of multiple methods

of assessment, which should work together to support the learning of all students over a period of time.

3.7.13 Student relationships

Relationships among students in mainstream schools are one of the factors that should be considered when implementing inclusion. Hartley et al. (2015) argued that social integration for students with SEN with their peers is one of the factors that should be considered when implementing inclusion. Moreover, Bebetos et al. (2013) highlighted that positive or negative relationships between students with and without SEN influence their behaviour towards each other. In the Index for Inclusion (2011, 14) there is an indicator for inclusion that highlights the relationships among students, namely, *“children help each other”*.

There are a number of studies that have explored the relationships among students in mainstream schools; for example, the study of Nepi et al. (2015) in Italy focused on social development during “study and play”. Nepi et al. (2015) found that students with SEN were more likely to be rejected and less well accepted in “study and play” conditions, compared to students without SEN; these results were compiled on the basis of nominations made by classmates. Similarly, Mullick et al. (2012) in Bangladesh found that students with SEN were not accepted by their peers in mainstream schools and that general education students did not want to play with students with SEN. In addition, Carter and Spencer (2006) based on a review of literature concluded that students with SEN in mainstream schools are rejected by their peers. Moreover, Nowicki (2003) after a meta-analysis of some studies focused on the social competence of students with LD in mainstream schools, concluded that students with LD are in a position where students without LD do not accept them and prefer their peers without LD.

The negative relationships between students with and without LD, as indicated by Nowicki (2003), can be attributed to lack of social skills of students with LD. Moreover, Bebetos et al. (2013) in Greece found that in physical education, students without SEN preferred students with LD not to be included in physical education; these findings were based on concern about performing well in order to win the game. For this reason, students wanted those who could aid them to achieve this goal.

In Saudi Arabia, students with LD face some difficulties during their study in mainstream schools; for example, Rajeh (2013) stated that students with LD feel frustration in mainstream schools, and difficulties in participating in school activities. Moreover, Alhusayn (2004) illustrated that mainstream schools lack social activities that encourage students with LD to interact with their peers.

To improve the relationships between students with SEN and general education students, arrangements for peer support is one of the methods that can help to increase the social interaction in mainstream schools (Brock et al., 2016 in USA). Carter et al. (2015) in the USA suggested developing a peer support plan that aids peers in interacting effectively with students with SEN. Another technique that helps to increase good relationships and positive attitudes towards students with SEN is providing training for general education students. Alaisqih (2002) in Saudi Arabia found that providing an extensive programme for general education students through lectures and activities helped in changing the attitudes of general education students towards students with LD to become more positive.

Whilst, so far, the findings have appeared negative in terms of the relationships between students with SEN and those without it is important to note that some studies have found positive relationships between these groups of students in mainstream schools. For example, Pijl and Hamstra (2005) in the Netherlands found that the majority of the students with SEN in their study had a good social development with their peers in mainstream classrooms. Moreover, Shogren et al. (2015) in the USA found that students with and without SEN in their study expressed their support for inclusion, felt a sense of belonging in school and had good relationships with each other. In addition, students with SEN indicated their preference to be in a mainstream classroom rather than to be pulled out to a special classroom or for a specific reason. Moreover, students without SEN indicated their support for students with SEN in the classroom. In addition, parents in the study of Elkins et al. (2003) in Queensland expressed the view that their child with SEN could benefit from inclusion in terms of social communication, improvement in self-sufficiency, the growth of recognition and acceptance by their peers, as well as the opportunity to make friends with non-disabled students, which would allow disabled students to simulate and mimic their actions. The finding above is in the line with one of the indicators from the Index for Inclusion (2011, 14) "*Children help each other*".

Generally, the studies reviewed above report both negative and positive relationships between students with SEN including students with LD and students without SEN in mainstream schools. These studies highlight that students with SEN may not be accepted by their peers in mainstream classrooms or during activities. However, in some cases, students with SEN could have positive relationships, acceptance and support from their peers in mainstream classrooms.

Another challenge to implementing inclusion is bullying among students. Booth and Ainscow (2011,14) suggest "*Bullying is minimised*" is an indicator for inclusion. A student is being bullied if he or she experiences negative action regularly compared to other students (Olweus, 1993). There are different forms of negative actions – they could be either physical or verbal (Olweus, 1997) and can take such forms as name-calling, teasing, severe verbal bullying, verbal aggression, threats, imitating, making fun of the students, physical attacks and taking belongings (Carter and Spencer, 2006).

There are a number of studies that have explored bullying in mainstream schools, for example, Hartley et al. (2015) found that in the USA students with SEN experience more bullying and psychological problems compared to general education students. Hartley et al. (2015) suggested this result is due to students with SEN usually not having the experience to cope with some negative situations. Similarly, Mullick et al. (2012) found that students with SEN were bullied by students without SEN. Students with SEN were objects of fun and their behaviour was not tolerated by their peers. Thus, students with SEN were seen to be in a vulnerable position in school.

To address bullying in schools, Hartley et al. (2015) suggested providing students with the skills to cope with some of the events that they might experience in schools, such as reporting incidents to adults. Similarly, Mishna (2003) argued that implementing systemic interventions is effective for reducing bullying for all students. Mishna (2003) suggested reducing bullying of students with LD through making the school environment safe. In order to achieve this, Mishna (2003) argues that an awareness programme about bullying should be provided. Moreover, bullying should be prevented through providing rules in schools. In addition, victimised students should be provided with strategies that help them to increase their social competence.

3.7.14 Parental involvement and attitudes

The involvement of parents in the processes of implementing inclusion is one of the factors that contributes to the success of inclusion (Stanovich and Jordan, 2002 in Canada; Ahmmed et al., 2012 in Bangladesh; Both and Ainscow, 2011). Christenson (2004) argued that parents' participation in the learning process is a critical and significant factor that promotes students' achievement and performance and supports students to engage more fully in their learning, both socially and emotionally.

There are a number of benefits related to involving parents in the education of their child (Mitchell, 2014), for example, Deppeler (2012) noted the importance of the involvement of parents in the inclusion process, arguing that parents' contributions are important for creating proper schoolwide strategies; furthermore, this involvement offers a good opportunity for different and new views and perspectives that may not normally occur in the school. Moreover, Damianidou and Phtiaka (2013) in Cyprus argued that establishing a good relationship between teachers and parents and opening channels of communication were fundamental in promoting the inclusion of students with disabilities. This is proposed to occur because this strong relationship allows parents to provide useful information on their child's needs and to share their views about what is motivating their children to learn. Similarly, Mitchell (2014) stated that involving parents in the education of students with SEN would help teachers because parents are experts on their children's behaviour and motivation and they can give teachers many valuable insights that could help teachers to implement the most appropriate strategies and policies to support all students.

To make the relationships between home and schools work effectively, Deppeler (2012) suggested a) establishing relationships that emphasise appreciation, confidence and acceptance; b) developing an appropriate approach for eliciting participants; c) raising parents' awareness regarding their involvements. In addition, Mitchell (2014) suggested making regular contact with parents through daily report cards or home–school notebooks.

However, the relationship between the home and schools varies between strong, weak and non-existent (Christenson, 2004). Christenson (2004) proposed that weak or non-existent relationships between home and schools act as a barrier. Christenson (2004) attributed weak relationships between parents and teachers to the shortage of financial and emotional

resources and time, whereas Mitchell (2014) suggested that strong relationships between parents and schools reflected parents' general concern about their child's learning.

In the Saudi context, the relationships between the schools and parents are weak (Allothman, 2014; Alanazi, 2012). A number of issues are reported, related to negative relationships between schools and parents; these negative relationships could be the result of schools failing to communicate effectively with parents about the importance of relationships between home and school, or to provide parents of students with LD with information about the needs and characteristic of their children (Rajeh, 2013; Almuslim, 2015; Alqahtani, 2012), not involving parents of students with LD in IEP (AL-Kahtani, 2015; Alqahtani, 2012) and not inviting parents to activities in schools (Almoghyrah, 2015). Also, the negative relationships could result from parents' lack of information about the strategies for educating their children, and the busyness and workload of parents (Alqahtani, 2012).

Thus, Almuqran (2009) and Almuslim (2015) asserted the importance of cooperation between parents and school, and of parents following up work with their children at home. Schools should also be active in communicating with parents and providing parents with training that meets the needs of parents, to educate them to communicate with schools effectively. Moreover, Almoghyrah (2015) argued that good communication between parents and schools is an influential factor that encourages parents' involvement in following up their children's progress in school.

Having discussed the relationships between parents and teachers, the next discussion will move to the issue of parents' attitudes towards inclusion, as an important factor to be considered when implementing inclusion (Elzein, 2009). In the literature, the attitudes of parents are reported to be a mix between supporting inclusion and not supporting inclusion.

Regarding the attitudes of parents of students with SEN, the findings are mixed. For example, the majority of parents of students with SEN in the study of Elkins et al. (2003) in Queensland and Elzein (2009) in Lebanon supported inclusion. Parents in the study of Elkins et al. (2003) perceived that their children would benefit from inclusion if additional resources and support were provided. Moreover, Garrick Duhaney and Salend (2000), after reviewing literature regarding parents' attitudes towards inclusion, found that the majority of parents of students with SEN have positive attitudes towards their children being included in mainstream

classrooms. Parents in the study of Garrick Duhaney and Salend (2000) thought that inclusion would have a beneficial impact on the acceptance of students with SEN by their peers without SEN, as well as having a positive impact academically, socially and emotionally. In contrast, De Boer et al. (2010) after reviewing some of the literature, concluded that parents of students with SEN have neutral attitudes towards inclusion. Some parents of students with SEN did not see inclusion as a good option for their children, as they worried regarding their children's emotional progress, personal learning and the available services in mainstream schools. In addition, the head teachers in the study of Mullick et al. (2012) in Bangladesh observed that some parents of students with SEN did not support inclusion because they had low expectations for their children in both wider aspects of their life and school. In order to address these problems, head teachers suggested encouraging parents to participate in the school programme to increase their knowledge about students with SEN, diversity and inclusion.

With regard to the attitudes of parents of students without SEN, again, the findings are mixed. In the study of Dimitrova-Radojici and Chichevska-Jovanova (2014) in Macedonia, parents of students without SEN considered special schools as better places for students with SEN. The reason was their concern that the teachers would adjust and tailor the curriculum for the whole classroom to promote the inclusion of children with disabilities, and that might lead to their children being less motivated and less challenged. Parents were further concerned that their non-disabled children would get less one-to-one time, since the teacher would dedicate all of his or her attention to the students with SEN. These concerns could explain parents' perspectives regarding separating students with disabilities into special schools. In contrast, De Boer et al. (2010) found that parents of students without SEN had positive attitudes towards including their children in mainstream classrooms with students with SEN. The parents thought that inclusive education could have a positive influence on their children, as it would encourage acceptance of diversity and promote the feeling of appreciation toward others. Similarly, Garrick Duhaney and Salend (2000) after reviewing literature regarding parents' attitudes towards inclusion found that the majority of parents of students without SEN had positive attitudes towards inclusion. Generally, parents indicated that their children would benefit from inclusion socially in terms of accepting diversity and making friendships with students with disabilities.

In Saudi Arabia, similarly, the attitudes of parents towards integration and inclusion are varied. For example, Alddaydan (2006) reported negative attitudes towards integration among parents of students with hearing impairments, as parents wanted their children to go back to special schools, whereas in the study of Hawsawi (2008), parents of students with LD had neutral to positive attitudes towards integration, as the parents wanted their children to interact with their peers in mainstream schools. Moreover, Alanazi (2012) found that parents of students with and without LD including students with specific LD are positive towards inclusion.

3.8 Summary

Chapter Three has reviewed the literature around SEN and inclusive education. It started by discussing the understanding of SEN. Also, the argument around the categorisation of SEN was reviewed. After that, learning difficulties were discussed in terms of the terminology used, definitions, classifications and characteristics. Furthermore, the social, medical and interactive models of disabilities were explained in order to explore how these influenced practitioners' views towards SEN and the potential for inclusion to be supported. After this, the review of literature moved on to discuss the issues related to the definition of inclusion and integration. Finally, the Index for Inclusion (2011) and factors that should be considered when implementing inclusion were discussed. The next chapter, Chapter Four, will discuss the methodology that was adopted in this research, which specifically aimed to investigate inclusion in the Saudi Arabian context.

Chapter Four: Methodology

4.1 Introduction

The previous chapters discussed the literature on SEN, LD and inclusive education. The current chapter discusses the issues related to the methodology applied during this research project. Firstly, the arguments around research paradigms and the paradigm that this research adopted will be explained. Moreover, the positionality and self-reflexivity of the researcher will be highlighted. In addition, the research approach and research strategy for the current study will be presented. An explanation regarding the sample of participants will be provided and the selection of data collection methods will be reviewed alongside a pilot study exploring the effectiveness of these strategies. The discussion will then move to illustrate how the data was prepared prior to analysis, with emphasis on the model that was adopted in order to analyse the data. Furthermore, ethical considerations will be addressed. Finally, the trustworthiness of the research will be explored. The current study aims to address two research questions which are:

- How do teachers define inclusion in mainstream primary schools in Saudi Arabia?
- What are the factors that act as barriers to implementing inclusion for students with LD in mainstream primary schools in Saudi Arabia?

4.2 Research paradigms

The research paradigm is one of the most important factors that researchers should take into account when conducting research. This is because the methodology that researchers follow depends on the assumptions of the paradigm that they choose (Avramidis and Smith, 1999). Therefore, the research paradigm helps researchers to consider the best research questions for their project, the most suitable methods for collecting the data, and how the data should be interpreted (Gray and Malina, 2004). In other words, the paradigm helps the researcher to conduct the research in the most appropriate way and locate it in a theory of knowledge (Collis and Hussey, 2009).

There are a number of definitions of paradigms in the methodology literature that should be examined, for example, Guba and Lincoln (1994, 107) define paradigms as *“a set of basic beliefs (or metaphysics) that deals with ultimate or first principles. It represents a worldview*

that defines, for its holder, the nature of the world, the individual's place in it, and the range of possible relationships to that world and its parts". In addition, a paradigm is seen as *"a set of overarching and interconnected assumptions about the nature of reality"* (Maykut and Morehouse, 1994, 5). Using these definitions presented above, it can be proposed that a paradigm is a lens representing a particular way of seeing the world and a particular view of reality.

There are a number of paradigms mentioned in the research literature, such as positivism, post positivism, interpretivism, and critical theory (Guba and Lincoln, 1994). However, this discussion will concentrate on two paradigms, positivism and interpretivism. The reason for focusing on these two paradigms is that these two paradigms are mainly used in social research related to SEN and inclusion (i.e. Memisevic and Hodzic, 2011; Kurth et al., 2015) and reflect conflicting views about how to understand reality (King, 2012; Collis and Hussey, 2009; Maykut and Morehouse, 1994).

To begin with positivism, the positivist paradigm is based on an assumption that there is *"only one truth, an objective reality that exists independent of human perception"* (Sale et al., 2002, 44). Thus, the positivist paradigm is characterised by a view that knowledge is objective, and there is distance between individuals and knowledge of the world. The social world is seen as the same as the natural world. In addition, researchers favour a deductive approach and the paradigm is associated with quantitative research (Usher, 1996; Lodico et al., 2006; Bryman and Bell, 2003; Trochim and Donnelly, 2007; Brooks, 1997). In more practical terms, through the positivist paradigm, researchers aim to test the validity of a hypothesis in artificial conditions, without any interaction from the researchers (Anderson, 1998). For example, in the study conducted by Zoniou-Sideri and Vlachou (2006) which aimed to explore teachers' beliefs about inclusive education and disabilities, they used a questionnaire to explore these beliefs without any interaction between the researchers and the participants. Also, these researchers tested the influence of some characteristics of participants on their beliefs, such as gender, year of experiences and degree of education.

In contrast, the interpretivist paradigm is based on a view that there are *"multiple realities or multiple truths based on one's construction of reality"* (Sale et al., 2002, 45). The interpretivist paradigm has a number of features that stand in contrast to those of the positivist paradigm. These features include a belief that knowledge is created by individuals, and it is therefore

subjective, with a tendency to adopt an inductive approach, and an association with qualitative research (Brooks, 1997; Trochim and Donnelly, 2007, Usher, 1996; Lodico et al., 2006; Have, 2004; Walliman, 2011). Practically, researchers in the interpretivist paradigm look at phenomena from various perspectives in a real setting, seeking understanding through observation and dialogue (Anderson, 1998). For example, in a study conducted by Kurth et al. (2015), they used observation in order to explore the nature of support that students with LD have in mainstream classrooms. These researchers interacted in the setting under investigation through observing how support is provided for students with LD.

Within Interpretivism one common approach to analysing data is through social constructivism, this approach aids researchers to make sense of how reality is constructed through social interaction and culture. Social constructivism is based on the view that the social world is constructed socially through interaction with others (Saunders et al., 2012). Gasper (1999 cited in Young and Collin, 2004 , 376) argues that social constructivism is based on the view that *“knowledge in some area is the product of our social practices and institutions, or of the interactions and negotiations between relevant social groups”*. Generally, knowledge in social constructivism is produced by social processes such as culture and education systems (Young and Collin, 2004). Social constructivism draws heavily from qualitative research and from analyses of how individuals understand and interpret key ideas.

Looking at the education of students with LD in Saudi Arabia, at the policy level, the Saudi education policy (1995) highlighted the difference between students with SEN, which includes students with LD, and general education students in terms of emphasis to provide specific regulation for students with SEN and a special curriculum, which indicates that at policy level students with SEN are seen as different from other students as they require special treatment (Hardie and Tilly, 2012; Llewellyn and Hogan, 2000). At practice level, students with SEN and more specifically students with LD study either in special classrooms or special schools depending on the severity of their disabilities. Also, in mainstream schools, students with LD have their own special classroom, own curriculum, own teachers and they do not interact with their peers except in morning assembly and school festivals. Moreover, in some schools students with LD are kept separate from general education students at break times. This approach to understand LD has a direct influence on how the teachers embedded in this system will understand and interpret ideas around SEN and inclusion. So, the context of the

education of students with LD in mainstream schools at this time is through integration, therefore it may be that the teachers employ this dominant socially constructed idea at this time. The researcher also acknowledges that his ideas are social constructed and therefore he is mindful of the influence this may have on his research. However, Saudi Arabia has shown interest in moving towards implementing inclusion for students with LD and other students with SEN (see 2.5). Therefore, the current context of the education of students with LD would be used by a group of special education teachers and a group of general education teachers in terms of interpreting the issues that would face implementing inclusion (Garfinkel, 2003). It is this understanding of the current context that makes it important to study inclusion from a social constructivism lens.

Anderson (1998) argued that each paradigm presents a different view of the world. Notably when adopting positivism, knowledge exists to be explored, whereas when adopting interpretivism, knowledge is explored through the views and explanations of individuals (Usher, 1996).

Considering the aims of the current study, it seems that the positivist paradigm is not suitable, since the main aim of this study is to explore the issues of implementing inclusion for students with LD in mainstream primary schools in Saudi Arabia; it is difficult to make a distinction between the researcher and participants when exploring the issues of inclusion (in the setting under investigation) through formulating hypotheses to test whether they work in the Saudi context or not. It is proposed that a better way of exploring these issues is through interaction between the researcher and participants, exploring their different perspectives about the issues of implementing inclusion in detail, from their own experience and practice (Saunders et al., 2012). The idea of interaction between the researcher and participants to explore the reality from the perspective of the participants is rejected in the positivist paradigm and welcomed in interpretivism. Therefore, the current study adopted the interpretivist paradigm in order to attain its research aims.

Guba and Lincoln (1994) explained that each paradigm is underpinned by a number of assumptions; these relate to ontology, epistemology and methodology. As this study is conducted from an interpretivist perspective, the ontology, epistemology and methodology of the Interpretivist paradigm will be discussed.

To begin with ontology, Saunders et al. (2012, 130) defined ontology as a view as to the *"nature of reality"*. The ontological assumption is based on a number of questions that researchers should ask themselves to determine their ontological position. These questions are as follows: Is there distance between social reality and individuals or is social reality a product of individuals? How does social reality exist? (Does social reality already exist or is social reality built by individuals?) (Cohen et al., 2007; Ponterotto, 2005). Based on the discussion above, the interpretivist ontology of the current research was based on the concept that social reality is made up of the different perceptions of individuals. This means that the issue of inclusion (as an aspect of social reality) would be perceived differently by different teachers (individuals) who would have different perspectives (multiple realities) regarding the issues involved implementing inclusion (Merriam and Tisdell, 2016).

The ontological perspective adopted has implications for epistemology, which concerns *"what constitutes acceptable knowledge in the field of study"* (Saunders et al., 2012, 132). Ponterotto (2005) perceived epistemology as the relationship between the person who conducts the research and the research sample. Guba and Lincoln (1994) suggested a question that would help researchers to locate their epistemological position, namely, what kind of relationships are there between researchers, samples, and the topic under research? Crotty (1998) argues that epistemology consists of a number of positions including subjectivism and objectivism. In objectivism, there is a distance between the researchers, samples and topic under investigation, so there is no influence of the researchers and sample on the topic under investigation.

In contrast, in subjectivism, the topic under investigation is created by interaction between the researchers and the sample (Ponterotto, 2005). The interpretivist epistemology for the current research is subjectivism. This is because it is based on the ontological position in the current study, which was that social reality is a product of different views of individuals. This suggests that interaction between the researcher and the participants is the best way of exploring the topic under investigation through a negotiation of the interaction between the researcher and the research participants. It was assumed that special education teachers group and general education teachers group would be able to provide rich information about their experiences in general education and special education and their perspectives about implementing inclusion in their settings.

The above mentioned assumptions, in turn, guide the methodology, defined as *“the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes”* (Crotty, 1998, 3). Since the current study is based on the interpretivist paradigm, qualitative approaches were identified as the most appropriate way to interact with participants; furthermore, the approach utilised case study which will be explained in more detail later.

4.3 Positionality and self-reflexivity

As data collection and interpretation of data rely on qualitative researchers, the discussion of the positionality of the researcher is important (Dwyer and Buckle, 2009). The current research therefore takes into account the positionality of the researcher. The researcher was seen as both an insider and an outsider by the participants who took part in the current research (Merton, 1972).

As an insider, the researcher shared with the participants his male gender, Saudi nationality and Muslim religion (Mercer, 2007). In addition, the researcher is familiar with the Saudi education system, as he studied in Saudi Arabian primary, intermediate and secondary schools, and had experience of the educational context for general education teachers as a former general education teacher. This perception of the researcher as an insider was reflected during the interviews, when some teachers used expressions such as *“as you know”*, when they talked about general issues regarding the practice in mainstream schools. Such expressions indicated that the teachers made a connection with the researcher as an insider (Merton, 1972).

On the other hand, in some respects the researcher was an outsider with regard to the participants, this occurred as a result of not currently working in mainstream schools or being a teacher either in general education or special education, it should be noted that the researcher now works as a university lecturer. In addition, the researcher introduced himself to the participants as both a PhD student, who was collecting his data, and as a university lecturer, which indicated that he was not part of the teachers' community.

In general, the position of the researcher in the current research was more that of an outsider than an insider, because the researcher did not have relationships with the participants and was not a member of the teachers' community. This positionality helped to make teachers

comfortable with revealing issues that arise regarding implementing inclusion (Cotterill, 1992). The researcher, as an outsider, had the advantage of being able to observe and ask questions without the influence of relationships with participants (Merton, 1972). Moreover, as Simmel (1950 cited in Kerstetter, 2012) argued, the objectivity of an outsider researcher is valued. However, being an outsider does not mean that the researcher did not understand the education context or practice in mainstream schools or had difficulty in gaining access to the participants (Kerstetter, 2012; Dwyer and Buckle, 2009). This was because of his previous experience as a general education teacher and familiarity with the Saudi education system. Moreover, the researcher, when gaining access to the schools, was welcomed by the majority of teachers taking part in the current research who showed their interest in both the project and the researcher (Dwyer and Buckle, 2009).

As the current research adopted interpretivism, discussion around the area of self-reflexivity is necessary. Self-reflexivity is a kind of self-examination that aids researchers in understanding how they as researchers may influence the process of conducting the research in order to minimise these influences, such as the assumptions and biases (Johnstone, 2007; Morrow, 2006). As researchers are the main instruments in qualitative research (Cohen et al., 2007), it is suggested that researchers should *“reflect about how their biases, values and personal background, such as gender, history, culture, and socioeconomic status, shape their interpretations formed during a study”* (Creswell, 2009, 233).

In the current research, the self-reflexivity highlighted throughout indicated the positionality of the researcher (Merriam and Tisdell, 2016). As indicated above, the researcher can be seen as insider and outsider at the same time. These dual roles provide the combined advantages of background knowledge, which helped in interpreting data, and freedom to observe and ask questions, without being influenced by personal relationships. Also, acting as an outsider enabled the participants to raise issues about inclusion more comfortably. It is also acknowledged that the researcher is influenced by social constructivism in terms of his experience in the area of SEN in Saudi Arabia.

In addition, meeting regularly with peers or other researchers who can challenge the ideas that are provided to overcome the bias in the study is one technique that is used by Morrow (2006) to engage in self-reflexivity. In the current study the researcher met regularly with his supervisors to discuss the process of research that he followed and how he did the data

analysis and interpreted the data. As the researcher's supervisors have different contextual backgrounds from the researcher, this meant the researcher was asked key questions by his supervisors, these questions related to his study and data analysis which aided the researcher to avoid bias and engage critically in the self-reflexive process.

4.4 Qualitative approach

As noted above, the researcher adopted an interpretivist stance, which required interaction with individuals who had different experiences of the situation that they lived in that would influence their perspectives and understanding of this reality (Scott, 1996; Thody, 2006). Therefore, a qualitative approach was employed. The qualitative approach is seen as *"a systematic approach to understanding qualities, or the essential nature, of a phenomenon within a particular context"* (Brantlinger et al., 2005, 195). Such an approach was favoured because the qualitative approach helps researchers *"explore phenomena in their natural setting and use multi-methods of interpretation, understand, explain, and bring meaning to them"* (Anderson, 1998, 126). In addition, Scott (1996) argued that the aims of the study determine the best approach to be adopted. So, if the study aimed to obtain more explanation about an issue from a specific group, qualitative research should be used. Moreover, Denzin and Lincoln (2005) argued that the qualitative approach helps researchers to explore phenomena in their natural settings through the meanings expressed by individuals.

In contrast, a quantitative approach would not have fitted well in the current study, because the quantitative approach is usually related with the positivist paradigm, which was rejected in this study as explained above. In addition, using a quantitative approach usually leads to choosing a survey as the main data collection method (Saunders et al., 2012). This approach was not appropriate in the current study because interaction between researchers and participants was necessary to explore the setting under study more deeply. Moreover, the quantitative approach looks at cause and effect relationships between variables (Bryman, 2012), and the frequency of incidence (Denzin and Lincoln 2005). However, these were not the aims of the current study: the goal was to explore the issues of implementing inclusion for students with LD deeply and in detail, rather than to measure the issues of implementing inclusion or quantify how often such events happen in mainstream schools.

In view of these considerations, a qualitative approach was preferred as it provided an opportunity to look deeply into the practice of teachers in general education and special education through exploring the issues of implementing inclusion for students with LD from the perspective of teachers (Creswell, 2012; Scott, 1996).

Merriam (1998) highlighted that there are a number of strategies associated with the qualitative approach, such as action research, grounded theory, case study research and ethnography. This study adopted case study as its strategy, the rationale for choosing the case study approach will be discussed next.

4.5 Case study

Case study was found to be an appropriate strategy to employ in the current study. It was considered compatible with the interpretivist paradigm adopted, as this approach supports researchers in identifying issues and problems in depth (Creswell, 2007). Moreover, Yin (2014) proposes that case study provides the opportunity for studying a phenomenon extensively in a natural setting. Similarly, Bell (2005) and Denscombe (2007) stated that case study gives the chance for the researcher to investigate a setting in detail, focusing on social processes and interaction between individuals inside the setting, which leads to discovering information and understanding of the situation that may not be available if another strategy, such as survey, was used. Furthermore, one of the strengths of using case study is the use of multiple data collection methods, which helps to gain rich information about the setting (Yin, 2014, Gillham, 2000), and to enhance the trustworthiness of research (Bassey, 1999). The specific data collection methods will be discussed later in this chapter.

Linking these arguments to the current study, it was considered that case study would be an appropriate strategy because it would facilitate obtaining an in-depth understanding of the current practice of education of students with LD in special classrooms and the current practice of education of general education students in general education classrooms in a real setting, from the different perspectives of special education teachers for students with LD, general education teachers, art education teachers for students with learning difficulties, physical education teachers for students with learning difficulties, art education teachers and physical education teachers exploring and understanding the issues of implementing

inclusion for students with LD by multiple data sources using interview, observation and documents.

A case study is defined as *“a qualitative approach in which the investigator explores a bounded system (case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information for example, observations, interviews, audio-visual material, and documents, and reports a case description and case-based themes”* (Creswell, 2007,73).

Although case study has a number of advantages, as mentioned above, it also has some limitations. The first limitation of a case study approach is generalisation of the findings (Bassey, 1999; Denscombe, 2007). Yin (2014) makes an effort to respond concerning this limitation, arguing that generalisation of the findings of a case study is not from sample to population, but from case to theory. Similarly, Firestone (1993, 22) distinguishes between generalisation from sample to population and *“analytic generalisation”*. Therefore, it is proposed that Firestone (1993) supported Yin (2014) in terms of the possibilities of generalisation from case to theory. In addition, Anderson (1998) too argued that qualitative research is not aiming to generalise to the population. Furthermore, Wiersma (2000,212) argued that *“Case study is often done without attempting broad or even limited generalisation, but readers of the research may find application to other situations”*

Consistent with the above view, it should be emphasised that the current study does not aim to generalise the findings to all mainstream schools in Saudi Arabia and does not claim that teachers in the current study are representative of all teachers in Saudi Arabia; the current study aims to present an in-depth understanding of the current practice of education of students with and without LD and explore the issues related to implementing inclusion. In this respect, the current study may help any stakeholder who wants to gain deep understanding about the issues that could influence the implementation of inclusion in Saudi Arabia; transfer to other settings would depend on the reader’s evaluation of appropriateness to their context (see the section on trustworthiness later in this chapter). Thus, this limitation of case study does not reduce its value as a strategy for this research.

Case study can be of two types, single case study and multiple case studies. Single case study provides a holistic view of a particular setting. Yin (2014,51) argued that single case study is

“an appropriate design under several circumstances, and five single- case rationales- that is, having a critical, unusual, common, revelatory, or longitudinal case”. In contrast, multiple case study refers to the use of examination of multiple single cases in one study (Yin, 2014). Yin (2014) suggested that single case study should be used when the case is typical of other cases, while Ghauri and Gronhaug (2005) argued that single case study should be used rather than multiple case studies when the aim of the study is exploratory. In contrast, using multiple case studies is suggested when the researcher aims to compare between a number of single cases that have different settings in order to ascertain the similarities and differences between these cases (Yin, 2014; Baxter and Jack, 2008).

Multiple case studies were found not to be appropriate for the current study, because the aim of the current study was exploratory, seeking in-depth understanding of a setting not comparison. Moreover, Yin (2014) highlighted that multiple case studies need more time and resources, and it would have been difficult to conduct multiple case studies in a number of cities in Saudi Arabia, because the long distances involved would have necessitated support from a team, and more time than was available.

In view of the above considerations, the current research was based on single case study that aimed to explore the issues of implementing inclusion for students with LD from five government primary mainstream schools, which represented five geographical areas (north, south, west, east and centre) in Riyadh in Saudi Arabia. These schools were typical in key aspects to the rest of the schools in Riyadh, with some small differences in the number of students and teachers and physical environments, such as number of sports grounds and location of classrooms. Moreover, these schools were selected randomly.

The reason for choosing Riyadh in the current study is that Riyadh is the largest city in Saudi Arabia, with a large multicultural population (General Authority for Statistics, 2014). It would thus be likely to offer a range of circumstances and perspectives. At the same time, educationally, Riyadh is typical of other large cities. The education system in Saudi Arabia is centralised, which means that the same policies, practices and materials apply in all large cities. In addition, the researcher’s past experiences as a teacher in general schools, both in a city in the north-east of Saudi Arabia and in Riyadh, supported the similarity between them. Furthermore, Riyadh was selected as being convenient for the researcher, as he lives in Riyadh, and thus knows the locations of the schools and the surrounding areas well.

Moreover, Riyadh is a big city with 30 mainstream primary schools that have special classrooms for students with LD. It would be difficult to cover all 30 mainstream schools in the detailed qualitative study. Therefore, a representative sample of five mainstream primary schools were selected.

4.6 Sampling

As mentioned in the literature review chapter, teachers play an important role in implementing inclusion effectively (for example, Monsen and Frederickson, 2004). This implies that in the current research, which explored the issues related to implementation of inclusion for male students with LD in mainstream primary schools, teachers were considered to be the most appropriate source of rich information about this issue. Teachers have direct contact with students and know the strengths and weaknesses of the situation under study. Other staff such as head teachers, counsellors, psychologists and parents are supportive of implementing inclusion. However, although the voices of these other stakeholders are very important for obtaining a complete picture of the issues of implementing inclusion from different perspectives, those were not the focus of this current work. Thus, teachers are the population of the current study.

It is important to mention that the current study is focused on male teachers, as in Saudi Arabia schools are always segregated by gender (see section 2.2 for more discussion). Thus, it would be difficult for a male researcher who did not have a family relationship with female teachers in the schools to conduct interviews with this population. Although this may appear a weakness of this study, there are a number of other male researchers who have conducted studies in Saudi Arabia using interview or observation without including women in their work (Alshahrani, 2014; Albuhaire, 2015; Alothman, 2014; Al-Kahtani, 2015). The same situation and restrictions would apply to a female researcher, i.e. female researchers cannot access boys' schools, nor can they conduct interviews or observations with male teachers. Examples of this approach can be drawn from the work of Alanazi (2012) and Alhudaithi (2015), who as female researchers, focused solely on female participants. The focus on male teachers is reflected in the findings of this study, as the results represent one view of teachers, male teachers, whereas female teachers may have had different views and the issues may have varied.

Sampling was a key consideration of this study (Plowright, 2011). The researcher selected a non-probability sample following suggestions from the literature (Vanderstoep and Johnston, 2009). This choice of sampling strategy was supported in the work of Cohen et al. (2007) who argued that non-probability samples are usually used with case study. With this in mind, twenty-four male teachers who work in the five boys' mainstream primary schools were recruited and agreed to take part in the current study. The teachers were divided into two groups. The first group comprised teachers who taught students with LD only. There were thirteen teachers in this group, including special education teachers for students with LD, art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties. The second group was teachers who taught general education students. There were eleven teachers in this group, which included general education teachers, art education teachers and physical education teachers. Moreover, some of the teachers from this group also taught students with LD in mainstream classrooms. Table 3 illustrates the number of teachers in each group. The reason for choosing teachers with different subject specialisms was to help in understanding the situation in mainstream primary schools without missing the voices of teachers of any specialism (Cohen et al., 2007).

Teachers within the schools were selected based on non-probability sampling, specifically purposive sampling, convenience sampling and in some cases, snowball sampling (See Table 3) (Plowright, 2011; Walliman, 2006). The reasons for choosing these types of sample were as follows: purposive sampling was used because the group of general education teachers worked directly with general education students and the group of special education teachers worked directly with students with LD. Thus, each category had particular experience and practices in teaching students with or without LD, so their experiences would help to explore the issues of implementing inclusion from a number of perspectives. In this respect, convenience sampling was used. Furthermore, snowball sampling was used in the case of three general education teachers and one art education teacher since it was mentioned by special education teachers for students with LD during their interviews that including them would be potentially useful. Two of the general education teachers had taught students with LD and the other had rejected inclusion of students with LD in his classroom. Moreover, the art education teacher had implemented inclusion between students with LD and general education students in one lesson. In Saudi Arabia, there is no clear policy about moving

students with LD from a special classroom to a general classroom, so the acceptance of students with LD is dependent on acceptance by teachers, whereas there is a clear policy about moving students with LD from a general classroom to a special classroom (MoH, 2002).

Table 3 Number and type of sample

Group	Teacher	number	Name anonymised for each participant	Type of sampling	Total number		
Group of special education teachers	special education teachers for students with LD	5	Abdelaziz	Purposive and convenience sampling	13		
			Faisal				
			Zafer				
			Talal				
			Essa				
	art education teachers for students with LD	4	Hesham	Purposive and convenience sampling			
			Zaid				
			Anas				
			Ibrahim				
	physical education teachers for students with LD	4	Mansour	Purposive and convenience sampling			
			Yazid				
			Khalid				
			Majid				
Group of general education teachers	general education teachers	3	Mohammed	Snowball sampling	11		
			Abdullah				
			Hassan				
		2	Saeid	Purposive and convenience sampling			
			Salih				
		art education teachers	2	Omar		Purposive and convenience sampling	
	Sultan						
	physical education teachers	4	Ali	Purposive and convenience sampling			
			Abdelmohsen				
			Fahad				
			Khalil				
	Total number for both groups:						
	24						

4.7 Data collection

The current study used three methods of data collection related to the qualitative approach, which facilitated interaction with participants. The data collection methods used were interviews as a main data collection tool, observation and documents analysis as supportive data collection tools (Creswell, 2009). The following sub-sections will discuss each method in detail.

4.7.1 Interview

The main data collection method used in the current study was interview. Interviews are also defined as one of the main data collection methods used in qualitative research (Bryman, 2012; Have, 2004). Anderson (1998, 202) defined interviews as *“a specialized form of communication between people for specific purpose associated with some agreed subject matter”*. It is proposed that interviews were one of the most appropriate methods to be used when the aim of the study is to explore the experience, feelings and views of people as it produces rich information (Denscombe, 2007; Banister et al., 1994). Therefore, using interviews was suited to the aim of the current study which was to explore the issues of implementing inclusion for students with LD through investigating the experiences and perspectives of teachers in general education and special education.

There are two ways of conducting interviews: individual interviews or focus groups (Bryman, 2012). This study used one to one interviews as it was easy to arrange an appropriate time that was suitable for participants and easy to control (Denscombe, 2007).

Following the decision to use one-to-one interviews, the next concern was the type of interview. Bryman (2012) and Denscombe (2007) proposed that there are three types of one to one interview. The first type is a structured interview, this is an interview based on questions prepared in advance and provided for the interviewee in a particular order. In addition, interviewees have limited options for answers. This type of interview is more frequently associated with quantitative research and is similar to a questionnaire. The advantage of this type of interview is that the interviews are standardised and easy to code. The second type is a semi-structured interview, this kind of interview is based on a prepared schedule of issues and questions that the researcher wishes to obtain information about, but allows for the follow-up of other issues that arise during the interview. It is more flexible, in that the interviewees can answer in more detail the questions posed. Moreover, Banister et

al. (1994) argued that semi-structured interviews provided the chance for researchers to ask for more explanation from participants. The third type is the unstructured interview, which is heavily reliant on the interviewee's thoughts. The interviewer introduces the topic, then leaves the interviewee to speak – the role of the researcher is non-intrusive (Bryman, 2012; Denscombe, 2007).

The current study used semi-structured interviews as an appropriate type of face to face interview in order to fit with the aim of the current study. Structured interview was rejected because it is less suitable for qualitative research, as being less flexible in terms of data gathering, and it does not always provide rich information. At the other extreme, the unstructured interview was also rejected, because whilst it can be suggested that this approach would have provided much information, this would have been without control and would not guarantee that the issues of concern would be covered (Denscombe, 2007). For these reasons, a semi-structured approach was preferred, as it overcomes the disadvantages of the other types of interviews, allowing a balance between freedom for participants and control by the researcher to ensure coverage of the issues related to the aim of the study.

There are a number of advantages related to conducting interviews. Firstly, it is a worthwhile data collection method that provides important information about the setting under study with less effort (Walford, 2001; Have, 2004). Moreover, using interviews gives the researcher the chance to adapt the interview in ways that allow them to ask for more explanation and probe responses (Bell, 2005). In other words, interviews are a flexible data collection method (Bryman, 2012).

On the other hand, there were some disadvantages of using interviews as the data collection method. For example, they lack objectivity, as interview data reflects a particular context and participant (Denscombe, 2007) and so it is likely to be biased (Bell, 2005). In the current study, much effort was paid to reducing subjectivity and bias in the interview, for example, during the preparation of the interview schedule questions were phrased in such a way as to avoid the use of double-barrelled questions, two in one questions, and leading questions (Anderson, 1998). In addition, before conducting each interview, the interviewee was informed that there were no right or wrong answers. Moreover, the interviewee was informed that the aim of the current study was solely to explore the issue of implementing inclusion, and not to evaluate their work. The interviewee was also allowed to talk freely and

the researcher listened (Scott, 1996). These techniques encouraged interviewees to feel free to express their experiences and perspectives towards the issues explored in the current study, which helped to reduce the subjectivity and bias. Another disadvantage of using interview is that interviews can sometimes be perceived as breaching the privacy of the interviewee (Denscombe 2007). To overcome this issue, personal questions were avoided and the focus was on the general issues related to the aim of this study. Moreover, interviewees were informed that they had the right to refuse to answer any question. A number of studies in the area of inclusive education have employed interviews in their approach and these support the choice of method applied in this study. Previous studies include the work of Aldaihani (2010) and Alothman (2014), who demonstrated that interviews helped in capturing a rich insight into inclusion in the contexts that their projects were exploring.

4.7.1.1 Preparation of interview guide

It is important to prepare for interviews well in order to ensure they are effective and beneficial for the research (Willig, 2008). In the current study, therefore, a number of steps needed to be followed to prepare for conducting the interviews. The first step was the translation of the aim of the current study, which was exploring the issues of implementing inclusion for students with LD, to the interview questions (Cohen et al., 2007; Anderson, 1998). The formulation of the interview questions was developed from the literature review (King, 1994) and pilot interviews were held with some teachers which led to amendments of the order of the questions and changes in some of the wording to make the questions clearer to understand. The interview questions covered a number of issues related to implementing inclusion, including: understanding of inclusion and integration, teachers' preparation, in-service training, relationships of parents with teachers, competence of teachers, relationships between students, collaboration among teachers, curriculum, teaching methods, teachers' perspective towards inclusion, resources and Infrastructure (see Appendix 1 for a full interview schedule).

The proposed interview questions were provided to the researcher's supervisor and a PhD student who was interested in inclusive education, and these initial pilot participants were requested to provide feedback. The initial pilot participants recommended the addition of some new questions, for example, asking teachers to provide examples of what they had said,

asking teachers to illustrate the benefit of implementing some practices and the impact of absence of some facilitating factors.

Furthermore, the interview questions were translated from English to Arabic, which is the native language of the interviewees. The translation of the interview questions was first performed by the researcher; whose first language is Arabic. After that, the researcher discussed the translation with a friend who specialises in English and speaks Arabic, in order to check the correspondence between the Arabic and English versions of the interview questions (Nes et al., 2010).

In addition, the researcher conducted an interview with a special education teacher, to practise his skills in undertaking the interview process, before completing the data collection (Matthews and Ross, 2010; Bryman, 2012). The researcher also attended a number of courses in his university and online regarding conducting interviews.

In order to support the data collection phase, the researcher developed an interview guide (see Appendix 2) based on the suggestions of Matthews and Ross (2010); Jacob and Furgerson (2012); Anderson (1998) and Bryman (2012). Jacob and Furgerson (2012) suggested using an interview guide to assist the researcher in collecting the data. An interview guide is a kind of procedural guide that aids researchers whilst conducting the interviews (Matthews and Ross, 2010).

The interview guide included a general note about what the researcher would say at the beginning and conclusion of the interview, the themes that should be covered, and a reminder to the researcher to collect the informed consent forms. It can be argued that better information is obtained when an appropriate interview guide is used (Jacob and Furgerson, 2012).

In addition, an information sheet which included the aims of the study and the rights of the interviewee and an informed consent form were developed (see Appendices 3 and 4). Moreover, an interview background form was produced, which included day, date, time, name, the name of the interviewee and ID code, and mobile number (see Appendix 5). The interview background and informed consent documents were saved in a locked box, as they held confidential information.

4.7.1.2 Pilot study for interviews

Before the main data collection, it was decided to conduct a pilot study with two schools not included in the main study. Interviews were conducted with six teachers (two art education teachers for students with learning difficulties, two physical education teachers for students with learning difficulties, one general education teacher, and one special education teacher for students with LD). These interviews provide a number of benefits for the main study. For example, it was found that there was complete segregation between students with LD and general education students in all subjects. This situation encouraged the researcher to include the general education teachers and special education teachers for students with LD in his study sample, as the first plan for the study sample included art education teachers, art education teachers for students with learning difficulties, physical education teachers and physical education teachers for students with learning difficulties. Including all of these teachers helped to explore the issues of implementing inclusion more clearly from different samples that worked with students with and without LD. In addition, during the process of conducting the pilot interviews, it was found that there were some questions that were not clear to the teachers. These questions were reworded to improve clarity, for example, when the researcher asked a general education teacher about the role of incentives in his view of inclusion, the researcher used the word 'incentives' without giving any examples such as increase in salary and reducing the number of sessions provided by teachers per week. The question was not clear to some of the general education teachers as they asked the researcher to explain more about what was meant by incentive. The researcher explained the meaning to interviewees by providing examples of incentives used, subsequently the question was reworded to: What is the role of obtaining a 30% increase in your salary on your view about inclusion?

Moreover, it was noticed that the teachers stopped talking when the researcher started to write notes in the interview. The problem was solved by telling the teacher at the beginning of the interview that the purpose of the notes was simply to help the researcher to remember some of the questions he would ask the interviewee and to help him in the analysis of the interview. Furthermore, during the pilot study, one of the teachers preferred not to have the interview recorded. This issue provided the researcher with practice in taking notes, during the interview that was not recorded.

In general, conducting a pilot study was beneficial for the current research (Silverman, 2013). Anderson (1998) argued that a pilot study helps to ensure that the method and procedures for the research are working well. If problems arise when completing the pilot study, researchers can redesign the questions or procedure when undertaking the actual research. In this way, the pilot study provides a useful insight for the researcher that helps to avoid mistakes that could appear when doing the actual research.

4.7.1.3 Conducting the interviews

After conducting the pilot study and taking into account the issues that arose from it, the main study was conducted in the five mainstream boys' primary schools. Before conducting the interviews, the researcher first met with the head teacher of each school and introduced himself, explaining to them the reason for coming to their schools and the aim of the research; he also provided evidence of permission from the General Administration of Education in Riyadh (GAER) for conducting the study in mainstream primary schools. After that, the head teacher of each school introduced the researcher to the group of general education teachers. Head teachers also introduced the researcher to the residential supervisor of the intellectual education programme in mainstream schools, who introduced the researcher to the group of special education teachers. There was no pressure put on teachers by MoE, the head teachers or the researcher to participate in the project, taking part in the study was completely voluntary.

The setting for conducting the interview was chosen according to the interviewee's preference, as interviewees would be more likely to pay attention when sitting in a comfortable place (Matthews and Ross, 2010). The setting was located in the head teacher's office, the office of the residential supervisor of the LD programme, or in the classroom when the students went to the playground, sports field or art education rooms. In order to ensure that the interviews were held at a time that was convenient for the teachers, the researcher discussed with each participant the best time for them to be interviewed, ensuring that these occurred when they had free time and did not have lessons. Moreover, the researcher attempted to build good relationships with the participants, for example by engaging in general conversation before conducting the interview to create trust.

At the beginning of the interview, the information sheet and consent form were provided for the participants to read and sign if they were happy to take part in the study. All teachers

signed the consent form and appeared willing to take part in the current study. Moreover, most teachers agreed for the interview to be tape recorded and signed for this, however, two teachers preferred not to have the interview recorded. The preference of the two teachers was respected and field notes were taken during their interviews. All interviews were conducted in Arabic. The duration of the interviews differed, ranging between twenty-seven minutes and one hour and ten minutes. The interview guide was used during the interviews and some notes taken by the researcher.

As the semi-structured interview approach allowed flexibility, some questions were added during the interviews to obtain more explanation from the teachers, asking for examples to be provided, and this allowed new questions to be added. For example, during the interview one of the teachers raised the fact that his school used some techniques to improve the relationships between students with and without LD. This issue that was raised encouraged the researcher to ask the teacher more about the perceived benefits of using such techniques.

Some issues that emerged during the interviews require consideration. For example, the researcher stopped the interview with two teachers and completed the interview at a later time. In one case, the teacher had a lesson and needed to go to the classroom and the other teacher had to accompany students with LD onto the school bus. In addition, in some cases, the interview location was next to the school playground and sports ground, and it was noisy.

4.7.2 Observation

The current study also employed observation as one of the supportive data collection methods. Observation is defined as *“the act of watching social phenomena in the real world and recording events as they happen”* (Matthews and Ross, 2010, 255). Moreover, Creswell (2012) defined observation as the process of collecting information about the situation under study through the observation of persons and places.

The current study employed non-participant observation rather than systematic observation or participant observation. This is because systematic observation, which is based on an observational schedule helps the researcher observe the frequency of the behaviour in order to collect numerical data from the setting under observation (Cohen et al., 2007; Saunders et al., 2012), was not deemed appropriate for this work. It is argued that systematic observation is related to the quantitative approach (Bryman, 2012). Although participant observation is

related to the qualitative approach it requires the researcher to be a (full or part) member of the group or setting under observation (Bryman, 2012). Thus, non-participant observation was used, as the researcher could not take part in the schools visited, because he is not employed in any primary mainstream schools in Saudi Arabia. Moreover, the researcher wanted to find out how education of students with LD and general education students works in practice, as the relevant issues were not known before conducting the observation (Hall, 2008).

Regarding the kind of data collected through observation, it can be divided into two types, which are structured observation and unstructured observation (Bryman, 2012; Creswell, 2012). Structured observation refers to *“employ[ing] explicitly formulated rules for the observation and recording of behaviour”* (Bryman, 2012, 272). Thus, researchers use a schedule for observing pre-set behaviour to ascertain whether the behaviour is occurring or not (Cohen et al., 2007). In contrast, unstructured observation refers to *“record[ing] in as much detail as possible the behaviour of participants with the aim of developing a narrative account of that behaviour”* (Bryman, 2012, 273). The current study used unstructured observation, as Bryman (2012) argued that unstructured observation could be associated with non-participant observation. In addition, as the aim of the current study was to explore the issues of implementing inclusion, unstructured observation helped to obtain rich information about the setting, whereas structured observation would not provide the opportunity to explore the issues (Cohen et al., 2007).

Observation can make a valuable contribution to qualitative research, as it provides rich information that leads to providing a comprehensive image about the situation (Thody, 2006; Denscombe, 2007). Moreover, observation occurs in a natural setting, which can provide good support for interpreting and analysing data that no other data collection method can provide (Anderson, 1998; Creswell, 2012).

In contrast, there are some disadvantages of using observation in research. For example, the validity of data collected through observation is weak, as observation relies on the researcher and field notes and it is difficult to generalise (Denscombe, 2007). The researcher in the current study made much effort to write as much as he could in the field notes of what he observed. These notes were expanded later the same day, while the researcher’s memories were fresh.

Another issue that arises when observation is used is that the people in the setting may change their behaviour when the researcher is present in the setting (Anderson, 1998). In the current study, effort was made to overcome this issue, for example, teachers were asked to conduct their lessons as normal and were reminded that the observation was not a kind of evaluation or judgement of their work. The researcher also visited their classrooms a number of times before conducting the observation, which helped the teachers to feel more comfortable and to overcome their reactivity. In addition, visiting the classroom several times helped to make the students in the classroom familiar with the researcher, as students may act differently when new people have access to the classroom for the first time (Cohen et al., 2007).

4.7.2.1 Conducting the observation

Before conducting the actual observation, an observation sheet was developed using the guidance from Banister et al. (1994) which included: name of school, name of teacher, classroom ID, name of subject under study, topic taught, number of students, class grade, time, and date (see Appendix 6).

Moreover, an information sheet and informed consent form were provided to teachers who agreed to be observed, to parents of students in the classroom of teachers who agreed to be observed and to head teachers of schools that were being observed (see Appendices 7, 8, 9). A number of parents called the researcher to ask for more information about the study. The researcher answered their enquiries and they agreed to their sons being observed for the purposes of this research project.

Like the interview, the observation was piloted. One special classroom and a general classroom were observed, in each case during an Arabic lesson. The pilot observation was beneficial because it made the researcher aware of how the teachers practised in their classroom. In addition, it allowed the researcher to practise how to write field notes and how to write up a full observation. Banister et al. (1994) argued that the importance of a pilot observation is to discover any issues regarding doing the actual observation.

After the pilot observation had been completed, the actual observation was conducted. The observation took place in nine classrooms during lessons in different curriculum subjects in order to explore teachers' practice in the classroom in relation to inclusion. Moreover, the

infrastructure of the schools and the behaviour of the students during break time were observed. Table 4 lists the observations that were conducted. All of the observations provided rich information about the practice of teachers in the classroom, and the relationships among students, both during break times and in the mainstream classroom.

The teachers who agreed to be observed discussed and agreed with the researcher the best time for the observation and the preferred place in the classroom for the researcher to sit. In addition, the observations were conducted on different days and there were never two observations in one day. This approach was used because conducting just one observation per day helped the researcher to remember as much information about the observation as possible in order to add to his notes later that day.

In addition, the permission of the head teachers was obtained to observe the infrastructure of the schools, break times and accessing classrooms. Moreover, the teachers that were present in the school yard during the observation were aware that the researcher was observing.

Table 4 A list of observations conducted for the research project

Place of observation	Kind of observation
General education classroom	Observation of Arabic lesson
	Observation of physical education lesson
	Observation of art education lesson
Special education classroom	Observation of Arabic lesson
	Observation of maths lesson
	Observation of science lesson
	Observation of art education lesson
	Observation of physical education lesson
Mainstream classroom	Observation of art education
One Mainstream schools	<ul style="list-style-type: none"> • Infrastructure of school. • Break time.

During each observation, including those around the schools and at break time, field notes were taken in writing (Willig, 2008). The field notes contained information about what had been seen and heard by the researcher, all were carefully compiled without interpretation (Maykut and Morehouse, 1994). A full account of the observation was written on the same

day in order to enable the researcher to remember and record as much information as possible (Willig, 2008). The teachers were informed that the researcher would write some notes during the observation and that the purpose of these was to help him to remember the observation in full later.

4.7.3 Documents

Documents were the third source of data used in the current study. The review of documents in the current study was important because documents “*can fill in some of the missing data pieces*” (McEwan and McEwan 2003, 82). In addition, documents provide rich information, for example on the role of legislation and whether or not it supports inclusion, which would not have been available through either the interviews or the observations (Creswell, 2012). Thus, reviewing documents provided important data needed to fill the gap with regard to the legislation, teachers’ preparation and in-service training themes. The documents used in the current research were official documents (legislation) issued by the MoE (Bryman, 2012), study plans for universities and schedules of in-service training and textbooks.

The analysis of educational legislation included a number of documents that related to general education and special education, namely:

- Saudi Education Policy (1995),
- Regulation of General Education (1999),
- Regulation of Special Education Institutes and Programs (2002),
- Disabilities Code (2000).

In general, using documents was seen in the current research as supportive of the results of the interviews and observations in exploring the issue of implementing inclusion that would not be found in the data collected during the interviews and observations (Edwards and Skinner, 2009).

4.8 Data analysis

After collecting the data through interviews, observations and documents, the next important stage was to make sense of the raw data (Cohen et al., 2007). The analysis was performed in two stages. The first was preparing the data to be ready for analysis, including transcription

and organization of the data. The second was engaging with the analysis, including doing the analysis and translation.

4.8.1 Preparation for data analysis

4.8.1.1 Transcription

The process of transcription of interviews that are audio-recorded and field notes for observations is very time consuming and involves a heavy work load (Collis and Hussey, 2009). However, it is very useful for analysing the data. This is because written data allow the researcher to read the transcripts a number of times and concentrate on what is written in order to understand it and make interpretations of the data. Written data also enables the researcher to refer back to the transcripts of interviews or field notes when necessary.

The researcher started the process of transcribing the data when he was undertaking the fieldwork and continued the process when he returned to the UK. The interviews were transcribed in full; verbatim, field notes for observations were expanded and written in full (Bryman, 2012). All transcriptions were completed in Arabic, the language in which the interviews were conducted and field notes written. The completed transcripts were listened to again for the researcher to review the accuracy of the transcription and to double check whether there were any words or sentences missing.

4.8.1.2 Organization of data

Basit (2003) compared using manual and software methods in coding qualitative data in two different projects, concluding that using computers in coding qualitative data is easier and more flexible for the researcher in terms of being able to un-code or move extracts to another code, whereas using a manual method is more frustrating for the researcher and requires more time for analysis.

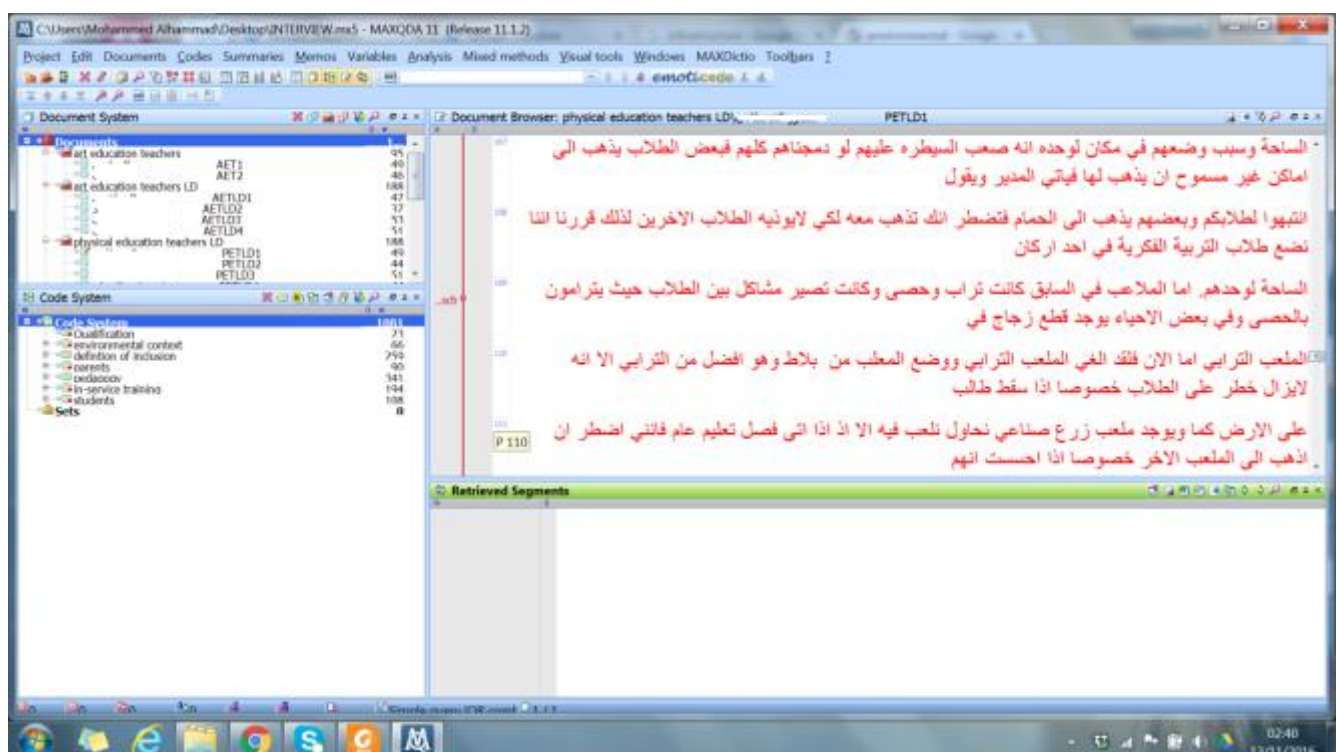
In order to optimise the analysis in this project it was decided that a computer program should be used to assist in analysing the data. The MAXQDA program was used to analyse the data, because it accepted input in Arabic, whereas other programs such as NVivo did not. The next discussion will present in detail the advantages of using computer programs in the analysis of data.

The researcher was aware that such a program did not undertake an analysis of the qualitative data on behalf of the researcher, in the same way as a quantitative program such as SPSS

(Joffer and Yardley, 2004). Nevertheless, using such a program helps to “*automate and thus speed up and liven up the coding process; provide a more complex way of looking at relationships in the data; provide a formal structure for writing and storing memos to develop the analysis; and aid more conceptual and theoretical thinking about the data*” (Barry, 1998, 2). There are a number of advantages to using MAXQDA: for example, the storage of data in one place and being able to organise the data efficiently which helps to retrieve and share it easily (Denscombe, 2007).

The MAXQDA program page consists of four boxes. The first box indexes the data; for example, allocating an ID code for each interviewee and observation. The second box is for themes and code system creation. The third box is a browser for the specific data selected. The fourth box retrieves segments of selected data and coding or themes. Figure 1 illustrates the home screen for the MAXQDA program.

Figure 1 Home screen for the MAXQDA program shows the home page of the program



Using MAXQDA made the process of analysis clearer in terms of having well-organised data and codes, and easily retrievable data for each code and theme, which enabled the researcher to read them again and look at the relationships between the data. For example, this program helped the researcher to see whether there was any difference in views regarding the

curriculum Textbooks code between the groups of special education teachers and general education teachers. It helped in the writing of comments and memos during the analysis. Such notes are useful to capture the researcher's thinking as they work through the process (Joffer and Yardley, 2004).

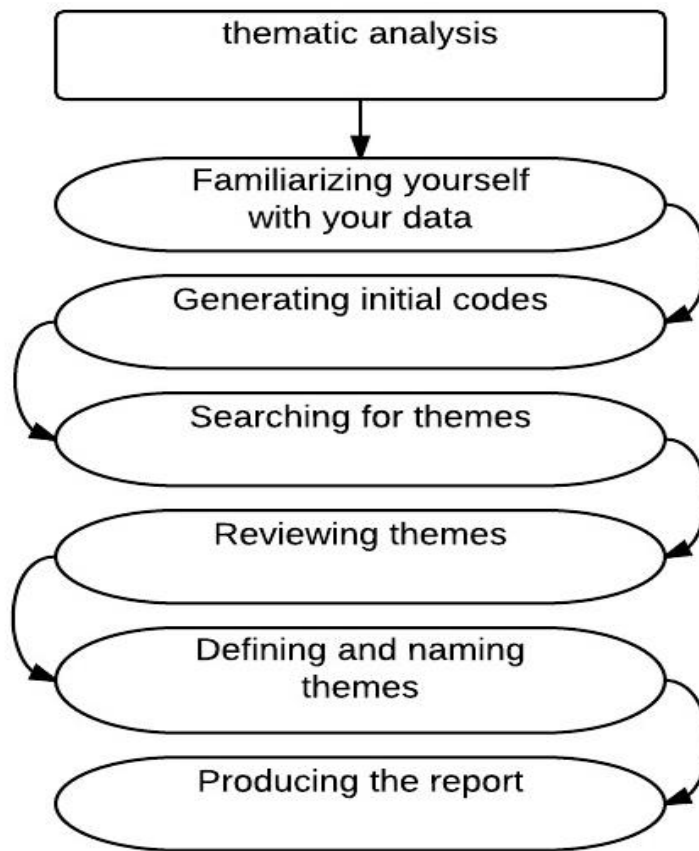
4.8.2 Engaging with data

4.8.2.1 Completing the analysis (interviews and observations)

After preparing the data for analysis, the next important step was engaging with the data to make sense of them (Merriam, 1998). There is no standardised method of analysis for qualitative data (Creswell, 2007). In addition, Maykut and Morehouse (1994, 121) argued that the *"process of qualitative data analysis takes many forms, but it is fundamentally a non-mathematical analytic procedure that involves examining the meaning of people's words and actions"*.

In the current study, three kinds of data – interviews, observations and documents – were collected. Thematic analysis was employed for analysis of interviews and observations. Bryman (2012) proposed that thematic analysis is one of the most common strategies used in the analysis of qualitative data. In addition, Guest et al. (2012, 11) indicated that *"a thematic analysis is still the most useful in capturing the complexities of meaning within a textual data set"*. Braun and Clarke (2006, 79) defined thematic analysis as *"a method for identifying, analysing and reporting patterns (themes) within data"*. The current study adopted Braun and Clarke's (2006) model for thematic analysis; in this model they suggested six steps for completing thematic analysis (see Figure 2).

Figure 2 Steps for the thematic analysis undertaken in this study



Source: Braun and Clarke (2006, 87).

The first step focuses on the researcher engaging with the data to become familiar with the entire data set. Braun and Clarke (2006) suggested that researchers should transcribe the data, read the data a number of times, and write down initial comments. The researcher in this step, as mentioned above, transcribed all of the data. In addition, the researcher read all the data a number of times to become familiar with them without taking any notes. Then, the researcher perused each interview and observation and started to form a general idea about the meaning and patterns of the data and began taking notes, which aided him in step two.

The second step was creating preliminary codes, that is, *“coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code”* (Braun and Clarke, 2006, 87). In order to support this step, the researcher, used the MAXQDA software, read the data more thoroughly, line by line, and started highlighting the content

that conveyed the same idea and then giving it an initial coding. Table 4 illustrates an example of one of the initial codes highlighted in the analysis.

Table 5 An example of initial codes from step two of the thematic analysis

teachers	Extract of transcripts	initial codes
Mansour	Encourage general education students through providing them with cards to go on a trip for general education students who help students with learning difficulties. These things help to integrate them	Improve relationships

After making initial codes for the data, step three is to search for themes. In this step, Braun and Clarke (2006, 87) suggested *“collating codes into potential themes, gathering all data relevant to each potential theme”*. The researcher reviewed the codes that were created and grouped similar codes under a theme based on an inductive approach. For example, the codes: lack of communication between parents and teachers, and no cooperation of parents with teachers were grouped and put under the theme of ‘poor communication between parents and schools.

After this, a review of the themes was undertaken as step four of the thematic analysis model. This was completed through *“checking whether the themes worked in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic ‘map’ of the analysis”* (Braun and Clarke, 2006,87). To verify the relationships between the code and themes, Braun and Clarke (2006) suggested that researchers should review all extracts and double check whether they are related to the themes assigned or not. At this stage, the researcher examined the relationships between extracts and themes by reading each code and its extracts. Some extracts and codes not related to the theme assigned were removed. In addition, Braun and Clarke (2006) also suggested researchers should review all of the data to double check whether there are any relationships between the data and themes. In this stage, the priority is to find out whether there is a relationship between the themes and data in general. It was found that all the themes proposed reflected the meaning of the data as a whole.

Defining and naming the themes was the fifth step of the analysis. Braun and Clarke (2006, 87) highlighted that this step is completed through *“ongoing analysis to refine the specifics of*

each theme, and the overall story the analysis tells, generating clear definitions and names for each theme". In the current study, this step was undertaken through reviewing the codes and extracts and double checking whether each theme was defined by these codes and extracts and did not depart too far from them. Moreover, a detailed account was written in the analysis chapters about each theme and its content, and how these themes are related to the current study. In addition, if necessary, themes were refined during the analysis. An example is the theme relationships between parents and schools. In the beginning of the analysis, it referred only to 'parents'. After deeper analysis and returning to the extracts, it was found better to redefine the theme to become relationships between parents and schools. This is because the new theme was a better definition for the extracts and codes, whereas the 'parents' label was more general.

The final step of the thematic analysis model is producing the report. Braun and Clarke (2006, 87) argued that the sixth step is *"The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis"*. This step was undertaken in the current study through providing some examples from the data during the writing up of the analysis chapter, to illustrate each theme. In addition, to support the importance of the theme, some phrases such as 'the majority of teachers' were used, or the number of teachers who mentioned a specific theme was noted. Moreover, the presentation of themes was based on the research questions and issues discussed in the literature review.

4.8.2.1 Document analysis

The documents were analysed based on a number of questions relating to the research aims (Matthews and Ross, 2010). These questions were: Is there any mention of inclusion? Are there any factors supporting the implementation of inclusion in these documents? Are there any factors preventing the implementation of inclusion in these documents? Thus, the researcher read each document to determine the answer to the questions posed above.

4.8.3 Translation

As mentioned above, all transcripts were completed in Arabic. One difficulty that faced the current research was whether all transcripts should be translated or not. It was decided not to translate all transcripts. This decision was reached because it would have been difficult to translate everything from Arabic to English, as this would require much time, owing to the

large amount of data. In addition, it would be expensive to recruit someone to translate all of the transcripts. Furthermore, reading the data in Arabic helped the researcher to become close to the Arabic meaning. For these reasons, the analysis of data was completed in Arabic and interpretation and coding were completed in English. This approach was supported by Messiou (2003) and Gerosimou (2011) who used a similar approach when they completed their interviews in Greek and did not translate all of their data to English. These researchers also completed their coding in English and only translated appropriate extracts. In fact, the equivalence between languages is always an issue in translation work, although it is difficult to avoid it. However, a number of steps were taken to ensure the accuracy of the translation and to overcome any weaknesses in this process.

The extracts quoted from the transcriptions were included in the analysis chapter and translated from Arabic to English. To ensure the accuracy of translation of the quotations, the researcher translated all relevant quotations, as he was familiar with the data. After this, he sent them for proofreading to double-check both syntax and grammar. Then, the researcher sat with a friend who is qualified in English and whose mother language is Arabic, and they read the translations together to double check whether the translation from Arabic to English was correct or not. In addition, the translator and the researcher worked cooperatively to discuss the meaning of the quotations, which led to producing the final agreed version for translation that was used in the analysis chapter. This approach to translation was supported by Nes et al. (2010).

4.9 Ethical considerations

Consideration of the ethical aspects should be taken into account in any research, particularly if it includes human participation (Hopkins, 2014). This is because, without consideration of ethical issues, the research could be problematic (Saunders et al., 2012). Research ethics are defined as *“the moral principles guiding research, from its inception through to completion and publication of results and beyond – for example, the curation of data and physical samples, knowledge exchange and impact activities after the research has been published”* (Economic and Social Research Council, 2015, 43).

Hammersley and Traianou (2007) stated that there are several elements representing the main ethical considerations for educational research that need to be considered. These elements include avoidance of harm to participants, voluntary participation without coercion,

ensuring the privacy of participants in terms of confidentiality and anonymity and treating the participants equally. All of these elements were taken into account in the current study.

The ethical decisions in the current study were based on the Ethical Guidelines for Educational Research provided by the British Educational Research Association (2011), and on the University of Lincoln Ethical Guidelines.

The first ethical issue to be addressed was gaining access to the participants. The researcher had to follow a number of steps in order to obtain permission to access the schools in Saudi Arabia. First, ethical approval for the study was obtained from the Research Committee in the University of Lincoln. After that, a letter from the researcher's supervisor (see Appendix, 10) addressed to the Saudi Cultural Bureau in London informed them that the researcher would go to Saudi Arabia to collect the data for his research, subsequently the Saudi Cultural Bureau addressed a letter to GAER (see Appendix 11). After reviewing the letter and research instruments (interview and observation) the GAER issued a letter addressed to the head teachers of all the boys' mainstream primary schools in Riyadh, to ask them to allow the researcher to have access to the schools, to interview teachers and to conduct observations in the schools and classrooms (see Appendix 12). The researcher was then introduced to the teachers, an information sheet and informed consent form were provided for teachers who agreed to take part, either for interviews or observations, to read and sign. In addition, an information sheet and informed consent form were provided to the head teachers to read and sign. Finally, an information sheet and informed consent form were sent to obtain permission from the parents of students who were studying in the classrooms under observation to read and sign; these letters were sent under the supervision of the schools.

It is necessary to mention that there is no connection between the MoE and the schools that were visited. Therefore, if the teachers, head teachers and parents of students had no interest in the study, they did not participate. It was a volunteer sample and no pressure was put on teachers and parents to take part in this study. It was envisaged that those who hoped to improve issues around SEN would want to take part and would support this project as it may produce beneficial insights. There were, however, a number of teachers who preferred not to take part in the current research. Their preferences were respected and the researcher did not interview or observe them. In addition, some parents preferred their child not to take part so their child was not observed or mentioned in the current study.

All of the necessary information was provided to make the participants aware of what the interview and observations entailed and their right to withdraw, these were intended to make them feel comfortable in relation to taking part in the research. This approach aimed to ensure that the participants felt that they could be open, and that this empowered them only to provide information that they felt happy to have on record.

To ensure the security and protection of the data, several steps were followed. These steps included setting up passwords on the computer where the data were stored electronically. Furthermore, the researcher ensured that he closed down the computer each time he left it. Any hard copy materials were put in a locker.

4.10 The quality of the research

The quality of qualitative research is based on the question as to how trustworthy the findings of the research are (Merriam, 1988). Lincoln and Guba (1985) suggested a number of criteria that help to improve the trustworthiness of qualitative research. The criteria used in the current research were credibility, transferability, dependability and confirmability.

To begin with credibility, Guba (1981, 79) suggested that the credibility of research is based on the question, *"How can one establish confidence in the 'truth' of the findings of a particular inquiry for the subjects (respondents) with which and the context in which the inquiry was carried out?"*. To ensure the credibility of the research, a number of approaches were used in the current study: triangulation, and peer debriefing (Lincoln and Guba, 1985).

Triangulation was used in the current study to ensure the credibility of the research (Cohen et al., 2007; Shenton, 2004). Bryman (2012,392) defined triangulation as *"using more than one method or source of data in the study of social phenomena"*. In the current study, triangulation of sources and methods was used as the key elements of the case study (Yin, 2014). As mentioned above, different sources of data were used in terms of the teachers who took part in the current study, including a group of general education teachers and a group of special education teachers. The use of different sources of data helps to provide a complete picture of the issue under study (Lodico et al., 2006; Shenton, 2004) and to see the differences and similarities between the groups of general education teachers and special education teachers. In addition, triangulation of methods was used. As mentioned above, the current study employed three types of data collection: interviews, observations and documents. By

using triangulation of methods, the issues of inclusion explored were supported by different kinds of data, which helped to increase the validity of the findings and provided additional information (Foster, 2006).

In addition, peer debriefing was another approach used to ensure the credibility of the current research. Lodico et al. (2006) defined peer debriefing as referring to the role of a person who meets with the researcher regularly and is familiar with the research, so he or she can look at the data, ask questions, test interpretation, and overcome bias (Shenton, 2004). In the current research, the supervisors of the researcher carried out peer debriefing.

Another criterion that helps to ensure the trustworthiness of the research is transferability. Guba (1981,79-80) illustrated that the transferability criterion is based on the question, *“How can one determine the degree to which the findings of a particular inquiry may have applicability in other contexts or with other subjects (respondents)?”*. Lincoln and Guba (1985) and Shenton (2004) argued that to achieve transferability, rich details about the setting under study should be provided to readers, which allow them to make a judgement about the transfer of the findings to other settings or populations. In the current research, rich information was provided about education policy in Saudi Arabia, Saudi culture, the number of schools visited and their city location (Riyadh city), number of participants, type of participants, number of data collections such as number of interviews, observations and documents (Shenton, 2004). As mentioned above, the current study does not aim at generalisation of its conclusions to other schools or cities. However, readers, through their judgement, could consider whether the current study may be transferable to their context or not (Lodico et al., 2006).

In addition, the dependability criterion was used in the current study to ensure trustworthiness. Dependability is based on the question, *“How can one determine whether the findings of an inquiry would be consistently repeated if the inquiry were replicated with the same (or similar) subjects (respondents) in the same (or similar) context?”* (Guba, 1981, 80). To establish dependability in qualitative research, researchers should provide the reader with a detailed explanation of the procedure for collecting and interpreting the data (Lodico et al., 2006). In the current research, much detail was provided about the kind of data collection used, the procedure of conducting the interviews and observations. Moreover, the kind of documents were described in detail. Furthermore, the procedure for the analysis of

data was fully explained. In addition, the interview transcripts and field notes for observations and documents were kept in a safe place. Finally, in the analysis chapter, some excerpts from the interviews, observations and documents are provided.

Confirmability is the fourth criterion used in the current study. Confirmability is based on the question, *“How can one establish the degree to which the findings of an inquiry are a function solely of the subjects (respondents) and conditions of the inquiry and not of the biases, motivations, interests, perspectives, and so on of the inquirer?”* (Guba, 1981, 80). Shenton (2004) argued that confirmability in qualitative research refers to establishing objectivity and that there is no bias in the finding. To achieve confirmability, triangulation should be used (Lincoln and Guba, 1985). In the current research, triangulation of data and sources were employed to reduce the bias of the researcher which helped to ensure confirmability (Shenton, 2004). Moreover, Houghton et al. (2013) suggested using an audit trail to provide full details of the methodological decisions made in the study and the rationale behind them. All of the details were given earlier in this chapter.

Through using these procedures, it is proposed that where possible, the researcher has supported the strengths of the study and has sought to overcome some of the weaknesses that are frequently associated with qualitative work.

4.11 Summary

This chapter discussed the issues related to the methodology applied in this PhD study. It started by discussing how the current research adopted the interpretivist paradigm. Moreover, the positionality and self-reflexivity of the researcher were reviewed. After that, the qualitative approach was highlighted as the approach that was found to be appropriate for the current research, based on the research paradigm adopted. In addition, the discussion moved on to review the case study strategy used in the current study. Furthermore, the target population of the current study was defined and the sample selection procedures were explained. Then, the arguments moved towards identifying and justifying the data collection methods and techniques used in the current study, which were interviews, observations and documents. Also, the chapter reported on how the interview and observation approach were piloted. After discussion of the issues related to the data collection methods, the preparation of the data for analysis and the engagement with the data to analyse it, including how the

data was translated, were discussed. Thematic analysis was highlighted as the data analysis method adopted in the current study. Ethical considerations were reviewed and steps taken to increase the trustworthiness of this qualitative research were reported.

The next chapter will present the findings of the study, in relation to the research questions. Due to the amount of detailed data collected, the findings will be presented in two chapters. The first of these, Chapter Five, will present the responses in relation to question one: *“How do teachers define inclusion in mainstream primary schools in Saudi Arabia?”* The second of these chapters, Chapter Six, will address the second question, *“What are the factors that act as barriers to implementing inclusion for students with LD in mainstream primary schools in Saudi Arabia?”*

Chapter Five: Teachers' Knowledge and Understanding Regarding the Meaning of Inclusion

5.1 Introduction

The previous chapter explained the methodology used in this study. This chapter and the next will present the findings of the research. The aim of the study was to explore the key issues of implementing inclusion for students with LD in mainstream primary schools in Saudi Arabia. The first question addressed in this chapter is "How do teachers define inclusion in mainstream primary schools in Saudi Arabia?" In order to explore this question, the results drawn from the teachers' interviews and school observations are utilised. As inclusion is sometimes conflated or contrasted with integration the discussions here will explore both of these terms in turn.

A rationale for exploring the teachers' understanding of integration is that some of the teachers may have referred to their experience of integration when they were asked about inclusion. In addition, integration of children with LD is what is implemented in Saudi schools, whereas inclusion is not implemented; this is because Saudi legislation does not support the implementation of inclusion for students with LD. Therefore, it is necessary to explore the teachers' understanding of these two terms and make comparisons between them. The analysis of the first research question will therefore be based on exploring teachers' knowledge and understanding regarding inclusion and their knowledge and understanding of integration.

5.2 Knowledge and understanding regarding inclusion

The knowledge and understanding of the term inclusion that teachers demonstrated during the interviews are analysed in two parts. The first part focuses on discussions that suggested that the teachers were not familiar with inclusion and that they sometimes struggled to define what this meant. The second part focuses on discussions that suggested that the teachers were familiar with inclusion.

5.2.1 Not familiar with the term inclusion

In teachers' response regarding the meaning of inclusion, five of the twenty-four teachers indicated that they had no knowledge about this term. For example, when Salih was asked

about how he defined inclusion, he answered, *“In fact, I do not try to practise inclusion, so, I cannot provide a definition of it”*. Although Anas had a diploma in special education in LD and Ali had studied some modules on special education for his bachelor degree, both teachers expressed that they did not know about the term inclusion when asked about their understanding of inclusion, both answered, *“I do not know”*.

The term inclusion was not clear for some teachers, as they may not have come across the term inclusion before, this may be because inclusion was not implemented in their schools. In addition, during the observation of schools it was noticed that students with LD studied in special classrooms and had special education teachers for students with LD, whereas students without LD studied in general education classrooms and had general education teachers. The lack of familiarity with the term inclusion may be a reflection of the way that the educational system supported these students; more specifically, they were not included in mainstream classrooms.

5.2.2 Familiar with the term inclusion

While some of the teachers who were interviewed did not appear to understand the term “inclusion”, most teachers (nineteen out of twenty-four) had heard the term. Their definitions can be categorised into six sub-themes that arose during the data analysis: placement, curriculum, placement and curriculum, removing obstacles, comparison to integration, and including in society.

The first theme was placement. Ten out of nineteen teachers related their definitions of inclusion to the placement of students with LD with their peers in the same classroom all of the time. For example, Omar defined inclusion as *“students [with LD] always being with them [general education students]”*. In the same way Yazid and Khalid defined inclusion in general as the inclusion of students with LD with their peers. For example, Yazid defined inclusion as *“including students with SEN with general education students ...”*

In addition, some teachers specified including students with LD with their peers in the same mainstream classroom when they talked about the definition of inclusion. For example, Abdelaziz defined inclusion as *“including a group of students such as students with LD inside a normal classroom”*. Similarly, Majid, Abdelmohsen and Faisal defined inclusion as studying in the same classroom with their peers.

In addition, Ibrahim related his definition of inclusion to placement in all aspects of school life. He defined inclusion as *“including the student [with LD] in general education in the classroom, school yard, and school halls and in all school facilities.”* Similarly, Zafer related his definition of inclusion to the participation of all students (students with and without LD) in all aspects of school. He defined inclusion as *“including all students, those with LD with normal students. I mean in everything and in every place.”*

The teachers above related their definition of inclusion to the notion of all students being together, those with LD with students without LD, in the same classroom and in all aspects of school life. This definition of inclusion is consistent with the proposal in the literature including UNESCO (2005) and IDEA (2004).

The second arising theme was curriculum, which was introduced by one participant, Mansour, who related his definition of inclusion to studying the same curriculum subjects. He defined inclusion as *“undertaking academic subjects with general education [students]”*. Therefore, it is proposed that one definition of inclusion, as seen by this teacher, would be providing the same curriculum subjects to students without LD as to students with LD.

Another understanding of inclusion was placement and curriculum. Three teachers related their definitions of inclusion to studying the same curriculum subjects and placement in the same classroom as peers without LD. These teachers are different from the above teachers in terms of relating their definition to two important factors, whereas the previous teachers related their definition to just one factor, either placement or curriculum.

For example, Khalil defined inclusion as *“being together for curriculum subjects, during activities and break time”*. Also, Saeid defined inclusion as *“including students with SEN with general education students. Also, including them in the curriculum”*. Similarly, Talal defined inclusion as *“Including students with special education needs with general students to acquire the same knowledge and study the same curriculum or less knowledge but in the same classroom. This means, for example, for maths, students with LD are included and for reading, students with LD are included etc. in the same class with the general education students”*.

The above example reveals that teachers related their definition of inclusion to placement of students with LD with their peers in the same classroom and studying the same curriculum.

The definition proposed in the placement and curriculum theme is similar to the meaning of inclusion proposed by Mitchell (2005).

One understanding of inclusion was illustrated by one participant, Essa, who defined inclusion in terms of students with LD being together with students without LD at all times in the same classroom, similarly to the way some teachers defined inclusion above. However, Essa differed from them by extending this definition to include factors such as providing more facilities and adapting environmental factors. He defined inclusion as follows: *"Inclusion provides more service and an environment that is suitable and a more supportive service such as more education aids than in integration. Inclusion is engaging students with LD with general education students from the beginning of the school year, I mean from the start of the school day inside the classroom."* This teacher viewed inclusion as removing of obstacles to learning whilst ensuring equal participation.

In addition, there were three teachers who defined inclusion by comparing it with integration. For example, Khalid defined inclusion as *"including students with disabilities through either integration or inclusion. Naturally, inclusion is with their peers and integration is being in schools"*. In addition, Yazid made a distinction between inclusion and integration to illustrate his understanding when he defined inclusion. Yazid defined inclusion as *"including students with SEN with general education students, whereas integration is being in a special classroom in general education schools"*. These teachers related inclusion to when students with SEN are with their peers, whereas integration meant being in special classrooms in mainstream schools.

Along the same line, an understanding of inclusion illustrated through a comparison between inclusion and integration was also shown by Essa. As mentioned above, he defined inclusion as *"providing more service and an environment that is suitable and a more supportive service such as more education aids than in integration"*. This teacher illustrated his understanding of inclusion in terms of providing more facilities compared to those that would be offered in order to support integration.

However, two teachers had different thoughts about the definition of inclusion from the previous teachers; they related their definition to inclusion of students with LD in society. For example, Hassan defined inclusion as *"inclusion is being included in everything in life which*

includes education as well". Therefore, it could be proposed that these particular teachers used a wider reaching definition when they defined inclusion.

5.3 Knowledge and understanding regarding Integration

It is important to consider teachers' knowledge and understanding of integration, after the analysis of the meanings that teachers attached to inclusion. One reason for variation in the results is that, as stated above, the term inclusion was not clear for some teachers and one teacher (Mohammed) was confused between integration and inclusion. Notably Mohammed presented a definition of integration that was actually more closely aligned to issues of inclusion, stating that integration was *"putting the student with LD in a general education classroom where he [student with LD] stays for the majority of the time"*.

After reviewing the definitions that teachers provided regarding the term integration, it was found that the nineteen teachers who were asked expressed their understanding of the term integration and these responses revealed that the teachers held different personal meanings. Analysis of the teachers' definitions revealed five themes: placement, social benefits, placement and psychological benefits, benefitting educationally, and benefitting educationally, socially and psychologically, each of which is discussed in more detail below.

To begin with placement, there were eight teachers who related their definition of integration to placement; notably, these indicated that integration was where students with LD are integrated with students without LD in mainstream schools. For example, Khalid stated that integration was *"being in the same school"*. Interestingly, Saeid defined integration as *"segregation between them [students with LD and students without LD] in a normal school"*.

In addition, two teachers were more specific in their definition of integration as they specified the locations where students were integrated. For example, Ibrahim defined integration as *"including normal students with students with SEN in some non-curriculum activities or in some curriculum subjects, but not all"*. This definition of integration provided by Ibrahim reflected a general view of integration – that some students with SEN, such as students with visual impairment, were integrated with their peers in academic subjects, while other students with SEN, such as students with LD, were integrated with their peers during social activities. Similarly, Faisal defined integration as *"[students with LD] being in their own classroom alone, and they being included at break times and sometimes in art education and*

physical education". He related his definition of integration to students with LD and his emphasis on their having a separate classroom.

Similarly, Fahad's definition provided more explanation of activities in which students with LD are integrated; Fahad defined integration as *"including general education students with students with LD in Sports participation and competitions..."*

Furthermore, Ali and Khalil in their definitions of integration provided other locations where students with LD were integrated with their peers. Khalil defined integration as *"in break time, morning assembly and sitting together"*. Similarly, Salih related his definition of integration to students with LD meeting with general education students. These definitions of integration closely resemble the results from previous research, e.g. Warnock (1978) and the Regulation of Special Education Institutes and Programs (2002).

In addition, six out of the nineteen teachers related their definition of integration to the social benefits of integration. For example, Sultan defined integration as *"including the group of General education students with the group of students with LD to achieve coexistence and compatibility. Also, to prepare them for compatibility in general life."* Essa similarly defined integration as *"a modern trend which concerns the education of students with SEN in terms of providing the service in the least restrictive environment and allowing them to participate in society and providing them with the means to prepare them for inclusion in society outside school"*.

Similarly, Majid defined integration as *"in general, it includes students with SEN in society. So, integration is the participation of students with SEN with general education students in the same schools"*. A similar view was expressed by Anas who defined integration as *"including general education students with their peers and brother students with LD who are educable with a view to them entering society"*.

Abdelaziz went further in his definition of integration as he expressed the benefit of integration in terms of students integrating in society and having the same rights. He defined integration as *"including a group of students who have mental, hearing or visual impairments in general schools and including them in society and having the same rights as normal students"*. Abdelmohsen related his definition of integration to removing discrimination

between students, as he defined integration as *“including students with LD with general education students in the playground in order not to be discriminatory. However, within curriculum study, general education students study in designated classrooms and students with LD study in their own designated classroom”*.

Teachers whose responses were captured within this theme related their understanding of integration to the social benefit of these practices, meaning that providing students with LD with the same rights as general education students, removing the discrimination between students with LD and general education students and facilitating integration not only in schools but in society in general, was deemed important. This finding is consistent with the definition of integration presented by Stephens et al. (1988).

Another theme related to the definition of integration is placement and psychological benefits. Zaid had a similar view to previous teachers who related their definition of integration to the placement of students with LD. However, Zaid differed from these previous definitions by highlighting the psychological benefits of integration. He defined integration as *“including students with mild disabilities with normal students in break time and on school trips and activities in order for students to feel normal”*. This finding, although limited, as it was drawn from only one participant, revealed that it was possible to conceptualise the wider benefits for the individual with SEN (Stephens et al., 1988).

In addition, Hassan related his definition of integration to benefitting educationally. He defined integration as *“including students with SEN with general education students in order for students with SEN to acquire new knowledge”*. Similarly, Talal related his definition of integration to benefitting from everything in schools. He defined integration as *“students with SEN benefit from every facility in an educational environment”*. These teachers related their definitions of integration to the educational benefit of the integration of students with LD, as these students may benefit from being in mainstream schools in terms of learning new knowledge, such as learning new words from general education students when they meet together in break time and learning new skills, such as throwing rubbish in the bin, by imitating them. These findings are consistent with previous research reported by Stephens et al. (1988).

The last theme related to the definition of integration was to benefit educationally, socially and psychologically. Yazid suggested an even broader benefit of integration in his definition of integration. He defined integration as *“including students with SEN with general education students in order to prepare them psychologically, socially and educationally”*. The definition of integration proposed under the theme of educational, social and psychological benefit is consistent in some ways with the definition proposed by Stephens et al. (1988).

5.4 Summary

The analysis discussed above reveals that the majority of participating teachers had a clear understanding and knowledge about the two important terms, inclusion and integration, albeit with different personal emphases. It is also important to note that the majority of teachers knew the difference between these two terms. The variety demonstrated in the definitions of inclusion is largely consistent with previous findings from literature in the UAE and USA contexts (GRPSEPS,2010; IDEA, 2004). There was, however, a minority of teachers who indicated that they did not understand the term inclusion. It is also interesting that some teachers provided a definition of inclusion although they had not experienced inclusion or inclusion had not been implemented in their schools.

In general, teachers related their definitions of inclusion to students with LD studying with their peers in the same classroom all of the time, following the same curriculum, and removing any obstacles to their inclusion in mainstream schools. On the other hand, teachers related their definition of integration to including students with LD with their peers in non-curriculum activities, the playground, morning assembly and school trips, whereas they have their own classroom and special teachers to support them across the social, educational and psychological domains.

In addition, teachers did not reflect on any positive effect of inclusion when they defined inclusion; they concentrated on the procedure of including students with LD with their peers, whereas in defining integration they did indicate the positive effects that this practice can have, for example, the social, psychological and educational benefits. This may be reflective of teachers' lack of experience of inclusion particularly as inclusion is not implemented in Saudi schools. This finding may also closely reflect the policies that are currently applied in Saudi schools.

Generally, the important point about the understanding of teachers regarding inclusion is that it helps them to be aware of how this approach works in practice and it helps them to identify the challenges that would be faced when implementing inclusion.

Following the above analysis of the knowledge and understanding of inclusion and integration, the next chapter will analyse the key factors that could act as barriers to implementing inclusion for students with LD in primary mainstream schools in Saudi Arabia; this analysis is undertaken in order to explore what would need to be overcome in order to achieve inclusion in primary schools particularly as it is reported in the literature that inclusion is beneficial for students with LD (Dessementet et al., 2012; Freeman and Alkin, 2000; Peetsma et al., 2001).

Chapter Six: Factors that Act as Barriers to Implementing Inclusion for Students with LD in Mainstream Primary Schools in Saudi Arabia

6.1 Introduction

This research aimed to explore issues related to the inclusion of students with LD in mainstream primary schools in Saudi Arabia. The previous chapter addressed the first research question which was: How do teachers define inclusion in mainstream primary schools in Saudi Arabia? This chapter will address the second research question, what are the factors that act as barriers to implementing inclusion for students with LD in mainstream primary schools in Saudi?

The analysis discussed in the current chapter was based on the results drawn from interviews, observations and documents such as legislation, curriculum textbooks, the study plan in universities and the schedule of in-service training. The analysis revealed fifteen themes that could act as barriers to implementing inclusion. These themes are related to five overarching categories which are illustrated in Table 6.

Table 6 The overarching categories and themes arising from the data analysis

Teachers	Students	Parents	Pedagogy	Environmental context
Teachers' preparation	Relationships between students with LD and general education students	Relationships between parents and schools	Human support	Educational legislation in Saudi Arabia
In-service training			Curriculum	Head teachers' awareness
Competence of teachers			Teaching strategies	Number of students in classroom
Teachers' perspective towards inclusion			Resources	Infrastructure of schools
			Assessment	

6.2 Teachers' category

Four themes were found to be related to the teachers' category; these are teachers' preparation, in-service training, competence of teachers and teachers' perspective towards inclusion. Each theme will be discussed in the next section.

6.2.1 Teachers' preparation

Teacher's preparation is considered as one factor that could act as a barrier to the implementation of inclusion that the data indicated. Table 7 shows the teachers' preparation analysis in the current study was based on five variables, including teachers' main qualifications, whether they had studied any modules on inclusion, integration and SEN, and whether they had any further qualifications. It is important to mention that teachers' preparation in Saudi Arabia is based on two pathways. There is one training programme designed to prepare teachers to teach general education students, which includes subject specialisms, for example, training for teachers of Arabic language; the other pathway prepares teachers for working with students with SEN – the qualifications in this pathway are based on type of students, for example a bachelor degree in LD.

The data in Table 7 reveal that all teachers in the current study had a bachelor degree except Salih, Abdelmohsen, Fahad and Khalil, who each had a diploma. Furthermore, Table 7 shows the different subject majors that the teachers participating in this study had studied. In addition, all art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties had a diploma in LD. Art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties confirmed during the interview that they obtained the diploma whilst working in their roles after they moved from teaching general education teachers to teaching students with LD.

A number of issues emerged from reviewing the study plan of the Saudi universities where the participants studied and from interviews with the teachers. One of the issues that emerged from reviewing the study plan for a bachelor degree in LD is that modules on core curriculum subjects such as Arabic, mathematics and science are missing from these teachers' preparation. The main study focus of the bachelor programme in LD is modules on SEN and LD. For example, there are modules about SEN such as *Introduction to Special Education*,

Assessment and Diagnoses of Special Education and Behaviour Modification. In addition, there are some modules that concern LD, such as *Introduction to Mental Retardation*, *Adaptation Behaviour Skills* and *Teaching Methods for Students with Mental Retardation*. However, subject knowledge is missing from this curriculum and could affect special education teachers for students with LD negatively when inclusion is implemented, because they would lack adequate knowledge about core subjects.

Another issue indicated in Table 7 is that general education teachers, physical education teachers and art education teachers did not study any modules in universities or colleges on inclusion or integration, whereas special education teachers for students with LD had undertaken a module on inclusion and one unit about integration under one module, and physical education teachers for students with learning difficulties and art education teachers for students with learning difficulties studied a module about inclusion when they studied for their diplomas. The study plan for a bachelor degree in LD mentions a module titled *Educating the Abnormal in Regular Schools*. This module covers topics such as defining inclusion, preparation for inclusion, the characteristics of inclusive schools, the process of changing the schools and individuals to incorporate inclusion, building a cooperative team and how such a team works to help in meeting students' needs. The module focuses on the theories of inclusion rather than the practice of inclusion. In addition, under the module *The Education of Educable Students*, there is one topic about integration in regular schools. Moreover, in the syllabus for the diploma of special education in LD that art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties had contained just one module on inclusion, titled *Educating the Abnormal in Regular Schools*.

During the interviews with the teachers, general education teachers, physical education teachers, art education teachers, physical education teachers for students with learning difficulties and art education teachers for students with learning difficulties all confirmed that they had not studied any modules on inclusion or integration during their preparation in universities. In addition, when asked, none of the special education teachers for students with LD mentioned that they had studied modules on inclusion. This differed from the result indicated in a review of the study plan. However, special education teachers for students with LD indicated during the interview that they had studied integration during their preparation, not inclusion. For example, Abdelaziz said, "*It was not a module on integration. It was a topic*

within some modules. There was no module on inclusion". Since the evidence is that teachers had not studied modules on inclusion, so it may be worth considering introducing the concept into the teacher training programmes.

Another issue revealed is that not much attention was paid in universities to preparing teachers (general education teachers, art education teachers, physical education teachers, art education teachers for students with learning difficulties, physical education teachers for students with learning difficulties) to teach students with SEN. Many of the modules in teachers' preparation focus on core major subjects that the teachers would teach. For example, Abdullah had a bachelor degree in Arabic language; the main focus of the programme was on Arabic literature and Arabic grammar and so on. Also, there are some modules on the principles of education, such as *teaching methods* and *Islamic education*.

Moreover, some disciplines contained optional modules about SEN. For example, in the bachelor degree in Physical Education, it was found that there was one optional module on special education, titled *Physical Activity for Students with Special Educational Needs*. Table 7 indicates that some of these teachers had not taken any modules on SEN and other teachers had only studied an optional module on SEN. Furthermore, one of the teachers during the interview indicated that not much attention was paid in universities to preparing teachers for teaching students with SEN. Ibrahim said that *"Regarding the modules of special education, there are not enough because there are only one or two modules and the syllabus for the art education degree from the teachers' college is not concerned with SEN"*. Therefore, providing such modules on SEN would be helpful to increase teachers' awareness and competence in relation to SEN.

One important finding was that all art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties reported during the interviews that they had benefited from obtaining a diploma on teaching students with LD in terms of acquiring the knowledge and skills that they needed. For example, Yazid stated, *"In fact, I benefit from the diploma in terms of dealing with students with LD, as well as in terms of preparing the lesson and using different teaching methods and identifying the student's mental and physical side. I did not have all this information about them until I took the diploma. I benefit from the diploma and I apply what I have studied on my students."* In

addition, the art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties were confident that the diploma supported them in their work and their development of effective skills. Majid said, *“Of course, I benefit from the diploma”*.

From the discussion above, it can be noticed that the preparation of teachers in Saudi universities is based on two pathways: one for general education students and the other for students with SEN. In addition, there was little consideration of SEN and inclusive education in the majority of teachers' preparation for general education students, as the study plans either did not include any modules on them, or at best universities provide only one or two modules as basic information about SEN. This lack of training at this level leads to these teachers being unqualified to teach students with SEN, and students with LD more specifically, as these teachers do not have either knowledge about students with LD or the competency to teach them. In addition, the shortage of teacher preparation for inclusion may lead teachers to face difficulties when implementing inclusion.

One interpretation of the results from this part of the analysis is that training is fundamental for all teachers to enable them to implement inclusion effectively in their classrooms. If such specific training is not provided, the teachers may not be qualified to deal with the challenges of working with LD and promoting inclusion.

Table 7 Overview of teachers' preparation

Teachers	Main qualifications	Modules on inclusion	Modules on integration	Modules on SEN	Further Qualifications
Special education teachers for students with LD	<ul style="list-style-type: none"> All of them had a Bachelor degree in LD 	One module	one unit under one module	Focus on SEN	x
Art education teachers for students with LD	<ul style="list-style-type: none"> All of them had a Bachelor degree in art education 	X	X	Hesham , Zaid and Ibrahim one optional module	All had diploma in LD (studied one module about inclusion)
Physical education teachers for students with LD	<ul style="list-style-type: none"> All of them had a bachelor degree in physical education 	x	x	Mansour and Majid studied one optional module	All had diploma in LD (studied one module about inclusion)
General education teachers	<ul style="list-style-type: none"> Mohammed had bachelor degree in mathematics Abdullah had bachelor degree in Arabic language Hassan had bachelor degree in Islamic culture Saeid had a diploma in primary education Salih had bachelor degree in fundamental of religion 	x	x	Mohammed has one optional module.	x
Art education teachers	<ul style="list-style-type: none"> Omar had Bachelor degree in art education Sultan Had Arabic language bachelor 	x	x	All studies one optional module	x
Physical education teachers	<ul style="list-style-type: none"> Ali had bachelor degree in physical education Abdelmohsen,Fahad , Khalil had a diploma in physical education 	x	x	Ali studied two optional modules	X

6.2.2 In-service training

In-service training is one of the factors found in the data that could be a challenge to implementing inclusion. There are two sub-themes that the data indicated: the obstacles to

attending in-service training and the content of in-service training. Each sub-theme will be discussed in this section.

During the interviews, teachers mentioned some challenges related to attending in-service training. The first challenge is location which was shown to influence the teachers' attendance rate. It is important to mention that in-service training for teachers in Saudi Arabia is not compulsory and there is no online training provided for teachers. Abdelaziz argued with regard to the influence of location where in-service training was provided that *"there is difficulty in attending training because the training locations are far away. For example, you live in one place and the training location is far from you, with a lot of traffic in Riyadh and no training location near to you; these reasons make people negligent about attending."* Talal agreed with Abdelaziz regarding impediments to attending training with regard to the locations where training is held. This teacher also commented that often the training provided was too far away; for this reason, the last training he had attended was seven years prior to this study. Therefore, Zaid and Abdelaziz suggested that in-service training should be provided in local schools in order to facilitate attendance. This evidence was interpreted as indicating that the issue of location could pose a barrier to implementing inclusion because some teachers might reject the idea of attending training if it involved travelling a long distance.

Another challenge was mentioned by a number of teachers (two physical education teachers for students with learning difficulties and one art education teacher for students with learning difficulties) who pointed out that they had not attended any preparation training related to teaching students with LD when they moved from teaching general education students to teaching students with LD. For example, Mansour indicated that *"I started immediately to teach students with LD. The general administration of education in Riyadh did not provide me with a preparation programme"*.

In addition, Sultan and Abdelmohsen were teaching students with LD temporarily, because there were no art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties in their school. These teachers indicated that they had not attended any training for teaching students with LD.

The importance of preparation training for teachers when moving to teaching students with LD in mainstream schools was also indicated by Anas, who talked about his experience when

he moved to this type of provision. When he was asked about the importance of training, he responded, *"I see it is useful [in-service training] especially in integration. This is because when integration was first implemented it was not well established. Integration was just implemented in mainstream schools and they did not provide training for teachers to attend. They just implemented it and told the teachers to teach the students. So, with time and experience we started identifying the problems that we faced and started to resolve them gradually as we interacted with the students."*

The evidence presented above supports the notion that teachers lack knowledge and skills when they move to teaching students with LD; therefore, they face some challenges in teaching especially at the beginning. Arguably, the analysis of this data suggests that the lack of preparation training for teachers when implementing inclusion would act as a barrier to successful inclusion.

In addition, during the interviews two teachers from the groups of special education teachers and general education teachers indicated that they faced obstacles to attending in-service training. The first obstacle was mentioned by Abdelaziz who said, *"Sometimes you want to attend a course and you register your name to attend the course, but you are surprised that your name is not accepted"*. These teachers pointed out that some courses quickly become fully booked. Therefore, some teachers are not able to attend a course that they feel is necessary for them in order to continue their own development. In addition, a review of courses provided by the Educational Training Centre in Riyadh revealed that almost all courses are run only once per semester, although Riyadh is a big city and there are many teachers. The data suggest that insufficient training opportunities for all teachers and the limited number of places may have an impact on the ability of teachers to engage with the training.

Another obstacle to attending in-service training was raised by Omar, who stated that *"training can be problematic, because it may cause tension between you and the head teacher as the head teacher may reject your request to attend a training course because your classroom would be empty [without a teacher] or because of the workload"*. This teacher indicated that workloads and non-availability of other teachers to take over the classroom of the teacher attending in-service training limit opportunities to engage with important training. Thus, this teacher felt that a lack of organisation from the Educational Training

Department in Riyadh at the time of providing the training may influence teachers considering attending training.

The evidence above suggests that the existence of obstacles to teachers attending in-service training could act as barriers for implementing inclusion, so these challenges should be considered further.

This discussion has examined the challenges that face teachers with regard to attending in-service training. The next discussion will move to looking deeply at the content of in-service training provided for teachers.

Training courses in Riyadh are provided for teachers in three ways. The first way is through the Educational Training Department. The training courses in this training department are provided to the group of special education teachers, group of general education teachers, head teachers and student counsellors. The second way is through the Special Education Department, which is dedicated to special education teachers, new head teachers for mainstream schools, physical education teachers for students with learning difficulties, and the parents of students with LD. The third way is through supervisors and resident supervisors who provide training for teachers under their supervision.

Reviewing the training courses that are provided by the Educational Training Department in Riyadh in the seven training centres, which are held in the morning and the evening, it was observed that no training courses about integration or inclusion were offered. In addition, there were few training courses in SEN. Just eleven out of the three hundred and forty-four training courses provided were related to SEN and provided for all staff in schools including the head teachers, teachers, and student counsellors; all of the other training courses were general training or related to general education. The training courses provided are typically focused on general topics such as the *Art of Public Speaking*, *School Journalism*, *Smart Board*, *Photoshop*, *Charisma*, and *Effective Dialogue*. In addition, there are a few specialised courses directly related to the teacher's specialism and the subjects that they teach. The analysis of data related to the training provided by the Educational Training Department suggested that there is a lack of provision of inclusion and integration training courses, and a shortage of training courses related to SEN. These issues may reflect negatively when implementing inclusion.

Moreover, during the interviews, four teachers indicated some issues with the content of the in-service training provided. For example, some training courses provided were overly theoretical and not related to practical skills. This issue was highlighted by Sultan who said that *“The training courses that are offered now are useless. This means you will not come out with anything you can implement in practice. They are just theoretical courses and may increase your knowledge but are not related to practice”*. Teachers emphasised that theory courses have no influence on teachers’ practice because they just provide the teachers with information, rather than skills for application. Based on interpretation of the data above, providing theoretical training courses would challenge implementing inclusion in terms of there being no or limited benefit from theory based training. Thus, practical training courses should be considered, as Ibrahim pointed out the importance of practical workshops for his practice in the classroom.

Another issue that should be considered is continued renewal of the training provided and not merely repetition of the same training courses over and over again. Talal indicated the issue of such repetition. He said, *“The last training I attended was seven years ago, because I have already taken most of the courses. So, these courses would be repeated for me. I want training courses that I have no knowledge about and have never taken before.”* This evidence suggests that it is important to continually renew the provision that is offered so that all teachers can have the opportunity to continue their professional development.

Another issue that is related to the content of the training courses is that the resources that are available in schools and the ability of the teachers to implement what they learn from the training should be considered. This issue was highlighted by Ali, who said that a lack of resources and a heavy workload are challenges that teachers face when they want to implement what they have learned from training. Ali said, *“The important thing is that teachers should implement what they take from the training. As you know the training is kind of nice talk and in good order but when you go to practise it, it is difficult to implement through either lack of resources or the workload on teachers. For example, I have twenty-four lessons. In addition, I teach other subjects such as art education, Quran and Islamic jurisprudence. So, it is difficult to implement what I take from the training”*. This indicated that the content of the training courses should take into account the ability of teachers to implement it in practice in terms of availability of resources and time. Thus, providing training courses that are not

appropriate to the circumstances surrounding teachers may challenge implementing inclusion, in terms of the difficulties of practising what teachers learn in training courses.

As mentioned above, the Special Education Department is one way of providing training courses for teachers. As indicated in their operational plan for 2015, training courses were dedicated to special education teachers, new head teachers for mainstream schools, physical education teachers for students with learning difficulties, and the parents of students with LD. However, there were no training courses designed for art education teachers for students with learning difficulties. Moreover, no training courses were offered at all about integration or inclusion. All of these training courses were provided in the area of SEN.

Furthermore, general education teachers, including art education teachers and physical education teachers, cannot attend any training provided by the Special Education Department, nor can they attend certain courses provided by the Educational Training Department that are dedicated to teachers who teach students with SEN. Yazid discussed this issue in relation to his own experience. He had wanted to attend training courses in special education before he moved officially to teaching students with LD, but the Special Education Department rejected his application. Yazid said, *“I have attended nearly thirty training courses in general education, whereas, in special education they [Special Education Department] refused to provide training in special education except for special education teachers, because I was a collaborator [in teaching students with LD]. However, when I took a letter from the school indicating that I teach students with SEN they provided the training [in special education] for me”*. The analysis of training courses provided by the Special Education Department indicated that the problem of restriction of training courses to a particular category of teachers would have a negative influence on the knowledge and skills of those teachers who are not allowed to attend.

The third way of providing training identified through the interviews was that some supervisors and residential supervisors provide training courses unofficially – a kind of personal endeavour from them. This approach to training was indicated by five teachers from the group of special education teachers who talked about how their supervisors provided workshops for them. These teachers indicated that they benefitted from these workshops in their practice. For example, Zafer discussed how he had benefitted from training provided by

the resident supervisor in his school; the course content had focused on sex education for students with SEN, and during this training he had learned some techniques for dealing with students when they faced issues of sexuality.

Generally, training is important, as it can support teachers in a number of ways in terms of increasing teachers' knowledge and skills (as indicated by eight teachers from a group of special education teachers and general education teachers), development of teachers' performance (Faisal), changing teachers' attitudes (Talal), and exchange of experience between teachers (four teachers from the group of special education teachers and general education teachers). However, the data indicated some challenges to attending in-service training and some issues related to the content of in-service training provided which could act as barriers for implementing inclusion.

6.2.3 Competence of teachers

The competence of teachers for educating students with LD in the mainstream classroom is one of the factors that the data indicated could act as a barrier for implementing inclusion. The theme competence of teachers will be discussed next in two ways: the first explores the confidence of teachers in including students with LD in their classroom; the second is the knowledge and skills that were indicated to be needed by teachers.

None of the general education teachers group showed confidence in educating students with LD in the mainstream classroom. For example, Hassan said, *"In fact, we lack information about special education entirely, as well as the method of dealing with them [students with LD] in theory and practice"*. In addition, Saeid argued that, *"it is difficult to deal with them [students with LD] without enough information about them"*. Abdullah felt that general education teachers are incompetent with regard to teaching students with LD because they do not specialise in teaching such students. Abdullah said, *"general education teachers would face difficulties in their [students with LD] teaching because they are specialised in teaching general education students and they [students with LD] need teachers who are specialised for them, and know the right teaching methods and how to deal with them, as they [special education teachers for students with LD] studied this and know about it"*. These quotations show that groups of general education teachers felt that they lacked the knowledge and skills to deal with students with LD, which had a negative impact on their confidence. On the other

hand, all of the special education teachers groups showed confidence in teaching students with LD. This may be ascribed to their experience in teaching students with LD or to the knowledge and skills they had regarding students with LD, as they were prepared in universities to teach such students.

The general education teachers group showed no confidence in teaching students with LD, because they felt that they lacked some knowledge and skills. To increase their competence, teachers require some knowledge and skills, which can be divided into three areas.

The first area was obtaining general information about students with LD. Six teachers in the group of general education teachers expressed their need to obtain information about students with LD. For example, they felt that they needed to know who the students with LD were, their Intelligence quotient, their mental age, their health status, their behaviour and their abilities. The second area was obtaining knowledge and skills about how to deal with the behaviour of students with LD. Four of the group of general education teachers mentioned their need to learn more about this area. For example, Ali raised the necessity of obtaining knowledge and skills: *"I do not know how I am supposed to deal with them. For example, with general education students, if I give the student a suspension or raise my voice at them, they know something is wrong and they adjust. In contrast, with students with LD, I do not know whether they will recognize that they have done wrong or how they will adjust."*

The third area was teaching methods for students with LD; six teachers of a group of general education teachers pointed out the importance of obtaining knowledge and skills about special teaching methods. For example, Abdullah said, *"Teachers have to recognize the special ways and methods for delivering knowledge to students with LD very quickly"*. In addition, Salih stated that it is necessary to *"recognize their teaching methods because students with LD have their special teaching methods. I think my form of teaching methods does not suit them, as students with LD have their special teaching methods"*. These teachers thought that acquiring special teaching methods for teaching students with LD would be necessary to increase their confidence. Also, all teachers in the group of special education teachers suggested that all general education teachers should obtain knowledge and skills regarding students with LD before they move on to teaching students with LD in mainstream classrooms. For example, Essa said, *"There are three things general education teachers should*

be capable of doing to help them in the success of inclusion. These things are recognizing the students [with LD], the right ways to deal with them, and how to deliver the skills for the students". In addition, Hesham argued, *"I see it is difficult to include students with LD in general education in order for students [with LD] to benefit [from the inclusion], if the teachers [general education teachers] do not have any background about these students [with LD]. So, intensive initiation programmes should be provided about students with LD and how to deal with them; such as, if some students have spasms, how the teacher should deal with these students ... in addition, general education teachers need to be knowledgeable about [regarding their students with LD] the teaching methods, their psychological condition, the ways of dealing with them, how to discipline them, how to know about IQ measures, how to make an individual education plan and how to deal with students with LD and general education students".* Teachers in the group of special education teachers were in agreement with teachers in the group of general education teachers in terms of the necessity of obtaining such knowledge and skills to overcome the low competence of teachers in the general education teachers group.

Generally, the lack of confidence of general education teachers regarding including students with LD in mainstream classrooms could act as a barrier to implementing inclusion, as these teachers expressed their need for such knowledge and skills and they felt that they were not ready to include students with LD in mainstream classrooms. Thus, providing the necessary knowledge and skills for general education teachers should be considered when implementing inclusion.

6.2.4 Teachers' perspective towards inclusion

Teachers' perspectives towards inclusion is one of the factors that the data indicated could act as a barrier to implementing inclusion for students with LD. The theme, teachers' perspective towards inclusion, will be analysed in two respects. The first is how teachers perceived the inclusion of students with LD in mainstream classrooms; the second is whether incentives provided for teachers would influence the teachers' view towards inclusion.

The views of the participant teachers towards inclusion can be divided into two groups. The first group comprises teachers who were ambivalent about inclusion. The second group consists of teachers who had a negative perspective about inclusion.

To start with ambivalence in the perspective towards inclusion, a number of teachers (fifteen) were ambivalent in their support of inclusion. They had a positive perspective towards the inclusion of students with LD in art education and physical education on the one hand, while on the other hand they had a negative perspective towards the inclusion of students with LD with their peers in academic subjects such as Arabic language, maths and sciences. In other words, their perspective on inclusion depended on the environmental context.

For example, Anas talked about his view on inclusion of students with LD in art education. He said, *"I can see the benefit of including them [students with LD] in art education. This is because it has benefit for both general education students and students with LD in terms of productivity and understanding of artistic taste. Also, the students with LD will greatly benefit from the general education students in how to produce the work."* Further support came from Yazid who argued that *"including them [students with LD] in physical education, I support it. This is because they [students with LD] will benefit from their friends [general education students] in terms of imitating their skills."*

The evidence above illustrates that these teachers had a positive perspective towards the inclusion of students with LD in mainstream classrooms with their peers in art education and physical education. In addition, these teachers thought that inclusion of students with LD with their peers without LD could have beneficial impacts in terms of the potential for students with LD to learn from the general education students important skills related to these two subjects.

However, these teachers also expressed a negative perspective towards inclusion for students with LD in academic subjects. The reasons for not supporting such inclusion will be discussed later. For example, *"I am against it [inclusion]"* (Hesham), *"I see inclusion in the mainstream classroom as being difficult"* (Yazid), *"It is better for them [students with LD] to have their own teachers and only a few students"* (Fahad), and *"not to be included in academic subjects"* (Abdelaziz). These examples express teachers' negative perspective towards inclusion in academic subjects in mainstream classrooms.

Regarding the negative perspective towards inclusion, the data indicated that nine teachers had a negative perspective towards inclusion of students with LD in mainstream classrooms in all subjects, even art education and physical education. For example, Omar said, *"I do not*

support inclusion; even integration I do not support". Ibrahim stated that *"inclusion in art education, I think, is one hundred per cent difficult"*. Furthermore, Khalil argued, *"I do not believe in inclusion"* and Faisal stated, *"In my point of view I think that it [inclusion] is very difficult and it is explicitly not feasible"*. The above quotations highlight the negative perspective towards inclusion of students with LD in mainstream classrooms in academic subjects and even art education and physical education.

The reasons that influenced the teachers were mediated by the environmental context, specifically those in which the school subject was being discussed, and by perceptions of the deficiency of students with LD. Sixteen teachers mentioned that they perceived students with LD to have low abilities in learning compared to general education students, which was why they had a negative view towards inclusion. For example, Majid stated, *"Their abilities [students with LD] are lower than the abilities of general students"*. In addition, Essa stated, *"I do not think there will be much benefit from it [inclusion], because there is so much disparity between general education students and students with LD in their mental scores"*. These quotations illustrate that the teachers directly compared the abilities of students with LD with those of general education students, which negatively influenced the view of the teachers towards inclusion. Moreover, the explanations against inclusion revealed in the responses of four teachers related to perceived difficulties in dealing with the behaviour of students with LD in mainstream classrooms because these students sometimes misbehave. For example, Hassan related his negative view towards inclusion to *"the difficulties in controlling students with LD inside the classroom"*. In addition, Salih said, *"I observed that the students with LD are hyperactive, ... So, controlling them is difficult"*.

Another reason mentioned by five teachers was that they felt there are difficulties in teaching students with LD in mainstream classrooms. For example, Majid argued that *"there will be difficulties facing teachers in teaching them [students with LD]. This is because he [the teacher] will be dealing with two categories, the general education students' category, and the SEN and students with LD category, each of which needs a special status. In fact, if I have general education students I teach them collectively but for students with SEN [students with LD] I need to deal with each one alone"*. The teacher quoted assumed that it would be difficult to develop teaching practices appropriate to the difference in levels of ability between these two groups.

Another reason mentioned by eight teachers was that the curriculum provided for general education students is different from that provided for students with LD. Therefore, they perceived that the students with LD would face difficulties in accessing the general curriculum. For example, Yazid said, *"The curriculum provided by the MoE is beyond the ability of students [students with LD]. So, there will a difference between the students, especially those with LD who cannot compete with the general education students in the curriculum because their [students with LD] abilities are limited. So, I think they should study in their own classroom because their teachers will teach them according to their needs. I can see that inclusion in mainstream classrooms is difficult"*.

The expected negative influence of inclusion on students with LD was a further reason mentioned by two teachers and this view influenced their perception towards inclusion in mainstream classrooms. For example, Essa stated, *"I think that students with LD will not get as much care as they would in their special classroom"*; in addition, Abdelaziz referred to a *"student with LD who has a severe deficiency [who] sometimes gets upset when he is in the presence of general education students because he becomes more aware of his deficiency and feels he is at the bottom in the general classroom. This influences him very much and the general education students make fun of him. However, he may see his deficiency as trivial and may feel superior when in his own classroom [special classroom]"*. These teachers felt that inclusion could influence students with LD negatively in terms of students with LD not receiving much attention in mainstream classrooms and being more conscious of their impairment in this environment. Therefore, these reasons help to rationalise why these teachers had a negative view towards inclusion.

On the other hand, six teachers perceived that inclusion would have a negative influence on general education students. For example, Hassan stated, *"The fear is that, time is lost on teaching these students [students with LD] which negatively affects general education students. This is because general education students acquire the skills quicker, whereas, the students with LD are slower in acquiring the skills and the teachers will need to concentrate on the students with LD and ignore the general education students, which will affect them. So, I can see that the general education students will be affected academically when implementing inclusion because I will need to spend more time on teaching the students with LD."* This teacher felt that teachers would not give enough attention to general education

students when implementing inclusion and they would pay too much attention to students with LD.

In addition, six teachers discussed a feeling that inclusion would need more effort from them on top of the workload of teaching general education students. For example, Fahad said, *"I am against it [inclusion] because it needs time and special care"*. In addition, Omar stated, *"General education teachers have twenty-four sessions and supervision at the beginning and end of the school day and two standby sessions. So, a huge workload"*. These teachers expressed their negative perspective towards inclusion because teaching students with LD would require more work from them and they already had so much work to do during the school day. Thus, teaching students with LD would add additional aspects to their workload and they were reluctant to accept this.

The last reason, mentioned by two teachers, was the large number of students in the classroom, whether students with LD or general education students. For example, Sultan said, *"The large number of students confuses the teachers. Currently I do inclusion in one session but if I was to do inclusion in more than one session I do not think I could teach them [students with LD in classroom] ... The number of students with LD is between eight and eleven in the classroom where I include them. This is difficult for me."* Similarly, Essa felt that the large number of general education students in the classroom influenced his view on inclusion. He said, *"At the present time, we are overcrowded in the general education classroom. So, what do you think if we include students with LD with them?"* Overall these teachers highlighted the importance of class size and how this could influence their feelings towards inclusion.

One of the factors that should be considered when implementing inclusion is the influence of incentives provided to groups of special education teachers on the teachers' support for inclusion of students with LD. Special education teachers for students with LD, art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties in Saudi schools receive a 30% increase in their salary for teaching students with LD and teach eighteen sessions per week. In contrast, general education teachers, art education teachers and physical education teachers received only the standard salary and were required to teach twenty-four sessions per week.

A high number of participant teachers (seventeen) saw a positive influence of incentives on the view of teachers towards inclusion. For example, Fahad talked about the influence of incentives on teachers as *“a factor that encourages acceptance of inclusion and teachers to provide more”*. This suggests that, where possible, such incentives could be used to encourage teachers to be more open to inclusion. On the other hand, a few teachers (Hesham, Majid, Hassan) did not think incentives would influence teachers' view towards inclusion. For example, Hassan said, *“I do not see incentives having a role in my supporting of inclusion. This is my personal view. Even if they were to provide me double salary I would not teach students with SEN.”* In addition, Majid argued that the influence of incentives provided to teachers would be temporary, as teachers would support inclusion for a while, due to receiving the incentive, but would change their view after a time. This data suggested that although incentives could be used to encourage inclusion these may be only a short-term measure and have a limited impact over time.

Generally, all teachers in the current study had a negative perspective towards inclusion of students with LD in academic subjects such as Arabic and maths. The teachers indicated a number of reasons for such negative views. These included the deficiencies of students with LD (e.g. intellectually and behaviourally) and some environmental contextual factors. However, some of these teachers favoured inclusion of students with LD just in art education and physical education; their view may reflect the fact that in art education and physical education there is no academic demand required. The negative perspective of teachers may influence their practice in terms of their enthusiasm to implement inclusion.

6.3 Student category

There was one theme related to the students' category, which is the relationships between students with LD and general education students. This theme will be analysed next.

6.3.1 Relationships between students with LD and general education students

This study found that relationships between students with LD and general education students could act as a barrier for implementing inclusion in some ways. The theme, relationships between students with LD and general education students, will be discussed in two ways. The first focuses on how students with LD and general education students behave towards each other in integrated settings. The second explores the attitude of each set of students towards

inclusion. It is important to mention that the analysis of this theme is based on the perspectives of teachers and the results of the observations.

To begin with, how do students with LD and general education students behave towards each other? The findings of the current study were mixed, with indications of negative, positive and changeable behaviour among students.

Eleven teachers proposed that there is negative behaviour between students with LD and general education students, in negative terms. Negative behaviour could take the form of some general education students being afraid of students with LD (especially general education students from the first and second grades, who have only recently started school), the bad habits of general education students such as laughing at students with LD or using insulting words such as 'mad student', poor relationships and rarely sitting together.

In contrast, negative behaviour on the part of students with LD can be seen in the form of poor relationships and rarely sitting together, some students with LD preferring to sit alone and not interacting with the other students, bad habits such as spitting, use of bad language, being aggressive.

The data indicated a number of factors that could contribute to problematic relationships between students with LD and general education students. Khalid attributed negative behaviour on the part of general education students to the absence of a preparation programme for general education students when integration is implemented. Khalid said, *"The problem is that there is no awareness lecture provided for general education students or a person to talk about integration and why it is implemented, and talking about disabilities and their characteristics and why some students have different characteristics such as Down's syndrome. So, the nonexistence of these lectures causes students with LD to fear general education students"*. The lack of such preparation of general education students could influence negatively their behaviour towards students with LD. Thus, seven teachers suggested providing an introductory lecture for general education students about students with LD, to prepare general education students for inclusion.

Another factor that could lead to poor relationships between students with LD and general education students is separating students with LD from general education students during break time, as the majority of students with LD who have behavioural problems stay in one

part of the schoolyard and do not interact with their peers (four teachers). Moreover, during the visit to school 1, it was noticed that students with LD were sitting on the theatre platform located in the schoolyard and a number of special education teachers for students with LD were observing them and did not allow them to play with other students or walk around the schoolyard; some students with LD tried to get down from the theatre platform and one of the special education teachers for students with LD asked them to get back onto the platform. Furthermore, it was noticed that two students with LD were walking about in the schoolyard alone, without interacting with each other.

However, twelve of the teachers reported instances of positive behaviour between students. For example, some teachers stated that sometimes a student with LD made friends with a general education student; in such cases, both students played together and helped each other, for example some general education students helped students with LD to unwrap their sandwiches at break time.

In addition, eight teachers argued that behaviour between students with LD and general education students improved over time. Mansour related that, *"in fact, the first time the students with LD came to this school, the relationships were not good, general education students were afraid of students with LD. Also, some general education students said they [students with LD] are mad. However, after years of this, the situation has now improved."* The examples above show evidence that the relationships between students with LD and general education students are changing; from being unfamiliar with students with LD, reflected in behaviour such as fear and insults, to becoming positive towards them, e.g. as shown in the attitude of general education students.

Also, Sultan and Abdullah who taught students with LD in mainstream classrooms (just for one year) supported the view that the behaviour between students became more positive after a time, when students had more contact with each other. Sultan stated that, *"general education students at first were crying. So, I brought nice students with LD – as some students with LD are badly behaved – and put them next to these students who were crying. Also, I tried to discuss with the students who cried why they were crying ... Now the situation is different and the general education students ask to sit next to the students with LD."* In addition, during the observation of an art education lesson in a mainstream classroom, it was noted that some

students with LD stayed next to some general education students at a round table and there were no problems from the general education students. This confirms that the behaviour between students with LD and general education students is starting to become more positive.

As mentioned above, some negative behaviour between general education students and students with LD was reported. Four teachers described the techniques they used to improve the behaviour between these students in the integrated setting which could be beneficial when implementing inclusion. For example, Hesham created a 'Friend of Programme' which aimed to improve the behaviour between general education students and students with LD. Hesham said, *"I established a programme called 'Friend of Programme' through providing an art workshop for students with LD and general education students together in order to introduce more students with LD to general education and to activate integration ... Some general education students, after finishing the workshop, told me they wanted their friends with LD to go for a walk with them."*

Zaid used another technique to improve the behaviour between students with LD and general education students. This teacher sent an invitation letter to all general education teachers in the school to invite them and their students to visit a special art education class for students with LD, if they had time. Zaid talked about the outcome of this technique: *"I observed the interaction between them [students with LD and general education students]. For example, I asked one of the students with LD to demonstrate how he cut the wood and got a general education student to help him in holding the wood. They were interacting with each other."*

Furthermore, other techniques were mentioned by Mansour and Abdelaziz who talked about their schools' experience in improving the behaviour between students with LD and general education students. Their schools provided gifts for general education students who interacted positively with students with LD. In Mansour's school, they *"encourage general education students through providing them with cards to go on a trip for general education students who help students with LD. These things help to integrate them."* In Abdelaziz's school, they *"announced a competition for general education students, which is that any general education students that bring five names of students from the LD programme would receive 10 Riyals [£1.5]. Many general education students were enthusiastic and wanted to*

ask for the students' names and recognise them [students with LD] to get the reward. So, they become acquainted with each other."

The analysis of the behaviour between students with and without LD suggested variability. Negative behaviour between students may act as a barrier for implementing inclusion, but, taken as a whole, these results suggested that a number of strategies could be used to improve the behaviour between the students with and without LD and these approaches had demonstrated evidence of positive outcomes for all students.

After discussion of findings related to the behaviour between students with LD and general education students, the next discussion will move to examine the students' attitudes towards inclusion.

Three teachers had occasionally implemented inclusion between students with LD and general education students in some physical education and art education lessons (as a personal voluntary effort). From their experience in implementing inclusion in art education and physical education, they observed that students with LD desired inclusion. For example, Majid said that *"in general, students with LD like playing with general education students"*. This quotation indicates that students with LD enjoy playing with their peers in physical education.

On the other hand, general education students' attitudes towards inclusion were reportedly different in art education and physical education lessons. In more detail, Sultan observed that general education students in art education had positive attitudes towards inclusion. General education students *"asked whether students with LD would be coming to the art education room today. Also, they asked about students with LD and why they were absent."*

However, Khalid and Majid found that general education students had negative attitudes towards inclusion in physical education, as these students did not want to play with students with LD. For example, Khalid said, *"There is a problem which is general education students do not want them [students with LD]. When they [general education students] know that the students with LD are going to play with them they say they do not want them."* Also, Majid stated that, *"some excellent general education students do not come [when this teacher implements inclusion] as they say students with LD do not know how to play"*. The examples

above indicated that general education students perceived students with LD as having low abilities, so they did not want to play with them.

This evidence suggests that, depending on the subject, there can be mixed responses from the general education students; sometimes they were happy to include students with LD in some activities but at other times they were more reluctant. These negative attitudes from the side of general education students towards inclusion as indicated by the data may act as a barrier to implementing inclusion.

6.4 Parents' category

There was one theme arising in the data related to the parents' category which focused on the relationships between parents and schools. This theme will be discussed next.

6.4.1 Relationships between parents and schools

Relationships between parents and schools are one of the factors that can act as a barrier in implementing inclusion for students with LD. The relationships between parents and schools will be discussed according to three themes arising from the data analysis: first, communication between parents and teachers; second, parents' attitudes towards integration; and third, the involvement of parents of children with LD in implementing inclusion. It is important to mention that the analysis of this theme is based on the perspectives of teachers.

To begin with communication between parents and teachers, the data indicated that the quality of communication between teachers and parents was unreliable, with positive and negative aspects. Negative communication between parents and teachers can be divided into two types. The first is lack of communication and the second is non-cooperation of parents with teachers.

To begin with lack of communication, seventeen out of the twenty-four teachers interviewed mentioned that they had poor communication with some parents regarding their child. For example, Abdelaziz indicated, *"In fact, I try to communicate with them [parents] but I fail badly"*. In addition, Essa said that *"the relationships are almost non-existent. It is rare that parents come in order to ask about their son. I have been in my career now for more than ten years, and it is rare that parents come to ask about their sons. In fact, this problem is suffered by everyone, both in special education and in general education. But we, as specialists in*

special education, see this problem as an obsession and a major problem". Moreover, Salih illustrated that he tried to communicate with parents by different methods but failed. Salih said that *"they sometimes give us a fake mobile number, so when we ring them they don't respond. Also, we ring the home number and they don't respond. So, we are compelled sometimes to look for the student's cousin in the school to ask them to ask the parents to come to the school. In fact, sometimes the parents come but sometimes our attempt to get the parents to come fails. So, we see some students whose parents are not interactive fail in the same grade for three to four years."* The evidence above highlighted that poor communication between parents and teachers affects their child's progress.

Moreover, six teachers of art education and physical education reported poor communication between them and parents, suggesting that parents were not concerned about the performance of their children in these two subjects, so they did not communicate with them. For example, Omar said that *"there is no relationship because the parents do not see art education as important"*. In addition, Zaid pointed out, *"They [parents] do not ask about whether their son has mastered any skills or not, because educational knowledge is the concern of the classroom teachers"*. Furthermore, Yazid stated, *"Parents are concerned with academic subjects such as reading and writing"*. Anas explained that parents did not communicate with him because *"... Art Education is not an academic subject"*.

Drawing on the evidence in the above examples, it is suggested that teachers perceived a lack of communication between them and some parents and it is proposed that this can have a negative impact on the child's education.

Another issue regarding poor communication between parents and teachers is the non-cooperation of parents with teachers; a number of teachers discussed this issue. One form of non-cooperation between parents and teachers is parents not reviewing the students' schoolwork at home. For example, Zafer expressed that *"There are parents who don't respond when you send them a letter. Also, the students don't do the homework that is given to them. You feel the family is uncommunicative and this reflects on the student"*. Similarly, Saeid illustrated the same issue of lack of follow up by the parents. Saeid said, *"Some of them [parents], whatever you write to them in the homework books, there is no follow up"*. In addition, Salih said, referring to low achieving students, *"The problem is not the weakness,*

the problem that I face is lack of follow up by the parents". Also, Salih stated that *"sometimes, the parents do not look at the homework book"*. In addition, Salih pointed out that *"I put a paper about the student's status in the student's bag [telling parents] how to help the student's learning. Also, sometimes I put paperwork in the bag, but in fact, the parents do not see it"*. The quotations above show the lack of interaction between parents and teachers in terms of parents following up their children at home.

In addition, Abdelaziz described another aspect of parents' non-cooperation, which is that parents did not follow the teachers' advice. Abdelaziz stated, *"I remember he [the parent] came to us [the teacher] and said, what do you want from us exactly? I asked him to communicate, for example, 'I am asking you to repeat what I gave him [student] in the classroom at home, to let the student realise that you and I are saying the same thing'. In fact, I do not find any interaction. Once I found comments in the homework book from the home, but I think it was not from the father, it was from the mother. It said that this work had been repeated, but the student did not appear to have been influenced by this repetition. I told you, the cooperation of parents is extremely important."*

The teachers illustrated that some parents are not cooperative in following up work with their children at home and do not implement the teachers' advice; these issues may impact negatively on the children's progress in the classroom.

As stated above, some of the teachers reported that they had poor communication with some parents and the unsatisfactory nature of these relationships could act as a barrier for implementing inclusion. This is because a lack of cooperation between home and school may negatively influence students' education in the classroom.

In contrast, fifteen teachers reported that they had good relationships with some parents. For example, Hesham said *"Thank God, parents are interacting with me"*. Also, Ibrahim stated that *"a few of them [parents] are not interactive, whereas the majority of parents are interactive with me"*. This evidence helps to demonstrate that although there is variability in the communication that teachers have with parents, some parents are active in supporting the relationship and they are prepared to work with the teacher in order to support their child.

Four teachers perceived a number of benefits of good communication between them and parents. These benefits include teachers being able to learn from parents about how best to teach the students, the way parents deal with students with LD, and what their child has difficulties with in the curriculum, to help parents overcome these difficulties in the home.

For example, Talal discussed one student in his classroom and how a meeting with his father helped him in his teaching of the student. Talal said, *“My meeting with his father provided me with things that help me in my teaching and information about the student that I did not know. For example, the student behaves very well socially and he gave me a very good tip that I don’t think anybody will know about, which is, if the student loves someone he immediately responds to them. But if the student does not love someone, it is impossible for him [student] to respond. I did not know about such behaviour.”* Also, Abdullah said that *“continuous communication from parents reflects on their sons. For example, if he [student] has a weakness you will see his improvement with communication because you let the parents know about the problem and teach them how to address it and how to deal with him, such as how they can teach their child at home and the capacity of their child and what he needs.”*

This data supports the proposal that good relationships between parents and teachers could benefit both parties, in the sense that they can learn from each other in terms of teaching and supporting the needs of the students. Thus, good relationships could reflect positively on the students’ progress in the classroom.

Another issue that emerged from the data, which should be considered before implementing inclusion, is the parents’ attitude towards integration, which could be applicable to inclusion, whether parents of students with LD or parents of general education students. A few teachers (three) talked about the parents’ attitudes towards integration.

To begin with the attitudes of parents of students with LD, Hesham talked about some parents of students with LD who had negative attitudes towards integration. Hesham said, *“There are some parents who are more fearful for their child and do not want them to study [in mainstream school]”*. Conversely, Mansour saw that the parents of students with LD tended to have positive attitudes towards integration. He said, *“I see that the parents of students with LD are supportive of integration because they are happy if they see their sons playing with others, just as you are if you see your child playing with other students, this makes you*

happy". The data above indicated that the attitudes of parents of students with LD are mixed, depending how they perceive the impact on their child.

Similarly, teachers reported mixed attitudes of parents of general education students towards integration which may apply when implementing inclusion. Anas argued that from his experience, some parents of general education students have negative attitudes towards integration. He said, *"There was some fear about integration, not from the parents of students with LD. The fear is from the parents of general education students"*. Also, Anas said, *"We face problems with parents of general education students; for example, they ask why integration has been implemented in this school and some of them move their sons from the school"*. Mansour agreed that some parents had negative attitudes towards integration. Mansour said, *"We are also faced with challenges by parents of general education students. For example, they said, why do you let our sons play with 'mad people'?"*

However, Majid perceived that parents of general education students changed their attitudes towards integration after their awareness about integration increased: *"Parents have changed their attitudes from the past. Because in the past they feared integration, whereas now the situation has changed and they know there are no problems with integration."* This teacher saw that parents changed their attitudes when they became aware there were no problems from integration.

In addition, Mansour said that the attitudes of parents could reflect on their children in terms of encouraging or discouraging their children to interact with students with LD when inclusion was implemented. He stated that *"regarding the parents of general education students, they have their role in the success of inclusion if they encourage their sons to help students with LD and remind them of their religion which orders them to help. I think the students will interact with students with LD, whereas, if they [parents of general education students] fear them [general education students] and warn them not to go near them [students with LD], I think this will influence their sons."* The evidence presented above suggests that whether parents of general education students have positive or negative attitudes may influence how their children interact with children with LD and therefore have a wider impact in terms of the overall success of implementing integration.

The data indicated one factor that influences the parents' attitudes is a lack of awareness about LD and inclusion. This issue was raised by Anas, who argued that misinformation or lack of awareness about students with LD had influenced him as a teacher and the same problem may influence the parents' attitudes towards integration. Anas said, *"I thought that students with LD had severe disabilities and they urinated on themselves. But now that I see them [students with LD] and know them, I find them simpler. This is my thought as a teacher. What do you think about parents who do not know any students with LD? You will see they are fearful about integration and say they do not want their sons to study with these 'mad children' in the mainstream school."*

To overcome parents' lack of awareness about students with LD and inclusion, Abdelaziz suggested, *"It is important to provide training for parents and ask them to attend it"*. The process carried out by the school of Hesham when implementing integration could be beneficial when implementing inclusion. Hesham pointed out, *"We provided an introductory programme for parents and sent them brochures about integration and special education and about the benefits of integration."*

The data presented above suggest that the awareness of parents regarding students with LD and inclusion should be considered when inclusion is implemented. This is because low awareness of parents could influence their attitudes negatively. Thus, providing training for parents about inclusion and students with LD could have a positive influence on parents' attitudes.

The involvement of parents of students with LD is one factor that should be considered when implementing inclusion. This is because parents are one of the most important factors for implementing inclusion, parents can provide information for teachers about their children that could help teachers in their teaching (Damianidou and Phtiaka, 2013).

Teachers throughout the interviews stressed the importance of the involvement of parents of students with LD when implementing inclusion. The involvement of parents means that parents prepare their children for inclusion (Essa) in terms of helping them to engage well in an inclusive setting, psychologically and socially. The preparing of students with LD is reliant on parents as they can support their children. Moreover, parents could provide such information about their children (Salih) which would help in implementing inclusion

effectively. Furthermore, parents should follow up the students academically in the home and cooperate with teachers (Abdullah, Saeid).

The following quotations illustrate how teachers perceived the importance of the involvement of parents of students with LD when implementing inclusion. Essa talked about the role of parents of students with LD in preparing students with LD for inclusion *“Naturally, there will be a plan for implementing inclusion, and I think the family is one factor of this plan. This is because the family has the responsibility, such as preparing the student psychologically, preparing the student for engaging and following up any change that appears in the student at home. Also, the family should reflect on the extent to which he develops socially, behaviourally, and psychologically at home.”* Moreover, Salih indicated the importance of communication with parents of students with LD to provide such information about students with LD. Salih said that he needed parents to *“identify the students more, such as what they need, what kind of disabilities they have and whether they have any illness”*. Moreover, Abdullah talked about the importance of following up parents of students with LD based on his experience when implementing inclusion. Abdullah said, *“Honestly, the mother of this student was communicating with us through the students’ counsellor and we were teaching her about methods and types [to teach her son] and what was required from him, such as memorizing. Also, there are weekly plans [sent to his mother]. The mother was following up with us.”*

The discussion above suggested that involvement of parents is important when implementing inclusion, as parents could reinforce what their children learn at school by spending time helping their children academically at home, such as accomplishing the tasks. This in turn could reflect on their children’s progress in the classroom.

To summarise, the findings revealed in the theme relationships between parents and home indicated that, there are a number of factors that should be considered when implementing inclusion. Consideration should be given to communication between teachers and parents and attitudes of parents of students with and without LD towards inclusion. Moreover, the findings highlighted the importance of involving parents of students with LD in order to help teachers when implementing inclusion.

6.5 Pedagogy category

There were five themes that were revealed in the pedagogy category: human support, curriculum, teaching strategies, resources and assessment. These themes will be analysed next.

6.5.1 Human support

The theme human support refers to collaboration between personnel. This discussion will begin by highlighting the kind of collaboration found to exist in mainstream schools. After that, ways to collaborate between personnel that were suggested by teachers will be highlighted, with a mention of the benefit of collaboration. In addition, the availability of a teacher's assistants will be discussed.

To start with collaboration between personnel, none of the teachers mentioned during the interviews that they worked officially with other teachers in teamwork or in cooperative teaching. This is because inclusion is not implemented in Saudi mainstream schools, as students with LD study in special classrooms and have their own teachers, while general education students study in general classrooms and have their own teachers.

However, seven teachers from the group of special education teachers mentioned some collaboration between them that was not continuous; they only collaborated when it was necessary. These teachers reported that they collaborated with other teachers when they faced difficulties in teaching students with LD or when they faced difficulties in dealing with students with LD. Such collaboration took the form of asking for advice or help from other teachers who had skills and knowledge about teaching and dealing with students with LD. Also, some special education teachers for students with LD provided support for general education teachers when, on rare occasions, students were moved to the mainstream classroom. For example, Faisal pointed out that when one student with LD was moved from the special classroom to the general education classroom, one of the special education teachers for students with LD observed the students' homework and interaction while he was in the general education classroom. Also, the special education teacher for students with learning difficulties provided knowledge and skills for the teachers in terms of teaching methods, and how to deal with students with LD. Also, Abdullah, Saeid, Fahad, Sultan mentioned that they were advised by special education teachers for students with LD when they taught students with LD in their classroom.

In addition, Faisal talked about his collaboration with one art education teacher for students with learning difficulties regarding teaching students with LD. Faisal said, *“I asked an art education teacher for students with learning difficulties to assist in the lesson about the letter ف [an Arabic letter which is similar to the letter F in English] and I told him that I wanted an effective method for aiding students in the acquisition of this letter. This is because the students do not learn through theoretical explanation and I wanted something practical that the students could work on. The art education teacher for students with learning difficulties suggested getting the students to draw the letter Fa with glue on a board, and then putting sand on the glue to stick to it. Then, the teacher asked the students to blow on the board to get rid of the loose sand. After that, the letter Fa appeared clearly. The students benefit from this method greatly.”* The quotation indicated that the teachers felt that collaboration with other teachers to share information and good practice reflected positively on the students’ learning.

The majority of participating teachers indicated that collaboration among them would be beneficial when implementing inclusion. The teachers suggested two approaches to collaboration. The first approach was to work with other school staff such as special education teachers for students with LD, psychologists and student counsellors as a form of teamwork to support the teachers and follow up the students with LD in mainstream classrooms (five teachers). For example, Hesham stated, *“After he [student with LD] moves to a general education classroom, it has to be followed up by a psychologist and a student counsellor and a special education teacher, to get different perspectives. In general, each has a specialist field, which is beneficial to the student.”* The teachers suggested that creating teamwork would affect students with LD in mainstream classrooms positively.

Another approach to collaboration was proposed by Essa who saw the importance of applying cooperative teaching between the general education teachers and the special education teachers for students with LD in mainstream classrooms. Essa pointed out that *“the mechanism of collaboration between the special education teachers and general education teachers is that the special education teachers or assistant teachers who specialise in special education are attended in the classroom by the general education teachers. They work together in parallel so that they benefit from each other In addition, all students will benefit*

from the general education teachers and benefit from the special education teachers. This method helps in the success of inclusion."

Twelve teachers reported a benefit of collaboration between teachers when implementing inclusion; collaboration would help general education teachers to benefit from the experience, knowledge and skills of special education teachers for students with LD. This, in turn, would lead to their complementing each other when teaching students with LD in a mainstream classroom. For example, Salih talked about his perspective towards collaboration with special education teachers for students with LD in general, saying *"This is one of the best things because he [special education teacher] has the experience and he has been teaching them [students with LD] for a while and he knows about the teaching methods, whereas, I do not know anything about the teaching methods"*. Also, Abdelaziz stated that *"collaboration is always fruitful and is beneficial for students. So, the special education teachers are able to provide plenty of advice for general education teachers and they advise about a suitable curriculum for these students [with LD] and how they [general education teachers] can use general education students to teach these students and benefit them."* The data above suggest that collaboration would reflect positively on the practice of teachers in mainstream classrooms, which may enhance the effectiveness of educating students with LD in mainstream classrooms.

In addition, Khalil suggested providing training courses for teachers regarding how collaboration between them could be undertaken. This area for development was not clear for some teachers as illustrated by Omar who stated that *"There is an important point which is what would the collaboration be based on?"* In addition, Hassan stated, *"I do not believe in collaboration because of the difficulties of harmonisation between me and him [special education teacher for students with learning difficulties] in teaching general education students and students with LD"*. These two teachers were not aware of any procedure of collaboration between them and other teachers. Therefore, from the evidence illustrated above, it could be proposed that providing training courses would increase such awareness in teachers.

Another factor that the data indicated which related to human support was the availability of a teacher's assistant. A teacher's assistant is one of the educational and technical personnel

that should be present for teaching students with LD as indicated by the Regulation of Special Education Institutes and Programmes (2002). However, in practice, there were no teachers' assistants at any of the schools that were visited during this research project. All teachers in the special education teachers group confirmed that teachers' assistants were not recruited in their schools. Abdelaziz stated, *"The existence of teachers' assistants is specified by the regulation of special education [Regulation of Special Education Institutes and Programmes (2002)], but it is not implemented. He [teacher's assistant] is one of the most important things that would help in implementing inclusion."* The quotation above indicated the gap between theory and practice in terms of the availability of teachers' assistants. This claim was supported by the practical observations during visits to the schools participating in the study.

As teachers' assistants were not available in mainstream schools, six teachers participating in the interviews highlighted the importance of the availability of teachers' assistants when implementing inclusion. Teachers indicated a number of benefits related to having the support of teachers' assistants. The benefits can be categorised into three areas. The first area is helping the teacher in his teaching in the mainstream classroom. For example, Ibrahim pointed out that *"after the teacher has delivered the lesson in all its aspects, the teacher's assistant helps to apply the lesson plan"*. This benefit is similar to Article 6.45.3 in the Regulation of Special Education Institutes and Programmes (2002, 58), which indicates the duties of teachers' assistants. This article points out that *"[The teacher's assistant] works in the classroom through follow-up reading or analogous work or theatrical production under the supervision of the teacher"*. The second area is to help the teacher to control the classroom. For example, Fahad stated that *"[The teacher's assistant] helps me to control the students"*. This benefit is similar to Article 6.45.2 in the Regulation of Special Education Institutes and Programmes (2002), which indicates that *"[The teacher's assistant] helps in the process of classroom control and supervision of the pupils in the schoolyard and school transportation, library, cafeteria and other"*. The third area is preparing the tools for the lesson. For example, Omar said that *"[The teacher's assistant] helps the teachers to prepare the materials and raw materials"*. This benefit is similar to Article 6.45.1 in the Regulation of Special Education Institutes and Programmes (2002), which indicates that one of the duties of a teacher's assistant is *"preparation of some special tools in the classroom and supervision of audio and visual appliances and other"*.

To summarise, the data indicated the benefits of collaboration between personnel which would reflect positively on the performance of the students in mainstream classrooms and on the teachers' practice in mainstream classrooms. Thus, collaboration should be considered when implementing inclusion and lack of collaboration could challenge implementing inclusion. Moreover, the lack of teachers' assistants could act as a barrier when implementing inclusion, as teachers' assistants could be helpful for teachers in mainstream classrooms.

6.5.2 Curriculum

Another factor that the data indicated could prevent implementing inclusion for students with LD is the curriculum. This theme will be discussed using two arising areas: the first is the kind and content of curriculum subjects; the second is adaptation of the curriculum.

To begin with the kind and content of curriculum subjects, there is a difference between the curriculum subjects that are provided to students with LD in special classrooms and general education students in general education classrooms. The curriculum subjects in Saudi Arabia are based on textbooks prescribed by the MoE. Therefore, in Saudi Arabia the terms curriculum and textbooks are used interchangeably. Moreover, the curriculum is centralised and all of the textbooks are used across all Saudi schools. The curricula are fixed and the role of the teachers is to deliver them to the students. In addition, in Saudi Arabia the textbooks are the only resources that teachers use to transmit the knowledge and skills contained within the curriculum.

The majority of curriculum subjects have textbooks that are provided for the students, either students with LD or general education students. Tables 8 and 9 show that there are a number of subjects where the same curriculum is provided for both students with LD and general education students, for example, the holy Quran (until fourth grade for general education students), monotheism, maths, science, art education and physical education. However, the number of sessions per week for each curriculum subject differs between students with LD and general education students, except for monotheism and art education, as indicated in the results of the comparison.

In addition, there are a number of curriculum subjects provided just for general education students, for example, the holy Quran and Tajwid (for fifth and sixth grades), Fiqh and behaviourism, Hadith and biography, Arabic language, Social and citizen education and

English. In contrast, there are a number of curriculum subjects that are provided only for students with LD. For example, Fiqh, Reading, writing and chant, Social education and Sociality. The existence of different curriculum subjects could be seen to restrict the opportunities for children with LD to be included in the mainstream classroom.

All general education teachers mentioned that they relied essentially on the textbooks when they taught general education students. For example, Mohammed stated that *"the textbook must be used, it is necessary"*. Furthermore, in the observation of an Arabic lesson in a general education classroom and the observation of an art education lesson in a general classroom, it was noted that students put the relevant textbook on the top of each table. In addition, in observation of an Arabic lesson in a general education classroom, the teacher asked students to take the book out of their bag at the beginning of the lesson and before he started teaching. Later, the teacher asked students to read the lesson from the book. In addition, he asked the students to answer the exercises in the book. The observations above indicated that curriculum textbooks were in use in general education classrooms.

However, special education teachers for students with LD mentioned that they did not rely on the textbooks provided for students with LD even though they are provided by the MoE. In fact, special education teachers for students with LD, art education teachers for students with learning difficulties and Yazid relied on IEPs for each student when they taught students with LD. Essa said, *"Most of the time, they [students with LD] do not have a curriculum to follow, they follow an IEP."* In addition, in the observation of an Arabic lesson in a special classroom, observation of a maths lesson in a special classroom and observation of a science lesson in a special classroom the researcher did not see any use of textbooks.

Table 8 Curriculum subjects for general education

Name of curriculum subjects	Primary education grades and number of sessions per week (general education)					
	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade
The holy Quran	7	7	7	6	x	x
The holy Quran and Tajwid ¹	x	x	x	x	4	4
Monotheism	1	1	1	1	1	1
Fiqh ² and behaviourism	1	1	1	1	2	2
Hadith ³ and biography ⁴	x	x	x	2	2	2
Arabic language	11	9	9	8	8	8
Social ⁵ and citizen education	x	x	x	2	2	2
Maths	3	5	5	5	5	5
Science	2	2	2	2	3	3
English	x	x	x	2	2	2
Physical education	3	3	3	2	2	2
Art education	2	2	2	2	2	2

- 1- The study of the rules governing pronunciation in recitation of the Qur'an.
 2- Islamic jurisprudence.
 3- Reports of what the prophet Mohammed said or did or how he behaved.
 4- The biography of the Prophet Mohammed.
 5- Geography and history.

Table 9 Curriculum subjects for students with LD in special classroom

Name of curriculum subjects	Primary education grades and number of session per week (special education)					
	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade
The holy Quran	3	2	2	2	2	2
Monotheism	1	1	1	1	1	1
Fiqh	1	1	1	1	1	1
Reading, writing and chant	9	8	8	8	8	8
Social education	2	2	2	2	x	x
Sociality ¹					2	2
Math	4	4	4	4	4	4
Science	x	2	2	2	2	2
Art education	4	4	4	4	4	4
Physical education	4	4	4	4	4	4

1- Geography and history.

One explanation for the lack of use of text books was that the content of the curriculum subjects provided to students with LD was said to be unsuited to their abilities. Special education teachers for students with LD indicated that the content of the curriculum was too advanced for the abilities of the students with LD. For example, Faisal, with reference to the maths curriculum, said, *"It is not necessary to use it [maths curriculum]. This is because the knowledge outweighs their abilities. Explicitly, we teach students [with LD] to add and subtract, but they do not master the numbers"*. In addition, Talal stated that *"the curriculum is produced for a specific level or type"*. This teacher pointed out that the curriculum is not suitable for the variety of abilities of students with LD.

However, this does not mean that special education teachers for students with LD did not use textbooks at all. Special education teachers for students with LD mentioned that they used the curriculum for some information, exercises and pictures that they considered suitable for

the abilities of specific students. For example, Abdelaziz talked about one way that he used the textbook when teaching students with LD. He said, *“Sometimes I use the pictures that exist in the curriculum. This is because the curriculum for me is like an assistant and it is difficult to teach the entire curriculum for all students [with LD].”*

The difference in the use of curriculum textbooks that was reported by general education students and special education teachers for students with LD could act as a barrier to implementing inclusion. This is because general education teachers rely on textbooks to transmit information and they did not have knowledge about using IEPs for students with LD.

Moreover, the content of curriculum subjects, provided for general education students was found generally to be totally different from the content of curriculums provided for students with LD. In order to understand these differences, it is important to look at the content of these curriculum subjects. Here, a full analysis of the science curriculum for the fourth grade is provided as an example.

The first difference was the kind of textbooks provided; general education students have two text books with exercise books for the science curriculum for semester one and two (MoE, 2015e), whereas there was only one science textbook (MoE, 2011) for students with LD, without an exercise book, to cover both semesters. Therefore, it appears that students with LD receive less tuition in scientific concepts and are expected to engage with fewer concepts overall.

The second difference was the information content of the science textbooks in terms of the units and subjects provided. In fact, the information in the science textbook provided for students with LD is completely different from that provided for general education students. For example, in the science textbook provided for students with LD, there was one unit with thirteen subjects for semester one; this included engagement with ideas such as the characteristics of colour and the character of shapes. In addition, there was one unit with four subjects for semester two, which included engagement with ideas about why our body needs exercise and how to preserve healthy teeth. In contrast, it can be noted that in the science textbook for semester one that is provided for general education students there are three units, each consisting of one or two chapters and under each chapter there are two or three subjects. The same also applies to the science curriculum textbook for the second semester.

For example, unit four focused on concepts and ideas about space. One chapter discussed the Solar System and space and within this there are two subjects: first, the Earth, the sun and the moon, and second, the Solar System. In addition, the exercise book provided more practical activities for each unit.

As there is differentiation in the content of the curriculum provided for students with LD and general education students, two teachers suggested providing a curriculum that enables both types of students to access the curriculum when implementing inclusion. Essa suggested providing an IEP for each student with LD in the mainstream classroom, whereas Abdullah suggested providing *“a unified curriculum for students with LD and general education students. In addition, it should be a suitable grade [such as first or second grade] and suitable for all students, both normal students and students with LD.”* In fact, this teacher provided suggestions for changing the current curriculum to a new curriculum that is suitable for all students.

Following the analysis of the content of the curriculum, the next discussion will explore the adaptation of the curriculum as reported by teachers. In current practice, there is a difference between general education teachers and special education teachers for students with LD in terms of whether they can officially adapt the curriculum. General education teachers are not officially allowed to adapt the curriculum; they are required by the *Procedural Manual for General Education* (2015a, 48) to deliver all the information and skills as set out in the textbooks. There is one operation in the manual called teaching design and one of the actions of the operation requires teachers to *“analyse the curriculum and then formulate the general and special aims of his subject for all units”*. This means that general education teachers are required to analyse all units of the curriculum textbooks in order to develop the general and special aims of the subjects that they teach.

In contrast, the *Procedural Manual for Special Education* (2015d, 68) requires special education teachers to adapt the curriculum to make it more appropriate for the ability level of students with SEN. There is one operation called teaching design, in which one of the actions is to *“Analyse the curriculum and then do the appropriate adaptation for it according to the kind of disability of students and then formulate the general and special aims of his subject for all units”*.

Based on the data above, it could be interpreted that the lack of flexibility to adapt the curriculum for general education teachers may act as a barrier to implementing inclusion. This is because general education teachers may lack the freedom to adapt the curriculum to help students with LD to access the general education curriculum.

However, four general education teachers mentioned during the interview that they adapted the curriculum unofficially. For example, Salih used an approach of structuring information and skills from easiest to hardest. Salih said, *"In fact, when I taught low attainment students I did not focus on teaching letters through sentences, but I focused on teaching them letters through words that include the letter to be taught, such as Ahmed [Arabic name], rabbit and other words; whereas, other students who can read sentences study the letter through sentences, such as 'Mohammed goes to the market'. Also, any part of the lesson that has conversation, I do not provide for low attainment students because my goal is to teach them the letter and the word. If they [students with low attainment] improve after a period, we begin to move to teach them letters through sentences."* This teacher modified the curriculum for low attaining students through providing the skills step by step, as he started teaching the easiest skills first, gradually progressing to harder ones over time and as students showed readiness.

Another strategy indicated was omission, which means that the teacher omits aspects of the curriculum that were too hard for the students. For example, Saeid stated, *"In some chapters of the Quran, there are difficulties in the pronunciation of some letters and words. So, in this case, we try skipping them."* Saeid showed sensitivity to the students' ability and used this knowledge to guide his decision about what he would teach the children and why he would avoid some content areas.

A further strategy for adaptation of the curriculum was mentioned by special education teachers for students with LD, art education teachers for students with learning difficulties, and Yazid who used IEP for students with LD. These teachers indicated that they adapted the curriculum to make it suitable for each student with LD or to a number of students with similar abilities. For example, Hesham said, *"I use the aims [of art education for general education students] depending on the abilities of students because there are individual differences among students. So, I use an IEP for each student. It is unreasonable for a student who has a weak or trembling hand to ask him to cut paper with scissors, because he cannot do it and this*

may influence him psychologically. So, I ask him to tear the paper with a ruler or with his hand." This teacher pointed out that he adapted the aims of art education through IEPs to make them suitable for the ability of the students.

Generally, the evidence presented above revealed some challenges to implementing inclusion in terms of differences in the kind of concepts studied and the content of the curriculum subjects provided for general education students and students with LD, difference in reliance on textbooks, and difference in the freedom of teachers to adapt the curriculum.

6.5.3 Teaching strategies

Other factors that could prevent implementing inclusion of students with LD are the teaching strategies that teachers use. Through interviews with a group of general education teachers and a group of special education teachers and observations in a number of general education classrooms and special classrooms, a number of strategies were found to be used for teaching students. There was found to be a difference between the two groups about which teaching strategies were widely used in their classroom. The teaching strategies theme will be discussed based on four teaching strategies – lecture with discussion, demonstration, Individual teaching and Peer tutoring in terms of comparison – which are used in special classrooms and general education classrooms.

To begin with the lecture with discussion, this teaching strategy is based on teachers transmitting the lesson for all students in the classroom using lectures and directing questions to the students, while the students listen to the lecture and answer the questions asked by the teachers.

All general education teachers mentioned that they used this teaching strategy and that they used it widely. For example, Hassan explained his method of teaching general education students the Arabic language subject as follows: *"I ask students to bring out the book and open it at the new lesson. After that I ask them about the previous lesson to remind them and relate it to the current lesson. Then I present a letter on the computer using a projector, and ask the students to observe the location of the letter in the word, is it at the beginning, middle or end of the word? After that, I present to the students the way to write the letter incorrectly to avoid doing so. After that I present some words and ask students to find the letter in the words ... sometimes, I read the words repeatedly for students."* This quotation expresses that

the teaching was based on a combination between the lesson being presented by the teacher and a discussion based on questions from the teacher and answers from the students.

In addition, during the observation of the Arabic lesson in the general classroom, it was observed that the teacher used the lecture and discussion strategy when teaching the lesson. For example, the teacher presented some words using the projector, and explained to the students the location of the letter ع (an Arabic letter) in the word. After that, he showed a number of words and asked the students to identify the location of the letter, whether it was at the beginning, middle or end of the word.

Moreover, all special education teachers for students with LD (except for Essa, who did not use this strategy) mentioned that they used the lecture with discussion strategy. For example, Faisal said, *"I write the letter on the blackboard mainly. Then I tell the students the lesson today is about ف (an Arabic letter, the same as F) and ask the students to tell me words starting with f. The students suggest words from school and home life."* This teacher illustrated his method of teaching all students with LD the letter f using the lecture with discussion strategy.

In addition, in the observation of a science lesson in a special classroom, it was noted that the teacher used the lecture with discussion strategy. The next extract from the fieldnote provides an example of how teachers use this strategy.

The teacher brought in a mint plant and went around every student to show him the plant. After that the teacher asked the students where the plant had come from. Student A answered "From the farm" and student B answered, "From the farm owner". So, the teacher asked, "How does the plant grow?" After a while, student B answered, "From the soil". After that, the teacher said, "As I have previously told you, it is from the seed". Then, the teacher went to the blackboard and drew the seed and drew the plant next to the seed and said that the plant grows from the seed. After that, he put some seeds in front of each student and told them, 'We put these seeds into the soil and water them so they grow into a plant'."

However, this strategy was not widely used in classrooms of students with LD. Faisal indicated that he used it with high ability students with LD who could cope with this strategy; Talal used this strategy with some information suitable for all students with LD in his classroom, whereas Abdelaziz and Zafer used this strategy to explore the abilities of the students, in order to teach

each student the knowledge that he was able to master. Abdelaziz argued that the lecture with discussion strategy is not appropriate for general use with students with LD. He said, *"This method [lecture with discussion strategy] is not suitable for students with LD, except when used in a limited way and simply, whereas, when used a lot it does not deliver the knowledge"*. Some special education teachers for students with LD were cautious about using the lecture with discussion strategy for students with LD widely, however, these teachers explained that they used this strategy for specific purposes, such as with higher ability students with LD, when they had some knowledge of the ability level of the students with LD or to explore the abilities of students with LD.

Generally, special education teachers for students with LD were different from general education teachers in using this strategy; general education teachers used this strategy widely, whereas special education teachers for students with LD used this strategy for specific purposes.

Another strategy used by teachers was demonstration, based on teachers performing skills in front of the students, after which the students imitated the skills demonstrated. All physical education teachers, art education teachers and Salih mentioned that they used this strategy when teaching students. For example, Fahad said, *"Generally, my method is that, after the students come to the sport ground, I start with a warm up. After that, I explain the skill theoretically then I apply it in the correct way as a model."* This teacher described the method of teaching students' physical education skills through performing the skills in front of the students, after which the students attempted the same skills. This approach is consistent with social learning theory (Bandura, 1977), of which observational learning is one of the key features of this theory (Reynolds and Fletcher-Janzen, 2007).

In addition, during the observation of a physical education lesson in a general classroom it was noted that at the beginning of the lesson the teacher started to perform some exercises in front of the students and the students then imitated the teacher. All art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties mentioned that they used the demonstration strategy with students with LD to show them how to perform skills. For example, Zaid said, *"The carpentry lesson has several stages, for example; I demonstrate in front of the students how to cut wood"*. This

teacher pointed out that he cut the wood in front of the students, so that the students were able to imitate his approach.

It was evident that the demonstration strategy was used by all art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties as an exploration of the abilities of students with LD, so that they could focus on skills suitable for their abilities. After that, the teachers moved to working with each child or a group of students with similar abilities using the individual teaching strategy. Similarly, physical education teachers and art education teachers explained that if a student did not master the information and skill from the lecture and discussion, and demonstration strategies, they would move on to using the individual teaching strategy.

Generally, the demonstration strategy was used in a similar way to the lecture with discussion strategy in terms of physical education teachers, art education teachers, and Salih, using it for all students, whereas art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties used it for specific purposes and then moved on to teaching students with LD individually.

Another teaching strategy mentioned by teachers was individual teaching in which teachers taught a student or a group of students who had similar abilities individually through one to one teaching or repetition of skills or providing worksheets.

All general education teachers, Omar, and physical education teachers (except for Khalil) pointed out that they used this strategy for students who did not acquire the required knowledge and skills through any other strategy. For example, Omar expressed that *"Some students cannot draw what is required of them. For example, I asked a student to draw a mosque and the student did not know how to draw it. In this case I dealt with him individually. This meant that I went to the student and asked him to look at the picture of a mosque and asked him to try to draw it at home ten times. After that, I started with him step by step. For example, I asked him what was the shape of the mosque? and the student answered square; then I asked him to draw a square, after that I asked him to draw the door and the windows."* The evidence presented above demonstrates how teachers can support children individually and support their development even further by breaking down the skills into discrete steps for the students.

In addition, four teachers of the group of general education teachers mentioned that they used a one to one teaching strategy through repetition of information until the students had mastered it. For example, Ali said that he *“took the students who had not obtained a skill and asked them to repeat the skill until they had mastered it”*. This quotation illustrates how the teacher uses the process of repetition in order to support learning.

Furthermore, Hassan and Salih explained that they provided more worksheets for the students that had not mastered the target knowledge in order to enable them to practise more and provide additional opportunities for these students to acquire the necessary skills.

On the other hand, the individual teaching strategy was commonly used by all special education teachers for students with LD, art education teachers for students with learning difficulties, physical education teachers for students with learning difficulties, and Abdullah, Saeid, Fahad and Sultan (each whom had taught students with LD once in their classroom). These teachers highlighted during the interviews that they used this strategy as their main teaching strategy with students who faced difficulties in acquiring specific skills. For example, Sultan said, *“Regarding the teaching, it is individual, each student on his own ... and I help them step by step, such as when to put the colour and how to mix points and so on”*. In addition, Essa stated, *“I use the individual teaching strategy”*. Furthermore, Abdullah indicated that he used the individual teaching strategy when teaching students with LD in the mainstream classroom.

The inference that this was a widely used strategy was supported during the observation of a maths lesson in the special classroom. It was noted that the teacher sat at his table in front of the classroom and asked each student to come to him with their notebook and sit on a chair in front of him. At one point, the teacher asked student C to come to him and the teacher opened the notebook and drew a circle and put a number of points inside the circle and asked the student how many points were in the circle. The student answered five and the teacher asked him to write it down. After that, the teacher drew a number of circles and put points in them and asked the student to go back to his seat to complete the answers.

The reliance of the above teachers on individual teaching strategy when teaching students with LD may be due to their view that *“their mental abilities vary from student to student”* (Abdelaziz). In addition, Majid pointed out that *“each student has his situation and ability and*

I teach them accordingly. My teaching strategy is individual.” These teachers indicated that the difference in abilities between students with LD caused them to rely on the individual teaching strategy in order to support the wide range of needs in the classroom.

Six teachers from the group of special education teachers stressed the importance of repetition when teaching students with LD individually or in general to help the student to acquire specific knowledge. For example, Anas said that *“overall, students with LD need to concentrate more and we need to repeat the lesson for them over and over again”*. Moreover, Saeid and Abdelmohsen pointed out that they used repetition of knowledge and skills for students with LD when they studied in the mainstream classroom.

In addition, Zafer indicated that he provided worksheets for each student with LD after he had used the lecture with discussion strategy and had ascertained the ability of each student. Furthermore, Sultan mentioned that he provided worksheets for students with LD in grades one, two and three when he taught them in the mainstream classroom or the special classroom.

Generally, individual education strategies were used by both the group of general education teachers and the group of special education teachers. Moreover, this strategy was more commonly used for students with LD compared to general education students. This was said to be because the group of special education teachers relied on individual education strategies when they taught students with LD, whereas they used demonstration and lecture with discussion as exploration of the abilities of students with LD or with some students with LD whose abilities were high. By contrast, the group of general education teachers used this strategy for students with low attainment.

Another strategy used by teachers was peer tutoring. Three teachers from the group of general education teachers mentioned that they used this strategy with students with low attainment. For example, Saeid explained how he dealt with one student in his classroom who faced difficulties in writing correctly, by asking a high-achievement student to sit next to the student with low attainment and to teach him.

In addition, all art education teachers for students with learning difficulties, special education teachers for students with LD (except Talal), two teachers from physical education teachers for students with learning difficulties, and Sultan indicated that they used a peer tutoring

strategy when they taught students with LD. For example, Faisal stated, *“Also, I use peer tutoring strategy. I let a distinguished student explain the lesson for a student and the students learn from him.”*

Three teachers from the group of special education teachers used this strategy by bringing some general education students to the special classroom. For example, Anas stated, *“I brought two students from general education to help students with LD and I met with them before the lesson and told them what was required of them. Of course, I brought general education students into the handcraft lesson. In fact, it [peer tutoring] has a positive impact as I noticed that general education students provide help better than the teacher, and students with LD interact with them.”*

This teacher indicated that peer tutoring had a positive influence on students with LD when he enlisted their peers from general education, which enabled the students with LD to interact with their peers to learn from them. In addition, Essa said that peer tutoring is a better strategy when implementing inclusion in order for *“students [with LD] to benefit from general education students”*.

Abdullah and Sultan indicated that they used a peer tutoring strategy when they taught students with LD in the mainstream classroom and confirmed that in their opinion the students with LD benefit from peer tutoring. Furthermore, during an art education lesson in the mainstream classroom, it was noticed that the teacher put each student with LD next to a student without LD. The teacher asked the students without LD to help their peers with LD in colouring the worksheet provided for them.

Generally, peer tutoring is not commonly used in general education classrooms, whereas almost all of the special education teachers group indicated that they used this strategy and that it had a positive influence on the children’s development of knowledge.

Generally, the discussion above indicated that there were differences between the teaching strategies used in general education classrooms and special education classrooms, in terms of which ones were used widely and which are suitable for students. Some teaching strategies were used widely in general education classrooms, such as the demonstration strategy and lecture with discussion strategy, whereas these two strategies were used in special classrooms for specific purposes only, such as an exploration of the abilities of students with

LD or with more able students. In contrast, Individual teaching and peer tutoring strategies were most commonly used in special classrooms. The data suggest that using the demonstration strategy and the lecture with discussion approach widely for students with LD in the mainstream classroom could act as a barrier for implementing inclusion because these approaches would not meet the learning needs of students with LD.

6.5.4 Resources

One of the issues that may act as a barrier for implementing inclusion is the unavailability of resources. This section will begin by discussing the lack of materials, sports equipment and teaching aids in the general education classroom and special classroom reported by observations and the teachers in this study. After that, the issue of using the resource rooms will be discussed.

Lack of materials, sports equipment and teaching aids was one of the issues reported by teachers throughout the interviews. Ten teachers reported the lack of some teaching aids that they needed when teaching students. For example, it was reported that equipment such as a projector for presenting the lesson or video clips, smart board, iPad and general teaching aids for specific lessons, such as pictures, posters and models were missing.

Thus, four teachers reported that the lack of resources forced them to omit some information, skills and activities from the curriculum, because the materials were not available, or concentrated on one skill and ignored others due to this lack of resources. For example, Sultan said, *"I do not follow the curriculum provided by the ministry. For example, the printing lesson – I cannot implement it because the necessary tools are not available."* In addition, Fahad stated, *"There is an important point, which is that I prepare the lesson and teach my students according to the resources that are available. It is not logical to teach students the skills involved in throwing a basketball if I don't have the basket, or ask them [general education students] to roll if I do not have foam mattresses."* Similarly, Omar mentioned that a lack of materials led him to concentrate on drawing lessons in art education rather than teaching students' lessons in printing or other areas, which required some materials that were not available.

During observation of an Arabic lesson in a special classroom, the observation of a maths lesson in a special classroom, observation of an art education lesson in a general classroom

and observation of a science lesson in a special classroom, it was noted that the teaching aids available in the classrooms were blackboards, and some posters depicting Arabic letters and Arabic numbers on the classroom walls. In addition, in observation of a science lesson in a special classroom, there was a twenty-five-inch TV and a video recorder. Furthermore, in OALSC it was observed that the teacher used a small portable projector but when the teacher displayed a video clip on the blackboard the image was not clear because there was too much light and there was no projector screen. After the lesson, the teacher talked to the researcher and told him that he had bought the projector with his own money. However, there were no computers or projectors in any of the special classrooms that were observed.

On the other hand, during the observation of an Arabic lesson in a general classroom, it was noted that the classroom had a wall-mounted projector, a computer, a projector screen, and pictures on the wall of the classroom. In addition, the teacher used the computer and projector all throughout the lesson; to transmit pictures, sound and video. Moreover, in the observation of an art education lesson in a mainstream classroom it was noted that there was a smart board, but the teacher was not using it. He told the researcher that this was because he did not know how it worked. In general, it was observed that the general classrooms, especially in the first and second grades, were well equipped with teaching aids, compared with the first and second grades in special classrooms.

As mentioned above, teachers reported a lack of materials and sports equipment and teaching aids in their classroom. A number of teachers (thirteen out of twenty-four) emphasised the importance of providing enough materials and sports equipment and teaching aids such as smart boards, computers and the internet, when implementing inclusion.

Another factor related to resources is the availability of a resource room. A resource room is a room that houses educational resources such as a library, projector, computer, screen projector, and sometimes a smart board. There is one teacher in charge of this room and the room is available for use by all teachers and students in the school.

During the interviews, the teachers raised some issues related to using the resource room. Four teachers found it was often difficult to book the resource room, normally because another teacher was using it and there was only one resource room for the whole school.

Omar said, *"I used to use it [resource room]. Now, I do not use it because it has become busy and I need to make a reservation"*. Furthering this discussion, when the researcher visited the mainstream schools, it was found that there was only one resource room provided for the whole school; it was open for general education students and students with LD.

In addition, Abdelaziz revealed another issue which was the resource room was lacking in some important items that were useful for him when he was teaching students with LD. Abdelaziz stated, *"I went to the resource room. The resource room teacher greeted me. I was preparing the lesson to present it to the students. However, the presentation was silent because there was no speaker. So, I presented the lesson while talking about it, because the room had no sound equipment."* This example shows how the absence of some items in the resource room could reduce the benefit of using this space for teaching.

Generally, it was found that there was some lack of materials, sports equipment and teaching aids, which negatively affected the teachers when working with students. It could be proposed that this finding shows a lack of resources could act as a barrier to implementing the inclusion of students with LD. This is because teachers may face difficulties in providing some information or explaining some points when they do not have adequate facilities. Moreover, from the limitation of having only one resource room for the entire school as indicated in the data, it could suggest that teachers may not benefit from the resource room for an important lesson because other teachers may have booked it; therefore, they may not have access to the equipment that they need in order to support the students, which may act as a barrier to implementing inclusion.

6.5.5 Assessment

The assessment of learning used with students with LD and general education students is one factor that should be considered when implementing inclusion. The discussion of the assessment theme will be based on the approach used in the assessment for students with LD and the approach used in the assessment of general education students.

The approach used for the assessment of students with LD and general education students in primary schools is based on on-going assessment (Ministry of Education, 2002, 2014a, 2014b). The regulation of students' assessment (Ministry of Education, 2014a, 1-2) defines on-going assessment as:

“A comprehensive evaluation process where the teacher uses a variety of techniques from the assessment, from tests and other. It is a continuous process in conjunction with the teaching process and aims to improve the educational process through feedback as well as to issue a judgment on the extent of the progress achieved by the student toward the educational goals set.”

In addition, the regulation suggests that teachers have the freedom to choose suitable methods of assessment, such as oral test, written test, and observation (Ministry of Education, 2014a, 2014b). Furthermore, the explanatory regulation on students' assessment (Ministry of Education, 2014b) stresses the importance of using assessment methods that are suitable for the nature of the disability that students with SEN have and the importance of providing them with enough time to successfully complete the assessment. In addition, the assessment of students in primary education relies on criterion reference measurement (Ministry of Education, 2014a). The regulation of students' assessment (Ministry of Education, 2014a,2) defines criterion reference measurement as a *“kind of test that compares the performance of students in a test based on prescribed external criteria without regard for the level of his peers”*. The MoE provides prescribed knowledge related to each curriculum subject for teachers to use in assessments and students must acquire a certain level of this knowledge to move on to the next grade (Ministry of Education, 2014a, 2014b). Special education teachers for students with LD focus on the knowledge that is suitable for each student based on IEPs. Generally, the method of assessment for general education students and students with LD is the same, but there was some difference between them in terms of the prescribed knowledge.

One of the issues with the prescribed knowledge is that it does not take into account the abilities of students with LD; in addition, general education teachers do not have the freedom to omit some of the essential prescribed knowledge, which can restrict the students' ability to meet the test requirements. This finding could be interpreted as a potential barrier when students with LD are included in the mainstream classroom.

In contrast, during the interviews, both groups of teachers indicated a number of methods that they used to help some students to acquire knowledge if they had not acquired it the first time. The first technique was to repeat the information until the student mastered it (fourteen teachers). For example, Khalil said, *“I look at the knowledge that I have provided for*

them [general education students] to see whether the students have mastered it or not. If they have, they pass on this knowledge. If not, I repeat the knowledge until they have acquired it."

Another technique was for teachers to spend more time on tuition with these students until they mastered the knowledge (four teachers). For example, Zaid stated how he dealt with students who had not mastered the required knowledge *"Students who have low attainment, I try to concentrate on them"*.

In addition, some teachers indicated that they would change the teaching approach that they used in order to convey the information in another way to help students to acquire the knowledge (five teachers). For example, Ibrahim mentioned that *"For the students who do not acquire the required [knowledge] I try to find an alternative method to make the students understand the lesson. For example, if the lesson is about primary colours – red, yellow and blue – and the student does not know these colours, I try to find another method to make him understand these colours, such as bringing in coloured balls or fruit."*

In addition, four teachers tried to break down skills into their component parts in order to make them more manageable for the students. These teachers did not move on to the next element until the student had mastered the current one. For example, Salih talked about a student who was not able to master information: *"When the day's lesson was about learning three letters. I asked him just to learn one letter. If he mastered it, this was good. After that we moved on to other letters to learn them."*

Generally, the data revealed some similarities and some differences in assessments practice in general education classrooms and special classrooms. The differences found could be problematic, because they are related to the kind of prescribed knowledge that students would be assessed by. Also, general education teachers did not have the flexibility to adapt the criteria prescribed by the MoE. Thus, these differences could act as barriers to implementing inclusion.

6.6 Environmental context category

There are four themes related to the environmental context category. These themes are educational legislation in Saudi Arabia, head teachers' awareness, number of students in the classroom and infrastructure of schools. These themes will be discussed next.

6.6.1 Educational legislation in Saudi Arabia

One of the factors that the data indicated could act as a barrier to implementing inclusion for students with LD is the educational legislation in Saudi Arabia. The analysis of the educational legislation included Saudi Education Policy (1995), Regulation of General Education (1999), Regulation of Special Education Institutes and Programmes (2002), and Disabilities Code (2000). These documents were analysed based on a number of questions related to the research questions. These questions were: Is there any mention of inclusion? Are there any factors supporting the implementation of inclusion in these documents? Are there any factors preventing the implementation of inclusion in these documents?

None of the legislation documents mentioned above support inclusion. There are a number of articles that could be interpreted as challenging for implementing inclusion. For example, in Saudi Education Policy (1995, 21), there is a sub-section related to the education of students with SEN titled Special Education for Disabilities that consists of four articles, which are:

“188: The country cares – in accordance with their potential – about educating those with physical and mental disabilities through a special curriculum and training variety that is culturally consistent with the variety of their cases.

189: This kind of education aims at caring for those with disabilities and providing them with the necessary Islamic cultural and general cultural skills, training them with appropriate aids to reach a more suitable level in their abilities.

190: The curriculum for the blind aims to provide religious science and Arabic sciences.

191: The relevant authorities should make a deliberate plan for the enhancement of each branch of this education to achieve its objective and to make regulations to organise its work.”

The articles above indicate that special education is regarded as different from general education as shown by such phrases as: *“special curriculum”, “the curriculum for the blind”, “this education”, “its objectives”, “regulation and its work”*. All of these phrases emphasise differentiation and emphasise that the education of students with SEN is different from that of general education students.

Moreover, the General Education Regulation (1999), is in agreement with the Saudi education policy (1995) in seeing special education as different from general education. Special education is mentioned in this regulation as parallel education (Article 2). In addition, there is one article that could constitute a barrier for implementing inclusion. Article 10.1 is about the enrolment of students in primary schools. This article states that *“students enrol who meet the admission requirement according to the following: 1- doing the medical examination scheduled.”* (4). One of the items on the medical examination form is about the mental state of the students and whether the student is “natural” or “abnormal” (this is the exact terminology used in the form). In addition, at the end of the form, there is an item to decide whether the student is suitable for general education or not. Therefore, this means that a student who has LD would not be accepted in general education (mainstream schools) and should study in a special education programme in a mainstream school or in a special school.

Another indicator of mixed support for inclusion of students with LD can be seen in Article 18.3 in the Regulation of Special Education Institutes and Programmes (2002, 15) which contains some ambiguity regarding the place where students with LD should be taught. Article 3.18 states, *“The regular school is the natural environment educationally, socially and psychologically for students with SEN. The special education service can be provided according to the type and degree of the disability and individual needs of the pupils through one of the following styles: A- a normal classroom with service of a teacher-consultant [a teacher who is specialist in special education, who provides advice in many regular schools for teachers of regular classrooms who has one or more students with SEN]. B- a normal classroom with service of an itinerant teacher [a teacher who is a specialist in special education who educates one or more students with SEN in a number of regular schools, so he moves between these schools]. C- a normal classroom with resource room service [a room that houses educational resources such as a library, projector, computer, screen projector, and sometimes a smart board]. D- Special classroom. E- Day school. F- Residential School.”*

Article 3.18 suggests that there are a number of options for students with LD to study either in a mainstream classroom, special classroom or special schools. However, the current practice is for the education of students with LD in special classrooms, even when their degree of disability is mild, so there is a difference between theory and practice.

Moreover, the Regulation of Special Education Institutes and Programmes (2002) mentions the existence of teaching assistants in mainstream schools to help teachers in their work as their duties indicate. However, in practice, there are no teachers' assistants in mainstream schools and this restricts inclusion because of a lack of provision.

In addition, the Regulation of Special Education Institutes and Programmes (2002) sets out the procedure and conditions for moving students from general education to special education for students with LD, whereas there is no mention of a procedure for students with LD to move from special education to general education.

However, there are some articles that could assist in implementing inclusion. These include stipulations that the number of students with LD in the mainstream classroom should be three or fewer (Article 4.6.4.H), Special education teachers should be given the chance to modify the curriculum to be suitable for students with SEN, including students with LD (Article 11.94), and that special education teachers and general education teachers should be required to cooperate with each other in a way that reflects positively on students with SEN including students with LD (Article 6.40.13; 6.41.7; 6.41.7).

Nevertheless, the analysis of the legislation revealed that generally the regulations do not support implementing inclusion of students with SEN including students with LD, who were seen as different from their peers; that the placement of students with LD is not clear; there is a gap between theory and practice in terms of availability of teachers' assistants; and no mention is made of the movement of students from special classrooms to mainstream classrooms.

6.6.2 Head teachers' awareness

One of the factors that the data indicated could act as a barrier to implementing inclusion is head teachers' lack of awareness about students with SEN, which may reflect negatively when implementing inclusion.

Three teachers reported that the head teachers were not fully aware of issues regarding SEN and that this was highlighted in their actions, for example, the closure of the video room that contained specialist equipment for students with LD which could support their needs more appropriately. Also, another head teacher changed the location of the art education room a number of times and did not take into account the abilities of students with LD, some of whom

had difficulties in walking. For example, Mansour stated, *“We face problems from the school administration in this school when comparing special education with general education in terms of providing the lesson, knowing that there are some special circumstances that may occur during the lesson that force me to change the way the lesson is run to something else. For example, I do not transmit certain skills to some students because of their disabilities. However, the head teacher came and asked me why I did not teach the skills that I taught to other students. As I am a teacher, I know which skills are suitable for which students.”*

Conversely, three teachers asserted the potential importance of administration for supporting inclusion. Majid stated, *“When the administration become more interested in inclusion, it helps inclusion to succeed”*. These findings support the view that inclusion can be most effectively supported when all members of the school work towards this goal.

Taking all of the data above into account, it could be interpreted that lack of awareness of head teachers regarding SEN and the procedure of inclusion is a barrier to implementing inclusion. This is because, if head teachers are not fully aware of the issues, they cannot provide appropriate facilities or help teachers to implement inclusion in the context of their school.

6.6.3 Number of students in the classroom

The number of general education students and students with LD in mainstream classrooms is one of the issues that may act as a barrier when implementing inclusion. The theme, number of students in the classroom, will be discussed according to the two arising factors revealed in the analysis: the number of students in the classroom and the difficulties of large mainstream classrooms.

To start with the number of students in the classroom, looking at the details, there is a disparity between the number of students in general classrooms and in special classrooms. As indicated by the teachers in their interviews the number of students in general classrooms is between twenty-four (Salih) and thirty-five (Ali). In addition, the Rules for Creating and Merging Schools (2009) specify that the number of general education students in general classrooms should not be more than thirty students. On the other hand, in special classrooms, the number of students with LD is between five (Faisal) and twelve (Zafer). In addition, the Regulation of Special Education Institutes and Programmes (2002) proposes that the number

of students with LD in special classrooms should not exceed eight students, in the case of educable students (students with mild LD).

During the observations of an Arabic lesson in a general education classroom, it was noticed that the classroom was almost full and the students were sitting in rows. The teacher was unable to control the whole classroom as there were some students at the back of the classroom that the teacher had not noticed; these students were problematic and they did not engage with the lesson. It was observed that there were twenty-four students in this classroom. In contrast, observations of a science lesson in a special classroom revealed that there were only five students and the teacher was able to go to each student individually to show them the object of study. In addition, the teacher could easily see all the students as they were sitting at the front of the room and not in rows as observed in the larger class group.

In addition, the number of students in the general classroom was greater than the number of students in the special classroom. The large number of students in general education classrooms may be because students in general classrooms may not need as much support compared to students in special classrooms.

The data indicated that large numbers of students in general classrooms and special classrooms could act as a barrier to implementing inclusion. This is because when students with LD are included with their peers in general education, the number of students is increased, creating or adding to problems of overcrowding classroom control and ability to provide individual attention.

Some teachers (nine) anticipated a number of difficulties that they would experience in teaching a large number of students (general education students and students with LD) in the mainstream classroom. These difficulties focused on the increased misbehaviour between students with LD and general education students – Omar said, *“if students with LD are included with them [general education students], I think they would start fighting among themselves.”* They also foresaw difficulties in teaching all the students. Khalid stated, *“If there are many students, you will face difficulties in implementing inclusion in terms of giving the knowledge”*. These teachers felt that a large number of students in the classroom could act

as a barrier to implementing inclusion because the large number would negatively influence their practice and management of the classroom.

Indeed, almost all teachers asserted the need to reduce the number of students in the mainstream classroom when implementing inclusion and rejected the notion of having a large number of students in the mainstream classroom. Some teachers proposed some benefits of small mainstream classes. For example, Ali indicated one benefit was that the small number would allow teachers to be more innovative in their teaching. He stated that *“when the number of students is appropriate [in mainstream classroom], the teachers will innovate [in their teaching]”*, so, teachers may be more willing and able to try new approaches to support students better when the number in the class is small. In addition, Zafer argued that a small number of students in the mainstream classroom helped teachers to *“have enough time for teaching. Also, the teacher can distribute his time and the classroom will be quiet, but if you put forty [students] in one classroom, this is difficult”*. Moreover, Talal mentioned that a small number of students in the mainstream classroom provides more opportunity for the students with LD to *“learn by watching and peer tutoring. This means, there will be benefits”*. Talal drew attention to the fact that a small number in the mainstream classroom would positively influence students with LD to learn more from their peers as well as from the teacher.

Generally, teachers foresaw some difficulties in implementing inclusion with a large number of students in the mainstream classroom, such as misbehaviour, difficulties in controlling the classrooms and difficulties in teaching. Thus, it is proposed that class size could act as a barrier when implementing inclusion.

6.6.4 Infrastructure of schools

One of the issues indicated in this study that may act as a barrier to implementing inclusion is the infrastructure of schools. The findings drawn from the theme of infrastructure within schools will be discussed in terms of the design of sports grounds, the design of buildings and playgrounds, and the infrastructure of the classrooms.

To start with the infrastructure of the sports grounds, seven teachers (physical education teachers and physical education teachers for students with learning difficulties) discussed issues around the lack of safety in sports grounds, as the surfaces are hard; some are made from concrete, and some of them are gravel. These teachers expressed worries about injury

to students if they fell when doing sports activities. For example, Abdelmohsen stated, *“The problem with the gravel sports grounds is that there is gravel on the ground and the students throw it, whereas, in hard-surface sports grounds, it is dangerous when the students fall and may break something. I remember, it has happened a number of times with general education students, as some of them fall on their hands and some on their heads”*. One barrier concerns child protection and the risk of children being physically hurt when participating in certain activities. This may be a special concern if some students have problems with balance or co-ordination.

During the observation of the schools, it was found that all schools visited had hard surface sports grounds. School 1 and school 4 had gravel covered sports grounds, while school 2 and school 5 had artificial grass sports grounds. When school 1 was visited, it was seen that the sports grounds were not designed with safety in mind, as the football goalposts were made from iron and there was no foam matting around them. However, the indoor sports hall for the students with LD located in school 5 was deemed safe, as the floor and walls were made from rubber and offered some protection from injury.

In addition to unsuitable surfaces, another problem was that mainstream schools lacked enough sports grounds; eight teachers related this issue. For example, Mansour stated that *“there is no place allocated to physical education for special education students as there are only two sports grounds in the outdoor grounds. So, when two classrooms from general education go down to the sports grounds, I go to a place that has cladding sheets and I teach the students [with LD] there. Also, I draw a football goal on the wall to simulate the original sports ground.”* This teacher highlighted how the lack of sports grounds influenced him as a teacher by causing him to teach students with LD in an area not appointed to be a sports area, because there were not enough facilities for all classes including general and special classes.

When school 2 was visited, Mansour took the researcher to the area where he taught students with LD. It was a small area located between the school canteen and the sports grounds. This area was not fully covered by cladding sheets and was not prepared to be a sports area as the floor was hard. A football goal was painted on the wall in red airbrush. In that school, it was noticed that there were two sports grounds. In school 3, although there were three sports grounds, the one allocated to physical education for students with LD was small and separated from the main sports ground by a barbed-wire barrier. However, the

other schools visited were better equipped. For example, school 1 had four sports grounds, school 3 had three sports grounds and school 5 had two outdoor sports grounds and two indoor sports grounds, one for general education students and the other for students with LD.

In further discussion, four teachers highlighted the lack of indoor sports halls in mainstream schools. For example, Majid talked about the lack in mainstream schools of a *“sport hall [indoor] as you know the weather is sometimes cold and sometimes sunny. So, I need a sports hall”*. This teacher indicated that his school lacked suitable facilities for teaching physical education in variable weather conditions. Furthermore, during the visits to schools, it was noticed that there were no indoor sports halls except in school 5 which, as noted above, had two.

As regards design of building and playgrounds, three teachers reported safety issues due to mainstream schools being built on several storeys. They noted that the barriers around were not high enough, so students could easily look down at the ground floor from the higher floor when moving around the buildings. Some teachers worried that students with LD may fall from higher floors when there were not adequate barriers in place. For example, Ali talked about the issue of school design saying, *“We have no safety. For example, students with LD study on the first floor and sometimes they [students with LD] look at us on the ground floor [from the first, as the barrier is low], so we ask them to stay away from it [the barrier] as it is dangerous”*. Furthermore, during the visits to mainstream schools, it was noticed that schools had multiple storeys and from each floor it was easy to look down at the ground floor and the barriers could be climbed. Generally, in the schools visited, special classrooms were located on the ground floor, except in school 5, where the special classroom was located on the first floor.

Also, during the visit to school 1 it was noticed that the playground area was not considered safe. A number of points noticed during the observation of school 1 confirm this claim. For example, there were a number of lamp posts made from iron in the playground, without any foam matting around them, rubbish bins made from iron, a number of seats fixed to the wall made from iron with sharp ends, the football goalposts and volleyball net posts were made from iron with no foam around them to prevent injuries, and there was a theatre platform in

the playground with steps for getting onto the platform, but no handrails. All of these features are potentially hazardous and could lead to injury.

Another issue that was mentioned by five teachers was the lack of lifts in school buildings, even though schools in Saudi typically have two to three floors, and some classrooms are located on higher floors. Moving from floor to floor for some students with LD is difficult, due to mobility issues that can impact on their ability to negotiate stairs. For example, Sultan, when asked about the school building, said, *"We have an obstacle with stairs because the art education room is on the third floor and there is no lift. So, I am compelled sometimes to hold the hands of students with LD going down the stairs"*. This teacher indicated the inconvenience of this lack of a lift, as some students with LD could not walk unaided from the ground floor to their classroom.

In addition, during the observation, it was noticed that there were no lifts in the schools visited. This posed problems since, in school 5 the special classrooms for students with LD were located on the first floor. In school 1 the art education classroom was on the third floor and in school 4 the resource room, which was used for teaching all students including children with LD, was on the second floor.

Five teachers suggested some issues related to the design of classrooms in terms of unsafe floors and inadequate furniture in the special classrooms. The issue of unsafe flooring was important as some students with LD have spasms and epilepsy; therefore, this was interpreted as posing a hazard to these children. For example, Hesham pointed out that, *"the problem with the tables that exist in the classroom is they are made of wood so when students [with LD] have spasms, it is dangerous if they hit their head"*. Faisal and Talal suggested a need for felt carpet on the floor as a safety measure for students with LD as this would cushion any falls and reduce opportunities for injury. In addition, Talal suggested putting sponge on the wall as a safety measure for students with LD. During the observation of general classrooms and special classrooms it was noticed that all classrooms had wooden tables and chairs, and all had hard floors except the one visited in the observation of a science lesson in a special classroom where the floor was covered with felt carpet.

With reference to classroom conditions more generally, Abdelaziz and Essa suggested mainstream classrooms should be bigger and be better designed and equipped in terms of

“quietness of air conditioning, soundproofing from the noise from the sports grounds, appropriate lighting, having a smart board and projector” (Abdelaziz). In addition, Mansour suggested providing an appropriate place for students with LD to relax, for example, to support the needs of students with epilepsy or those who need to take medicines that cause drowsiness. Mansour stated that in his school there was no such place for students with LD to relax and instead the students relaxed in the psychologist’s room, which contained a bed.

It appeared that the group of special education teachers discussed problems about classroom design more than the group of general education teachers, who did not see any issues with classroom design. This may be because general education teachers did not need to consider these issues for their students.

To summarise, the data indicated the mainstream schools visited had inappropriate infrastructure for implementing inclusion. There were a number of issues related to infrastructure of schools in terms of lack of safety of sports grounds, lack of enough sports grounds and indoor sports halls, lack of safety in school buildings and playgrounds, lack of accessibility of classrooms, lack of lifts in mainstream schools, and schools consisting of multiple floors with some classrooms located on the upper floor and with special classrooms perceived as unsafe.

6.7 Summary

This chapter reported the findings related to the second research question which was; what are the factors that act as barriers to implementing inclusion for students with LD? The themes emerging from the analysis were grouped into five categories which were themes related to teachers, themes related to students, themes related to parents, themes related to pedagogy and themes related to environmental context.

Overall, the findings as discussed support the view that a number of factors can act as barriers when developing inclusive practice. Some factors can be overcome through effective training programmes, whilst others may depend more on the development of effective relationships between teachers, parents, children and other professionals working with the children. These findings present a complex picture that suggests that many issues need to be considered when implementing and supporting effective strategies for inclusion.

The next chapter will discuss the overall findings of the study with reference to the research questions; links will be made between the findings of this research and the literature addressed in Chapter Three. Furthermore, the subsequent chapter will also begin to propose some implications and recommendations for practice.

Chapter Seven: Discussion

7.1 Introduction

The preceding two chapters presented the issues of implementing inclusion for students with LD in mainstream primary schools in Saudi Arabia in terms of how teachers understand inclusion, and the factors that could act as barriers to implementing inclusion for students with LD.

As previously discussed, inclusion has been found to benefit students with LD, both academically and socially with children showing improved outcomes when they are included in a mainstream classroom alongside their peers (Dessementet et al, 2012; Freeman and Alkin, 2000; Peetsma et al., 2001). However, one of the challenges facing the Saudi context is how to facilitate implementing inclusion for students with LD. Thus, exploring teachers' understanding of the term inclusion and identifying the factors that could act as barriers to implementing inclusion, which the current study aimed to do, would help in understanding how to facilitate inclusion for students with LD in the Saudi context.

This chapter will discuss the overall findings of the study in the light of the literature review presented in Chapter Three. It will start by discussing the knowledge and understanding of inclusion; after that, the key factors that challenge implementing inclusion. Also, some factors that facilitate implementing inclusion will be discussed.

7.2 Knowledge and understanding of inclusion

Overall, the majority of teachers expressed their understanding of the term inclusion with different personal understandings. This finding is consistent with other studies conducted in the Saudi context (Albanyan, 2011; Alothman, 2014) which found that the majority of teachers taking part in their research showed their individual understanding of the term inclusion. One interpretation for this finding is that the MoE had begun to prepare for the provision of inclusion for students with SEN in mainstream schools (see Chapter Two) and talked about inclusion on social media which has made teachers more familiar with the term inclusion; however, it would appear that teachers do interpret these meanings according to their own understandings and this in part explains the variability in responses.

One important finding of the research was that some teachers in the current study distinguished between inclusion and integration in terms of the themes that emerged from the analysis of the teachers' interviews (see Chapter Five). In more detail, the themes related to integration that were proposed by some teachers were different from the themes related to inclusion proposed by some teachers. There are a number of writers who distinguished between the terms inclusion and integration, saying that there are differences between these two terms in practice (Vislie, 2003, Mushoriwa, 2001). Moreover, Ainscow (1995) discussed the difference between integration and inclusion in terms of integration being where schools make additional arrangements to contain students with LD, whereas inclusion refers to schools reforming to take into account the diversity between students. However, this finding is in contrast with what was proposed by Weber (2012) in terms of the GCC using inclusion and integration interchangeably and having the same meaning.

One notable finding was that a few teachers expressed that they did not understand the term inclusion. This finding is similar to those discussed by Alshahrani (2014) in so far as the teachers in his study tended to provide a definition of integration rather than a definition of inclusion when he asked them about inclusion. These findings led to the conclusion that the teachers did not understand the meaning of inclusion well. Also, Alanazi (2012) found that half of the sample defined integration as inclusion which indicated that teachers do not understand the term inclusion. One interpretation of this confusion may reflect the fact that, at the time when these research projects were conducted, the discourse about inclusion in Saudi Arabia did not appear in the MoE agenda (Alanazi,2012; Alshahrani,2014). The failure of teachers to understand inclusion may reflect negatively on their view towards inclusion and they may decide not to support implementing inclusion.

The diversity in the definitions of inclusion presented by the teachers was also not surprising, as no single definition of inclusion in the literature review has been proposed. The meaning of inclusion is the subject of arguments between writers (Harrington, 1997). Acedo et al. (2009) argue that the difficulties of defining inclusion reflect the broad scope of the term inclusion. In addition, Bowie (2009) argued that the meaning of inclusion is different between countries. Therefore, it is reasonable to assume that the teachers participating in this study may also have reflected such different interpretations of the term inclusion. The interpretations by teachers of the term inclusion were categorised into five broad areas which

are Placement, Curriculum, Placement and curriculum, Removing obstacles and Including in society.

Generally, the meaning of inclusion that teachers illustrated in this study is related to some key notions proposed in the literature. For example, some teachers in this study related their definition of inclusion to the participation of students with LD with their peers in all aspects of school life which means that they study together in the same classroom and play together during the school year (theme: placement). This definition is similar to the definition proposed by UNESCO (2005), GRSEPS (2010) in UAE.

Furthermore, some teachers related their definition of inclusion to the placement of students with LD with their peers in the same classroom as well as participation with their peers in the same curriculum that is provided (themes: curriculum and placement and curriculum). This definition is similar to the definition illustrated by Kibria (2005, 4), who defined inclusion as: *“the policy of placing children with disabilities in general education classrooms for instruction with appropriate supports to meet their educational needs.”* In addition, the definition of inclusion that relates to studying the same curriculum could be related to one feature of the evolving inclusive practices dimension as proposed by Booth and Ainscow (2011, 15) which is *“Constructing curricula for all.”*

Moreover, there was a teacher in this study who defined inclusion in terms of students with LD being with their peers in the mainstream classroom and providing more services such as more support, more teaching aids and suitable environments that facilitate their inclusion (theme: removing obstacles). This definition is related to some of the definitions suggested for inclusion in the literature (Mitchell, 2005, Ainscow, 2005). For example, Mitchell (2005) argued that the principle of inclusion is based on two factors – the right of students with SEN to become an essential part of the mainstream classroom, and providing more support for students with SEN in terms of teaching aids, suitability of the curriculum, and assessment.

Finally, some teachers related their definition of inclusion to including students with LD in society, which includes education but also addresses social life outside school (theme: Including in society). This definition is similar to the definition proposed by Puri and Abraham (2004, 25) who define inclusion in terms of *“a political strategy based on human rights and democratic principles, that confronts all forms of discrimination, as part of a concern to*

develop an inclusive society and to ensure that some students receive additional resources and are not ignored or neglected”.

In summary, the teachers who were able to express their understanding of the term inclusion did so by adopting a number of different interpretations. These teachers also indicated in their responses that they knew the difference between inclusion and integration. Taken as a whole the definition of inclusion generated by these teachers could be proposed as: *including students with LD with their peers without LD in every part of school life, including classroom activities, studying the same curriculum and playing in the school yard. Also, there is a requirement to provide more support and teaching aids for students with LD which will lead to including them in society more generally.*

It could be proposed that the definition of inclusion that is illustrated is related to the social model of disabilities (Dyson, 1997; Lindsay, 2003). This is because this definition focuses on the environmental factors that aid students with LD to be included in the mainstream classroom and there is no mention of the abilities of students with LD or any proposed deficiencies on the part of the individuals. In addition, in the literature, inclusion could be related to the social model (Pearson, 2009).

However, one important finding was that not all teachers were able to define this important concept and that could have an impact on the kind of support that children with SEN receive. It is proposed that further work needs to be undertaken in the Saudi context to ensure that all teachers are able to support the needs of children with SEN.

7.3 Key factors that challenge implementing inclusion for students with LD in mainstream primary schools in Saudi Arabia

This section will discuss the key factors that could challenge implementing inclusion, which is explored in more detail in Chapter Six. The key factors that will be discussed here are organised into four dimensions, which are: teachers’ readiness, teachers’ practice, environmental, and relationships.

It is necessary to mention that each dimension and its key factors has an influence on implementing inclusion effectively. It is difficult to say one dimension is more significant than another as there is correlation among these dimensions, which all contribute to implementing

inclusion effectively. However, it is necessary to discuss each dimension and identify whether these levels challenge implementing inclusion in the Saudi context. Table 10 summarises the factors that act as barriers and mentions some factors that could act as facilitators to implementing inclusion.

Table 10 Overview of factors challenging implementing inclusion

Dimension	factors	Sub-factors acting as barriers to implementing inclusion	Sub-factors facilities implementing inclusion
Teachers' readiness	Teachers' preparation	<ul style="list-style-type: none"> •Two pathways in preparing teachers. •Not much attention paid to inclusion and integration in two pathways. •Not much attention paid to SEN in general education pathways. 	<ul style="list-style-type: none"> •Providing diploma in inclusive/SEN education.
	In-service training	<ul style="list-style-type: none"> •Some challenges of attending training courses. •No training courses provided on inclusion and integration. •Few training courses provided related to SEN. •Training courses mainly theory and lack of practice. 	
	Competence of teachers	<ul style="list-style-type: none"> •No confidence of general education teachers as regards inclusion students with LD in mainstream classroom. 	<ul style="list-style-type: none"> •Teachers require necessary knowledge and skills before implementing inclusion.
	Teachers' view towards inclusion	<ul style="list-style-type: none"> •All teachers have negative perspective towards inclusion in academic subjects. 	<ul style="list-style-type: none"> •Some teachers support inclusion of students with LD in art education and physical education.

Relationships	Relationships between students with LD and general education students	<ul style="list-style-type: none"> • Negative behaviour between some students with and without LD. • Some general education students have negative attitudes towards inclusion in physical education. 	<ul style="list-style-type: none"> • Using techniques to improve the relationships between students
	Relationships between parents and schools	<ul style="list-style-type: none"> • Poor communication with some parents. • Some parents of general education students and students with LD have negative attitudes towards integration. • Low awareness of parents towards students with LD 	The importance of involving parents of students with LD when implementing inclusion.
Practice	Collaboration	<ul style="list-style-type: none"> • No continuous and official collaboration between teachers. • No existence of teachers' assistants in the schools. 	<ul style="list-style-type: none"> • The importance of activation of collaboration between teachers. • The important of existence of teachers' assistants when implementing inclusion.

	Curriculum	<ul style="list-style-type: none"> • Different curriculum content provided for students with LD and general education students. • Some difference in the kind of curriculum subjects provided for general education students and students with LD. • Curriculum centralised. • Curriculum is fixed and only source of knowledge and skills for teachers. • Difference between general education teachers and special education teachers in requirements of delivering content of curriculum. • Difference between special education teachers and general education teachers in relying on textbooks. 	<ul style="list-style-type: none"> • Benefit of using adaption of curriculum for some students with and without LD.
	Teaching strategies	<ul style="list-style-type: none"> • Different teaching strategies used in general education classroom and special classroom. 	<ul style="list-style-type: none"> • Using variety of teaching strategies in mainstream classroom.
	Assessment	<ul style="list-style-type: none"> • Prescribed knowledge provided does not take into account the abilities of students with LD. • General education teachers do not have the freedom to omit some essential prescribed knowledge. 	<ul style="list-style-type: none"> • Using on-going assessment. • Used different methods for assessing.
	Resources	<ul style="list-style-type: none"> • Lack of materials, sports items and teaching aids. • There are not enough resources room in schools. 	<ul style="list-style-type: none"> • Provide more resources when implementing inclusion for students with LD.
Environmental	Educational legislation in Saudi Arabia	<ul style="list-style-type: none"> • No legislation that completely supports implementing inclusion. • The Regulation of Special Education Institutes and Programmes (2002), concentrates on integration rather than inclusion. 	<ul style="list-style-type: none"> • Existence of some articles that could support implementing inclusion.

	Administrative	<ul style="list-style-type: none"> • Lack of awareness of some head teachers regarding inclusion and SEN. 	
	Number of students	<ul style="list-style-type: none"> • The number of general education students is higher than the number of students with LD in special classroom. • The large number of students in the mainstream classroom. 	<ul style="list-style-type: none"> • Having small numbers of students with LD and general education students in the mainstream classroom when implementing inclusion.
	Infrastructure	<ul style="list-style-type: none"> • Sports grounds are lacking in safety features. • Limitation of the number of sports grounds in some schools. • The lack of indoor sports grounds in the majority of schools visited. • School designs are not safe. • Playgrounds are not safe. • Lack of lifts and some classrooms located on higher floors. • Infrastructure of special classrooms are not appropriate. 	

7.3.1 Teachers' readiness

There are a number of factors that could challenge implementing inclusion related to teachers' readiness. These factors, as indicated in Table 10, are teachers' preparation, in-service training, and competence of teachers and teachers' perspective.

To begin with teachers' preparation, this was one of the factors identified in the current study as being inappropriate for implementing inclusion. In literature, the positive influences of preparing teachers well regarding the inclusion of students with SEN while at university are highlighted. The key influences in preparing teachers include having positive attitudes towards inclusion (Campbell et al., 2003 in Australian; Bradshaw and Mundia, 2006 in Brunei), raising teachers' confidence (Coutsocostas and Alborz, 2010 in Greece), raising teachers' willingness and self-efficacy (Brady and Woolfson, 2008 in UK), and increasing teachers' feelings of success in teaching students with SEN (Ahmmed et al., 2012 in Bangladesh).

However, the current study found inadequate teacher preparation as, in Saudi Arabian universities, teachers are prepared using two pathways: a general education pathway and a pathway for preparing teachers for working with students with SEN. In the general education pathway, not much attention is paid to SEN or inclusive education during this programme; whereas in the SEN pathway not much attention is paid to inclusion, and teachers are not well prepared for teaching general education students, nor for teaching any of the academic subjects to students with LD as there are no modules in any academic subjects, such as Arabic language or maths, which may reflect negatively on the procedure of implementing inclusion and cause a lack of knowledge about core subjects.

The findings of the current study are consistent with other studies (Scruggs and Mastropieri's 1996 review of studies from western countries; Shadreck, 2012 in Zimbabwe) which found that universities were not providing teachers with enough knowledge regarding SEN and inclusive education. In addition, Morley et al. (2005) in the UK, Ahmmed et al. (2012) in Bangladesh, Murry and Alqahtani (2015) and Alhudaithi (2015) in Saudi Arabia, and Amr (2011) in Jordan argued that teachers were not well prepared for teaching in the mainstream classroom as there were not enough courses provided for them. The lack of teacher preparation in universities has a negative influence and this can result in teachers seeing themselves as unqualified for teaching students with LD in the mainstream classroom (Gaad and Khan, 2007 in UAE).

Teachers' preparation in Saudi Arabia appears to be lacking one important pathway – preparing teachers for teaching all students, including students with and without SEN and including students with LD. The lack of a clearly defined inclusive pathway that prepares teachers to teach all students leads Gaad and Khan (2007) in UAE to suggest cooperation between special education and general education departments in universities to design modules that provide the knowledge and skills for teachers regarding teaching all students.

Generally, teachers' preparation in Saudi Arabia is based on specialised teaching of students, which means that there are teachers for general education students and there are teachers for special education students. The way that is followed in Saudi Arabia regarding preparing teachers could be related to the medical model of disability (Llewellyn and Hogan, 2000). This is because the existence of pathways designated to teach just students with SEN leads to the idea that students with SEN are different from their peers, and that students with SEN need special teachers for them to overcome their deficiencies (Hardie and Tilly, 2012). Based on the discussion above, teachers' preparation appears to have an influence on teachers' practice when implementing inclusion.

To overcome the inadequacy of teachers' preparation, the literature has suggested the importance of including some modules in universities to prepare teachers to teach students with SEN in mainstream classrooms (Bradshaw and Mundia, 2006 in Brunei; Morley et al., 2005 in UK; Alshahrani, 2014). For example, Subban and Sharma (2006) in Australia stressed the importance of providing pre-service teachers with some strategies for implementing inclusion effectively, as acquiring this knowledge would help the teachers support groups of SEN learners. Furthermore, Avramidis and Kalyva (2007) in Greece suggested providing pre-service teachers with the knowledge and skills for assessment, making an IEP, adaptation of the curriculum for all students in mainstream classrooms and the skills for cooperating with other teachers, which would reflect positively on teachers' practice in inclusive settings. In Saudi Arabia, Alquraini (2015) suggested universities should provide a new module in general education teachers' and special education teachers' preparation, about how to help students with SEN to access the general curriculum. Also, a similar suggestion was proposed by Biazwir (2010) and Aldabas (2015) who suggested providing some modules to increase teachers' knowledge and skills about inclusion.

The suggestions proposed in the literature regarding the importance of providing some modules in universities to prepare teachers for inclusion have some correlation with the current study in terms of the positive role of obtaining some qualifications in teachers' practice. Findings from the interviews with art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties indicated that after moving from teaching general education students to teaching students with LD, they studied for a diploma in LD. All art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties stated that they benefited from having the diploma when teaching students with LD; this was proposed to be because this diploma prepares teachers with the knowledge and skills needed for teaching students with LD.

Based on the evidence illustrated above, it can be suggested that providing the diploma in SEN/inclusive education for teachers when implementing inclusion would assist by supporting teachers in obtaining the necessary knowledge and skills. In addition, providing the diploma in SEN/inclusive education could be related to the interactive model and social model (Dyson,1997; Lindsay, 2003). This means that the diploma would focus on the abilities of students with SEN and would focus on the environmental factors that help students with SEN to be effectively included in the mainstream classroom, such as the curriculum, teaching strategies and availability of resources.

The inadequacy of teachers' preparation has led to further exploration into another factor related to teachers' readiness to implement inclusion which is the in-service training provided for teachers. The importance of providing in-service training for teachers when implementing inclusion is emphasised in the literature (Scruggs and Mastropieri, 1996). Researchers have found a number of benefits from attending in-service training related to inclusion. For example, Secer (2010) in Turkey argued that attending training courses on inclusion would improve the practice of teachers; Allison (2012) in the USA highlighted positive influences in terms of increasing teachers' confidence and teachers' views about themselves regarding readiness for teaching in an inclusive setting. In addition, Lifshitz et al. (2004) in Israel and Palestinian and Secer (2010) in Turkey found that teachers change their attitudes towards inclusion after attending training courses. In Saudi Arabia, Alshammari (2014) indicated that

providing training courses played a role in influencing teachers' attitudes to become more positive towards integration.

One of the major barrier factors that related to in-service training that the current study revealed is that there is no training provided on inclusion and integration. Also, the training courses in special education provided by the Educational Training Department are limited, and the majority of training courses in special education are dedicated to teachers who teach students with SEN, and do not allow the general education teachers group to attend them. This finding is coherent with the findings of Alothman (2014) and Alhudaithi (2015) who found that in Saudi Arabia training courses in inclusion are not provided. In addition, the finding of the current study is contrary to one of the indicators for inclusion proposed by Booth and Ainscow (2011, 15) which is "Professional development activities help staff respond to diversity".

The issues discussed above may make inclusion difficult to implement. This is because not providing teachers with training courses on how to implement inclusion would lead to teachers lacking the knowledge and skills regarding this area. Furthermore, dedicated special education training for special education teachers while not allowing the general education teachers group to attend would act as a barrier. This is because the general education teachers group are important for implementing inclusion (e.g. Ainscow 2007 and Stanovich and Jordan, 2002), as students with LD would study in their classrooms. Therefore, if teachers did not have the training they would lack the knowledge and skills needed to support this group. Some researchers stress the importance of providing training courses that relate to inclusion, for example, Avramidis et al. (2000) in the UK suggested, when implementing inclusion, in-service training should focus on how to deal with students with SEN in an inclusive setting. Moreover, Gyimah et al. (2009) in Ghana also suggested focusing on the nature of needs of students with SEN and the methods that allow teachers to accommodate students with SEN in the mainstream classroom. These suggestions appear to be related to what should be done in the classroom and related to the practice of teachers. Thus, the Educational Training Department in Saudi Arabia should take into account the interactive model and social model (Dyson, 1997; Lindsay, 2003) when providing training courses related to inclusion. Training courses would cover the issues related to students with LD in terms of their abilities and how to support students with LD in the mainstream classroom. Also, the

training should cover issues related to teaching, adaption of curriculum and other related factors such as environmental factors.

Another barrier revealed after the analysis of the current practice of delivering in-service training for groups of general education teachers and special education teachers is that there were a number of obstacles related to in-service training that may restrict teachers from attending: for example, the locations providing the training courses being at a distance; not providing a preparation in-service training course for art education teachers of students with learning difficulties and physical education teachers of students with learning difficulties when they moved from general education to teaching students with LD; not enough training courses provided as some of these courses quickly become fully booked; inappropriate organisation of the time provided for the training courses as the hours were not convenient for the teachers to attend; repeating the same training course over a long time period and the training courses provided being mainly theory with a lack of practice. The existence of these challenges could influence some teachers and deter them from attending in-service training courses which may influence their view about their inefficiency and lack of readiness to implement inclusion (Agbenyega 2007 in Ghana). The findings of the current study are consistent with those of Alotaibi (2012) who found that there are some obstacles that face art education teachers for students with learning difficulties in benefiting from the training courses provided, such as some training courses that are provided only once per semester lacked any practical aspect. Thus, Gaad and Khan (2007) suggested including the practical aspect when providing training courses, such as visiting classrooms that implemented inclusion. In addition, Alqahtani (2009) in Saudi Arabia argued that a lack of in-service training may influence special education teachers for students with LD in special classrooms negatively regarding their use of a variety of teaching methods. Generally, in-service training was found to be one of the most important factors that should be considered when implementing inclusion as indicated above; lack of in-service training related to inclusion may challenge implementing inclusion.

Inadequacy of teachers' preparation and lack of in-service training in inclusion could influence teachers' competence for implementing inclusion. The current study found competence of teachers towards implementing inclusion could be one of the challenges for inclusion. The competence of teachers for implementing inclusion was identified in the literature as one of

the factors required for implementing inclusion effectively (Crawford and Porter, 2004 in Canada). Bradshaw and Mundia (2006) found that the incompetence of teachers for teaching students with SEN in the mainstream classroom was one of the more important challenges, as teachers may feel frustration and lack of confidence when teaching students with SEN.

However, all general education teachers, art education teachers and physical education teachers in this study showed no confidence regarding educating students with LD in the mainstream classroom. These teachers felt that they did not possess the important knowledge and skills for educating students with LD. In contrast, all special education teachers for students with LD, art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties expressed their competence for educating students with LD. This finding is consistent with the findings of the study by Minke et al. (1996) in the USA, who found that special education teachers have higher competence in teaching students with LD compared to regular classroom teachers who have lower competence. One reason that may indicate the incompetence of general education teachers, art education teachers and physical education teachers is the lack of knowledge and skills regarding teaching students with LD (Allison, 2012 in USA; Morley et al., 2005 in UK). Also, it may refer to what was discussed above in terms of the lack of appropriate preparation for teachers implementing inclusion and the lack of training courses related to inclusion and SEN.

To improve the competence of teachers towards educating students with LD in the mainstream classroom, teachers in the current study expressed the need for teachers to obtain the necessary knowledge and skills before implementing inclusion. The knowledge and skills that were required of teachers were categorised into three elements: general information about students with LD, the way to support the needs of students with LD behaviourally, and the way to teach students with LD. These requirements were similar to other suggestions provided in some studies; for example, teachers in the study of Avramidis et al. (2000) in the UK suggested providing them with training courses containing knowledge about dealing with students with SEN and how to manage the behaviour of students with LD would be helpful. In addition, Gyimah et al. (2009) in Ghana indicated that to prepare teachers for inclusive education, information about students with SEN should be provided. Moreover, Avramidis and Kalyva (2007) in Greece suggested providing teachers with knowledge about

teaching strategies for teaching all students in the mainstream classroom including strategies for teaching students with SEN (Gaad and Khan, 2007 in UAE) would be helpful.

The requirements proposed by teachers for improving their competence could to be related to the interactive model of disability (Norwich, 2004) in terms of the fact that the teachers requested knowledge about students with LD and how to deal with them, and requested knowledge about teaching students with LD.

As teachers feel incompetent to teach students with LD, their feelings may influence their perspective towards implementing inclusion. Teachers are one of the important factors for implementing inclusion effectively (Secer, 2010 in Turkey; Gal and Yeger, 2010 in Israel; Avramidis and Norwich 2002; Monsen and Frederickson, 2004 in New Zealand; and Ainscow 2007). It is therefore important to consider their perspective.

Teachers' attitudes and views towards inclusion vary in the literature and between countries. Some studies indicated that teachers have positive attitudes towards inclusion (Avramidis and Kalyva, 2007 in Greece; Cornoldi et al., 1998 in Italy; Subban and Sharma, 2006 in Australia; Haider, 2008 in Pakistan; Gyimah et al., 2009 in Ghana; Ross-Hill, 2009 in the USA); similar findings have also been observed in Saudi Arabia (e.g. Alanazi, 2012; Alothman2014; Alqahtani 2003). In contrast, there are some studies that pointed out that teachers have negative attitudes towards inclusion (Minke et al., 1996 in the US; Agbenyega, 2007 in Ghana; Gaad and Khan, 2007 in UAE; Kalyva et al., 2007 in Serbia; Fakolade et al., 2009 in Nigeria; Shadreck, 2012 in Zimbabwe; Chhabra et al., 2010 in Botswana; and Coutsocostas and Alborz, 2010 in Greece). In the Saudi context, there are a number of studies that found that teachers have negative attitudes towards inclusion (e.g. Alquraini 2011; Alnahdi 2014). In the current study, there is a similarity with other studies that have indicated that teachers' have a negative perspective towards inclusion. Almost all of the teachers had a negative perspective towards implementing inclusion for students with LD in academic subjects such as maths, science and Arabic language. However, some of the teachers had a positive perspective towards the inclusion of students with LD in art education and physical education.

The willingness of some teachers to accept inclusion of students with LD in art education and physical education can be explained by art education and physical education being seen in the Saudi context as non-academic subjects and teachers may feel that there is not much

work required to support students with LD in these two subjects compared to academic subjects.

Teachers in this study highlighted a number of reasons that negatively influenced their views towards inclusion of students with LD in the mainstream classroom. The reasons indicated were strongly based on the needs of students with LD; teachers focused on their perception of such students' low abilities, the difficulties in teaching students with LD (Lifshitz et al., 2004 in Israeli and Palestine); the difficulties in interacting with students with LD (Gal and Yeger, 2010 in Israel); the negative influence of inclusion on students with LD (Chhabra et al., 2010 in Botswana); the difficulties for such students of accessing the general education curriculum (Agbenyega, 2007 in Ghana); and the negative influence of inclusion on general education students, as teachers may spend more of their effort in supporting the students with LD, not the general education students. Also, some reasons that the teachers indicated were related to the environmental context such as the large number of students in the classroom (Crawford and Porter, 2004 in Canada) and inclusion requiring extra work in terms of planning, resources and teaching (Crawford and Porter, 2004 in Canada; Fakolade et al., 2009 in Niger; Alshammari 2014 in Saudi Arabia).

The reasons indicated above reflecting a perception of students with LD as problems are related to the medical model of disability, which sees students with disabilities as being deficient (Hardie and Tilly, 2012, Gross 2002). In addition, the negative attitudes of teachers are contrary to one of the indicators of the Index for Inclusion (2011, 14) which is "expectations are high for all children". Furthermore, it could be argued that the social stigma related to students with LD may influence teachers' perspectives negatively (Hadidi and Alkhateeb, 2015; Ashencaen Crabtree and Williams, 2013).

The current study identified one factor that may have a positive influence on teachers' enthusiasm for the inclusion of students with LD. This factor was providing incentives (increasing salary and reducing the number of sessions per week required) for teachers in order to support inclusion. A number of teachers in this study confirmed the positive influence of such incentives on their enthusiasm towards inclusion. It can be proposed that incentives provided for general education teachers, art education teachers and physical education teachers would help them to accept inclusion and support it, which may reflect positively on implementing inclusion. This finding is similar to those presented by Alfahili (2009) in Saudi

Arabia who proposed that teachers should receive financial and non-financial incentives to make general education teachers participate in implementing integration (which could be applied to inclusion), whereas providing the incentive for special education teachers and not for general education teachers would make the latter have negative attitudes towards inclusion (Alkhaldi,2014).

From the above discussion, it can be argued that the view of teachers towards inclusion and the existence of various reasons that influence teachers' views when implementing inclusion could act as barriers to implementation. This is proposed to occur because teachers may not work effectively towards implementing inclusion for students with LD as these teachers perceive it as being difficult to implement. However, providing incentives for teachers may encourage teachers to implement inclusion effectively.

Generally, the discussion indicated that teachers may not be ready to implement inclusion as the preparation of teachers was inadequate, in-service training was not provided in a way that would help teachers to teach all students with different abilities, as well as the self-perceived incompetence of general education teachers to include students with LD in mainstream classrooms and negative perspective of teachers towards inclusion, which acted as barriers.

7.3.2 Teachers' practice

Another dimension that could challenge implementing inclusion is teachers' practice. In Chapter Six, a number of factors that have a negative influence on teachers' practice when implementing inclusion were identified. These factors, as indicated in Table 10, were teaching strategies, curriculum, collaborations, resources and assessment.

It is stressed in the literature that the use of appropriate teaching strategies suitable for all students including students with LD is one of the factors that should be considered when implementing inclusion in the mainstream classroom (NCERI, 1994 in USA; Brady and Woolfson, 2008 in UK; Allison, 2012; Ashencaen Crabtree and Williams, 2010). However, in the current study, it was found that the teaching strategies widely used in the general education classroom were different from those used in special classrooms. It can be observed that the teachers in the general education classroom usually used a lecture with discussion strategy and a demonstration strategy (Bandura,1977), whereas, in the special classroom, the

teachers usually used an individual teaching strategy and a peer tutoring strategy (Vygotsky,1978). Taken together these results appear to demonstrate that differentiation between the strategies used in the special classroom and those in the general education classroom may make inclusion in the mainstream class more difficult. This is because using the strategies that are used in the general education classroom would not take into account the needs of students with LD. Therefore, in the literature, researchers stress that teachers should not rely on one teaching method and should use a variety of teaching methods that take into account the different needs between students in terms of enhancing learning for all students (Rose and Howley, 2007; Huang, 2007).

The benefit of using a variety of teaching methods was mentioned in the current study by some teachers who taught some students with LD and low attainment students with peer tutoring and individual teaching strategy in the mainstream classroom; the teachers observed that these students benefited from these strategies in their learning. The benefit of using peer tutoring in the mainstream classroom has a positive role in promoting inclusion as supported by one indicator in the Index for Inclusion (2011, 14-15) which is “children learn from each other”.

Taking the evidence illustrated above, it is proposed that using teaching strategies that are not suitable for students with LD could act as a barrier for implementing inclusion, whereas using a variety of teaching strategies in the mainstream classroom would help to implement inclusion effectively. This is because all students would benefit from using these strategies when included, an approach that is supported by Norwich and Lewis (2001) who indicated general teaching strategies could be used for students with SEN as there are no specific teaching strategies for SEN.

Another challenge to implementing inclusion related to teachers’ practice is the curriculum that is provided in the Saudi context. In the literature, it is highlighted that the accessibility of the curriculum for all students with and without SEN is one of the factors that supports implementing inclusion effectively (NCERI, 1994 in USA; Ashencaen Crabtree and Williams, 2010).

In the current study, a number of aspects were found that restricted students with LD from accessing the general curriculum. These factors are first that, the curricula provided for

students with LD and general education students are different in terms of content, and second, the kind of curriculum. Also, there is a difference between the groups of special education teachers and general education teachers in whether they are obliged to rely on the curriculum or not, and whether they are allowed to adapt the curriculum or not. In addition, the centralised and fixed curriculum is seen as challenging to implementing inclusion. Therefore, it may be difficult for students with LD to access the curriculum provided for general education students as the curriculum provided for general education students is above the abilities of students with LD (Almuslim, 2015; Aleumri, 2009; Alsyd, 2009 in Saudi Arabia). The findings of the current study support the view of Peters (2004) who argued that one of the challenges that face implementing inclusion is an unsuitable curriculum, whereas UNESCO (2005) stresses that flexibility of the curriculum is one way to support inclusion. In the Index for Inclusion Booth and Ainscow (2011) mentioned that “Constructing curricula for all” is related to the evolving inclusive practices dimension. In addition, the existence of differences between the curriculum provided for general education students and that for students with LD could refer to the medical model of disability (Llewellyn and Hogan, 2000) which sees students with LD as deficient and being different from general education students, thus leading to the need to provide a special curriculum for them.

However, some teachers in the current study indicated that they adapted the curriculum for some students with and without LD; these teachers indicated the benefits of such adaptation for students’ learning (Lee et al.,2010). The techniques used by teachers in the current study were to structure the knowledge presented from easiest to toughest, and to omit some knowledge that would be hard for some students (Fletcher-Campbell, 2005; Lee et al., 2006). Also, the group of special education teachers rely on IEPs as a way of adapting the curriculum provided to students with LD. Adaptation of the curriculum was seen in the literature as a way to make inclusion work effectively (Almosa ,2013; Alquraini,2015).

Taking the evidence illustrated above, it could be proposed that the existence of an inaccessible curriculum would make inclusion ineffective to implement. This is because a curriculum that does not take the different needs of all students into account may cause difficulties for teachers when delivering it in the mainstream classroom. Thus, the teacher should be given the opportunity to adapt the general education curriculum when students

with LD are included in the mainstream classroom (Alnahdi, 2014) so that they can provide knowledge that is suitable for students with LD.

Another factor that has a role in teachers' practice when implementing inclusion is collaboration. It was found in the literature that the support that teachers have from the other staff in schools such as special education teachers, speech and language therapists, social services and medical personnel has an influence when implementing inclusion (Ahmmed et al., 2012; Chopra, 2008). It could be suggested that collaboration between teachers could be related to the social model of disability (Oliver, 1990, 2009). This is because when teachers collaborate they do not see students with LD as deficient; in fact, teachers collaborate in order to support the learning of students with LD and remove any challenges in the environment that might face these students.

However, the current study revealed that there was no official and continuous collaboration between teachers to support each other (Alanazi, 2012). The absence of collaboration between teachers is in contrast to two of the indicators in the Index for Inclusion (2011, 14). These indicators are "Staff co-operate" and "Staff plan, teach and review together". The absence of collaboration between teachers refers to the separate education between students with and without LD in the mainstream classroom.

The benefit of support from other staff in schools was highlighted in some studies in terms of the fact that supporting reflects positively on teachers' efficacy to teach students with SEN in the mainstream classroom (Stanovich and Jordan, 2002 in Canada; Coutsocostas and Alborz, 2010 in Greece), helps to overcome the obstacles to implementing inclusion (Avramidis and Norwich, 2002) and helps in the adaptation of curriculum activities (Gal and Yeger, 2010 in Israel; Alquraini, 2015 in Saudi Arabia). Moreover, Agbenyega (2007), Gaad and Khan (2007) in UAE and Huang (2007) argued that without support from the other staff in schools implementing inclusion would be useless. Therefore, in the current study the teachers proposed that working in collaboration with other teachers in schools would help them to support each other in ways that make teaching effective in the mainstream classroom (Gyimah et al., 2009; Gaad and Khan, 2007). Moreover, the teachers in the current study suggested two approaches to support that would help them. The first is working as a team with other staff in school such as special education teachers for students with LD, general education teachers and student advisors to follow up students with LD in the mainstream

classroom (Avramidis and Norwich, 2002; Allison, 2012 in USA). The other way suggested was implementing cooperative teaching in the mainstream classroom (Meijer, 2001; Scruggs et al., 2007). Arguably, based on the evidence highlighted above it could be proposed that a lack of collaboration and support would act as a barrier for implementing inclusion.

In addition, teaching assistance is one of the sub-factors related to collaboration factors that can influence teaching practice. It was found that availability of teaching assistants was one of the factors that should be considered when implementing inclusion (Groom, 2006; Moran and Abbott, 2002). In addition, Subban and Sharma (2006) in Australia indicated that one of the factors that arose that concerned teachers about inclusion was the missing support from teachers' assistants. Moreover, the role of a teaching assistant links to one of the indicators for inclusion proposed in the Index for Inclusion (2011, 15), which is "Teaching assistants support the learning and participation of all children".

However, in the current study, it was revealed that no teachers' assistants were employed in the schools that were visited. Although the Regulation of Special Education Institutes and Programmes (2002) points out that teachers' assistants are one of the support mechanisms that schools should provide for educating students with LD in mainstream schools, it can be observed that there is a gap between the legislation and the practice. Thus, Alshahrani (2014) and Alquraini (2011) in Saudi Arabia emphasise the importance of the existence of teachers' assistants when implementing inclusion. Nevertheless, the findings of the current study indicated the importance of the existence of teachers' assistants when implementing inclusion. The teachers highlighted a number of benefits around the availability of teachers' assistants, for example, helping the teachers in their teaching, helping teachers in controlling the classroom and preparing the lesson tools for teachers (Farrell et al., 1999, UK; Groom and Rose, 2005 in UK; Groom, 2006; Moran and Abbott, 2002). The lack of teachers' assistants when implementing inclusion could act as a barrier. This is because teachers would lose one of the factors that helps them in their teaching of students with LD in the mainstream classroom, which may make it harder for them to carry out their day to day teaching if they needed to make additional resources or provide additional tuition for students with LD.

In addition, the availability of resources is another factor that influences teachers' practice when implementing inclusion in the mainstream classroom. The availability of enough resources in the mainstream classroom is also highlighted in the literature that supports

implementing inclusion effectively (Scruggs and Mastropieri, 1996 review of studies from western countries; Cook et al., 1999 in USA; Avramidis et al., 2000 in UK; Haider, 2008 in Pakistan; Ashencaen Crabtree and Williams, 2010). Resources are also one of the indicators for inclusion were highlighted in the Index for Inclusion (2011, 15) in that “Staff develop shared resources to support learning”. However, the majority of teachers indicated that their schools lacked materials, sports equipment and teaching aids (Alotaibi, 2011; Rajeh, 2013; Alibrahim, 2003).

Another issue found in this study related to resources is that there were not enough resources rooms in the schools that were visited. There was only one resources room for both students with LD and general education students in each school. Therefore, it is proposed in the literature that such lack of resources would lead to not meeting the needs of students with LD in the mainstream classroom (Minke et al., 1996 in USA). Furthermore, Fakolade et al. (2009) in Nigeria and Agbenyega (2007) in Ghana argued that one of the challenges that reduced success when implementing inclusion is the lack resources. In addition, Alshahrani (2014) indicated that the availability of high quality resources would help to implement inclusion effectively. A lack of resources can be related to the social model of disability; this is because the needs of students with LD would not be met due to environmental factors (Hart, 1996).

As a result of the lack of resources in schools in the current study, half of the sample suggested more resources should be provided when implementing inclusion for students with LD as this availability reflects positively on students’ learning (Gyimah et al., 2009 in Ghana), makes the lesson clearer and more attractive (Minke et al., 1996 in USA; Avramidis et al., 2000 in UK), and enables teachers to deliver the lesson more quickly. From the discussion above, it could be argued that the lack of resources in the mainstream classroom and the limitation of resources rooms in schools would lead to negatively influencing the implementation of inclusion effectively.

Another factor related to teaching practice is the methods of assessment for students in mainstream classrooms. The importance of using assessments that are suitable for all students including students with LD in the mainstream classroom was stressed in the literature (Mitchell 2005; Mittler 2000; NCERI, 1994 in USA). One of the indicators for inclusion mentioned in the index (2011, 15) is that “assessment encourages the achievements

of all children". Generally, using on-going assessment is effective in the mainstream classroom; the teachers who implemented it had the freedom to use a variety of tools, techniques and methods to assess the students in order to improve students' learning (Watkins, 2007). In addition, the participants in the study conducted by Alshahrani (2014), in the Saudi context, suggested that on-going assessment is a better way for assessing students with hearing impairment in the mainstream classroom when compared to more traditional forms of assessment. Using on-going assessment, providing freedom to teachers to choose the appropriate methods for assessing students and using techniques that help students to acquire the knowledge could be related to the social model of disability (Oliver, 1990, 2009). Teachers help all students to acquire the knowledge and pass the assessment without concentrating on students' deficits.

However, there is one issue that appeared from the analysis of the current practice of assessment in the Saudi context that would reduce the benefit of on-going assessment when used in mainstream classrooms. The issue is that on-going assessment based on prescribed knowledge expected to be mastered by general education students does not take into account the abilities of students with LD. Also, teachers do not have the freedom to omit any of the prescribed knowledge. Thus, they may be restricting the ability of children with LD to do what is suitable for them, which may reduce their participation in the mainstream classroom.

Based on the evidence presented above, it could be argued that the lack of flexibility for teachers in choosing the prescribed knowledge suitable for the abilities of students with LD when they are included in the mainstream classroom would act as a barrier to implementing inclusion. This is because fixed, prescribed knowledge would not take into account the different abilities between students. Generally, teachers not being able to adapt the scope of the assessment is a limiting factor.

Generally, the current teachers' practice in the Saudi context could challenge implementing inclusion. This is because the teaching strategies that are widely used in general education classrooms are different from those used in special classrooms; there is differentiation between the curriculum provided for general education students and for students with LD, as well as a fixed curriculum, not enough resources in schools, no availability of continuous

collaboration between personnel, no availability of teaching assistants and no freedom for general education teachers to adapt the knowledge for assessment.

7.3.3 Environmental

One of the dimensions that could challenge implementing inclusion is the environmental dimension. There are a number of factors that challenge implementing inclusion related to the environment level. These factors, as indicated in Table 10, are the educational legislation in Saudi Arabia, head teachers' awareness of SEN, number of students in the classroom and infrastructure.

The existence of legislation that supports implementing inclusion is one factor that should be taken into account when implementing inclusion (Chopra, 2008 in India; Gyimah et al., 2009 in Ghana). In the Saudi context, there is no legislation that completely supports implementing inclusion yet. With regard to the four documents reviewed, it can be observed that in the Saudi Education Policy (1995), General Education Regulation (1999) and Disabilities Code (2000), there is no stress on or mention of inclusion at all. In addition, the Saudi Education Policy (1995) and General Education Regulation (1999) asserted the differentiation between general education students and students with SEN in terms of the fact that some articles that support students with SEN and general education students are different. Furthermore, Regulation of Special Education Institutes and Programmes (2002, 15) is similar to the other documents reviewed in terms of there not being much attention paid to inclusion – instead these documents concentrated on integration. This regulation emphasises inclusion just for students with visual impairments and students with specific LD, whereas, for the other students with SEN, the regulation is not clear as it depends on the degree of their disabilities and provides a number of places where the students with SEN would study such as “A- Normal classroom with service of teacher-consultant. B- Normal classroom with service of itinerant teacher. C- Normal classroom with resource room service. D- Special classroom. E- Day school. F- Residential School”.

The lack of an inclusive policy that supports implementing inclusion was mentioned by Hassanein (2015) in Egypt (an Arab country). Also, Alkhateeb et al. (2016) indicated that Arab countries lack policy that supports implementing inclusion. Therefore, the Index for Inclusion (2011, 15) points out one of the indicators for inclusion, which is, “The school ensures that

policies about ‘special educational needs’ support inclusion”. This supports the view that lack of relevant policy would act as an important barrier.

The legislation in Saudi Arabia could be related to the medical model of disability; it appears to highlight the students with LD and students with SEN in general as deficient compared to the rest of the school population. Thus, the legislation distinguishes between students with LD and general education students in a way that does not support inclusion. In addition, Marks (1999) argued that the majority of legislation is based on the medical model and the results drawn from the current study support this proposal.

Although the Regulation of Special Education Institutes and Programmes (2002) concentrated on integration rather than inclusion and the current practice of educating students with LD is studying in a special classroom, there are some articles that should be activated to help in implementing inclusion; for example, studying in the mainstream classroom with support from a teacher-consultant, itinerant teacher or resource room service (Article 3.18), specifying the number of students with LD in the mainstream classroom – not more than three students (article 4.6.4.H.), allowing special education teachers to modify the curriculum (Article 11.94), encouraging special education teachers and general education teachers to cooperate in teaching (articles 6.40.13 ,6.40.14, 6.41.7), and the suggestion about the availability of teachers’ assistants.

In the Saudi context, which is a centralised system, the lack of legislation that supports implementing inclusion and providing guidelines about how to facilitate implementing inclusion in mainstream schools (Agbenyega, 2007 in Ghana), acts as an important barrier. In contrast, the stakeholders and administrators should benefit from the existence of some articles and activation of these articles which could help in implementing inclusion effectively.

Another factor that could challenge implementing inclusion is the awareness of head teachers about SEN. The administrative role, including head teachers, in supporting implementing inclusion was noticed in the literature (Allison, 2012; NCERI, 1994 in USA; Praisner, 2003 in USA; Fakolade et al., 2009 in Nigeria). Rayner (2007) stated that effective head teachers can help motivate other staff in schools to implement inclusion effectively. In addition, one of the indicators for inclusion that is highlighted in the Index for Inclusion (2011, 14) is that “The school has an inclusive approach to leadership”, whereas, the absence of effective leadership

is seen as one of the barriers for implementing inclusion in mainstream schools (Hassanein, 2015).

However, in the current study some teachers highlighted certain issues concerning head teachers. For example, some stated that the head teachers in their schools had low awareness about students with LD, including not being aware of the abilities of students with LD. The low awareness of some head teachers is inconsistent with one of the duties of the head teachers of mainstream schools as indicated in the *Regulation of Special Education Institutes and Programmes* (2002) – this document states that head teachers must know about the characteristics of students, including students with SEN, which indicated that there is a gap between theory (legislative) and practice.

Thus, the teachers felt that head teachers are one of the factors that would support implementing inclusion. In order to overcome this barrier some participating teachers suggested providing awareness training courses for head teachers about students with SEN, including students with LD, and about inclusive education (Alfahili 2009; Alddaydan, 2006).

It could be argued from the evidence provided above that the lack of awareness of head teachers may lead them to practise some decisions that may negatively influence implementing inclusion effectively or reduce the enthusiasm of teachers for implementing inclusion. Therefore, the awareness training courses that could be provided for head teachers should be based on the interactive model of disability (Wedll, 1978, cited in Lindsay, 2007). This is because training courses would provide knowledge about the characteristics of students with LD and other environmental factors that support the learning of students with LD in the mainstream classroom.

One of the factors that should be considered when implementing inclusion related to the environmental dimension is the number of students with and without LD in the mainstream classroom (Gaad and Khan, 2007 in UAE; Gal and Yeger, 2010 in Israel; Secer, 2010 in Turkey).

The analysis of the current practice indicated that there is a large disparity between the number of students in the general education classroom and in the special classroom. The number of general education students is far higher than the number of students with LD in the special classroom. The number of students in the mainstream classroom would be further increased when including students with LD with their peers, which would create difficulties

for teachers when working with such a large number of students. These difficulties around numbers of students were highlighted by some teachers in this study. In particular, the teachers proposed that larger numbers result in an increase in misbehaviour between students, difficulties in controlling students, and difficulties in teaching all students. The findings of the current study are consistent with those in the work of Agbenyega (2007) in Ghana and Alkhateeb et al. (2016), who found that a large number of students in the mainstream classroom is a major challenge to implementing inclusion.

Therefore, the majority of teachers in this study stressed the importance of having small numbers of students with LD and general education students in the mainstream classroom when inclusion is implemented (Short and Martin, 2005 in USA and Alquraini, 2011 in Saudi Arabia). The teachers highlighted a number of benefits of having a small number of students in the mainstream classroom, such as the ability to be innovative in their teaching, having enough time for teaching, and reflecting positively on students with LD in terms of benefiting from their peers. This finding is similar to other studies that indicated the importance of reducing the number of students in the mainstream classroom, for example, Cornoldi et al. (1998) in Italy suggested that the number of students should be no more than twenty general education students. However, Huber et al. (2001) found that there is no influence of the number of students with SEN on the attainment of general education students.

As a result, it is proposed that a large number of students in the mainstream classroom would act as a barrier to implementing inclusion because the teachers would face some difficulties in teaching all students, whereas a small number of students in the mainstream classroom would assist in implementing inclusion effectively.

Infrastructure of schools and classrooms is another factor that could challenge implementing inclusion. After reviewing a body of literature, Avramidis and Norwich (2002) and Alquraini (2011) in Saudi Arabia concluded that schools should be restructured in a way that would make schools more accessible to students with SEN before implementing inclusion. In addition, Avramidis et al. (2000) in the UK stressed the importance of making access to classrooms easier in terms of reorganising the classroom for students with SEN. Moreover, taken as a whole, it could be proposed that good infrastructure that makes schools and classrooms accessible for all students is an important factor to consider (WHO, 2001). Similarly, in the Index for Inclusion Booth and Ainscow (2011, 14) indicated two indicators for

inclusion related to the Infrastructure factor, which are “The school is made physically accessible to all people” and “The buildings and grounds are developed to support the participation of all”.

However, the current study highlighted that the infrastructure of the majority of schools and classrooms visited was inappropriate. In more detail, it was found that most sports grounds were unsafe, there was a limited number of sports grounds, a lack of indoor sports facilities, the design of schools was not safe as the schools consisted of multiple floors and students could look down to the ground floor easily as there were no high barriers, playgrounds were not safe, there was a lack of lifts, and the infrastructure of the special classrooms was unsafe. The inappropriate infrastructure of the majority of schools and classrooms in the mainstream schools highlight some aspects of inclusion captured in the social model of disability (Oliver, 1990, 2009). This is because environmental conditions make inclusion difficult in these schools; the focus was not on the students themselves but rather on the way that the schools were designed in order to accommodate a mainstream population.

From the discussion above, it could be argued that the existence of these issues when implementing inclusion could act as a barrier for implementing inclusion in the Saudi context. This is because inappropriate infrastructure of schools and classrooms would limit the access and participation of students with LD in school life.

Generally, these environmental factors could be a challenge to implementing inclusion. This is because the legislation in Saudi Arabia does not support implementing inclusion, low awareness of some teachers about students with LD, large numbers of students in general education classrooms and special classrooms, and inappropriate of infrastructure.

7.3.4 Relationships

The relationships dimension includes the relationships between parents and schools and the relationships between students with LD and general education students.

To begin with relationships between parents and schools, the literature advocates that the involvement of parents and the attitudes of parents towards implementing inclusion should be considered when implementing inclusion (Stanovich and Jordan, 2002 in Canada; Ahmmed et al., 2012 in Bangladesh; Elzein, 2009). In the current study, communication between teachers and parents was varied. In more detail, the teachers reported that they had poor

communication with some parents; but also, they reported that they had good communication with other parents. In fact, there were similar proportions teachers who reported positive and negative relationships. Poor communication between home and school is perceived as a barrier (Christenson, 2004). In the Saudi context, Alothman (2014) and Alanazi (2012) reported that the relationships between homes and schools are weak, in addition, Rajeh (2013) and Almuslim (2015) argued that the weak relationships with parents is because they are not providing training courses for parents about the needs and characteristics of their children. Moreover, Alqahtani (2012) suggested these weak relationships are due to the busyness and workload of parents. The teachers in the current study suggested the importance of involving the parents of students with LD when implementing inclusion, in terms of preparing their sons for inclusion, providing information about their sons and following up work with the students at home. The findings of the current study are consistent with Damianidou and Phtiaka (2013) in Cyprus which suggested that communication between parents and schools is important for supporting inclusion. Moreover, Mitchell (2014) and Deppeler (2012) argue that parents, from their experience with their children, could provide valuable information about their children which would help teachers in their teaching and management of these students. In addition, one indicator for inclusion suggested by Booth and Ainscow (2011, 14) is "Staff and parents/carers collaborate", further supporting the importance of this factor.

Another issue that the current study revealed concerned the attitude of parents of students with and without LD towards inclusion. In the literature, the finding of parents of general education students and SEN students' attitudes towards inclusion is mixed between positive attitudes (Elkins et al., 2003 in Queensland and Elzein, 2009 in Lebanon; Alanazi, 2012 in Saudi Arabia) and negative attitudes (De Boer et al., 2010 and Dimitrova-Radojici and Chichevska-Jovanova (2014) in Macedonia).

The teachers in the current study observed that some parents of general education students and students with LD have negative attitudes towards integration and the same may also apply to inclusion. However, one teacher proposed that parents of students with LD would be happy for their sons to play with their peers and this might apply to inclusion. The absence of awareness about students with LD was one factor that was highlighted by teachers that may reinforce the negative attitudes of parents. To overcome the low awareness of parents

towards inclusion and students with LD, some teachers suggested providing training courses for parents regarding inclusion and students with LD.

The negative attitudes of some parents may be related to the medical model thinking about disability (Hardie and Tilly, 2012). This is because some parents of general education students saw students with LD as “mad” (as indicated by one teacher) and they did not want their children to play with such students. In other words, these parents saw students with LD as a problem. In addition, one parent of a student with LD saw his child as deficient and he preferred his child not to study in a mainstream school, as indicated by one teacher. Taking the evidence illustrated above, the existence of poor relationships between parents and teachers could act as a barrier for implementing inclusion. This is because the teachers would miss one important factor for effective inclusion – parents. Moreover, the existence of negative attitudes of parents towards inclusion could act as a barrier for implementing inclusion.

Another relationship that could challenge implementing inclusion that is indicated in Table 10 is the relationships between students with LD and those without LD. It is highlighted in the literature that one of the factors that should be considered when implementing inclusion is the relationship between students (Hartley et al., 2015). The behaviour between students with and without LD in the current study was varied. Teachers indicated that they observed some incidents of negative behaviour between some students with and without LD, but there were also some incidents of positive behaviour. In addition, teachers observed that in the beginning of implementing integration or when new students came to schools for the first time, the behaviour between students with and without LD was negative, but after some time the behaviour changed to become positive.

Teachers observed that some negative incidents occurred between students with LD and general education students, such as rarely sitting together, hitting each other or being rude to each other. This finding is consistent with those of Nepi et al. (2015) in Italy and Carter and Spencer (2006) who found that students with SEN are not accepted by their peers in mainstream schools. Similarly, Mullick et al. (2012) found that general education students prefer not to play with students with SEN and that students with SEN are often subjected to bullying (Hartley et al., 2015 in USA). Furthermore, in the Saudi context, Rajeh (2013) and Alhusayn (2004) stated that students with LD face difficulties in interacting in school activities

in mainstream schools. The segregation of some students with LD at break time could give rise to negative behaviour between students. However, the current study is different with regard to two indicators proposed in the Index for Inclusion (2011, 14) that stress “minimising bullying” and “children help each other”.

Lack of preparation towards inclusion for students with and without SEN is one factor that was found in the current study. The importance of the preparation of students for inclusion was proposed by a number of studies, for example, Mishna (2003) suggested providing an awareness programme to reduce bullying in mainstream schools. Alaisqih (2002) in Saudi Arabia supported that providing lectures and activities about students with LD helped to change attitudes towards students with LD.

To overcome negative behaviour between students with LD and general education students and to increase the interaction between them, several teachers in the current study indicated that some techniques were introduced in their schools to support positive behaviour; these included creating a programme in schools to increase the time of contact between students and to introduce the students with LD to general education students so that they could get to know each other, providing gifts for general education students who interacted well with students with LD, and going on school trips. Teachers reported the benefit of using these techniques on students’ behaviour. Similarly, Brock et al. (2016) and Carter et al. (2015) in the USA suggest providing peer support as a technique to help to improve the relationships between students with and without SEN.

Another issue that the data indicated related to relationships between students with LD and general education students is the attitudes of both types of students towards inclusion as reported by some art education teachers for students with learning difficulties and physical education teachers for students with learning difficulties who implemented inclusion in art education and physical education occasionally. Teachers observed that students with LD are in favour of inclusion in the two subjects, while general education students in Art education also have positive attitudes towards inclusion. However, some physical education teachers for students with learning difficulties observed that some general education students were not in favour of implementing inclusion in physical education, and complained to the teachers that they did not want to play with students with LD.

One interpretation of the negative attitudes of general education students towards inclusion in physical education is that, in the case of playing football in a physical education class, the students prefer to have teammates that help them to win the game and general education students may think students with LD would not help them to win because of their disabilities (Bebetsos et al., 2013 in Greece). In contrast, in art education, there is no competition between students regarding who wins, so general education students were positive towards inclusion in this subject.

From the discussion above, it could be argued that the existence of negative behaviour between students with LD and general education students could act as barriers for implementing inclusion. This is because negative behaviour could increase the marginalisation of students with LD in mainstream schools and classrooms, and reduce their participation in school life. Moreover, the existence of negative attitudes towards inclusion may result in limited interaction with students with LD in lessons that may lead to marginalisation in mainstream classrooms. In contrast, the existence of positive behaviour between students with LD and general education students and the positive attitudes towards inclusion from students with and without LD could help to implement inclusion effectively. This is because a positive relationship could help to increase the participation of students with LD in school life and reduce their exclusion.

Generally, the relationships between parents and schools, and those between students with and without LD could challenge implementing inclusion. This is because there is some poor communication between parents and schools and some parents have negative attitudes towards integration which may apply to inclusion. Also, there is some negative behaviour between students with and without LD in mainstream classrooms and some general education students have negative attitudes towards inclusion in some subjects.

7.4 Summary

This chapter has discussed the findings of the study and linked these important aspects to key literature from the review in Chapter Three. In addition, explicit links have been made between the findings and the research questions. The chapter started with a discussion of the first research question, and it was found that the majority of teachers expressed their understanding of the term inclusion, but some showed their unfamiliarity with the term. It

was proposed that these findings may have implications for effectively implementing inclusion in mainstream schools. The discussion then moved on to explore the key factors that could challenge implementing inclusion (see Table 10 for a summary). The themes, which were derived from the data analysis, illustrated a number of issues that need to be addressed to overcome challenges that may arise when implementing inclusion in the Saudi context.

The next chapter will move on to present the conclusions drawn from this research, the limitations of the current study, the contribution to knowledge made by this thesis, and recommendations drawn from the study.

Chapter Eight: Conclusion

8.1 Introduction

This is the final chapter of this thesis. It starts by presenting an overview of the study. After that, the research contributions are highlighted. In addition, recommendations for practice are made. Then the limitations of the study are acknowledged. Moreover, suggestions for further research are presented.

8.2 Overview of the study

The current study aimed to explore the issues of implementing inclusion for students with LD in all aspects of school life in mainstream primary schools in Saudi Arabia. These issues were addressed through exploring the understanding of inclusion and revealing the factors that could act as barriers for implementing inclusion at the school level in order to develop recommendations to aid the implementation of inclusion more effectively in the Saudi context. Two research questions were employed to achieve the research aims. The research questions were: How do teachers define inclusion in mainstream primary schools in Saudi Arabia? What are the factors that act as barriers to implementing inclusion for students with LD in mainstream primary schools in Saudi Arabia?

The rationale behind the current study was that Saudi Arabia is one of the countries that ratified the Convention on the Rights of Persons with Disabilities (2006) and its optional protocol; and there is a lack of studies exploring the issues of implementing inclusion in the Saudi context, especially for students with LD, who represent a high number of the students with SEN that study in special classrooms in mainstream schools in Saudi Arabia (Alkhashrami, 2004). There are a number of studies that indicate that inclusion for students with LD is beneficial academically and socially for the students with LD (Dessementet et al., 2012; Freeman and Alkin, 2000; Peetsma et al., 2001).

After determining the aim and research questions, the literature was reviewed to provide a background to a number of interconnected areas, which are understanding SEN, understanding LD, understanding the model of disabilities, understanding inclusion, understanding the Index for Inclusion and exploring the key factors for implementing inclusion for students with SEN.

Based on the aims and research questions of the research, the Interpretivist paradigm was adopted, which led to employing a qualitative approach to data collection. In more detail, a single case study strategy (Yin 2014) was employed in the current research. Twenty-four teachers participated, including a group of general education teachers and a group of special education teachers. Moreover, interviews, observation and documents were used as data collection methods. The analysis of the data was based on the thematic analysis model (Braun and Clarke, 2006).

Generally, the findings of the current study indicated that the majority of teachers expressed their understanding of the term inclusion, albeit with different meanings among the teachers. However, there were a few teachers who expressed that they did not understand the term inclusion. Moreover, a number of barriers were found that need to be addressed in order to implement inclusion effectively in this context. These barriers included teachers' readiness for inclusion, teachers' current practice, environmental context, and relationships which include relationships between parents and schools and relationships between students themselves.

8.3 Contributions of this study

The current study contributes to the knowledge gap on inclusive education research in terms of exploring a new context, which has not been undertaken before, regarding the issues that would face implementing inclusion for students with LD in mainstream primary schools in Saudi Arabia. The research investigating aspects of inclusive education in the Saudi Arabian context is limited (Alkhateeb et al., 2016; Ashencaen Crabtree and Williams, 2010, 2013; Weber, 2012; Gaad, 2015). Moreover, the MoE is planning to implement inclusion for all students with SEN in the near future (Tatweer a; Tatweer b; the Ministry of Education and Tatweer, undated) which makes conducting such research necessary and timely in order to determine the potential barriers to implementing inclusion for students with LD.

This study contributes to the knowledge of inclusive education in the Saudi Arabian context in terms of enhancing the understanding of the factors that could challenge implementing inclusion. To the best of the researcher's knowledge, the current study is one of the first studies undertaken in the Saudi context in terms of exploring the issues of implementing inclusion for students with LD from a deep examination of the current practice of educating

students with LD and educating general education students, and from the perspectives of a group of general education teachers and a group of special education teachers, whereas the majority of Saudi research in the Saudi context investigates the teachers' attitudes towards implementing inclusion (e.g. Alothman, 2014). As indicated previously, inclusion has its role in academic achievement and social interaction for students with LD (Dessementet et al., 2012; Freeman and Alkin, 2000; Peetsma et al., 2001) and this supports the need for a greater understanding of the potential barriers to inclusion that may be experienced.

The qualitative approach adopted in the current study is also quite unique, with only a few previous studies adopting this approach to study inclusive education and special education areas in the Saudi context (Al-Kahtani, 2015; Alothman, 2014). It is suggested that this qualitative approach made it possible to explore in detail the barriers to inclusion that were relevant to this group of learners. The approaches that Saudi researchers usually adopted were quantitative (Alothman, 2014) or mixed methods approaches. Alshahrani (2014, 112) confirmed that "I became aware that all SEN research in Saudi Arabia has been located within the scientific/positivistic quantitative research paradigm". As a result, the methodology of the current research contributes to the methodology of inclusive education and special education research in the Saudi context. Generally, the barriers that would face implementing inclusion for students with LD that were found in the current study were similar to the barriers found in other international research on inclusive education (e.g. NCERI, 1994 in USA).

Furthermore, the study designed for the current research could be beneficial for other Gulf countries and Arab countries that have similar education systems for the education of students with SEN, whether in special schools or special classrooms, to explore the issues that face implementing inclusion for students with SEN. The next section will present recommendations based on the result of the current study.

8.4 Recommendations

This section will propose a number of recommendations based on the findings of the study, which would help policymakers to implement inclusion more effectively in the Saudi context. The recommendations here will be presented based on the factors that were explored in the study. It is proposed that these recommendations would help to overcome the barriers that were identified in the current work. As mentioned previously, it is difficult to support the

notion that one factor is more important than another as each factor has its role in building and supporting inclusion.

The current study found that all teachers (groups of general education teachers and special education teachers) are not well prepared to teach students with and without LD in the mainstream classroom, as mentioned in the analysis of the study plan in universities in Saudi Arabia reviewed in section (6.2.1). To prepare pre-service teachers for inclusion, it is recommended that universities in Saudi Arabia include more modules that combine theory with practice about how to implement inclusion effectively in teachers' preparation to increase the competence of teachers. In addition, universities should consider one-track teaching preparation in universities that provides teachers with the knowledge and skills of the core curriculum, SEN, and the procedure of implementing inclusion. Moreover, it is suggested that it would be advantageous to provide a diploma qualification in inclusive/SEN education for teachers who implement inclusion or for pre-service teachers after they finish university, to raise teachers' knowledge and skills about implementing inclusion effectively.

In addition, the in-service training that is provided for teachers was found to be inappropriate if inclusion were to be implemented. Thus, it is recommended that there should be provision of training courses for teachers before implementing inclusion. Such training should include discussions about what inclusion is, how to implement inclusion effectively; how to adapt the curriculum; background about students with SEN and students with LD; how collaboration works effectively between staff in schools; and how teachers can use a variety of teaching strategies to increase knowledge, skills and performance in the mainstream classroom. Generally, training courses that are provided either before or during implementing inclusion should permit all teachers to attend and not just be dedicated to SEN teachers; courses should include a practice aspect, their content should be renewed continually and not repeated over and over, enough training courses should be provided that can encompass the majority of teachers, they should be provided at a convenient time for teachers such as after school time or the teachers given a day off to attend the training course; teachers should have the possibility of implementing what they learn from the training courses in reality and the training courses should take place in a location that is convenient for the teachers, such as at the schools or in the area near the schools. These recommendations would help to support a

more appropriate provision of training and ensure that more staff can participate, thus satisfying part of the criteria highlighted in the Index for Inclusion (Booth and Ainscow, 2011).

Moreover, the current study found that the practice of teachers in mainstream schools is not conducive to implementing inclusion in terms of the curriculum, the different teaching strategies that are widely used in general education classrooms and special classrooms, the lack of resources, the absence of collaboration between personnel in schools, the non-availability of teaching assistants and assessment based on a body of prescribed knowledge. Thus, it is recommended that the curriculum should be more flexible and teachers given freedom to adapt the curriculum in a way that makes it suitable for all students. Moreover, teachers should use different teaching strategies that are suitable for each student's needs in the mainstream classroom and not rely on just one teaching strategy that is not suitable for all students including students with LD. In addition, enough resources should be provided in the mainstream classroom to help teachers in their teaching when implementing inclusion. Teachers should have flexibility in choosing the knowledge on which students will be assessed that is suitable for each student in the mainstream classroom. Moreover, collaboration between staff should be activated and teaching assistants should be provided when implementing inclusion to provide further support for teachers in the mainstream classroom.

Another finding of the current study related to environmental factors indicated inappropriate school infrastructure, a high number of students with LD and general education students in general education classrooms and special classrooms, no policy supporting inclusion and low awareness of head teachers about the abilities of students with LD. Therefore, it is recommended that the MoE should provide regulations that support implementing inclusion in mainstream schools and remove any policy, regulations and articles that support segregation. In addition, The MoE should take into account the number of students with LD and general education students in the mainstream classroom when implementing inclusion to ensure classrooms are not overcrowded. In order to raise understanding, head teachers should attend training courses about students with SEN, including students with LD, about the procedure for implementing inclusion and about their role as leaders of mainstream schools, to raise their awareness. Furthermore, sports grounds and playgrounds should be designed or refurbished with safety in mind, to reduce potential injury to all students, not just those with LD, but particularly to overcome current concerns for this vulnerable group. In

addition, there should be a higher barrier on the upper floors to make it difficult for students to look down and reduce the chance that students may fall, and where possible lifts should be introduced in mainstream schools to allow easier access to all classrooms. The classrooms should be designed in an appropriate way in terms of providing good air-conditioning, better lighting, foam put on the furniture and the floor covered by felt carpet to reduce injury to students who may fall. Finally, more sports grounds and indoor sports grounds should be provided to meet the demand from all classrooms and cope with seasonal variation in weather conditions.

Also, the relationships between parents and schools and relationships between students with LD and general education students were found in the current study to be factors that could challenge implementing inclusion. It is recommended that parents of all students should be encouraged to cooperate with teachers for all subjects in terms of following up on work with their children at home to increase their children's learning. Parents of students with LD should be involved when implementing inclusion; this should include regular communication with teachers. The low awareness of parents about students with LD and implementing inclusion should be overcome, for example by offering training courses, lectures or producing helpful factsheets for parents. In addition, any negative behaviour should be addressed and segregation between students with LD and general education students in mainstream schools should be removed from all aspects of school life to increase the interaction between students and support more positive relationships. Positive relationships between students should be further encouraged by providing more rewards.

The current study found that teachers have a negative perspective towards implementing inclusion in mainstream classrooms. Therefore, it is recommended that the negative perspective of teachers towards inclusion of students with LD be removed before implementing inclusion; however, this may be a particularly difficult barrier to remove. It is suggested that this can be facilitated by providing teachers with the skills, knowledge and appropriate support to aid them in teaching and supporting the needs of students with LD in the mainstream classroom and providing incentives for teachers to encourage them to teach in inclusive mainstream classrooms.

Generally, these recommendations could aid policymakers and stakeholders to implement inclusion more effectively in the Saudi context and help students with LD to benefit from

participating in the mainstream classroom (Jorgensen and Lambert, 2012). Furthermore, these recommendations would support schools in Saudi Arabia in working towards the Index for Inclusion (Booth and Ainscow, 2011) which proposes that such work will result in positive outcomes for all children including children with LD.

8.5 Limitations of the study

There are a number of limitations related to the current study that should be considered. These limitations are as follows:

The participants were only male teachers, as female teachers were excluded from taking part in the study, due to the gender segregation practised in Saudi schools, universities and the majority of public and private environments. This is to enforce the Islamic requirement that males and females do not interact with each other, except where there is a family relationship, such as father, mother, brother, sister, son, daughter, uncle, aunt, nephew, wife or husband; if interaction is necessary the female should be accompanied by a male member of her family. In addition, in Saudi culture, usually Saudi women would prefer not to be contacted by Saudi men, so the researcher would have had difficulty in finding a female teacher who was willing to take part in the study and be interviewed by a male researcher, which would have required more time to organise and undertake. Moreover, Saudi education policy (1995) stresses the separation between boys and girls in most aspects of school life, in terms of separate buildings, separate teachers (male teachers for boys' schools and female teachers for girls' schools), training provided, and supervision; it is only in kindergarten that co-education is allowed. Therefore, this study, in focusing on male teachers, represented one view, which is that of male teachers, whereas female teachers may have had different views and the issues in girls' schools may be different.

It is noticed that usually researchers who conducted a qualitative or mixed methods approach in the Saudi context selected a sample of the same gender as that of the researcher. For example, Alshahrani (2014), Albuhairi (2015), Alothman (2014) and Al-Kahtani (2015), as male researchers who used qualitative and mixed method approaches, chose male samples as they were restricted by Saudi culture based on the Islamic view about interacting with a female sample. Also, Alanazi (2012) and Alhudaithi (2015), as female researchers chose female samples for the same reason. Thus, this study is not representative of all views of teachers in

mainstream schools in Saudi Arabia; however, it does reveal some interesting insight into the views held by the male teachers interviewed.

Another limitation that should be considered is that the sample only included teachers (a group of general education teachers and a group of special education teachers). Therefore, parents (of students with LD and general education students), students with and without LD and other staff in schools, such as head teachers or counsellors, were excluded from taking part in the study. However, teachers reflected some perspectives on parents' relationships with schools and relationships between students with and without LD. There were a number of reasons why the study focused on teachers. Firstly, it was found in the literature that teachers are one of the most important factors for implementing inclusion effectively, as teachers have the main responsibility for such implementation (Stanovich and Jordan, 2002; Avramidis and Norwich, 2002). Another reason is that it would have been difficult for one researcher with the limitations of time and budget to cover different types of participants, in addition to the different types of teachers – a group of general education teachers and a group of special education teachers, who participated. Therefore, other types of voice such as parents, students, head teachers may have had different views and issues from those of teachers regarding implementing inclusion.

Another limitation that should be considered is that the current study was focused on exploring the issues of implementing inclusion in mainstream primary schools and did not take into account the kindergartens, intermediate and secondary stage of education. The main reason behind the focus on primary education was that the number of primary mainstream schools (thirty) that have so far implemented integration for students with LD is higher than the number of mainstream schools in intermediate education and secondary education stage to have done so. Also, all teachers in kindergartens are female, and are therefore difficult for a male researcher to access. It is acknowledged that there may be additional or different issues regarding implementing of inclusion in intermediate education or secondary education or kindergarten stage that were not explored in this study.

This study focused on the issues of implementing inclusion for students with LD, excluding other types of students with SEN. For this reason, the findings of this study should be considered to be relevant only to students with LD, whereas inclusion of other types of

students with SEN may give rise to different issues or barriers that have not been captured by this study.

One final limitation related to the study is the issue of generalisation of the findings. As mentioned in the methodology chapter, generalisation of the findings to other populations was not the intention of this study. However, the generalisation of the current study claimed it is a generalisation to the theory of inclusive education (Yin, 2014). Therefore, it is proposed that this work does make a contribution to knowledge about inclusive education of children with LD.

8.6 Suggestions for further research

In light of the findings of the current study, there are a number of areas that are not covered that could be addressed in future research. Firstly, as the current study focuses on boys' schools and male teachers, it is suggested that future work should aim to explore the issues of implementing inclusion for students with LD in girls' schools and with female teachers, to explore whether there is a difference between the issues of inclusion in boys' and girls' schools. Moreover, it is suggested that the issues of implementing inclusion in mainstream schools that implement the integration of students with LD in small towns and villages be explored, in order to uncover whether there is any difference between the issues revealed in the large city of Riyadh and in small cities and villages. This is because the environmental context such as infrastructure and resources may be important and have an impact on the potential barriers. It is suggested that the issues of implementing inclusion in intermediate, secondary or kindergarten stages be ascertained and explored so that a holistic understanding of inclusion and barriers to implementing this approach for children with LD be achieved.

Future work could explore the issues of implementing inclusion from the perspectives of parents of students with and without LD, students with and without LD, head teachers of mainstream schools and counsellors. Moreover, it is suggested that mixed methods or a quantitative approach be employed to measure the issues of implementing inclusion. This is because a quantitative or a mixed method study would enable coverage of a much larger sample over a wider and more varied geographical area, which would help to generalise the findings and to measure the impact of the factors found in this study. Finally, it is suggested

that the issues that would face implementing inclusion between different types of students with SEN be explored and compared. This would be of interest since students with different types of SEN may need different resources and forms of support, and may face different attitudes from teachers, other students, parents and the community in general. Such differences would need to be understood in order to provide effective inclusive education for multiple categories of students with SEN in one setting.

8.7 Concluding remarks

The issues and barriers that would arise when implementing inclusion for students with LD in mainstream primary schools were explored in the study. The study began by exploring the understanding of the term inclusion that the participating teachers had; after that, the study revealed a number of factors that could challenge implementing inclusion. These important findings were used in order to develop a number of recommendations for policy and practice and it is proposed that this information could help stakeholders, theoretically and practically, to implement inclusion for students with LD effectively in the Saudi context by applying the recommendations from this research to their practice.

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Appendices

Appendix 1: Interview questions

Interview questions

Section A: Understanding inclusion and integration:

- How do you understand inclusive education?
- How do you understand integration?

Section B: Teachers' preparation:

- What kind of qualifications do you have?
- Have you studied in universities or college any modules on special educational needs or modules on inclusion? If yes, what kind of models were these?

Section C: In-service training:

- Have you faced any challenges in attending in-service training?
- What are the benefits of attending in-service training?
- What are the negative effects of not attending in-service training?

Section D: Relationships between parents and teachers:

- Do you have any relationships with parents?
- If yes, what kind of discussions do you have with parents?
- What is the positive effect of having relationships with parents?
- What is the negative effect of not have relationships with parents?

Section E: Competence of teachers:

- Are you ready to teach students with LD in your classroom? Why? (for general education teachers group).
- If no, what knowledge and skills do you need to teach students with LD in your classroom? (for general education teachers group).
- What are the knowledge and skills that general education teachers need to teach students with LD in the mainstream classroom effectively? (for special education teachers group).

Section F: Relationships between students with LD and general education students:

- Tell me from your observation about the relationships between general education students and students with LD?

Section G: Collaboration between teachers:

- Have you collaborated with other teachers in teaching your students? How?

- In your opinion what are the benefits of collaboration with other teachers when implementing inclusion?

Section F: Teachers' view towards inclusion:

- What is your view about including students with MLD in your classroom?
- Do you think that increasing the salary and reducing the number of sessions you are required to provide per week would have any influence on your support of inclusion? Why?

Section G: Curriculum:

- What do you think about the curriculum subjects provided?
- Do you use the textbook provided? Why?
- Have you adopted the curriculum? How? Why?

Section H: Teaching strategies:

- How do you teach your students? Give me an example?
- How do you teach low attainment students?

Section I: Assessment:

- How do you assess your students?
- How do you reassess the students who do not acquire the knowledge?

Section J: Administrative:

- In your opinion, what is the role of head teachers in supporting implementing inclusion effectively?

Section K: Teacher's assistant:

- In your opinion, what is the role of the teacher's assistant in supporting the teachers in the mainstream classroom?

Section L: Resources:

- What kind of resources do you have in your classroom?
- What kind of resources do you not have?
- What are the benefits of using resources in your classroom?
- Are there any negative influences of not using resources in your classroom?
- Have you visited the resources room in your school?
- What are the benefits of visiting the resources room?

Section M: Number of students in classroom:

- How many students are there in your classroom?
- Do you think there is an influence of classroom size on implementing inclusion?

Section M: Infrastructure:

- Is your school ready for implementing inclusion? Why?
- Is your classroom ready for implementing inclusion? Why?

Appendix 2: Interview guide

Interview Guide

Introduction:

Firstly, I would like to thank you for agreeing to take part in the current research. As you will read in the information sheet, the study aims to explore the issues of implementing inclusion for students with LD with their peers in mainstream classrooms. There are a number of topics that will be covered during the interview regarding your practice in the classroom and your opinion about implementing inclusion.

Are you ready to start the interview?

Provide information sheet ☐

Provide Informed consent and ensure it is signed ☐

Topics that need to be covered

Meaning of inclusion	Teaching strategies	
Qualifications	Assessment	
In-service training	Teacher's assistant	
Relationships with parents	Resources	
Competence of teachers	Number of students	
Students' relationships	Infrastructure	
Collaboration between teachers	Curriculum	

Conclusion:

Thank you very much for your time and the valuable information you have provided. I really appreciate it. If you have any questions or want more information, please do not hesitate to email me or contact me on my phone.

Thank you

Appendix 3: Interview - information sheet



Information sheet

(Teacher Interview)

First of all, I would like to thank you to agreeing to take part in this study and to be interviewed.

I would like to introduce myself. My name is Mohammed Alhammad. I am a PhD student at the university of Lincoln.

The study aims to explore the key issues that would arise when students with learning difficulties include with their peers in mainstream classroom in all academic subjects.

To explore your view, interviews will be conducted. I would like your permission to record the interview. However, you have the right to reject the use of the recorder. Also, you have the right to stop the recording at any time and delete all the interview or part of it without giving any reason. All the data recorded will be confidential and stored in a computer secured by a password and no one will have access to the data except the researcher and his supervisors. In addition, no real names will be used in the write up of the research and your name and your school's name will be anonymised. Furthermore, you have the right to withdraw at any time from the interview without giving any reason. In addition, you have the right to ask for clarification of any question you do not understand and decline to answer any question you do not wish to answer.

If you have any questions or queries you can contact the researcher through mobile/email/ text or his supervisor (see below).

Again, thank you very much for agreeing to take part in this study. I hope this interview pleasant to you.

The researcher

Mohammed Alhammad



Mamh8@yahoo.com

supervisor

Dr. Andrea Abbas

aabbas@lincoln.ac.uk

Appendix 4: Interview - informed consent



Informed consent (Interview)

Please tick the boxes below to show your agreement with following statements:

- I have read the information and understanding the aim of the study. ☐
- I am agreeing to take part in this study voluntarily. ☐
- I understand that the data will be confidential. ☐
- I understand that all the names of participating teachers and schools will be anonymised. ☐
- I understand that the data will be stored securely on computer and no one can access the data except the researcher and his supervisors. ☐
- I understand that the interview will be recorded and I have the right to reject the recorder or stop it at any time without giving any reason. ☐
- I understand that I have the right to withdraw at any time without providing any reason. ☐
- If you wish to read the transcript of your interview, please provide your email:
.....
- If you wish to add some comment or conditions regarding the interview or the study, please write them in the box below.

Participant's signature:.....

Date:.....

Researcher's signature:

Date:.....

Appendix 5: Interview background

Interview background

Day	
Date	
Time	
School name	
Interviewee name	
Interviewee ID	
Mobile phone	

Appendix 6: Observation sheet

Observation sheet

Name of teachers	
Name of school	
Classroom Id	
Classroom grade	
Name of subject	
Topic taught	
Number of students	
Time	
Date	

Appendix 7: Information sheet and informed consent for teachers' observation



Information sheet (Observation -Teachers)

First of all, I would like to thank you for agreeing to take part in this study and to be observed.

I would like to introduce myself. My name is Mohammed Alhammad. I am a PhD student at the University of Lincoln in the UK.

The study aims to explore the key issues that would arise when students with learning difficulties include with their peers in mainstream classroom in all academic subjects.

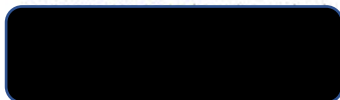
To explore issues related to inclusion, observations will be conducted. I would like your permission to observe you in the classroom and make notes about what is happening. However, even if you do agree to participate, you have the right to withdraw at any time from the observation without giving any reason and all the data obtained will be deleted from my computer. All the data obtained will be confidential and stored in a computer secured by a password, and no one will have access to the data except the researcher and his supervisor. In addition, no real names will be used and your name and that of your school will be anonymised.

If you have any questions or queries, you can contact the researcher by mobile/email/text or his supervisor (see below).

Again, thank you very much for agreeing to take part in this study. I hope this observation is pleasant for you.

The researcher
Mohammed Alhammad
Mamh8@yahoo.com

supervisor
Dr. Andrea Abbas
aabbas@lincoln.ac.uk





Informed consent (Observation - Teachers)

Please tick the boxes below to show your agreement with the following statements:

- I have read the information and understand the aim of the study. ☐
- I agree to take part in this study voluntarily. ☐
- I understand that the data will be confidential. ☐
- I understand that all the names of the participating teachers and schools will be anonymised. ☐
- I understand that the data will be stored securely on computer and no one can access the data except the researcher and his supervisor. ☐
- I understand that I have the right to withdraw from the observation at any time without providing any reason and all data will be deleted. ☐

If you wish to read the field notes regarding the observation, please provide your email address:

.....

If you wish to add some comment or condition regarding the observation or the study, please write this in the box below.

Participant's signature:.....

Date:.....

Researcher's signature:

Date:.....

Appendix 8: Information sheet and informed consent for parents of students.



Information sheet

(Observation - Parents of students)

First of all, I would like to thank you for agreeing to your son taking part in this study and being observed.

I would like to introduce myself. My name is Mohammed Alhammad. I am a PhD student at the University of Lincoln in the UK.

The study aims to explore the key issues that would arise when students with learning difficulties include with their peers in mainstream classroom in all academic subjects.

To explore issues related to inclusion, observations will be conducted, which is why I would like your permission to observe your son in the classroom. However, if you do agree to your son's participation, you have the right to withdraw him at any time from the observation without given any reason and all of the data obtained will be deleted. All the data obtained will be confidential and stored in a computer secured by a password and no one will have access to the data except the researcher and his supervisor. In addition, no real names will be used and your name, and those of your son and his school, will be anonymised.

If you have any questions or queries, you can contact the researcher by mobile/email/text or his supervisor (see below).

Again, thank you very much for agreeing to your son taking part in this study

The researcher
Mohammed Alhammad

[Redacted signature] r)

Mamh8@yahoo.com

supervisor
Dr. Andrea Abbas
aabbas@lincoln.ac.uk



Informed consent (Observation - Parents of students)

Please tick the boxes below to show your agreement with the following statements:

- I have read the information and understand the aim of the study. ☐
- I agree to my son taking part in this study voluntarily. ☐
- I understand that the data will be confidential. ☐
- I understand that all the names of the participating students and schools will be anonymised.
☐
- I understand that the data will be stored securely on computer and no one can access the data except the researcher and his supervisor. ☐
- I understand that I have the right to withdraw my son at any time without providing any reason and all data will be deleted. ☐

If you wish to read the field notes of the observation, please provide your email address:

.....

If you wish to add some comment or condition regarding the interview or the study, please write this in the box below.

Parents' signature:.....

Date:.....

Researcher's signature:

Date:.....

Appendix 9: Information sheet and informed consent for head teachers



Information sheet (Observation - Head teachers)

First of all, I would like to thank you for agreeing to the school environment and students during break time being observed.

I would like to introduce myself. My name is Mohammed Alhammad. I am a PhD student at the University of Lincoln in the UK.

The study aims to explore the key issues that would arise when students with learning difficulties include with their peers in mainstream classroom in all academic subjects.

To explore issues related to inclusion, observations will be conducted. I would like your permission to observe the school environment and break time. If you do agree to conduct observing in the school. You have the right to ask for all or part of the data to be deleted without giving any reason.

All the data obtained will be confidential and stored in a computer secured by a password and no one will have access to the data except the researcher and his supervisor. In addition, no real name will be used and your name and that of your school will be anonymised.

If you have any questions or queries, you can contact the researcher by mobile/email/text or his supervisor (see below).

Again, thank you very much for agreeing to take part in this study.

The researcher
Mohammed Alhammad



Mamh8@yahoo.com

supervisor
Dr. Andrea Abbas
aabbas@lincoln.ac.uk



Informed consent

(Observation - Head teachers)

Please tick the boxes below to show your agreement with the following statements:

- I have read the information and understand the aim of the study. ☐
- I agree to the researcher observing the school environment and students at break time. ☐
- I understand that the data will be confidential. ☐
- I understand that all the names of the staff and students in the schools will be anonymised. ☐
- I understand that the data will be stored securely on computer and no one can access the data except the researcher and his supervisor. ☐

If you wish to read the field notes of the observation, please provide your email address:

.....

If you wish to add some comment or condition regarding the observation or the study, please write this in the box below.

Head teachers' signature:

Date:

Researcher's signature:

Date:.....

Appendix 10: supervisor letter



November 2013

TO WHOM IT MAY CONCERN

**Re: Mohammed Alhammad – ID ALH11203385
PhD in Educational Research & Development**

I am writing to confirm that Mohammed Alhammad is a full time student enrolled onto our PhD in Educational Research & Development (Special Education) on a full-time basis.

To complete his thesis he is required to return to Saudi Arabia to complete his data collection in order for the results to be analysed and included in his findings. The title of his thesis is "Issues of inclusion: students with learning difficulties in mainstream primary schools in Saudi Arabia". He will return 1 January 2014 and I expect him to complete this process by 31 March 2014. I am happy to support his time away in order for him to do this.

Please do not hesitate to contact me should you require any further information.

Yours faithfully

A handwritten signature in black ink that reads "Andrea Abbas".

**Dr Andrea Abbas
Centre for Educational Research and Development
University of Lincoln
Brayford Pool
Lincoln LN6 7TS
England**

**E: aabbas@lincoln.ac.uk
T: + 44 (0)1522 886212**

College of Social Science

University of Lincoln Brayford Pool Lincoln LN6 7TS United Kingdom
www.lincoln.ac.uk T +44 (0)1522 882000

Appendix 11: Saudi Cultural Bureau letter

ROYAL EMBASSY OF SAUDI ARABIA
CULTURAL BUREAU
LONDON



سفارة المملكة العربية السعودية
الملحقية الثقافية
لندن

التاريخ ١٤٣٥/١/٢٤ هـ

إفادة

رقم الملف B304

تفيد الملحقية الثقافية بسفارة المملكة العربية السعودية في لندن بأن الطالب/ محمد عبدالله بن محمد الحماد سجل مدني [REDACTED] والمبتعث من قبل جامعة الإمام محمد بن سعود الإسلامية لدراسة الدكتوراه في مجال التربية الخاصة بجامعة Lincoln قد التحق بالبعثة بتاريخ ١٤٣٢/٣/٧ هـ ومن المتوقع أن تنتهي بعثته بتاريخ ١٤٣٦/١١/٢٨ هـ يريد القيام برحلة علمية إلى المملكة العربية السعودية لجمع بيانات تتعلق بالبحث الخاص بدراسته لمرحلة الدكتوراه وهو بعنوان (أبرز القضايا المتعلقة بتطبيق الدمج الشامل للطلاب ذوي الإعاقة العقلية البسيطة في المملكة العربية السعودية).

وقد أعطيت له هذه الإفادة بناءً على طلبه لتقديمها إلى إدارة التربية والتعليم في منطقة الرياض لمساعدته في جمع البيانات المطلوبة .

وتقبلوا فائق التحيات،،،

ن: الملحق الثقافي

بسفارة المملكة العربية السعودية في لندن

فيصل بن محمد المهنا أبا الخيل


٢٠٢

Appendix 12: General Administration of Education in Riyadh letter

الرقم : ٣٥٣٧٩٦٩

التاريخ : ١٤٣٥/١١/٢٥

المرفقات : أداة باحث



وزارة التربية والتعليم
Ministry of Education

المملكة العربية السعودية

وزارة التربية والتعليم

٢٨٠

إدارة العامة للتربية والتعليم بمنطقة الرياض

إدارة التخطيط والتطوير

تسهيل مهمة باحث

الاسم		بطاقة السجل المدني	
محمد بن عبد الله محمد الحماد		[REDACTED]	
العام الدراسي	الدرجة العلمية	الكلية	الجامعة
١٤٣٥/١٤٣٤ هـ	الدكتوراه	مركز البحوث التربوية	lincoln
عنوان الدراسة: أبرز القضايا المتعلقة بتطبيق الدمج الشامل للطلاب ذوي الإعاقة العقلية البسيطة في المملكة العربية السعودية			
عينة الدراسة : معلم			

المكرم مدير مدرسة

وفقه الله

السلام عليكم ورحمة الله وبركاته ، وبعد :

بناء على تعميم معالي الوزير رقم ٥٥/٦١٠ وتاريخ ١٤١٦/٩/١٧ هـ بشأن تفويض الإدارات العامة للتربية والتعليم بإصدار خطابات السماح للباحثين بإجراء البحوث والدراسات ، وحيث تقدم إلينا الباحث (الموضحة بياناته أعلاه) بطلب إجراء دراسته ، ونظراً لاكمال الأوراق المطلوبة نأمل تسهيل مهمته .

مع ملاحظة أن الباحث يتحمل كامل المسؤولية المتعلقة بمختلف جوانب البحث ، ولا يعني سماح الإدارة العامة للتربية والتعليم موافقتها بالضرورة على مشكلة البحث أو على الطرق والأساليب المستخدمة في دراستها ومعالجتها.

شاكرين لكم وتقبلوا تحياتي..

مدير إدارة التخطيط والتطوير

٢٥
سعود بن راشد آل عبد اللطيف