The inclusion of students with disabilities in Jordan: The Impact of Teachers’ Attitudes, Beliefs, Knowledge and Resources

Mahmoud Muhanna

Submitted for the Award of
Doctor of Philosophy in the School of Education

Western Sydney University

March, 2018
ACKNOWLEDGMENTS

My sincere thanks to my supervisors, Associate Professor Christine Johnston and Associate Professor Danielle Tracey, for their technical guidance, time, suggestions and advice to aid the completion of this research study. I would also like to express my gratitude to staff at the School of Education at Western Sydney University, and especially Dr Russell Thomson for his advice with data analysis. My gratitude also goes to staff at the Ministry of Education and Ministry of Social Development in Jordan for assisting me to conduct this research study.

I also would like to thank my best friends and brothers, Mwafaq Alsheyyab, Mohammad Al-Shennaq, Jawad Al-Ajlouni, Imran Malkawi, Dr Thamer Malkawi, Mohammad Malkawi and Amer Malkawi for their emotional support.

To the five most important people in my life, my beloved wife Buthayna Alomari and children Sadeen, Muhannad, Adam and Elias, thank you for your support and understanding throughout my years of study. I am thankful to my sisters, Sokaina, Buthayna, Somaia and Tamara, for their encouragement to complete my study. Finally, I am grateful to my parents for their unconditional love, moral support and understanding, throughout not only my years of study, but also throughout my life.

My thanks to Lilla Wendoloski and Monique Perrin for their professional editing of this thesis with respect to language completeness and consistency and to Sue Heald for her invaluable assistance with formatting.
STATEMENT OF AUTHENTICATION

The work presented in this thesis is, to the best of my knowledge and belief, original except as acknowledged in the text. I hereby declare that I have not submitted this material, either in full or in part, for a degree at this or any other institution.

Mahmoud Muhanna
# TABLE OF CONTENTS

Acknowledgements ........................................................................................................................................ ii
Statement of Authentication ......................................................................................................................... iii
Table of Contents .......................................................................................................................................... iv
List of Tables .................................................................................................................................................. 1
List of Figures ................................................................................................................................................. 1
Table of Abbreviations ................................................................................................................................. 1

Abstract ......................................................................................................................................................... ii

1 The Inclusion of Students with Disabilities in Jordan .............................................................................. 1
   1.1 The paradigm shift towards inclusive education around the world ............................................. 1
   1.2 Critical factors affecting successful implementation of inclusive education ............................ 1
   1.3 Inclusive education in Jordan ........................................................................................................... 2
   1.4 Scope of this research ...................................................................................................................... 2
   1.5 The significance of this study ......................................................................................................... 3

2 Identifying the Gaps Between Legislation, policy and practices in Inclusive education in Jordan 6
   2.1 Definition and some ethical aspects of “Inclusive Education” ...................................................... 7
   2.2 History of Inclusive Education Internationally ............................................................................. 9
       2.2.1 Universal Declaration of Human Rights (1948) ................................................................. 10
       2.2.2 Normalisation and segregation (1960s) .............................................................................. 10
       2.2.3 World Declaration on Education for All (1990) ............................................................... 11
       2.2.4 Developments in the 1990s ................................................................................................. 12
       2.2.5 Salamanca Statement (1994) ............................................................................................. 12
       2.2.6 UN Convention on the Rights of Persons with Disabilities (2006) ................................. 13
   2.3 The History of Inclusive Education in Western Countries ............................................................ 14
       2.3.1 Australia ............................................................................................................................... 15
       2.3.2 United States ....................................................................................................................... 20
       2.3.3 United Kingdom .................................................................................................................. 23
       2.3.4 Canada ............................................................................................................................... 25
   2.4 Overview of the Population of People with Disabilities in MENA region and in Jordan specifically 27
   2.5 The History of Legislation and Inclusive Education Policy in Jordan ............................................. 29
       2.5.1 Constitution (1952) ............................................................................................................. 29
       2.5.2 Law of Education 1964 ........................................................................................................ 29
       2.5.3 National Survey (1979) ........................................................................................................ 29
       2.5.4 Disabled Law 1989 ............................................................................................................ 30
       2.5.5 The Law for the Welfare of Disabled Persons 1993 ........................................................... 30
       2.5.6 Signing of UN Convention (2007) ..................................................................................... 32
       2.5.7 Recent and current legislation and inclusive education policy within Jordan .................... 32
       2.5.8 The Law on the Rights of Persons with Disabilities 2007 .................................................. 34
   2.6 History of Special Education in Jordan ............................................................................................. 37
       2.6.1 Teacher education and training ........................................................................................... 39
       2.6.2 Resource rooms in Jordan ................................................................................................... 40
Examining the Construct Validity of the Malkawi measure via Exploratory Factor Analysis

6. Results: Interviews Analysis

6.1 Inclusive Education Policy

6.2 Teacher Preparation

6.3 Resources

6.4 Teacher Attitudes

6.5 Teacher knowledge

7. Results: Examining the Psychometric Properties of the Subscales in the Survey

7.1 Examining the Construct Validity of the Malkawi measure via Exploratory Factor Analysis
# LIST OF TABLES

Table 5.1: Teachers’ Background as Disclosed in the Interview ............................. 82

Table 5.2: Gender ........................................................................................................ 87

Table 5.3: Age Group .................................................................................................. 87

Table 5.4: Level of Education Taught ........................................................................ 87

Table 5.5: Formal Qualification in Special Education .................................................. 87

Table 5.6: Highest Qualification Attained ................................................................... 88

Table 5.7: Current Teaching Role ............................................................................... 88

Table 5.8: Work Location ........................................................................................... 89

Table 5.9: Number of Students with Disability Taught, by Type of Disability .......... 89

Table 7.1: Results of the exploratory factor analysis .................................................... 131

Table 7.2: Conceptual and Operational Definitions of the Five Factor Scores .......... 135

Table 7.3: Cronbach’s Alphas for the Five Subscales .................................................. 136

Table 8.1: Test of Normality of the Continuous Variables from the Research Data ... 139

Table 8.2: The Effectiveness of Teacher Preparation Course to Teach Students with Different Types of Disabilities for Special education teachers. ......................... 144

Table 8.3: Correlations Between the Attitudes Subscale and Experience Teaching Types of Disabilities ......................................................................................................... 150

Table 8.4: Mean Rank for Special and General education Teachers of Necessary Knowledge to Teach Students with Disabilities ......................................................... 152
Table 8.5: Correlation among All Constructs Scores (Inclusive Education policy, Teacher Preparation, Resources, Teacher Attitudes, Teacher Knowledge) ........157

Table 8.6: Final Regression Model .................................................................158

Table 9.1: Tool B: Analysis of the 2007 Law, Situational Analysis and NSPD 2010-2015. ........................................................................................................................................163

Table 9.2: Strengths and Weaknesses of the Inclusive Education Strategies........185

Table A1: Summary of the Interview Themes, Subthemes and Quotes.................253
LIST OF FIGURES

Figure 2.1: History of Inclusive Education Internationally …………………………… 10

Figure 3.1: Bronfenbrenner Ecological Model (Bronfenbrenner, 1994) ………………… 46

Figure 5.1. Exploratory Sequential Mixed-Method Design for the Current Study ………… 78
## TABLE OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASD</td>
<td>Autism Spectrum Disorder</td>
</tr>
<tr>
<td>DDA</td>
<td>Disability Discrimination Act</td>
</tr>
<tr>
<td>DOS</td>
<td>Department of Statistics</td>
</tr>
<tr>
<td>DSE</td>
<td>Disability Standards for Education</td>
</tr>
<tr>
<td>EFA</td>
<td>Education for All</td>
</tr>
<tr>
<td>HCAPD</td>
<td>Higher Council of Affairs of Persons with Disabilities</td>
</tr>
<tr>
<td>HI</td>
<td>Hearing Impairment</td>
</tr>
<tr>
<td>IDEA</td>
<td>Individuals with Disabilities Education Act</td>
</tr>
<tr>
<td>IEP</td>
<td>Individual Educational Programs</td>
</tr>
<tr>
<td>LD</td>
<td>Learning Disabilities</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td>MERN</td>
<td>Manitoba Education Research Network</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>MR</td>
<td>Mental Retardation</td>
</tr>
<tr>
<td>MSD</td>
<td>Ministry of Social Development</td>
</tr>
<tr>
<td>NCHR</td>
<td>National Centre for Human Rights</td>
</tr>
<tr>
<td>NCLB</td>
<td>No Child Left Behind</td>
</tr>
<tr>
<td>NDIS</td>
<td>National Disability Insurance Scheme</td>
</tr>
<tr>
<td>NSPD</td>
<td>National Strategy on Persons with Disabilities</td>
</tr>
<tr>
<td>PCA</td>
<td>Principal Components Analysis</td>
</tr>
<tr>
<td>UAE</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>United Nations Programme on HIV/AIDS</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>UNGEI</td>
<td>United Nations Girls’ Education Initiative</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>VI</td>
<td>Visual Impairment</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WSUHREC</td>
<td>Western Sydney University Human Research Ethics Committee</td>
</tr>
</tbody>
</table>
ABSTRACT

As a policy, inclusive education aims to provide equal educational opportunity for all students, regardless of their abilities. However, inclusive education policy on its own cannot guarantee the successful inclusion of students with disabilities in the general classroom. Many factors intervene at the level of policy implementation which determine the success or failure of inclusive education policy in a country. Although there has been much research on identifying the facilitators and barriers to inclusion in Western education systems, little research has been done in Jordan where an inclusive education policy has been in place since 1993. This thesis reports on the first large-scale study exploring the factors that teachers identify as critical for implementing effective inclusive education in Jordan.

Several critical issues appear to be associated with teachers’ perception of the effective implementation of inclusive education in Jordan. These factors include: (1) the policy itself, (2) the availability of resources, (3) teacher attitudes, (4) teacher preparation and (5) teacher knowledge (Alkhateeb, Hadidi, & Alkhateeb, 2016; UNESCO, 2008a). An exploratory sequential mixed-method design was used in this study, which included (1) qualitative interviews with six teachers: three from special education schools and three from general schools; 2) a quantitative survey developed for this project and exploring teacher perception of the factors outlined above, with 341 teachers (183 with a general education background and 158 with a special education background), using an instrument, the Malkawi Measure, developed for this project to explore teachers’ perceptions of the factors outlined above and (3) an analysis of the Jordanian inclusive education policy and strategy related to inclusive education. The data for the qualitative phase were analysed using descriptive thematic analysis whilst the quantitative data were analysed using the statistical software package SPSS version 24. The framework that was used in the policy analysis is the United Nations Girls’ Education Initiative (UNGEI) framework (UNGEI, 2008, 2010) on equity and inclusive education.

The items in the survey for each subscale (based on the five named factors) were tested for reliability and validity and were subjected to an exploratory factor analysis. Internal
consistency was also measured using Cronbach’s alpha, with an overall value of higher than 0.70 achieved.

Exploratory factor analysis (EFA) was performed using all 40 items included in the survey to measure the five constructs: inclusive education policy, teacher preparation, resources, teacher attitudes and knowledge. The aim of this exercise was to identify the structural pattern of the items. A five-factor structure was found.

Multiple linear regression was used as the main multivariate technique in the data analysis to identify the factors affecting the level of confidence that teachers have in their ability to teach students with disabilities. Teacher knowledge; teacher preparation and understanding of inclusive education policy; holding a special education qualification; level of qualifications; and years of experience in general education were found to account for a significant proportion of the level of confidence that teachers have in their ability to teach students with disabilities. The independent variables explained 42.8% of the variance. The most important predictor of the teachers’ levels of confidence was their knowledge of inclusive education followed by having a qualification in special education.

The results indicate that more than one factor is associated with successful inclusive education in Jordan. It seems that, to achieve educational equity for diverse groups of learners in general education schools in Jordan, two key aspects must be considered: the changes needed for the development of an inclusive education system and the associated preparation of teachers. Therefore, the goal of creating inclusive education in Jordan should not rely only on the needs of students with disabilities but must include teacher preparation, knowledge, attitudes and resources, the education system and policies.

Overall, the findings suggest that inclusive education in Jordan will not occur unless the implementation of an inclusive education policy is combined with well-organised practices that directly address inequity in teacher preparation, teacher attitude, teacher knowledge and the resources available across the education system in Jordan.
1 THE INCLUSION OF STUDENTS WITH DISABILITIES IN JORDAN

1.1 The paradigm shift towards inclusive education around the world

The inclusion of students with disabilities in the general classroom has undergone a major policy shift over the past three decades in most countries around the world (Individuals with Disabilities Education Act (2004) (US); UNESCO, 2008b). From the previous approach of educating students with disabilities in segregated settings and grouping them according to their abilities, a new movement has emerged, known as inclusive education, concentrating on providing equal education opportunities for all students, regardless of their abilities (Foreman & Arthur-Kelly, 2008). The consequences of this inclusive education policy include changes in the roles and responsibilities of all personnel and professionals who work with students with disabilities (Laluvein, 2010; UNESCO, 2008b).

The United States provides an example of this paradigm shift. In the United States, the Individuals with Disabilities Education Act (1975) (US) (IDEA) was legislated to eliminate discrimination against people with disabilities, and to promote community acceptance of the principle that people with disabilities have the same fundamental right to education as all members of the community. Inclusive education has increasingly come to be understood more broadly as a reform that welcomes and supports diversity amongst all learners regardless of their abilities (Hodkinson, 2007; UNESCO, 2008b; Vakil, Welton, O'Connor, & Kline, 2009).

1.2 Critical factors affecting successful implementation of inclusive education

Educational policies on their own cannot guarantee the successful inclusion of students with disabilities in the general classroom (Haihambo & Lightfoot, 2010). Several
critical factors from the literature appear to be associated with policies to implement inclusive education. These factors include an effective implementation system, sufficient funding support, administrative support, professional support and teacher preparation and knowledge (Laluvein, 2010; Orr, 2009; Winzer & Mazurek, 2011).

1.3 Inclusive education in Jordan

Similar to the US, the education system in Jordan is based on the right to education for all, with Article 4 of the Law for the Welfare of Disabled Persons (1993) (Jordan) providing that all students with disabilities have the opportunity to access the learning and social environment (Higher Council of Affairs of Persons with Disabilities, 2015; Ministry of Education, 2004). Equally here, too, inclusive education policies alone will not improve the implementation of inclusive education unless they are accompanied by policies and practices that directly address inequity in the resources available to the education system in general, and at the classroom level in particular. Including students with disabilities in general classrooms may not be an easy matter. However, it is very important to create this shared goal among students with disabilities, their families, community members and education stakeholders (Idol, 2006). All education stakeholders, professionals and community members need to work collaboratively to achieve successful social and educational inclusion of students with disabilities. Classroom teachers can share their experiences and knowledge with other teachers and professionals to better facilitate inclusive education (Shade & Stewart, 2001; Soresi, Nota, & Wehmeyer, 2011).

1.4 Scope of this research

A review of the literature reveals that successful inclusive education relies on several factors: inclusive education policies, teacher preparation, resources, teacher attitude and teacher knowledge. Therefore, the current research study investigates the role of these factors and their impact in the context of Jordan’s inclusive education system.

This research study builds on the results of a previous study conducted by the present researcher (Muhanna, 2010) which explored the attitudes of general and special education teachers towards the inclusion of students with autism in general classrooms in Jordan. This study found that both groups of teachers held a slightly negative attitude. This is probably
because inclusion of students with disabilities only started being implemented in Jordan in 1993, and teachers did not yet know what to expect. In addition, the type of academic preparation and skills that teachers receive in Jordan can lead to the expression of negative attitudes (Muhanna, 2010).

The focus of this research is to broaden our understanding of the needs of classroom teachers in Jordan beyond simply their attitudes, and to generate strategies and recommendations to support teachers in building their capacity to include students with disabilities in their classrooms. Working with and including students with disabilities is one of the most challenging tasks facing schools around the world as well as in Jordan and this study seeks to make a direct contribution to this challenge.

Over the past few decades, the number of students identified with disabilities in Jordan has increased significantly and so too has the need to provide these students with effective support so they can participate and learn within schools (Al Jabery & Zumberg, 2008; Al Khatib, 2007; Alghazo, 2004; Bataineh, 2009; Muhanna, 2010). This study addresses this need by generating information that contributes to the development and implementation of effective guidelines to support classroom teachers as well as the whole education system in Jordan. Policies and practices of inclusive education are still developing, and it might be that the current education system, its resources and teacher preparation and knowledge are inadequate. With the combined efforts of all stakeholders, appropriate policies, incentives and best practices can be put into place. This approach will ensure that teachers can acquire the knowledge and skills necessary to include students with disabilities in the general classroom effectively.

1.5 The significance of this study

This research study is significant because the main goal of the Jordanian welfare declaration in Article 4 of the Law for the Welfare of Disabled Persons (2007) (Jordan) is to support people with disabilities, with the help of families and the community. In general, it also aims to enable students with disabilities to achieve the goals of human rights and social development, which is the responsibility of the education system, teachers, families and communities. There is a dearth of empirical research conducted in Jordan pertaining to this
issue, and a lack of adequate research tools to investigate this issue in Jordan. The current study addresses these two limitations within the current inclusive education research field.

This research study is significant also because the current practices in Jordan reveal many examples of students who do not receive an education due to their disability (Al Jabery & Zumberg, 2008; Al Shoura & Ahmad, 2014). Nonetheless, Jordan’s inclusive education policy emphasises equity and the value of building positive school communities for every child, regardless of their abilities (Higher Council of Affairs of Persons with Disabilities [HACPD], 2015).

The inclusive education of students with disabilities cannot be ensured by institutional policies alone (Haihambo & Lightfoot, 2010). On the contrary, and as discussed in Chapter 3, implementing successful inclusive education entails multiple factors, including an effective implementation system, sufficient funding, administrative support, professional support and adequate teacher preparation and knowledge (Laluvein, 2010; Orr, 2009; Winzer & Mazurek, 2011). The few studies conducted in Jordan (Al Jabery, Al Khateeb, & Zumberg, 2012; Al Khatib, 2007; Al Shoura & Ahmad, 2014; Al Zyoudi, Al Sartwai, & Dodin, 2011; Aloidat, Almakanin, & Zumberg, 2014; Muhanna, 2010) have also shown that the level of inclusion in general schools is limited. As a result of individuals being denied a beneficial education, numerous young people lack the skills and knowledge essential for adult life, which has a negative impact on the economy and society. This study seeks to investigate these problems and gaps in order to find reasons and solutions. Therefore, learning about the needs and preparation of classroom teachers will assist the Jordanian school system in developing resources and training programs that are relevant to support teachers’ capacity to include students with disabilities in their classrooms.

The literature suggests that the primary solution to the challenge of including students with disabilities in the general classroom is the teacher (Avramidis & Norwich, 2002; Soresi et al., 2011). A teacher has a special role to play when trying to maximise the learning potential of students with disabilities. It becomes the teacher’s role to create a welcoming environment and provide students with ongoing opportunities to learn, share and engage in all classroom activities. Determining what alternative assessment needs to occur is another area
where teachers need to make changes to specifically support students with disabilities in the general classroom.

To achieve educational equity for students with disabilities, it is necessary to consider key aspects of the changes needed for the development of an inclusive education system and for the associated professional development of teachers (Carrington, 1999; Forlin & Chambers, 2011; Sims, 2010). Therefore, the goal of creating inclusive education should not consider only the needs of students with disabilities but must also include teacher preparation, school districts, the education system and educational policies (Carrington, 1999; Laluvein, 2010; Orr, 2009; Winzer & Mazurek, 2011). Moreover, inclusive education policies alone will not achieve inclusive education unless they are accompanied by well-organised and well-supported practices that directly address inequity in the resources available across the education system (Forlin & Chambers, 2011; UNESCO, 2008b; United Nations, 2015b).

To summarise, this research study aims to contribute to the development of the inclusive education system in Jordan and the implementation of effective methods and procedures to support classroom teachers by conducting one of the first empirical studies within Jordan, while establishing a new robust measure to be used in future research in Jordan. Finally, it should also be noted that, people-first language is used throughout the thesis except where there is a direct quote from a research article or a participant.
2 IDENTIFYING THE GAPS BETWEEN LEGISLATION, POLICY AND PRACTICES IN INCLUSIVE EDUCATION IN JORDAN

This chapter will commence with a definition of inclusive education to provide a comprehensive foundation before exploring a wide range of literature relevant to the legislation and policy around inclusive education, not only within Jordan, but also at the global level. Research literature will be synthesised and critiqued in order to draw a clear picture of past and present inclusive education practices. To aid this, legislation and policy relating to inclusive education will be examined with respect to how they have been implemented and applied historically. Past and present practice within Jordan with respect to inclusive education will then be examined. These critiques will reveal the synergies and gaps evident between inclusive education policy and practices in the Jordanian context.

A global perspective will provide insights into how Jordan has followed international examples. Although the larger international picture is an essential aspect of this study, micro studies highlighting specific components of classroom practice are also important. As such, this literature review is divided into two sections: the first examines international policies from an historical perspective up to the present day; the second confines its consideration of policies to Jordan.

The aims of this chapter are to review previous legislation on inclusive education globally, to outline the prevalence of disabilities in Jordan and to understand both the issues related to the current Jordanian legal framework and their impact on inclusive education and its practices. To achieve these aims, policy models and their practices will be discussed in detail. In the following chapter the other critical factors of resources, teacher attitude, teacher
preparation and knowledge which are related to inclusive education in Jordan will be considered.

2.1 Definition and some ethical aspects of “Inclusive Education”

The World Health Organization (WHO) estimates that people with disabilities make up 15% of the global population – around 650 million people. Eighty per cent of people with disabilities around the globe reside in developing nations and do not attend schools (Action of Disability and Development, 2011). Inclusive education is an approach that seeks to remove barriers in order to ensure the participation of all students globally and to provide equal opportunities and appropriate support for people to achieve full access to society and culture (United Nations, 2015a, 2010). The United Nations urges inclusive education to ensure that all students cooperate, study and collaborate, united in their learning environment.

Inclusive education is

a process of strengthening the capacity of the education system to reach out to all students and can thus be understood as a key strategy to achieve education for all. As an overall principle, it should guide all education policies and practices, starting from the fact that education is a basic human right and the foundation for a more just and equal society. (UNESCO, 2008b, p. 8)

Therefore, inclusive education is defined as the right of any child with any type and level of disability to have the opportunity to learn with their peers who are without disabilities in the general classroom and without discrimination (United Nations, 2015a). The WHO defines “disability” as a physical or mental condition that restricts a person’s involvement in any area of life within the environment (World Health Organization, 2005).

Inclusive education is central to the world vision of equity and equality. Inclusion is viewed as having three necessary components: locational integration, social interaction and functional integration (Avramidis & Norwich, 2002). The first component sees students with disabilities included in general education settings. The second component entails students with and without disabilities socialising together. The last component involves students with any form of disability being involved in general education opportunities. Although the least
**restrictive environments** aim for full inclusion, where students with disabilities should be educated with students without disabilities to the maximum extent appropriate, there is also the recognition that students may need to be integrated to different degrees and in different ways according to individual requirements.

The aim of inclusive education is to eliminate differences between general and special education and offer quality education regardless of disability type. Inclusive education entails reorganising existing educational systems so there is an equally understood responsibility for materials, settings and syllabuses for all students. This steps away from segregating students with disabilities and towards having a unified system for all (UNESCO, 1994; United Nations, 2008).

Inclusive practices require the full and equal participation of all in every aspect of education. This entails everyone learning together in an integrated environment (UNESCO, 1996). Inclusion urges people to respond to disability as a part of diversity and to acknowledge this, not as an issue, but as a resource (Switzer, 2003). This creates a feeling of belonging where opportunities abound, and people can develop socially and educationally as they desire (Segeren & Kutsyuruba, 2012).

Hardman, Drew, Egan and Wolf (1993) point out that inclusive education also involves family participation. An inclusive community is defined as “one that provides leadership in valuing families and the roles they play; and one that recognises that the responsibility for being included in the community does not rest with the family, the individual or disability and service organizations” (Mayer, 2009, p. 161). Inclusion is being seen as just one of the groups, a concept that is becoming more widely accepted over time (Thompson, Fisher, Purcal, Deeming, & Sawrikar, 2012).

Researchers Alton-Lee, Rietveld, Klemmer, Dalton, Diggins, and Town (2000), Bendová and Fialová (2015) and Forlin, Chambers, Loreman, Deppler, and Sharma (2013) suggest that inclusion entails putting inclusive values into action and part of this is treating inclusive education as an everyday norm. A component of achieving this is ensuring teachers have the knowledge to meet students’ learning needs in the general classroom (Alhassan, 2012; Forlin & Chambers, 2011). Students with disabilities and their families have great
hopes for the inclusive education movement, and participation in, and acceptance of, diversity can aid this. Educational processes and policies highlight individuals’ roles as participants on this earth, and this must be recognised through our actions every day. The concept of inclusion is being widely implemented and progress is apparent, however this does not mean that enough improvement has been made (Alhassan, 2012; Forlin & Chambers, 2011).

As will be discussed, legislation and inclusive education policy for at least the last six decades have stated that the philosophy behind inclusive education is to accept and support students with disabilities in the general classroom. The following section highlights the foundations of legislation and inclusive education policy.

2.2 History of Inclusive Education Internationally

In recent times, legislation and inclusive education policy have shifted towards promoting the social and educational equality of students with disabilities. Without social equality, educational equality alone is meaningless, as people with disabilities will still be socially isolated. A timeline summarising and comparing the major changes in legislation and policy in the UN, the USA, Australia, the UK, Canada and Jordan is given in Figure 2.1 below. The policy models and the practices arising from them are now discussed in detail.
2.2.1 *Universal Declaration of Human Rights (1948)*

It was as far back as 1948 that the Universal Declaration of Human Rights first highlighted the right to education for all children (United Nations, 1948). Article 26 states not only that education is a right but also that it can open doors and expand opportunities and freedom. Education contributes to fostering peace, democracy and economic growth as well as improving health and reducing poverty (United Nations, 1948). These developments on the right of education for all have impacted on national policies and practice and their sustainable development.

2.2.2 *Normalisation and segregation (1960s)*

The principle of *normalisation* was first articulated and developed by Bengt Nirje during the 1960s and 1970s. He argued that the aim of normalisation is to make the patterns of daily life for people with disabilities as close as possible to those of people without disabilities in the society. Wolfensberger (1980) considered that the aim of normalisation is to accommodate the community organisations that support students with disabilities to meet
their learning needs. However, Konza (2008) indicated that segregation remained an option for students with severe disabilities. Thus, normalisation and inclusion are inter-connected.

The principle of normalisation emphasises this and recognises the rights of a person with disabilities to live a life as close as possible to that of a person without disabilities in terms of opportunity (Foreman & Arthur-Kelly, 2016). This entails a “normal” education within either a public or private system of the family’s choice, and in a general education school. The principle of normalisation recognises the right to attend a school of one’s choice, regardless of disability (Foreman & Arthur-Kelly, 2016).

The *Individuals with Disabilities Education Act 2004* (US) (*IDEA*) defined *segregation* as students with disabilities being educated in segregated settings; that is, where students with disabilities were placed in separate schools or separate classrooms within a school, or separate courses within a general education setting (UNICEF, 2011). However, schools around the world have now become more integrated. Dixon (2005) defined *integration* as students with disabilities being placed in the general classroom to fit in with the school’s existing context. In the United States, students with and without disabilities began to be taught together in the same classroom following the 1975 enactment of the Education for All Handicapped Children Act (discussed later in this chapter) (Rose, 1980). Therefore, integration can be considered as the middle path between complete segregation and complete inclusion.

### 2.2.3 World Declaration on Education for All (1990)

The World Declaration on Education for All was adopted by participants in the World Conference on Education for All in Jomtein in 1990, to meet the basic learning needs for all children. The Education for All (EFA) movement was established which advocated for the *IDEA* to be amended (discussed later in this chapter) (United Nations, 2015a, 2015b). These developments mean there are now strong and well-known policies in place which started not only to raise awareness but also to shape attitudes towards inclusive education.

Moreover, as a result of the Declaration on EFA, there is now general recognition that education enhances potential and freedom. It also aids equality, friendship and vital socialisation, in addition to medical and financial matters. These global developments have
impacted on national policies and practices and their sustainable development (United Nations, 2015b).

2.2.4 Developments in the 1990s

The term “inclusive education” began to be used more frequently in the 1990s, although its definition was contested. Nonetheless, it did mean that the focus started to shift, and educational practices began moving in a positive direction for equity (Odom & Diamond, 1998). As inclusive education began to unfold, and more regulatory bodies were formed, barriers to implementation emerged. Firstly, students were categorised, and according to their categorisation, students could be denied access to inclusive settings (Janko, 1997). Secondly, there were complications with access to financial support based on policies. There were now special education funds and funds for students without disabilities; these funds could not be blended, yet the students’ education was. Finally, staffing issues arose as regulations mandated where teachers could teach in specific alignment with their training (Janko, 1997).

The increase in the number of people with disabilities around the world has required education systems to develop not only inclusive education strategies regarding teaching roles but also a widened conception of including students with different disabilities in society. The aim of creating well-organised learning environments for all students regardless of their abilities reflects a commitment to see all policies implemented in each country. Education is no longer viewed as being limited to students without disabilities; it is viewed as an ongoing practice of skills and knowledge development, extending throughout life, and available to a wide range of learners and settings. This development demands that educational and social policies are not considered in isolation from each other, but also highlights the limits of existing knowledge about how to implement such changes. The present global and country-specific lawmaking emphasises close attention to theories surrounding inclusive education for all. This follows UNESCO’s approach and programs implemented following a significant convention in the 1990s (UNESCO, 2005).

2.2.5 Salamanca Statement (1994)

During the 1990s the foundation of inclusive education was established. In 1994, the Salamanca Statement and Framework for Action on Special Needs Education declared that
“schools should accommodate all students regardless of their physical, intellectual, social, emotional, linguistic or other conditions” (UNESCO, 2005, p. 12). Over 300 participants from more than 92 governments and 25 international organisations gathered in Salamanca in 1994 to endorse EFA. This was achieved by reviewing shifts in legislation and policy to enhance inclusive education, mostly by enabling education providers to accommodate all students, regardless of their educational needs. Perhaps one of the most influential movements at this time was the widened definition of inclusive education to now encompass marginalisation, exclusion and vulnerability (Nguyen, 2010).

The Government of Spain and UNESCO united all the education authorities, administrators and policymakers. The conference acknowledged the Salamanca Statement which addressed issues around legislation, educational practice and guidelines for future action. The conference statement reflects the components of inclusive education by highlighting the desire to work towards “schools for all” – facilities which embrace all, welcome diversity, aid education and cater for all individual needs. As such, they play a vital role in the agenda for achieving EFA and for developing high-quality schools (UNESCO, 1994).

### 2.2.6 UN Convention on the Rights of Persons with Disabilities (2006)

The Convention on the Rights of Persons with Disabilities and its Optional Protocol (A/RES/61/106) was adopted on 13 December 2006 at the United Nations Headquarters in New York, and was opened for signature on 30 March 2007. There were 82 signatories to the Convention, 44 signatories to the Optional Protocol, and one ratification of the Convention. This is the highest number of signatories in history to a United Nations (UN) Convention on its opening day. The Convention is the first comprehensive human-rights treaty of the 21st century and the first human rights convention to be open for signature by regional integration organisations (United Nations, 2006). It entered into force on 3 May 2008.

Article 24 of the Convention outlines the rights of people with disabilities to receive an education without prejudice and with equal opportunity. The article also stipulates an inclusive education system at all levels and that people with disabilities must not be segregated from the general education systems due to discrimination. Furthermore, children
with disabilities must be provided with free and mandatory primary and secondary education. Lastly, the Convention provides for people with disabilities to learn social interaction skills to develop their involvement in education and participate in the community (United Nations, 2006).

Inclusive education has gained further importance in the last decade owing to such initiatives as the World Declaration on EFA (UNESCO, 2008a). The term is rapidly becoming understood more widely as an act that embraces and supports disparities amongst all students regardless of their abilities (Hodkinson, 2007; UNESCO, 2008b; Vakil et al., 2009). According to UNESCO (2005), there is common acknowledgement that education cannot be considered in isolation from other major public policies. UNESCO (2008c) has expressed the view that education policies involving students with disabilities are often not adequately connected with other policy developments, and this has negative consequences in both directions. Fundamentally, in order to build better links between education policy and other policy areas in all countries, education stakeholders must develop the ability to clearly articulate their objectives, determine how these interrelate with wider social and education system developments, and recognise and implement active policies and programs (UNESCO, 2005).

This section has reviewed the history of inclusion developments internationally. The importance of extending inclusive education further towards social and economic activities of people with disabilities to facilitate them to contribute to the community just as others, has been broadly recognised in the various UN resolutions. The following section will describe the history of inclusive education in Australia, the United States, the United Kingdom and Canada.

2.3 The History of Inclusive Education in Western Countries

It is useful to review how other developed countries in the world have moved towards inclusive education with laws, regulations and policies and implementation strategies before the Jordanian case is considered. A consideration of the history of the move to inclusive education in Western countries can provide insights into the movement and allow comparisons with the experience of Jordan in its efforts to provide inclusive education for all
students. This comparison can lead to identification of factors related to successful implementation of inclusive education and which of them are lacking in the case of Jordan.

2.3.1 Australia

2.3.1.1 Prior to 1970s

The period from the 1870s to the 1970s saw students with disabilities being taught in segregated settings in Australia. Research then began to highlight the benefits of the educational context and at the same time, people’s views, particularly in developed countries, began to change in favour of the rights of people living with disabilities and the education they were entitled to (Nirje, 1970). In the 1970s, owing to the above-mentioned research and the principle of normalisation, students with disabilities started to be educated in general education settings in Australia (Nirje, 1970).

2.3.1.2 1970s to 1980s

Since this era of momentum towards equality, Australia has had legislation in place to ensure that most students with disabilities are accommodated in general classrooms, either partially or fully, with specialised settings for students with severe disabilities. During this period, students who were indeed accommodated, received adjustments to school syllabuses and teacher support staff were utilised. Learners with specific requirements were commonly taken to educational facilities where the resources were more accessible and could be used as a shared resource. Due to this, Nirje (1970) indicated that many students did not attend the most convenient or the most appropriate environments to experience normalisation.

2.3.1.3 Post 1980s

Since the 1980s, this drive to educate students with disabilities in general education classroom settings has occurred under the concept of inclusion (Forlin, 1997). This concept goes a step further than normalisation by advocating for education for all, irrespective of the type and severity of disability, thus removing any division between general and special education. This concept of inclusion involves the provision of appropriate environments, syllabuses and resources to meet the needs of all students in one educational location. This is
a drastic shift – from attempting to achieve normalisation where possible, to abiding by a system of equality for all in terms of attitudes and delivery of education.

2.3.1.4 Disability Discrimination Act (1992)

The Disability Discrimination Act 1992 (Cth) (DDA) was enacted by the Parliament of Australia to protect people with disabilities from discrimination in all areas of learning and living. The objectives of the Act are:

(a) to eliminate, as far as possible, discrimination against persons on the ground of disability in the areas of:

(i) work, accommodation, education, access to premises, clubs and sport; and

(ii) the provision of goods, facilities, services and land; and

(iii) existing laws; and

(iv) the administration of Commonwealth laws and programs; and

(b) to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and

(c) to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community (Disability Discrimination Act 1992 (Cth), s3)

The DDA makes it illegal to treat people unjustly due to a disability. The term “disability” used in the DDA is broad. It encompasses physical, intellectual, psychiatric, sensory, neurological and mental disabilities. The DDA recognises Australia’s international human rights principles under the Convention on the Rights of Persons with Disabilities, in addition to principles connected to other instruments such as the International Covenant on Civil and Political Rights. The DDA protects people with disabilities from prejudice in all aspects of community life, including education and community services. The Australian government protects the rights of children with disabilities to receive the same educational possibilities as other children. This goal is shared by the DDA. All national education
providers, including government and non-government schools, must adhere to the DDA and the associated national policies.

2.3.1.5 Disability Standards for Education (2005)

In Australia, the Disability Standards for Education (2005) (DSE) were developed to protect people with disabilities from discrimination in all areas of learning and living. All education providers must abide by the Disability Standards for Education (2005). The DSE were formulated by the Attorney-General under the DDA 1992 (Cth). The DSE came into effect on 18 August 2005. The DDA makes it unlawful to breach the DSE, and compliance with the DSE is taken to be compliance with the DDA. Therefore, the DSE set out a process to be followed to ensure that all learners with disabilities have opportunities for education on the same basis as other students (Commonwealth of Australia, 2006). Excluding childcare, the DDA now provides for students from preschool through to tertiary education. The standards apply to making reasonable adjustments for:

- enrolment – students with disabilities can apply for information in the same way as students without disabilities and not face any prejudice
- participation – students with disabilities can be fully involved in all courses or programs without prejudice
- curricula development, provision and authorisation – all students can engage in learning opportunities
- providing services for assistance – a student with a disability can utilise the same services as students without disabilities and specific programs or resources are available
- harassment – systems must be in place to monitor and control harassment or victimisation of all students with disabilities.

The DDA policies are in place to provide students with disabilities with the same opportunities as other students. Every learner, including students with a disability, must experience dignity and education in a constructive atmosphere which respects and motivates participation by all. The release of the DSE started stronger discussions regarding the role of educational facilities, thereby enhancing the DDA (Commonwealth of Australia, 2006).
2.3.1.6 Signing of UN Convention (2007)

On 30 March 2007, alongside many other countries, Australia signed the UN Convention on the Rights of Persons with Disabilities (2006), which specifically declared:

Australia acknowledges the legal right of people with disabilities to live within the same capacities as all other members of society. Australia accepts that the Convention will oversee decision making on behalf of individuals with disabilities in terms of safety, whether it be partially or fully dependent on the circumstances, and only where necessary. Australia acknowledges that all individuals are entitled to mental and physical wellbeing, regardless of disability, and therefore accepts the Convention’s support for required treatment and intervention in regard to individuals’ safety and provision of needs. Australia also accepts the rights of people with disabilities to choose where they wish to reside locally and nationally. Health provision for non-nationals and immigration laws are the same for all people regardless of disability. (United Nation, 2015b)

2.3.1.7 Review of Disability Standards (2010)

Now a party to the UN Convention, Australia began to move forward. In 2010, it assessed the efficacy of the Disability Standards for Education with nearly 150 stakeholders and 200 submissions (Australian Institute for Teaching and School Leadership, 2015). The result disclosed overall satisfaction with the framework in terms of developing student involvement for all. However, the review also revealed barriers to the efficacy of the standards which may vary enormously between jurisdictions, cultures and contexts and which fail to adequately describe what an inclusive setting looks like in practice.

Australia-wide official standards are now implemented and are followed by teachers nationally. These standards relate to inclusion and it is a professional obligation of teachers to ensure inclusive practices within the classroom. This involves adapting classroom activities in order to address all individual needs and all types of disabilities to the best of students’ abilities. It also entails adjusting activities in line with current legislation. Lastly, the teacher
must ensure that all interactions in the inclusive environment are socially beneficial and conducive to learning (Australian Institute for Teaching and School Leadership, 2015).

The Australian government produced Guidance Notes to assist in interpreting the Disability Standards for Education (Australian Institute for Teaching and School Leadership, 2015). Therefore, the Australian government contributed to the development of material for educational institutions to support the implementation of the DSE to meet the needs of students with disabilities.

2.3.1.8 NDIS Act (2013)

Australians who are affected by an ongoing disability, along with their families and carers, also found support in 2013 through the National Disability Insurance Scheme Act 2013 (Cth) (NDIS) (National Disability Insurance Scheme Act, 2013). The essential components of this Act are to further endorse services and personnel support to enhance independence in the community for all people with disabilities. Furthermore, the NDIS Act aims to develop community understanding of social involvement and economic factors with a view to improving community inclusion.

NDIS services and the general education school system are gradually developing through practice and over time. The NDIS is expected to supply vital support for daily functioning in the community, but not directly to support schooling. This may include transportation to and from home, personal carer in and out of the home and post-school training to prepare for employment. Given that education providers have previously taken some responsibility for these services, some services may end up in the hands of other authorities.

Australia would thus appear to have a strong legislative base to support inclusive education. However, despite this, Slee (2013) has argued that inclusion is not occurring. Slee observes, as has been noted above, that several Acts contain exemptions and policies, such as those relating to immigration and have valid exclusions in terms of disabilities. There is still much work to be done to ensure that inclusive education is a reality for all students in Australia.
2.3.2 United States

In the United States, children with disabilities were excluded from schools in the 1930s and considered to be unfit and unable to contribute to their society and there were no services available to meet their learning needs. Some religions also considered them to be a punishment to their parents for doing something wrong (Switzer, 2003). It was common to view people with disabilities as inferior to people without disabilities (Switzer, 2003). The treatment of people with disabilities over the past 100 years was often shocking and cruel. Prior to the 1930s, people with disabilities were viewed as unhealthy and defective, and thus were often abandoned by their parents due to a lack of understanding about their situation.

2.3.2.1 Education for All Handicapped Children Act (1975)

The US Congress passed Public Law 94-142: Education for All Handicapped Children Act 1975 to enable all students with disabilities to have equal access to education in all public schools in the US. The law was intended to support states and localities in protecting the rights, meeting the individual needs and improving the educational outcomes of infants, toddlers, children and youths with disabilities and their families. The law provided, that students with disabilities from ages three to 21 should be educated in the “least restrictive environment”.

The main disadvantage of this law was the high cost of implementing inclusive measures. In addition, as teachers were not properly prepared to include students with disabilities in their classrooms, inclusive education did not work (Switzer, 2003). The Act required school districts to meet the needs of all students with disabilities.

The Act introduced “individual education programs” (IEPs) into school systems so that every student with a disability, whether it be a learning disability or a physical disability, had the same opportunity to obtain an education as every other student. IEPs were centred on the implementation of proven teaching methods (Frieden, 2004). The IEP was a federal requirement to serve children with disabilities in their education. Public schools were required to create an IEP for each student with a disability in order to highlight the specialised requirements of each learner. The IEP had to be revised every year and reviewed by a multidisciplinary body encompassing the student’s teacher, family and educational
IEPs were also designed to ensure that special education services were extended to include transition services. An IEP was an important document developed by a team of school personnel and the child’s parents. The duties of this team were to work together to address the individual needs of the child with a disability, to enable the child to participate in general education activities and to help them to learn in conjunction with their peers, irrespective of disability, to the degree that was suitable for the individual. The team comprising parents and school personnel was seen as the best equipped to determine the child’s strengths and weaknesses (Dabkowski, 2004; Moody, 2010). Essentially, IEPs had two purposes: firstly, to establish measurable annual goals for the child with a disability and secondly, to identify related services for the child with a disability in the main areas of school life, including the general education curricula, extracurricular activities and non-academic activities (Darden, 2013).

2.3.2.2 IDEA (1990)

The Education for All Handicapped Children Act 1975 was amended in 1990 and renamed as the Individuals with Disabilities Education Act 1990 (IDEA). The Act was amended again in 1997 and 2004, to ensure equal access to education. The primary purpose of IDEA was to eradicate prejudice against people with disabilities, and to enhance positive societal perceptions of the principle that students with disabilities have the same essential rights to education as everyone else (Individuals with Disabilities Education Act, 2004). In addition, IDEA aimed to address the unique educational needs of students with disabilities in the “least restrictive environment”. This encompasses utilising programs, facilities and learning without prejudice. Therefore, educational institutions have a duty to alter their environments in order to ensure equal access to learning.

2.3.2.3 NCLB Act (2002)

The No Child Left Behind Act 2002 (NCLB) was signed into law by President George W Bush in January 2002. It entailed 15 states implementing three-year IEPs on a trial basis. NCLB is concerned with socially and economically disadvantaged students. More recently there had been a shift to also incorporate the needs and roles of parents within this legislation,
by providing them with training through not-for-profit agencies to enable them to participate effectively with professionals in meeting the educational goals of their child (IDEA, 2004). Every learner was included in NCLB, regardless of their needs and abilities (Rhodes, 2012; US Department of Education, 2010). Personalised schooling was provided to all through the unifying vision of NCLB. Educators from general and specialised educational backgrounds and settings now had full and shared accountability. Increased knowledge and awareness of settings and facilities have had positive effects on the acceptance of responsibility. Previously, such promising opportunities had not been available for students with disabilities under federal legislation (IDEA, 1997; Rhodes, 2012).

2.3.2.4 IDEA (2004)

When President Bush and Congress set out to reauthorise the IDEA legislation in 2004, they ensured that it called for states to establish goals for the performance of students with disabilities that are aligned with each state’s definition of “adequate yearly progress” under NCLB. Together, NCLB and IDEA hold schools accountable for ensuring students with disabilities achieve high standards. IDEA (2004) looks at unique and specific needs and settings. Individualised education is ensured for all through the unifying goals of IDEA. In the words of Secretary Spellings:

The days when we looked past the underachievement of these students are over. NCLB and the IDEA 2004 have not only removed the final barrier separating special education from general education, they also have put the needs of students with disabilities front and center. Special education is no longer a peripheral issue. It’s central to the success of any school. IDEA is now aligned with the important principles of NCLB in promoting accountability for results, enhancing the role of parents and improving student achievement through instructional approaches that are based on scientific research. While IDEA focuses on the needs of individual students and NCLB focuses on school accountability, both laws share the goal of improving academic achievement through high expectations and high-quality education programs (IDEA, 2004).
IDEA ensures that no student can be ostracised, due to the “zero reject” component of this legislation which legally binds education providers to cater for every individual regardless of their disability type or severity. IDEA stipulates that students must be included into conducive learning environments where possible, in terms of age and the provision of general education, as per IDEA’s legislation. IDEA also dictates parental cooperation for ongoing student evaluations. Each learner with any type of disability has an IEP (a measure introduced by the 1975 Act) to determine what specific assistance may be required in order to achieve inclusion in a general education class. An example may be, if a student requires a speech therapist, rather than the student having appointments externally, the speech therapist would assist the learner in their educational environment. If the learner is at preschool stage, IEPs are replaced with Individualised Family Support Plans, whereby parents are more involved.

However, although the United States has policies in place to ensure inclusive practices such as through professional and medical discussions, policy translation and in-house meetings: it has been suggested that some schools restrict parental involvement (Bacon & Causton-Theoharis, 2013). It is argued that parental advocacy is the most beneficial tactic for achieving appropriate education.

2.3.3 United Kingdom

A report in Great Britain in 1978 (Warnock, 1978) highlighted the need for greater equality in education and within three years the Education Act 1981 (UK) was passed. Twelve years later, this Act was amended to focus on students with disabilities within general education schools. This Act heralded the beginning of inclusive education in the UK.

This was followed by the enactment of the Special Educational Needs and Disability Act 2001 (UK). The Act states that students with disabilities must be educated in general education classroom, unless parents decide against this because they think the general classroom does not suit their child’s need (Office of National Statistics, 2000).

The Act allows educational facilities to decline to accept students with disabilities if the students are deemed to negatively impact on the learning of other students.
Incompatibility with the provision of efficient education for other children can be used as an exemption from compliance with the Act.

2.3.3.1 Signing of UN Convention (2007)

The United Kingdom is committed to continuing to develop an inclusive system where parents of students with disabilities have increasing access to inclusive schools and staff have the ability to meet the students’ needs. The United Kingdom became a signatory to the UN Convention on the Rights of Persons with Disabilities on March 30, 2007. It declared that

The UK also asserts that in spite of Article 24 (2a, 2b) pertaining to education, children with disabilities should be educated away from their local school if this is more conducive in terms of service provision. This does not mean that parents cannot voice a preference of educational facility (United Nations, 2006, art. 24).

2.3.3.2 Equality Act (2010)

The Equality Act 2010 makes it unlawful within the United Kingdom for an educational institution to engage in any form of prejudice to students owing to any form of handicap, ethnicity, religion, gender or stage of maternity, thus cementing existing UK legislation (National Archives UK, 2015). This Act extends to existing students, future students and graduates by stating the obligation to provide fair and just admissions, ensure quality and not deny learners on the grounds listed above. For the last 20 years, the Act has been enforced in UK schools to amend facilities and curricula for students with any form of disability. The Act further requires the provision of additional resources in accordance with the individual student’s needs and teacher support staff (National Archives UK, 2015). However, some students have severe disabilities and require special resources. This can be provided within the general classroom through funding and teachers’ training.
2.3.4  Canada

2.3.4.1  Canadian Charter of Rights and Freedoms (1982)

In 1982 the rights of all Canadian citizens were embedded in the Canadian Charter of Rights and Freedoms and the Canadian Human Rights Act 1982. Section 15 of the Charter guarantees “equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability” (Government of Canada, 1985, p. 5).

All 10 provinces and three territories in Canada must abide by this national legislation including the terms of education provision. Each province and territory is equally responsible for curricula and legislation. This dates back to the British North American Act 1956 which was established to protect cultural traditions and the language of English and French settlers inside each territory and province and for this to be reflected in their education. This organisational structure has succeeded in accommodating policies which embed the disparate needs of Canadians. However, it has also been problematic as students’ requirements are addressed differently, and it could be said, inconsistently. For example, rather than a cohesive approach to inclusive practices across the country, some educational facilities excel whilst others are still far behind (Timmons & Wagner, 2008).

Some provinces were slower than others in adopting the Charter. Moreover, the extent to which it was adopted varied enormously. In 2005, Manitoba implemented the Public Schools Amendment Act (Appropriate Educational Programming) 2005, which specifically outlined obligations for appropriate education for all students (Van Wellegehem & Lutfiyya, 2013). It was the last province to do so after 20 years of attempting it. The Act stipulates inclusion as the principal focus and has seen the implementation of many standards applicable to families, educators and administrators.

2.3.4.2  Signing of UN Convention (2007)

Canada recognises that persons with disabilities are presumed to have legal ability on an equal basis with others in all aspects of their lives. Canada signed the UN Convention on the Rights of Persons with Disabilities (2006) on 30 March 2007 to declare that:
Canada acknowledges the legal capacity for disabled people as equal to all other non-disabled people residing in Canada. It is accepted that provision of required support and decision making will be conducted under Article 12 where necessary and by abiding with the law. However, Canada retains the right to continue to act as necessary in accordance with safety under Article 12 and will continue to lead decision making where possible. In consideration of Article 12 (4), Canada will not subject all measures, such as those mentioned above, to review if such situations are already subject to appeal. Article 33 (2) is acknowledged by Canada as assisting federal states in implementing the Convention’s aims and that this will entail governmental support from diverse and existing levels. (United Nations, 2006, art. 12)

2.3.4.3 Since 2007

Some researchers claim that inclusive practices in Canadian schools are inadequate. Timmons and Wagner (2008) argue that Canada has far from effective inclusion due to ineffective physical, educational and community inclusion. This was found after an in-depth and country-wide study of educational enrolments by students with disabilities. New Brunswick and Prince Edward Island showed the most promising results, with nearly 50% of students with disabilities learning within inclusive environments. This may be due to the community, local schools, extra activities or family involvement; it is also worthy of note that these are two of the smallest provinces in Canada.

The same study found that the larger provinces have about a 33% inclusion rate, excluding the more sought-after educational facilities (Timmons & Wagner, 2008). It was found that while many students with disabilities were indeed in general education classes, many were not effectively included socially or educationally. The way in which the inclusive education policy is utilised appears to differ from province to province and in terms of quality, form and degree (Timmons & Wagner, 2008). Recent research highlights that inclusive education within Canada is still a work in progress, and the goals put in place almost 30 years ago in order to recognise all citizens’ right have not been achieved.

26
In conclusion as this historical overview attests, whilst there has been an acceptance of the worth of inclusive education and the promulgation of legislation to support it, inclusion has yet to be effectively implemented in all the countries discussed. Legislative mandates and processes have been developed in recognition of social equity (Riddell, 2009) and such legislation perceives and enforces segregation as unacceptable. Yet, some services founded on segregation still exist and many disability policies have been found to be contradictory (Stancliffe, 2014). In the United States, thousands of students with disabilities are still separated from their non-disabled peers, regardless of the legislation in place (Kurth, Morningstar, & Kozleski, 2014).

This review of the implementation of inclusive education policy in Australia, the United States, the United Kingdom and Canada shows that inclusive education relies heavily on the government’s implementation of its own legislative provisions. These countries have reformed their inclusivity legislation to support the inclusion of students with disabilities in the general education system in line with the UN Convention on the Rights of Persons with Disabilities. The following section will discuss the history of legislation and inclusive education policy in Jordan.

2.4 Overview of the Population of People with Disabilities in MENA region and in Jordan specifically

In this section, the prevalence of disabilities in Jordan is assessed and the issues related to the current Jordanian legal framework and their impact on inclusive education and its practices are evaluated. This evaluation will lead to the identification of some possible factors affecting inclusive education in the Jordanian context.

Jordan covers an area of 89,342 km$^2$ and is located at the centre of the Middle East region. The number of people with disabilities in Jordan, according to the latest report, is estimated to be 1,170,000 out of a population of 9 million (13%) (Higher Council of Affairs of Persons with Disabilities, 2015). The estimated number of people with disabilities in the Middle East and North Africa (MENA) Region was 30 million in 2005; however, there is no data on the total population at that time. There are no newer data on the exact number of people with disability in MENA (Middle East and North Africa Region, 2005). These facts
show the urgent need to establish institutional mechanisms for regular updating of data on the total population, the total number of people with disabilities and the number of school age children with disabilities, categorised into types in both MENA as a region and, in Jordan in particular (UNICEF, 2014). Most of these students are currently without access to the education available to their peers without disabilities.

The absence of reliable figures on the number of students with disabilities in Jordan remains problematic. In Arab countries, inclusion awareness or recognition of the need for inclusive education is affected by limited data. A lot of people with disabilities are denied education, making data unreliable (Hadidi & Al Khateeb, 2015). This has undoubtedly impacted on prioritising inclusive education. Multiple factors have enormously affected the accuracy of incidence reports for people with disabilities, and this in turn has had a detrimental effect on data. Data in MENA are already limited and unreliable due to the impact of social stigma. This in turn affects the recognition of the seriousness of the problem, our understanding of it and the development of relevant legislation. There is still strong social stigma regarding students with disabilities and people are denied equality and education to save family reputations (Hadidi & Al Khateeb, 2015).

Despite the Universal Declaration of Human Rights and related developments over the past decades, the public policies and educational standards in the MENA countries, particularly in the north, do not yet promote an inclusive environment for people with disabilities (Middle East and North Africa Region, 2005). Moreover, the education system in the MENA region continues to exclude the majority of people with disabilities at the primary school-age level (Middle East and North Africa Region, 2005). Therefore, a major problem is that, in reality, people with disabilities are segregated in the education environment and face major barriers.

On the other hand, different types of inclusion in the MENA region, such as social inclusion, demonstrate the importance of improving strategic plans for inclusive education to foster learning at the level of the learner in their environment as well as at the level of the system which supports the learning experience. However, the second significant problem is that these efforts remain very limited in scope (Middle East and North Africa Region, 2005).
The next section addresses inclusive education legislation and practice, both historically and currently, in Jordan.

2.5 The History of Legislation and Inclusive Education Policy in Jordan

2.5.1 Constitution (1952)

The Jordanian Constitution was adopted in 1952 and includes provisions to address human rights and equity. A key principle of the Constitution is that every person, regardless of any type and level of disability, is entitled to be treated in the same way as all citizens, without discrimination (Higher Council of Affairs of Persons with Disabilities, 2015). The Jordanian Constitution emphasises equity among all the country’s citizens, and does not differentiate between citizens according to race, religion, sex, language or disability.

2.5.2 Law of Education 1964

There were no special legislative provisions in place prior to 1964 to support students with disabilities in Jordan. The first Law of Education 1964 in Jordan included recognition of the needs of students with disabilities. Article 3(7) in Chapter 2 of the law guaranteed the equal treatment of all students in line with all other students receiving an education in the community. It also required public agencies to provide equal educational opportunities for individuals with disabilities within the limit of their facilities.

2.5.3 National Survey (1979)

The first national survey of people with disabilities was not conducted until 27 years after the Jordanian Constitution was issued. The survey conducted in 1979, revealed the number of people with disabilities at that time to be 18,000 out of a population of 2,099,000. That number had grown to 55,000 out of a population of 4,716,000 by 1996 (Department of Statistics Jordan, 2015).

The survey report appeared to exclude students with learning difficulties and behaviour disorders. This was possibly due to some parents not revealing that they had children with disabilities and potentially due to limited access to reliable data (Hadidi, 1998). Turmusani (1999) suggested that some families hide their child with disabilities out of
concern for family reputations associated with communal attitudes towards children with disabilities. In addition, they feel shamed and believe that they will be rejected socially within the community. Despite strong Arab-Islamic values of equality, social stigmas are prevalent, leading to large numbers of people with disabilities being hidden away from society, with stigmas dominating over values (Turmusani, 1999). This results in people being denied an education as they are kept outside the community (Hadidi & Al Khateeb, 2015). Regardless, in reaction to the survey, in the early 1980s, classes were established for students with physical disabilities and hearing impairments.

2.5.4 Disabled Law 1989

Following the National survey (1997), the first law for people with disabilities was adopted in Jordan in 1989. This law was promulgated to determine the rights of people with disabilities in Jordan, as during the period from 1952 to 1989 there was no special legislation on the rights of people with disabilities in the country. The Disabled Law 1989 was repealed and replaced by the Disabled Care Law 1993 (discussed below), following the 20th meeting of the Arab Work Organisation in the capital of Jordan, Amman. This law requires the Ministry of Social Development (MSD) to provide people with disabilities with education, training and jobs that are appropriate for their abilities (Al-Majali & Faddoul, 2008). This transformed the way people with disabilities were regarded, from deserving sympathy to possessing legal rights.

2.5.5 The Law for the Welfare of Disabled Persons 1993

For Jordan, 1993 was a monumental year in relation to recognising, and developing legislation for, people with disabilities. The Law for the Welfare of Disabled Persons 1993 was issued, and special education policies were developed to ensure schooling for people with disabilities of any description in order to address their educational objectives, enhance their skills and provide assistance to enable their inclusion into society. Jordan formulated inclusion policies to educate all students with and without disabilities in the same general classroom by committing to enhancing inclusive education in Article 4 of the Law (discussed below) as an effective means to approaching all humans’ right to learning (Al Shoura & Ahmad, 2014).
The Law for the Welfare of Disabled Persons 1993 replaced the Disabled Law 1989 and served to drive forward the recognition of people’s rights. Jordan has achieved significant progress in human resources development indicators for people with disabilities through its concern and commitment to this policy aimed at protecting the rights of people with disabilities to live with dignity. The 1993 Law was a serious attempt to link the rights of people with disabilities and their needs to national development plans, and to implement exemption programs, vocational training and employment programs (Al Jabery & Zumberg, 2008; Hadidi, 1998; Muhanna, 2010). The law shifted responsibility for educational programs for students with disabilities from the MSD to the Ministry of Education (MOE). As a result, the MOE founded inclusive education to enhance education systems for students with disabilities in general classrooms (Hadidi, 1998).

Article 4 of the Law was issued to ensure equal rights for people with disabilities in the community in regard to their health, work and educational needs according to their level and type of disabilities (Amr, 2011; Hadidi, 1998). It also mandated that all services, arrangements, programs and plans must be available for the schooling of all students with disabilities. This law also reflects the extent to which the government is concerned about providing the best services to all people with disabilities regardless of their abilities (Education Act No. 3 1993). Article 6 maintains that all individuals with disabilities are entitled to education and training in preparation for work. This Article facilitates the context surrounding people with disabilities to move from place to place easily.

Following the implementation of Articles 4 and 6 of the Law for the Welfare of Disabled Persons, the MOE attempted to adopt measures resembling those of the NCLB Act 2002 (US) in order to develop inclusive education for students with disabilities (Al Shoura & Ahmad, 2014). Since then, the MOE has been trying to apply such measures gradually in its educational services to meet the needs of all students with disabilities. These services have been provided in the form of “resource rooms” in general education schools (discussed later in this chapter). Unfortunately, these rooms do not meet the needs of students with all types and levels of disability, but only those with learning difficulties.
2.5.6 **Signing of UN Convention (2007)**

Five years later, in March 2007, Jordan signed the UN Convention on the Rights of Persons with Disabilities and it was integrated into national legislation. Further to this development, Opportunity for All was founded by more than 100 community organisations in Jordan to tackle the issue of inclusion (National Centre for Human Rights, 2010). Numerous presentations and educational talks were given for the benefit of community organisations, journalists, council representatives and state officials to increase the comprehension of the key features of the Convention (National Centre for Human Rights, 2010). The main themes of these activities were related to addressing legislation in accordance with the disabilities present in the country and addressing the representation of people with disabilities in the Jordanian media (National Centre for Human Rights, 2010). Such research is ongoing and is done in cooperation with the above networks and authorising bodies with the sole aim of aiding inclusion in accordance with the Convention.

2.5.7 **Recent and current legislation and inclusive education policy within Jordan**

2.5.7.1 **Inclusive Jordan**

Today, the entitlements of people with disabilities are regulated by a hybrid of special and general laws. The judicial system is available to all people with disabilities through the courts. Non-juridical mechanisms encompass authoritative administrations and other pertinent bodies. Standard laws apply to all people with disabilities regarding education, work, politics, marriage, family and privacy. Furthermore, special laws address wellbeing and health, professional development, financial and work affairs (Higher Council of Affairs of Persons with Disabilities, 2015). The MSD with support from His Highness Prince Ra’ed Ibn Zaid, as well as the MOE, has paid more attention to people with disabilities and their education by enhancing its methods in schools to encompass training for talented students and students with disabilities (Higher Council of Affairs of Persons with Disabilities, 2015). Schools are supported in a variety of ways such as special programs and funding.

Jordan has achieved significant progress in human resource development indicators for people with disabilities, through its concern and commitment to policies and legislation with a focus on protecting the rights of people with disabilities to live with dignity (National
Centre for Human Rights, 2010). This has been achieved through the quantitative expansion and qualitative improvement of educational, health and social services that enable people with disabilities to become self-reliant and integrated into the life of a modern society (National Centre for Human Rights, 2010).

All levels of special education are currently covered by legislation which gives authority to the MOE; yet the MSD is accountable for the provision of tuition to any student with a disability in Jordan (UNESCO, 1995). Thus, the MOE and MSD currently share responsibilities for the education of students with disabilities. The MOE’s duty is to provide principal and subsidiary schooling to students diagnosed with disabilities, whilst the obligation of the MSD is to ensure tuition and integrative programs for students with disabilities (UNESCO, 1995):

Special education is organised within the MOE and the MSD with each one running a directorate of special education for its respective responsibilities. Administrative decisions are taken at a local level within the education system but at the national level within the MSD since the special schools and centres are within its responsibility and are administered centrally (UNESCO, 1995, p. 139).

The education system in Jordan promotes the mission of Jordanian school districts for students at risk including those with disabilities. His Highness Prince Ra’ad Ibn Zaid has emphasised that the country’s aims are to encourage the complete education of all students by aiming high, committing to quality, and providing an extensive program with the belief that all learners, regardless of their abilities, can be educated and become constructive players in society. Jordan’s successes in ensuring the entitlements and the needs of students with disabilities were recognised through the 8th Franklin Delano Roosevelt Award in 2005 (United Nations, 2005)

Jordan’s education reform programs include services directed to students with disabilities in order to provide programs based on the principle of education for all. Within this framework, the MOE accepts students with special needs and persons with disabilities in public schools within programs appropriate to meet their needs and the level of their abilities
Higher Council of Affairs of Persons with Disabilities, 2015). The purpose of targeting this area is to improve the educational environment and systems that enable people with disabilities to access education without discrimination within general classroom education, or in private or special institutions in the case of those who cannot be integrated (Ministry of Education, 2004).

Therefore, Jordan’s inclusive educational policies do emphasise equal learning for students with disabilities with the intention that they be included in the general classroom. In the current century, Jordan has witnessed a significant development in the level of awareness of the rights of people with disabilities and His Majesty King Abdullah II has focused on improving the lives of people with disabilities. His Majesty issued a royal decree at the end of 2006 to form a royal committee to arrange national legislation for people with disabilities. This has the aim of implementing the most significant and coordinated strategy between institutions to provide services for students with disabilities. A committee began planning the strategy documents, which were approved by His Majesty in February 2007 (Higher Council of Affairs of Persons with Disabilities, 2015).

2.5.8 The Law on the Rights of Persons with Disabilities 2007

In the same year, the Law on the Rights of Persons with Disabilities 2007 (2007 Law) was promulgated, repealing the Law for the Welfare of Disabled Persons 1993 (National Centre for Human Rights, 2010). This new law was implemented in order to ensure anti-discriminatory behaviours and attitudes. It stipulates the “integration” and “equality” of people with disabilities in Jordan. Furthermore, it provides recommendations to change laws in recognition of people with disabilities.

The law is based on 10 principles (National Centre for Human Rights, 2015; United Nation, 2008):

1. Honouring the ethical entitlements, privacy and free living of all people with disabilities.
2. Executing proposals and schemes for people with disabilities.
3. Allowing all individuals with disabilities take advantage of equal opportunities without prejudice.
5. Protecting entitlements of students with disabilities, developing skills and opportunities and their position in the community.
6. Enabling settings for people with disabilities to fulfil all desires and reap all advantages.
7. Acknowledging society as encompassing disparate people and needs.
8. Ensuring all people with disabilities to be incorporated in every part of daily life via beneficial programs and initiatives.
9. Undertaking ongoing analysis and inquiry and sharing of findings connected to the issue of mental and physical impairments.
10. Spreading knowledge and acceptance regarding problems surrounding people living with disabilities and their entitlements.

The principles of the 2007 Law confirm the importance of providing quality of life and sustainable services for all people with disabilities in Jordan. The 2007 Law also urged the MOE to adapt its education system and expand learning programs in schools all over the country as well as resources to meet the needs of all students with disabilities (Al Shoura & Ahmad, 2014; Amr, 2011). The Jordanian education system has tried to adopt the US education policy, No Child Left Behind (2002), to provide the best service for students with disabilities in Jordan in the least restrictive context (Amr, 2011). However, in Jordan, the distinction between legislation and policy is less distinct than it is in Western countries. For that reason, the HCAPD took the lead to put the 2007 Law into practical application in recognition that this had still not occurred (Amr, 2011). In collaboration with the MOE, it aimed to better serve students with disabilities in the general classroom, and developed strategies starting from 2010 that better serve the inclusive education system in Jordan. By adapting the UNGEI framework (2008, 2010), the MOE and the HCAPD in Jordan have the potential to move forward and develop an inclusive education system by incorporating the factors that need to be embedded in the 2007 Law and the NSPD 2010-2015.

2.5.8.1 Higher Council of Affairs of Persons with Disabilities (HCAPD)

The general aim of the HCAPD is to ensure access to education for students with disabilities in their community in the right context throughout the country, in the same way as
students without disabilities. The HCAPD has been implemented in Amman, Jordan and has been in place since 2007. Its key principles include obtaining expertise in the field and increasing early diagnoses, not only in terms of time, but also in terms of accuracy of diagnoses according to the types and levels of disability. Furthermore, it includes reviewing and enhancing current curricula and resources and actively gaining community awareness and participation.

The environments in which people with disabilities reside, and their degree of incorporation into the community, are two vital factors regarding individuals’ rights (Higher Council of Affairs of Persons with Disabilities, 2015). The HCAPD was established by the 2007 Law and one of its responsibilities is to recommend amendments to relevant legislation. Under Article 7, the HCAPD will make suggestions to amend laws for people living with disabilities. Such legislation pushes for further consideration of people with disabilities (in relation to global Acts on disability) by monitoring and assessing current policies. Furthermore, other regulations ensure that community morality and ethics are reflected in the treatment of people with disabilities by ensuring the provision of facilities and materials where necessary (Higher Council of Affairs of Persons with Disabilities, 2015). The HCAPD has been mandated with implementing this national strategy for people with disabilities.

Under Article 7 of the 2007 Law, the HCAPD will support and execute the National Strategy on Persons with Disabilities. In 2009, a national conference was held to review the strategy. The HCAPD assumed responsibility for the strategy’s implementation for the years 2010–2015 (Higher Council of Affairs of Persons with Disabilities, 2015). Under Article 7, the HCAPD must collaborate with associations in the cities of Jordan, throughout the country and globally. The HCAPD also advocates for students with different disabilities through its collaborations with global organisations (Higher Council of Affairs of Persons with Disabilities, 2015).

2.5.8.2 National Centre for Human Rights (NCHR)

Jordan’s National Centre for Human Rights (NCHR) plays an important role in promoting the goals of the UN Convention on the Rights of Persons with Disabilities. The NCHR has:
been very effective in realising the aims of the Convention. In 2005 the NCHR accepted the invitation of the Special Rapporteur on Disability of the Commission for Social Development to contribute in a discussion concerning the rights of persons with disabilities in the MENA region, in lieu of the eventual adoption of the Convention on the Rights of Persons with Disabilities. The NCHR made a significant contribution to this process, particularly by supporting the principle of equal legal capacity of persons with disabilities, as reflected by Article 12 of the Convention. (National Centre for Human Rights, 2010, p. 4).

With the aim of including people with disabilities into the community to guarantee just and fair treatment, a shared document on the 2007 Law was written and approved by the HCAPD, NCHR and the British Council with backing from the government of Jordan. This collaboration was also responsible for implementing the 2007 Law. More recently in Jordan, the NCHR was planning the initial report on the Convention on the Rights of Persons with Disabilities in accordance with Article 33(2) of Convention (National Centre for Human Rights, 2010).

2.6 **History of Special Education in Jordan**

In 1920 only 25 education schools existed in Jordan which were staffed by religious groups (Ministry of Education, 2010). It was not until 32 years later that a huge focus on developing education was introduced during the reign of His Majesty King Hussein I in 1952. The first institution providing for students with disabilities in Jordan was founded towards the end of 1960 offering services to students who were deaf and students with intellectual disabilities. During the 1960s to 1980s many educational services were added. As indicated above, during the 60 years since 1957, Jordan has shown a growing concern for individuals with disabilities culminating in the Law for the Welfare of Disabled Persons (Higher Council of Affairs of Person with Disabilities, 2015). This concern was first identified in the late 1960s when deaf and blind students started receiving their education in school (Hadidi, 1998).
In 1979, the first government institution for students with disabilities was established and funded by the MSD in order to offer:

- educational, vocational and rehabilitation services through organisations and schools
- free amenities and no taxes for institutions providing services for students with disabilities
- rehabilitation engagement programs. (Ministry of Education, 1995)

Further, in the late 1970s the University of Jordan became the first university to offer teacher education courses in special education. By this time, special education in Jordan had improved in terms of both facilities and teacher training (Ministry of Education, 2010). For example, there was an increase in the numbers of schools and centres for students with disabilities, which reached approximately 110 institutions in 1993 (Department of Statistics Jordan, 2015). However, although there was an improvement in the special education system in Jordan, inclusive education had not yet progressed adequately.

In 1980, the University of Jordan introduced a two-year diploma in special education for teachers of students with varied disabilities. Following that, increased interest in working with students with disabilities led to the University of Jordan in 1985 establishing a Master’s program in the field followed by a Bachelor’s degree in 1993. The University of Jordan graduated the first group of teachers specifically trained to work with students with disabilities in the late 1990s. A Doctoral study program in special education was later established in 2000 (Al Jabery, Khamra, & Hatem, 2013).

Special education training has spread to some of the other universities in Jordan, such as Yarmouk University, Mu’tah University and Al-Hussein Bin Talal University. Teachers working with students with disabilities are now able to achieve Master and Doctoral qualifications in special education at numerous academic locations and can obtain fieldwork experience in two-year college courses offered by the Jordanian Government (Muhanna, 2010).
2.6.1 Teacher education and training

A major challenge in Jordan is the provision of teacher training to produce competently trained teachers with the knowledge and skills needed for an inclusive classroom. The Arab world exclusively offers two types of educational programs for teachers: pre-service and in-service. Pre-service programs comprise a one- or two-year diploma, a four-year Bachelor’s degree or a two-year Master’s degree. These programs typically teach academic subjects and pedagogy and have a practicum component. In-service training usually consists of workshops offered through educational authorities (Amr, 2011).

Although the introduction of special education training for teachers was a positive step forward, some studies have highlighted teachers’ responses to these courses, stating that a more in-depth program is necessary and varied techniques need to be taught (Hadidi, 1998). It would seem there are two implications, in terms of current teacher preparation. Firstly, the pre-service graduate programs need to offer more authentic experiences with students with varied types and levels of disability in order to effectively prepare teachers. Secondly, there needs to be training for in-service teachers on an ongoing basis to establish their areas of concern and weakness and to move forward in line with other countries (Al Jabery & Zumberg, 2008).

In addition to university programs, other initiatives have been set up to support educators in the area of special education. An example is the Queen Alia Fund which supports volunteer social workers to run workshops and professional development courses for teachers at a senior level in the area of special education. These workshops and courses aim to provide special education supervisors with the right skills and capabilities to work with students with disabilities (Queen Alia Fund, 1984).

Furthermore, the General Union of Charitable Societies offers programs oriented to students with moderate disabilities. The UN Relief and Works Agency offers services to students with learning difficulties in some of its educational areas through learning resources rooms. Princess Servant College offers training programs for educational teachers, supervisors, principals and heads of divisions through learning difficulties centres. The college was founded in 1995 to offer teaching methods and skills in resource rooms (Al
Jabery & Zumberg, 2008). Private agencies and individuals provide support for the special educational field of learning difficulties by establishing private centres and schools for those students.

2.6.2 Resource rooms in Jordan

Students with disabilities need a range of special support services which are provided by specialised resource rooms (Al Khatib, 2007) within the inclusive education setting. The MOE has attempted to execute relevant legislation through the provision of resource rooms for students with disabilities in general education schools (Ministry of Education, 2010). Resource rooms are separate classrooms in a general education school where students with special educational needs are given special assistance with their learning, either individually or in small groups, when referred by their general education teacher. Resource rooms are mainly used to pull students out of the classroom two or three times a day. Resource rooms do not serve all students with disabilities, but only students with learning difficulties and they cannot be considered as achieving the principle of inclusive education given their reliance on a segregated withdrawal model.

These resource rooms aim to provide inclusion services for students with disabilities and their learning needs, but focus primarily on those students with learning difficulties (Amr, 2011). However, Amr (2011) listed some of the limitations of resource rooms:

- Not all students with disabilities can be accepted in resource rooms because of the lack of resources, experienced staff and funding.
- Only students with mild disabilities can be accepted in resource rooms and they must already be attending the general classroom.
- Students with severe or sensory impairments are excluded.
- There is limited collaboration and communication between teachers in the general classroom and teachers in resource rooms.
- There is no other place for early intervention except in resource rooms and because resource rooms are for students with limited types of disabilities, there is no early intervention for students with other types of disabilities.
In conclusion, the situation in Jordan regarding resource rooms and teacher training needs reconsideration. The practicum course only prepares teachers for general education without a focus on students with disabilities. Curricula, assessments, materials and approaches do not reflect inclusive education despite this term being used in policy. Finally, there is a lack of definition and shared meaning surrounding inclusive education, which creates a tendency to avoid rather than address the issue.

2.6.3 Current educational practice to include students with disabilities in general schools

Developing inclusive education for people with disabilities, securing their rights and meeting their needs are matters of serious consideration of the Jordanian Government (Higher Council of Affairs of Persons with Disabilities, 2015). They have become part of the basic premise that guarantees all citizens from all walks of life the right to access services from ministries and social institutions in an equitable and transparent manner without discrimination based on ability or gender (Higher Council of Affairs of Persons with Disabilities, 2015). As such the education system in Jordan has improved consistently since the mid-1990s. The education system is based on aspirations for freedom, justice and human rights and seeks to achieve a significant level of productivity and modernisation (Ministry of Social Development Jordan, 2009). Therefore, the number of special education schools increased gradually and had reached 206 schools in 2011, while there are 580 resource rooms providing services to about 20,546 students with disabilities (Hashemite Kingdom of Jordan Department of Statistics, 2010).

The expansion of inclusive education was intended to encompass educational institutions and special programs and materials that meet students’ capabilities and needs (Ministry of Education, 2010). Early intervention strategies for students with learning difficulties and some with intellectual disabilities were introduced to meet both educational and social needs. Resource rooms and charitable institutions are currently the most common settings providing education for students with disabilities (Ministry of Education, 2010). Such arrangements include educational assessment at schools and institutions that meet the needs of students with disabilities, so they can exercise the right to learning on an equal basis to their peers without disabilities. They also include provision of the right equipment to
facilitate learning and mobility, such as expanded entrances at schools, ramps and wider doors.

Unfortunately, such facilities remain in discussion rather than implementation (Amr, 2011). Furthermore, the MOE intends to increase awareness of students with disabilities, their parents and the local community via services and institutions (Amr, 2011). In addition, there is a lack of diagnostic tools for early detection and diagnosis for determining the exact numbers of students with disabilities enrolled in schools, their types (hearing, visual, physical or intellectual and learning disabilities) and level of disabilities (Al Jabery & Zumberg, 2008; Ministry of Education Department of Educational Documentation, 1980). Despite all above declarations, policies, plans and modifications being ready to be implemented, the best educational environment for students with disabilities remains underdeveloped.

2.7 Summary

Meeting the educational needs of students with disabilities is now accepted as a moral imperative for all to ensure equality where individual rights are recognised and protected. Failure to provide education with a suitable learning environment to aid students with disabilities is viewed as a rejection of a students’ rights (United Nations, 2008).

The historical perspectives highlight the steps forward to achieve equality for all. Where previously, having a disability meant being segregated, now there is recognition and an effort to meet their needs with inclusive practices. Yet, as research has shown, all too often what is meant to be inclusion is still integration or special education, rather than inclusive education.

Although legislation and inclusive education policy acknowledges the disadvantage faced by students with disabilities and seeks to change these by the provision of inclusive practices and facilities, it is evident that the obstacles are immense. These obstacles need to be identified and eliminated with effective strategies. Given the current number of students with disabilities in the world, mostly within developing nations, inclusive education needs to go beyond recognition, it must be implemented effectively.
There is no dearth of laws, regulations or policies. It is the practical measures that need tighter focus. In the case of Jordan, it supports inclusive education and has legislation in place to underline this. However, fully successful implementation suffers from inadequate staffing in schools (may also be linked to availability of the required skills) and insufficient support systems. Based on these observations, in the next chapter, Bronfenbrenner’s ecological model and its application to inclusive education practices are discussed. Other points to be reviewed are: inclusive education policy, resources, teacher attitudes, teacher preparation and teacher knowledge, especially in the Jordanian context.
To identify the factors that enhance inclusive education, it is necessary to explore the impact of environment on the individual first, whether it be the classroom or a community. There is a dearth of theoretical frameworks to study the effect of different factors on inclusive education of students with disabilities of any type. In their article, Jackson, Ryndak, and Wehmeyer (2008) discussed a number of social ecological theories applicable to the context of inclusive education and student learning. These theories are: Scientific Causation and Educational Practice (Dear, 2006; Lee, 2011), ecological theory (Nietupski & Hamre-Nietupski, 1987) and social ecological theory and the group process theory of Bronfenbrenner (1979, 1995). Out of these models, Bronfenbrenner’s Ecological Model is the most popular and has been used for studies researching contexts similar to the present one. This model is therefore used as the theoretical framework for this research also. A detailed description of the model is presented in the following section.

3.1 Bronfenbrenner’s Ecological Model

Bronfenbrenner’s ecological model examines the child’s development and relationships within the context of his or her environment (Bronfenbrenner, 1994). Bronfenbrenner divided his ecological theory into different layers or subsystems within which an individual interacts: microsystem, mesosystem, exosystem, macrosystem and chronosystem. Each layer, and the interaction between them, influences the child’s development.

Bronfenbrenner’s (1994) ecological model is adapted in the current study in order to understand the complex role of, and the intricate relationships within, society and the impacts on inclusive education. The chronosystem has not been used in the current study because the study was not longitudinal and looked at teachers’ perceptions at one point in time. Similarly, the legislation and policy analysis was looking at the legislation as it applies for those particular teachers. Therefore, although described, it does not appear in the model below.
3.1.1 Five subsystems

The subsystem pertaining to relationships and the immediate environment is the *microsystem*; here, the child interacts with the immediate surrounding environment, for example home or school, family members or social peers (Bronfenbrenner, 1994). The microsystem is a formal social-support system where the most personal interaction typically occurs, including personal relationships with peers, family, teachers and caregivers. Therefore, the microsystem encompasses classroom factors that influence the learner’s development, for example teacher strategies, student level, type of disability and common interaction techniques.

The *mesosystem* exists at the connection points between the structures of the child’s microsystem (Härkönen, 2005). Examples are teacher attitudes, teacher knowledge, special and general education teachers, teacher gender, years of teaching experience, experience teaching students with disabilities and professional developments.

The *exosystem* is the larger social system where the child does not function directly. The links between different settings can indirectly influence development in the immediate environment; for example, collaboration, resources, location of the school, primary and secondary school. The exosystem does not involve the individual as an active participant, but events in it still affect the student’s learning in the inclusive setting. It reflects the dynamic exchanges between the inclusive learning of the students and the larger contextual system where no direct interaction happens.

*Macro system* variables entail cultural beliefs which affect the family’s understanding of their child’s disability, classroom goals and social relations as the macrosystem is the embedded system affecting the development of national legislation strategy, inclusive education policy, teacher training and funding.

Lastly, *chronosystems* change over time and are not consistent. For example, as the child grows up he or she might react differently based on environmental changes and might be able to define how such changes will influence his or her own life. It is also about societal changes over time. This system focuses on transitions in time and place and the social life
course of the individual that occurs during development. A specific incident can change how the individual interacts with all layers (Bronfenbrenner & Morris, 1998).

These systems impact on individuals’ development and are all intertwined with relationships that are reciprocal. The idea is that the environment, and therefore development, consists of smaller and smaller compartments within each other yet impacting on one another (Bronfenbrenner, 1994). Some of the factors that will be discussed are included in Figure 3.1.

![Ecological Model]

**Figure 3.1: Bronfenbrenner Ecological Model (Bronfenbrenner, 1994).**

Studies identifying these factors or challenges will now be critiqued and applied to everyday practice internationally and within Jordan. The existing and potential barriers to inclusive education considered in the following sections are: inclusive education policy, teacher preparation, teacher attitudes, teacher knowledge, resources and finances, collaboration, and the physical environment (school settings and accessibilities).
3.1.2 Identifying critical factors influencing inclusive education

It is important to look not only at the child’s immediate environment when it comes to inclusive education, but also at the other layers and the interaction of the wider environment. Inclusive education entails much more than just physical enrolment at a school. It also entails lifestyle, community and social inclusion regardless of the individual’s religion, ethnicity or background. Inclusive education involves utilising all of an individual’s capabilities in the community, and shared societal values in order to establish social justice and a sense of community (United Nations, 2015b; Winzer & Mazurek, 2011).

A study conducted by Forlin, Kawai and Higuchi (2015) in the Pacific provides a useful example of the application of Bronfenbrenner’s ecological model in order to develop an appropriate context for inclusive education. Problems consisted of the vast majority of teachers holding no qualifications at all in the Republic of Nauru and a revised curriculum not being implemented in Papua New Guinea. The factors affecting an inclusive approach to education identified were the exosystem which includes school culture, school and classroom practice and collaboration. The microsystem highlighted a need for greater participation of individuals through a culture of acceptance. The mesosystem reflected local aspects such as cultural awareness, education and stakeholder support. Finally, the macrosystem, at a national level, pointed firmly towards the need for an inclusive education policy (Forlin et al., 2015). Bronfenbrenner’s model (1994) is thus a useful one for analysing the barriers to and facilitators of inclusion.

3.2 Legislation and Inclusive Education Policy

In many countries, as discussed in the previous chapter, there is some form of support through legislation and, consequently, within schools for inclusive education. There is no such legislative support in others. The philosophy of inclusive education is aimed at helping all students with disabilities. Legislation constitutes the outermost context layer: the macrosystem. However, equity and inclusive education policy at the macrosystem level is designed to strengthen the capacity of the education system to reach all students. Therefore, the establishment of a successful inclusive education setting depends on all relevant partners and layers in every education system (UNESCO, 2009).
In addition, successful implementation of inclusive education policy is related to teachers’ perspectives (Forlin et al., 2015). Other research has indicated that educational policies alone cannot guarantee successful inclusive education for students with disabilities in the general classroom (Haihambo & Lightfoot, 2010). The success of efforts to implement inclusive education is related to multiple factors. These factors have been found to include an effective implementation system, teacher preparation, resources, sufficient funding support, administrative support, teacher attitudes and knowledge as well as professional support and collaboration (Avramidis & Norwich, 2002; Laluvein, 2010; Orr, 2009; Winzer & Mazurek, 2011).

Research has highlighted the confusion about inclusive education policy and practices in Jordan (Al Shoura & Ahmad, 2014). For example, although recent government goals aim to ensure that all Jordanian schools are inclusive for all students with disabilities, the inclusive education policy does not ensure that this is the case (Al Shoura & Ahmad, 2014). Legislation and inclusive education policy globally and in various countries including Jordan have been discussed in depth in Chapter two. However, the current section briefly highlights the importance of inclusive education policy as a focus area for investigation of factors discussed below. Teachers themselves cite the reasons for failure of inclusive education as: teacher negativity; lack of inclusivity training; minimal, if any, knowledge of policies and the curricula being inflexible and therefore difficult for teachers to adapt, particularly without training (Kronfol, 2012; Lawati, 2013; Wehbi, 2014). Such barriers must be addressed if successful inclusive education is to be established.

3.3 Teacher Preparation

Teacher preparation varies considerably across education systems around the world. Preparing teachers to include students with disabilities in their classrooms is essential for effective inclusive education (Muhanna, 2010; Sosu, Mtika, & Colucci-Gray, 2010). Therefore, preparing teachers for inclusive environments should be an integral part of all teacher education courses. In the following subsections, the components of this major factor are analysed in detail.
3.3.1 Issues surrounding teacher preparation

For teachers to have the confidence and ability to include students with disabilities, teachers need to learn best practices and be well prepared. They also need to be provided with opportunities for in-service training and professional development during their career (Forlin & Chambers, 2011). Also, teacher preparation courses need to cover a range of applicable strategies of practical relevance; not just knowledge-based components (Forlin et al., 2015). Even with adequate teacher preparation, inclusive education may fail due to inadequate facilities, lack of classroom and financial resources, social stigma, students’ limited access to schools and lack of trained personnel (Alkhateeb et al., 2016; Cambridge-Johnson, Hunter-Johnson, & Newton, 2014). Such barriers must be addressed if successful inclusive education is to be established.

A study conducted with 558 district personnel from Colorado (US) schools including elementary and middle school teachers, revealed that 85% of teachers were not trained or confident to teach a diverse class due to lack of skills to provide individualised instruction in a class of mixed abilities (Pearman, Huang, & Mellblom, 1997). Another more recent Australian study conducted by Mergler and Spooner-Lane (2012) showed that teachers felt they did not have the necessary skills for effective inclusive education and that they required further and ongoing training programs. These teachers felt that there was a grave lack of knowledge of the disabilities and skills required to teach students with disabilities. In a study conducted within general education schools in Western Australia, an alarming 93% of teachers felt that they had received inadequate preparation to deal with students with all types of disabilities in an inclusive education school (Forlin, Keen, & Barrett, 2008). This suggests that teacher preparation courses must equip them with the capacity to work effectively with all types and levels of disabilities so that they may meet students' learning goals.

Many studies report teachers feeling unprepared theoretically and practically (Pearman et al., 1997; Werts et al., 1996). Many other studies refer to current inclusive training as ineffective and lacking in practical elements (Fayez, Dababneh, & Jumiaan, 2011; Forlin et al., 2015; Forlin et al., 2008; Werts, Wolery, Snyder, & Caldwell, 1996).
Designers of teacher education courses have considered attitudes to inclusive education in the development of knowledge and skills, with a view that the level of knowledge and skills shape attitudes. The results of a study by Lancaster and Bain (2010) support this view. They compared two versions of a 13-week compulsory undergraduate inclusive education course for pre-service elementary school teachers and no significant differences were found between the two versions of the course. However, an increased exposure to various types of disabilities and compulsory contact hours had a positive impact on teachers’ willingness to provide support and move forward with inclusive education practices (Lancaster & Bain, 2010).

An example of a teacher preparation course provided by Forlin (2010), was from Hong Kong, where inclusive education was a new concept, and one in which many teachers were not experienced. In this case, a strong component of training was to provide authentic interactions that enabled teachers to have first-hand experience with various types of disabilities and to understand students’ individual needs from the students’ own perspectives, before applying theory. This also promoted positive attitudes amongst teachers.

Although some teachers have cited information on curricula and diversity as most beneficial (Kearns & Shevlin, 2006; Winter, 2006), others have criticised this as having too strong a focus on theory and have stated a need for greater practical orientation (Forlin et al., 2015). An inclusive education system means, thinking of different ways to deliver learning goals through curricula, which will satisfy the learning needs of all students irrespective of their disability levels. Therefore, curricula must meet the needs of all students with different types and levels of disability. In addition, inclusive education means all students are included in every way. It is important that teachers’ training gives due importance to all these factors through strong components of theory and practicums. Both in-service and pre-service preparation is very limited as the idea of inclusive education has only appeared in the last two decades, and there are limited resources (Amr, 2011).

Thus, knowledge and skills to teach a class of mixed abilities, to deal with disabilities of different types and levels, to provide individualised attention to the acutely needy students with disabilities in a practically oriented way, are important. Besides, teachers should know the policies and regulations and institutional supports available for inclusive education in the
country. Classrooms now commonly have students of mixed abilities, ages and cultures (UNESCO, 2009). There is clearly a demand for further research into unique classroom environments in order to establish standards and strategies for such mixed contexts. It is imperative that authentic interactions are experienced under supervision and in a beneficial way for teachers in training. Therefore, the current study needs to determine if this is occurring in Jordan.

3.3.2 Pre-service teacher preparation

A study conducted by Forlin et al (2015) highlighted that pre-service teachers felt unprepared to teach students with disabilities and highlighted reports of pre-service teachers being minimally prepared. Teachers felt that they had obtained knowledge in the area of inclusive education, but insufficient skills to apply this knowledge. In another study by Forlin & Chambers (2011), the participants showed confidence in applying legislation and inclusive education policy but felt stressed and expressed lack of confidence about their knowledge of inclusive classroom practice. Forlin et al. (2013) noted an overwhelmingly negative response to inclusive education in India, suggesting that 96% of pre-service courses had minimal training in inclusive practices. This lack of knowledge and competence directly impacted on views of inclusion, again demonstrating the need and role of effective training.

In the case of Jordan, Fayez, Dababneh and Jumiaan (2011) found that pre-service early childhood teachers who graduated from Jordan and Hashemite universities had a high level of knowledge regarding learning disabilities yet an unwillingness to include students with such disabilities in the classroom. This was due to their having limited skills to deal with the varied learning disabilities, despite attending a compulsory training course. Yet the teachers were mostly in favour of inclusive education to include students with disabilities, as teachers felt that they could most easily adjust theory-based work to include them. Pre-service teacher preparation programs need a strong structure, especially in terms of preparing teachers to apply their learning into their teaching practices. It is also very important for new teachers to engage in standards-guided professional development for effective teaching once they begin to work in schools (Loreman, Sharma, & Forlin, 2013). The movement towards inclusive education in Jordan is still very slow due to the actual education system in Jordan. Pre-service preparation programs are still very limited for teachers and do not cover all skills.
needed to meet with all students’ needs, and the pre-service program has not been widely investigated (Al Shoura & Ahmad, 2014; Amr, 2011; Fayez et al., 2011).

3.3.3 In-service teacher training

In order to respond effectively to the increasingly diverse needs of students in the classroom, ongoing in-service training has been urged by many teachers who have found the current training programs in Jordan to be ineffective (Al-khateeb, Hadidi, & Elyyan, 1996; Horne & Timmons, 2009). A study in the UK conducted by Clough and Nutbrown (2004) showed very positive results regarding teachers’ abilities and attitudes to inclusive practices post training. Despite this positive feedback, elementary preschool teachers have urged further and ongoing training. The 120 teachers studied prior to, and during, inclusive training showed that positive attitudes were achieved in the long term. Yet the majority felt that the coverage of instructional techniques and adaptations fell short of requirements, justifying extended training programs. They also required ongoing professional development, as they worked longer and with more types of students with disabilities (Clough & Nutbrown, 2004). This could perhaps be achieved by greater immersion in training prior to inclusive teaching. The teachers in the study also felt that there was a considerable lack of assessments to ensure knowledge was transferred into practice or that techniques were adapted appropriately. Therefore, the need for a stronger focus within the classroom during training, and after training to keep up to date with all changes, was stressed.

Elhoweris and Alsheikh (2004) found that teachers who were enrolled in in-service graduate classes at a large Midwestern university in the United States had supportive views of inclusive education. However, some disparities were revealed regarding the perceptions of special and general education classroom staff, which were affected by the in-service graduate classes. Moore (2015) found that teacher anxiety decreased after they attended courses in inclusive education, due to their increased knowledge. Teachers felt calmer about the prospect of teaching in an inclusive classroom as they were now better prepared to apply the appropriate techniques and skills. Moore (2015) highlighted also how teachers, after training, were able to demonstrate adaptation of material and teaching for inclusive education and had knowledge of related laws, regulations and theories. Training had not only effectively
prepared the teachers for inclusive education, it had also shaped their attitudes towards inclusive education positively.

A study in Jordan conducted by Al-Zyoudi (2006) with 90 general and special education teachers at seven schools asked teachers to outline in what ways schools should change to address the needs of students with disabilities. Fifty-six percent of the participants outlined the need to improve their qualifications and training. For future in-service training, the teachers requested parent and teacher cooperation, IEPs, adaptations to curricula and, most of all, strategies for classroom management alongside adaptations to material (Al-Zyoudi, 2006).

This again draws attention to the fact that teachers are being trained but are not being given enough opportunity to apply their training to everyday practice. As the above Jordanian teachers outlined, adaptations to material and curricula are essential and these are skills that they need to acquire. Evidently, there is need for greater training for pre-service and in-service teachers in order to increase competency levels and comprehension of the reasons behind inclusivity (Jung, 2007). Inclusive education has multiple benefits for all students yet creates many difficulties for staff. When classroom teachers working in general education or within a special education school do not have the appropriate prior education, they experience feelings of incompetency often resulting in early exiting from the profession (Shade & Stewart, 2001).

In conclusion, training of both pre-service and in-service teachers should consist of theoretical as well as strongly practically oriented training in the philosophy of inclusive education, policies, laws, organisations and institutions, recognition of various disability types and levels, teaching in classes of mixed abilities using various innovative methods and giving attention to the individual needs of children with specific disabilities. There has not been enough appreciation of these training aspects in Jordan, as highlighted by the availability of scant research from Jordan. Jordanian pre-service teachers’ readiness to include students with disabilities in the classroom is yet to be demonstrated (Fayez et al., 2011).
3.4 **Resources**

Resources encompass teaching materials the physical environment and the adequacy of financial resources: all are vital enablers of inclusive education (Forlin et al., 2015). In addition, the collaboration between teachers and professionals as well as all other education stakeholders should also be regarded as resources enhancing effective inclusion. These factors will now be reviewed below.

### 3.4.1 Physical environment and other resources

Including all students, regardless of their type or severity of disability, entails adapting existing buildings and facilities (Pivik, McComas, & LaFlamme, 2002). The need for ensuring safety and meticulously arranged classrooms were outlined as concerns in studies conducted by Bērziņa (2010) and Pivik et al. (2002). Pivik et al. (2002) found a lack of facilities for accommodating students with all types of disabilities such as ramps and adjusted doorways. Half of the teachers also identified the physical environment as predominantly inhibiting successful inclusive education. In addition, a study conducted in Japan Forlin et al. (2015) concluded that local barriers consisted of insufficient equipment and facilities with no adjustments to accommodate students with physical impairments. Therefore, design and improvement of the schools’ facilities are an important factor in improved inclusive education, especially for those with physical disabilities.

A study conducted by Bērziņa (2010) via a survey with 303 teachers over three years in Latvia investigated the opinions of preschool and primary school teachers on the preconditions necessary for inclusive education. The teachers were also asked an open-ended question: why had or had not their school implemented an inclusive education approach? Forty-nine per cent of the responses indicated that environmental factors inhibited effective inclusive education in their schools, citing inappropriate facilities resulting in lack of safe and conducive settings for students with disabilities. Students with physical disabilities cannot learn in an inclusive school if they cannot enter the classroom and this can also impact on the attitudes of teachers, parents and administrators. Accessibility can go beyond wide doors, elevators and ramps. For example a student may need different programs, different assistive technonologies and furniture in the classroom to meet his or her needs.
Al-Zyoudi (2006) used a survey to investigate the attitudes of 90 Jordanian teachers at seven schools on inclusive education and the factors affecting their attitudes. Teachers’ levels of acceptance correlated with the accessibility of buildings and facilities; the better the buildings had been adapted, the more accepting the teachers were of inclusive education. Eighty-one per cent of the teachers supported buildings adapted to accommodate all needs. Seventy of the 90 teachers supported adaptations to accommodate wheelchairs by modifying space, ramps and classroom desks. This means Jordanian schools do not have basic accessibility requirements to meet even the minimum needs of students who are able to attend general schools, such as those with physical disabilities. This can result in an unwillingness to enrol students with disabilities.

While effective teacher training to improve knowledge and the need for in-service and pre-service training are important, such aspects are somewhat irrelevant without the necessary facilities and adaptive equipment and materials. These are the two areas of concern expressed by teachers. Despite training, implementation of inclusive education is held back due to insufficient resources (Amr, 2011). The resources consist of instructional and diagnostic resources, training and reliable data.

A study by Rajovic and Jovanovic (2013) found that lack of resources was also a key barrier for teachers in Serbia trying to implement inclusive education. The study specifically identified a lack of teaching material and equipment to aid students physically. Inadequate resourcing was also identified by Forlin and Chambers (2011) who described the provision of materials and physical aids as “inadequate”. This goes hand in hand with inclusive education policy and financial concerns, which exist as a problem globally (Al-khateeb et al., 1996; Bērziņa, 2010). Successful inclusive education is concerned with removing all barriers. Accessibility of school buildings is important for students with disabilities, especially for those with physical disabilities even if it is possible to get into and out of the school, there may be inappropriate settings inside the school which do not meet their needs.

3.4.2 Financial support

Although teachers are aware of the advantages of inclusive education, to deal with this “hands on” is often deemed too stressful due to a lack of resources. This is illustrated by
Shadreck (2012) who highlights that teachers acknowledge and accept the vision of inclusive education but only agree to work with students who need academic modifications, refusing to work with any students who have physical or mental disabilities, due to insufficient funding, facility amendments and teaching equipment. Funding is most notably required for additional staff support, such as trained personnel (Al Shoura & Ahmad, 2014). The need for adequate financial resources has also stressed by Al-khateeb et al., (1996) and Bērziņa (2010).

Schools in Jordan are financially restrained, and this impacts on the education system’s ability to provide necessary resources. Al Jabery and Zumberg (2008) stated that there was inadequate financial support in the case of inclusive education and that this can lead to poor services for students with disabilities. If all nations were to address all the components of Education for All (EFA), this would equate to only four days of global military spending (UNESCO, 2009). Despite the new development of education plans in Jordan and the concentration on inclusive education in the last two decades through legislation, allocation of resources and funds are inadequate in the Jordanian education system. Limited finances lead to a clear lack of teachers within sub-Saharan Africa, Asia and many Arab countries (UNESCO, 2009). A shortfall in the number of teachers undoubtedly affects the quality of education and thus, the effectiveness of inclusive education. The failure to provide inclusive education for students with disabilities due to inadequate financial support remains a major gap.

Furthermore, Arab countries already face numerous challenges surrounding education, irrespective of mutual conflicts. These consist primarily of clarity of definition, reliable data, separating the concepts of “care” and “inclusion”, inclusive education as a priority, transferring legislation and inclusive education policy into practice and collaboration (Hadidi & Al Khateeb, 2015). Developed countries were at a similar stage in the 1970s. Inclusive education is not even partially implemented in Jordan and other Arab countries.

On the other hand, UNESCO (2009) argues that effective inclusive education and quality of teaching are not linked to finances. For example, the school systems with the highest rated teaching approaches were those that shared equal responsibility for students with and without disabilities. Furthermore, equal support for all students and peer teaching were found to have the most beneficial outcomes in inclusive schools. Additionally, by
implementation of the above factors, inclusive education can start earlier in the early stages of the child’s development which has been proven to lay the critical foundation for ongoing effective inclusion at the individual and classroom levels (UNESCO, 2008c, 2009).

One form of financial support relates to rendering help to students with disabilities to live as equals in society. The problem of inadequate resources due to limited financial support for successful inclusive education was an issue that concerned teachers in the study conducted by Al-Zyoudi (2006) and led to poor service provision for students with disabilities (Al Jabery & Zumberg, 2008).

3.4.3 **Collaboration between professionals and education stakeholders**

Ripley (1997) defined collaboration as follows: “An effective team of teachers will work together as equal partners in interactive relationships, with both involved in all aspects of planning, teaching, and assessment” (Ripley, 1997, p. 2). Collaboration within the field of inclusive education involves a range of educational professionals.

There are advantages in collaboration between educational stakeholders and teachers. Teachers are able to improve the learning of their students with disabilities, as they change the curricula or any special programs to accommodate the students’ needs. Teachers sometimes have their own concerns about how to implement the best possible learning methods for students with disabilities (Ainscow, Booth, & Dyson, 2004). A collaborative approach here, can offer different methods of teaching to solve the problem. The following section will consider the different roles within collaboration.

Collaboration between professionals and teachers to address the needs of students with disabilities is one of the principles for successful inclusive education (Smith & Tyler, 2011; Trepanier-Street, 2010). Inclusive education requires creative thinking and teaching methods. Teachers might sometimes be frustrated, and other times elated. Those moments of success will give them the passion to move on and overcome their fear of trying different strategies for successful inclusive education (Anderson & Antonka, 1992; Monahan, Marino, & Miller, 1996; Simpson, 2005). Collaboration, via inputs from other teachers, can reduce frustration when teachers’ current methods fail. Although collaboration between teachers can help to reduce the workload and stress of the other teacher when they work collaboratively
with students with disabilities in the classroom, educators and policymakers also believe that such work can effectively engage such students (Giangreco, Edelman, Broer, & Doyle, 2001).

Teachers might not have the skills to do what they need to do in the inclusive classroom, thus inhibiting effective observations. In the case of such teachers, Carrington (1999) argues that professional collaboration between educators may produce effective teacher learning and the development if these the poorly skilled teachers observe other teachers who are knowledgeable about inclusive education processes in their inclusive schools. Some knowledgeable teachers can also guide their colleagues with limited or no knowledge, in trying different skills and practices that might work well in their inclusive classes.

Carpenter and Dyal (2007) added that there is a need for collaboration among teachers to share responsibilities in order to offer good learning goals for better inclusive education. Teachers can share the responsibilities associated with planning, classroom management and evaluation. Useful professional development in the inclusive education setting, as it relates to cooperative needs, further enhances the success of cooperative teaching situations (Carpenter & Dyal, 2007). A study conducted by Gebhardt, Schwab, Krammer, and Gegenfurtner (2015) on collaboration through training found that special and general education teachers who were involved in the study were satisfied with their teamwork, which enhanced students’ achievements and their social skills as well as improving the teachers’ positive attitudes towards inclusive education. Educational professionals’ involvement in the inclusive education process has resulted in the exchange of strategies between professionals, increased understanding of all students’ needs, stronger instructional programs grounded in general education content for students with disabilities, and increased acceptance of students with disabilities by their peers as well as teachers (Sims, 2010; Smith & Tyler, 2011; Stockall, 2014; Trepanier-Street, 2010; Werts, Zigmond, & Leeper, 2001; Young, Simpson, Myles, & Kamps, 1997).

Different strategies of working together as professionals and education stakeholders in the inclusive education setting are extremely important for both teachers and students with disabilities to attain their goals. Teachers may implement many important procedures to
deliver their teaching goals. In addition, in an extensive Swiss study by Abegglen and Hessels (2018), inter-disciplinary collaboration and team teaching was found to be a vital factor for the positive attitudes of teachers towards inclusion of students with disabilities. Inter-disciplinary collaboration between general and special education teachers was also found to be an essential pre-requisite in a Danish study by Hedegaard-Soerensen, Jensen, and Tofteng (2018).

Furthermore, Nel, Engelbrecht, Nel and Tlale (2014) studied teachers’ views on collaborations between different stakeholders within the South African inclusive education system using a questionnaire and interviews. The teachers perceived that they were not adequately trained or skilled to participate in collaborative partnerships on an equal status basis. They preferred to refer barriers encountered by learners to professionals and other supportive institutions to solve. However, the literature has shown conclusively that collaboration between education stakeholders and professionals facilitates inclusivity. Yet, in Jordan, collaboration between educational parties has not been fully adopted.

3.5 **Teacher Attitudes**

Teacher attitude may become a major barrier to successful inclusive education, if it is negative (Avramidis & Norwich, 2002). In either case, Woodcock, Hemmings, and Kay (2012) have suggested that teacher attitude is influenced by the level of training and the available resources. Thus, the absence of teacher training and resources will impact the attitude of teachers negatively (Avramidis & Norwich, 2002; Boyle, Topping, & Jindal-Snape, 2013; Cook, Tankersley, Cook, & Landrum, 2000; Gal, Schreur, & Engel-Yeger, 2010). Some other researchers have suggested that the types and levels of disability may also influence teacher attitudes (Al-Zyoud, 2006; Avramidis & Kalyva, 2007; Avramidis & Norwich, 2002; Forlin & Chambers, 2011). Within the inclusive classroom, teachers are facing pressure and difficulties in their roles. The challenges for teachers are to be practically prepared and have the ability to adjust their teaching styles to meet the needs of students with disabilities. Therefore, teachers are required to develop more positive attitudes to face the challenges. Some of the factors associated with teacher attitudes are discussed below.
3.5.1 **Teacher gender**

In a study conducted by Al Khatib (2007) in three different districts in general education classrooms in Jordan, female teachers were found to hold more positive attitudes than male teachers. This observation supports findings from Scotland, USA and Israel (Boyle et al., 2013; Park, Chitiyo, & Choi, 2010; Romi & Leyser, 2006). This gender difference in attitude was noticeable for both pre-service and in-service teachers (Boyle et al., 2013; Park et al., 2010; Romi & Leyser, 2006).

Another study conducted by Avramidis and Norwich (2002) in the UK found that gender was one of the factors contributing most to teacher attitudes along with age and experience. Male teachers were less positive than female teachers towards the idea of inclusive education. On the other hand, a comparison study between Jordan and the United Arab Emirates conducted by Al Zyoudi, Al Sartwai and Dodin (2011) on 300 in-service teachers found no significant differences due to gender. Evidently there is a need for further research into the relationship between gender and attitude and how the gender effect, if any, can be utilised in advancing inclusive education practices in Jordan.

3.5.2 **Teacher qualification and role**

Disparities between the attitudes of special education teachers and general education teachers are frequent in the literature. Although researchers over the last few decades have sought to highlight numerous benefits of inclusive education, negative perceptions remain high, particularly among the general education teachers in the US and Australia (Charley, 2015; Cook, Semmel, & Gerber, 1999; Familia-Garcia, 2001; Forlin, 2001).

Familia-Garcia (2001) emphasised this when researching special education and general education teachers’ views on inclusive education in New York. Although the special education teachers were in full support of the move to inclusive education, half of the general teachers refused to give their support, with 80% stating that they would leave the school if the move was implemented (Familia-Garcia, 2001). Another issue related to the roles of general and special education teachers is that of responsibility. As countries strive to follow inclusive practices, a special education classroom is sometimes required within a general education school (Familia-Garcia, 2001). The issue then arises of who should teach the inclusive
classes. Typically, a teacher with special education training would do so, leading to a perception that there is no need to integrate the students.

Many times, general education teachers see these classes as the responsibility of special education teachers, which may actually increase the gap between the two types of teachers, rather than closing it. Teachers need to cooperate and work together to develop strategies in order to effectively implement inclusive education (Al Khatib, 2007; Amr, 2011). Unfortunately, special and general education teachers in Jordan are not currently cooperating with each other (Al Jabery & Zumberg, 2008).

3.5.3 Teacher experience working with students with disabilities

Teachers’ experiences of working with students with disabilities undoubtedly influence their attitudes towards inclusive education. Ahmed, Sharma and Deppeler (2012) asserted that, indeed, teacher attitudes are created by their experiences of contact with students with disabilities and depended on whether they were perceived as successful or unsuccessful. This has been reinforced by Boyle et al. (2013) who found that after one year of experience within inclusive settings, teacher attitudes were increasingly negative. Importantly, 68% of the teachers studied had no qualification in special education which may be a confounding variable impacting this finding. The study indicated also that once these teachers had experienced negative feelings in their first year; their experiences and training thereafter made no further impact.

In another report, UNESCO (2009) found that teachers’ attitudes “depend strongly” on their experiences with “challenging” students. Whether the change in attitude was towards positive or negative is a point of dispute. For example, Leyser and Tappendorf (2001) showed a direct positive correlation between the number of inclusive classes teachers had taught and positive teacher attitudes. It is evident that teachers’ attitudes can depend largely on their experiences the more years of experience working with students with different types and levels of disability, the more positive attitudes teachers are likely to hold.
3.5.4 Type and level of disability of students

Students with disabilities present with a wide range of types and levels of disability. When it comes to planning for, and teaching students with disabilities, students’ levels and types of disability should be considered as their learning needs depend heavily on these two variables. Special programs and techniques and suitable adaptation of the teaching methods offer some scope in this respect. A teacher’s support of inclusive education varies as a function of both the type and severity of the child’s disability (Čagran & Schmidt, 2011).

Teachers report greater anxiety regarding supporting students with more severe disabilities (Avramidis, Bayliss, & Burden, 2000a; Čagran & Schmidt, 2011; El-Ashry & McLeskey, 2009; Forlin & Chambers, 2011; Hastings & Oakford, 2003). This would indeed seem to apply to students with emotional and behavioural disorders. Numerous studies highlight these two disabilities as the most challenging to teach as perceived by teachers (Avramidis, Bayliss, & Burden, 2000a; Čagran & Schmidt, 2011; El-Ashry & McLeskey, 2009; Fayez et al., 2011; Forlin & Chambers, 2011; Hastings & Oakford, 2003). The main concerns cited were the impacts of these disabilities upon other students and the study environment, and the perception that these impacts were potentially disruptive (Forlin & Chambers, 2011; Hastings & Oakford, 2003).

The study by Jobe, Rust, and Brissie (1996) found that teachers’ concerns regarding including all students in one classroom increased or decreased according to the type of disability and the level of teacher knowledge. The same findings emerged from a study of Indian pre-service teachers who felt more favourably towards the inclusive education of students with physical, visual and hearing disabilities (Forlin et al., 2013). In contrast, Rajovic and Jovanovic (2013) found that in Serbia, teachers held the greatest concerns regarding students with visual and hearing disabilities and were the most positive about students with emotional disorders. One has to ask how such stark contrasts exist. It would seem logical to refer to Ahmed et al. (2012), and the discussion of the relationship between experience and attitude. If there was greater provision in Serbia for effective teaching of students with sensory impairment, then understandably this would be perceived as less challenging.
More than half of the teachers in a study conducted in Hong Kong said that they would not work with students with severe disabilities (Lee, Yeung, Tracey, & Barker, 2015). These findings were partly due to the teachers’ perceptions of the disabilities, but also partly due to their work environment, reinforcing the relationship between teachers’ perceptions of disability types and their beneficial or non-beneficial environment. On the other hand, a study conducted by Avramidis and Kalyva (2007) highlighted how Greek teachers held supportive views regarding inclusive education, but variable perceptions of the challenges of accommodating students with different types of disabilities in the general classroom. The study also showed that those teachers who had experience teaching students with disabilities revealed more supportive views than their colleagues with minimal experience.

Rakap and Kaczmarek (2010) found that teachers who work in public elementary schools in Turkey did not have positive attitudes towards including students with disabilities in the general classroom. Findings showed that only 35% agreed to accommodate students with severe learning disabilities in the classroom, yet the majority responded positively to professional development in this area. If teachers are positive about the concept of professional development, this shows a willingness to grow and adapt to educational changes. Yet, only about one-third of the teachers in the study were open to working with students with severe disabilities. It would be useful to investigate the perception of “severe” as this may be a personal concept, which changes from teacher to teacher. Furthermore, this highlights the need for professional development to have a definite focus on more types and levels of disability in order to address and improve existing teacher knowledge.

In the Jordanian context, a study conducted by Alghazo (2002) revealed that the general high school teachers perceived negatively the inclusion of students with intellectual disabilities. Another study in Jordan by Al-Zyoudi (2006) found that, among teachers who had experience of teaching students with a disability, perceptions were strongly influenced by the type and severity of the students’ disability. Therefore, the type and level of disability appears to influence teachers’ perceptions. The analysis revealed that, teachers were more positive in their attitudes towards teaching students with visual impairments, hearing impairments and physical disabilities regardless of their level of experience. On the other hand, teachers were more negative in their attitudes towards including students with moderate
and severe intellectual disabilities. There is clearly a greater need for research on disability types and support facilities in relation to teacher attitudes as many situations pose challenges to teachers.

3.6 Teacher Knowledge

Teacher knowledge impacts on the effectiveness of inclusive education within the classroom, locally, nationally and globally. Teacher knowledge and skills in inclusive education and relevant policies are essential in order to ensure that individual rights are upheld (Avramidis & Kalyva, 2007). Policies that can be applied at a more local and micro level are also vital in that they serve to inform teachers of what is achievable. As more students with disabilities seek an inclusive education, there is a pressing need for teachers to possess a greater wealth of knowledge about different disabilities.

Orr (2009) argues that obstacles to inclusive education and the negative attitudes of general education teachers towards inclusive education are due to a lack of the knowledge and skills required to support and facilitate inclusive education. Thus, the need to impart knowledge about inclusive education to teachers is required to enhance positive perceptions is again emphasised. The role of up-to-date information, refined skills and training to enhance teachers’ overall knowledge base in all aspects of inclusive education has, in fact, been highlighted by many researchers including Alton-Lee et al. (2000), Avramidis & Kalyva, (2007), Cullen, Gregory, & Noto, (2010), Simpson, (2003) and Westwood & Graham, (2003).

In a Turkish study conducted with 194 general education teachers, Rakap and Kaczmarek (2010) suggested some further learning opportunities to help future teachers deal with inclusive education. Teacher candidates were advised to attend professional development focusing on (1) the type of disability, (2) best practice for successful inclusive education, (3) educating parents of children with disability and (4) designing and adopting IEPs in an inclusive classroom (Rakap & Kaczmarek, 2010, p. 72). It was found that these were the four most effective strategies for teachers to gain the knowledge needed to include students with disabilities in general classrooms.
In addition, a study conducted by Nonis and Jernice (2011) focused on the learning experience of pre-service special education teachers throughout the period of a nearly three-month special education teaching practicum in their respective special schools. The findings showed that most of the teachers enjoyed the practicum as they gained knowledge and skills from their mentors. This study highlights the link between practicum and training and the ways in which this can inform teachers for everyday practice.

Increased teacher knowledge would not only advance early intervention, it would also serve to eliminate a vast amount of teacher anxiety surrounding the teaching of students with severe and different types of disabilities. Only through education can such anxieties and apprehensions be dispelled (Agbenyega & Klibthong, 2014; Forlin & Chambers, 2011; Muhanna, 2010).

For Jordan to move forward with inclusive education and ensure positive teacher attitudes, this component of enhancing the knowledge of teachers and inclusive practice must take priority. A stronger link between knowledge and skills must be forged in order to increase teacher competency (Fayez et al., 2011). By following the above types of strategies, Jordan may be able to support advanced levels of teacher knowledge which can be put into practice.

3.7 Measuring Teachers’ Perceptions

Some studies have been conducted on teachers’ perceptions of including students with disabilities in the general classroom in Western countries (Batsiou, Bebetsos, Panteli, & Antoniou, 2008; Boyle et al., 2013; Clough & Nutbrown, 2004; Cramer, 2014; Hintz, Urton, Krull, Wilbert, & Hennemann, 2015). A study was conducted by Sharma, Forlin, Loreman and Earle (2006) to investigate pre-service teacher attitudes towards the inclusion of students with disabilities in the general classroom of teachers from Australia, Canada, Singapore and Hong Kong. The researchers found that teachers in Western countries hold more positive attitudes towards the inclusion of students with disabilities than teachers in Eastern countries. This difference was due to the higher level of implementation and the dominance of inclusive education policies in the country studied. Similar studies are needed in the context of Jordan. Indeed, few studies in Jordan have focused on pre- and in-service teachers’ perceptions of
inclusive education. One comparative study between Jordan and the UAE by Al Zyoudi et al. (2011) and another by Al-Zyoudi (2006) used surveys to gather data. In the latter work, length of training, length of teaching experience and the severity of the students’ disabilities were found to have strong influences on teacher attitudes. Another quantitative study conducted by the present researcher (Muhanna, 2010) investigated Jordanian teacher attitudes towards the inclusion of students with autism in the general classroom and the study found that special education teachers were slightly more positive in their attitudes than general classroom teachers. In addition, the literature review of the Jordanian context in this work, revealed that there is a lack of psychometrically sound measures to cover all constructs in the survey (e.g. inclusive education policy, teacher preparation, resources, teacher attitudes and teacher knowledge), especially in the cultural context of Jordan. Therefore, more research of this kind is needed.

Robust measures have been obtained by studies in Western countries using mixed-method research to investigate teachers’ perceptions of inclusive education and the threats facing inclusive schooling. This approach is not necessarily culturally appropriate in the Jordanian context. Inclusive education of students with disabilities in Western countries is very common and part of daily life in the general classroom. On the other hand, in countries such as Jordan, inclusive classrooms are not common and students with disabilities are taught in segregated settings (Muhanna, 2010). In addition, it is common and compulsory for general education teachers in Western countries to complete some training in inclusive education during their teaching education and this can give teachers the ability to work in an inclusive classroom. In Jordan, general education teachers have no training in special education during their teaching education. Therefore, one problem related to the adoption of survey instruments and standardised measures when researching in Jordan may be whether they are socially and culturally appropriate.

Therefore, a major goal of the current study was the development of a newly constructed measure of teachers’ perceptions of inclusive education in Jordan that would be culturally appropriate as well as reliable and validated. Another goal is to provide practical and ethical solutions to local and societal problems.
3.8 The Mixed-Method Approach

Mixed-method approaches have been used to investigate teachers’ perceptions towards inclusive education. For example, a study conducted in Germany by Hintz et al. (2015) used a mixed-method approach to investigate special and general education teachers’ perceptions toward inclusive education in the early stage of inclusion. Another study, using mixed method was conducted in the US by Greenfield, Mackey, and Nelson (2016) on the effectiveness of special education courses in changing the perceptions of pre-service teachers regarding teaching students with disabilities. The results from these studies suggest that using a mixed-method approach allowed the researchers to gain a deeper understanding of pre-service teachers’ perceptions than previous studies using a single-method research approach. While the quantitative approach suggested a significant difference in teachers’ perceptions over time, the qualitative approach “indicated some of the detailed growth pre-service teacher presented around using person-first language to describes students with learning disabilities, suggesting that this language aligned with the more positive perceptions gathered through the survey” (Greenfield et al., 2016, p.344).

3.9 Conclusion

The above review of the research literature illustrates a wide range of factors that influence the successful implementation of inclusive education. Firstly, attitude as a factor within inclusive education cannot, and must not, be ignored. Teacher knowledge and preparation are also critical but, as discussed, their impact is diminished if those undertaking the training have negative attitudes towards inclusive practices. Furthermore, the application of Bronfenbrenner’s (1994) ecological model demonstrates the imperative role of teachers’ perceptions within different societies. Therefore, proponents of inclusive education need to allocate more time and investment in changing attitudes in order to break down negative perceptions and enhance practice. Studies have highlighted the role of intrinsic factors such as gender and culture, which also require further focus (Al Khatib, 2007; Al Zyoudi et al., 2011; Avramidis & Norwich, 2002; Boyle et al., 2013; Hintz et al., 2015).

This review of the inclusive education literature has drawn out the critical elements and barriers. Clearly, there is a shortfall between theory and practice, but even more evident is
that different nations are at different levels of advancement towards inclusive education. Studies illustrate that, despite policies and training, a majority of schools in Jordan are not provided with support and resources where necessary, drastically restricting teachers’ abilities to carry out effective inclusive practices (Al Jabery & Zumberg, 2008; Al Shoura & Ahmad, 2014; Al-khateeb et al., 1996; Al-Natour, ALKhamra, & Al-Smadi, 2008). Also, due to financial constraints, materials and equipment that need to be in place in order to accommodate all students are still lacking in a majority of schools, creating an environment of frustration rather than encouraging learning. The literature does identify a positive move forward within Jordan in terms of the number of amended and inclusive facilities, but it is clear from responses within the above studies that more needs to be done (Abu-Hamour & Al-Hmouz, 2013; Al Shoura & Ahmad, 2014; Al Zyoudi et al., 2011; Amr, 2011).
4 AIMS, RESEARCH QUESTIONS AND RATIONALE

The purpose of this chapter is to present the specific aims of this study and the research questions posed. Secondly, the rationale behind these aims and research questions will be discussed.

Teachers are increasingly confronted with the challenge of delivering successful inclusive education when providing education for all students with disabilities in general education classrooms (Sprowl-Loftis, 2013; Vaz, Wilson, Falkmer, Sim, Scott, Cordier & Falkmer, 2015). Inclusive education policy and resources, teacher preparation, teacher knowledge and attitudes, collaboration and the level and type of disability of the student are important factors; these need to be addressed to ensure the implementation of inclusive education and to educate all students successfully in one general education classroom, regardless of ability (Forlin & Chambers, 2011; UNESCO, 2008b; United Nations, 2015b; Vakil et al., 2008). This study examines teachers’ perceptions toward the inclusion of students with disabilities in general education schools. This is because students should be guaranteed the right to inclusive education at all levels, regardless of the type or level of a student’s disability, and conversely, inclusive education should exist for students without disabilities.

4.1 Aims of the Study

The study aimed to examine the factors influencing the implementation of inclusive education in Jordan. The factors to be considered include inclusive education policy, teacher preparation, resources, teacher attitudes and teacher knowledge and skills. This was to be achieved through interviews with teachers, a survey and an analysis of inclusive education legislation and policy. The three types of data will be triangulated to obtain a cohesive picture of the problem investigated.
4.2 Research Aims, Rationale and Research Questions of the Study

The seven aims are presented in order of implementation within the study.

4.2.1 Aim 1: To explore Jordanian inclusive education legislation and policy

Aim: To analyse the 2007 Law in Jordan and to determine the extent to which the inclusive education policy is being implemented, through teachers’ perceptions.

This study aims to examine the implementation of inclusive education policy in Jordan from the teachers’ perspective in order to ascertain whether it supports or hinders the full involvement of all students with disabilities in Jordanian classrooms.

Rationale: Legislative framework are essential to enhance education for all students regardless of their abilities. The implementation of a clear inclusive education policy is vital and can lead to excellence in education for all. However, all educational stakeholders should have their objectives enhanced through such frameworks, and by assistance from educational authorities. Therefore, the approach of teachers may improve the provision of education as provided in the Law for the Welfare of Disabled Persons (1993) (HCAPD, 2015). The UNESCO policy guidelines (2009) state that “inclusive education is a process of strengthening the capacity of the education system to reach out to all learners and thus be understood as a key strategy to achieve education for all” (p. 8). Thus, the establishment and implementation of a successful inclusive education environment depends on all relevant partners in the education system (UNESCO, 2009).

Research Questions: The following research questions guide the investigation of the first construct, inclusive education policy, from teachers’ perspectives:

1.1. What is the scope of the inclusive education policy in Jordan? What provisions are set out for the implementation of the policy?
1.2.1 To what extent are teachers aware of the inclusive education policy?
1.2.2 Do teachers believe that inclusive education is being implemented and, if so, with what impact?
4.2.2 **Aim 2: Teacher preparation**

**Aim:** To determine whether teachers perceive their preparation as allowing them to provide inclusive education for students with disabilities.

This study examined whether teachers see their training in universities as successful in preparing them to include students with disabilities in their classrooms, and what the impact of their preparation is on inclusive education.

**Rationale:** Effective teacher preparation should be the first goal in amending current inclusive education practices. Educators must possess the necessary viewpoints, skills and inclusive education policy comprehension surrounding inclusive education in order to be effectively prepared (Costello & Boyle, 2013; Johnson & Howell, 2009; Majoko, 2017; Wiebe Berry, 2006). Realistically, this can only be achieved if teachers receive appropriate education prior to commencing a teaching career, and ongoing professional development thereafter. This study aims to determine whether teachers see this as currently occurring in Jordan.

Achieving competence in including all students regardless of their abilities requires well-prepared teachers who can facilitate successful inclusive education (Monsen & Frederickson, 2003). In addition, Forlin (2010) indicated that training must provide "authentic interaction" to prepare teachers for different types and levels of disability and enable them to understand individual needs. Therefore, teacher preparation courses need to cover practical strategies, not only knowledge-based components (Forlin, Kawai, & Higuchi, 2015). Furthermore, teacher preparation should not only address different types and levels of disability, but should include how to collaborate effectively with other education stakeholders and make use of available resources.

**Research Questions:** The following research questions guide the investigation of teacher preparation from teachers’ perspectives:

2.1. According to Jordanian teachers, how adequate are teacher preparation courses in preparing teachers to include students with disabilities in their classrooms?
2.2. Are teachers prepared to include students with different types of disabilities?
2.3. What are the differences between Jordanian special and general education teachers in their perceptions of the adequacy of teacher preparation courses?

2.4. What additional types of preparation do Jordanian teachers require to deliver inclusive education?

4.2.3 Aim 3: Resources

**Aim:** To explore the role and importance of resources in providing high-quality inclusive education, from teachers’ perceptions.

Using teachers’ responses, this study aims to investigate currently available resources and then analyse them in relation to inclusive education policy by determining what resources the inclusive education policy outlines should be offered to schools, what types of resources and supports teachers currently have and what teachers need for successful inclusion that meets the needs of all students.

**Rationale:** Implementing successful inclusive education requires multiple resources. These resources include an effective implementation system, sufficient funding support, special programs, administrative support, professional development and support (Laluvein, 2010; Loreman, 2001; Orr, 2009; Winzer & Mazurek, 2011), and physical resources such as ramps and adjusted doorways (Bērziņa, 2010; Pivik et al., 2002).

However, due to financial constraints the majority of schools in Jordan may be unable to provide these resources (Abu-Hamour & Al-Hmouz, 2013; Al Jabery & Zumberg, 2008; Turmusani, 1999). Given that it can be assumed that inadequate resources cause considerable barriers to inclusion, this research study aims to investigate the current situation with respect to resource allocation for inclusive education in Jordan.

3.1. What kinds of resources do Jordanian teachers report as currently existing in schools to support inclusive education? And what additional types of resources do teachers need?

3.2. How does the existence of and the need for resources differ between Jordanian special and general education teachers?
4.2.4 **Aim 4: Teacher attitudes**

**Aim:** To explore teacher attitudes towards inclusive education.

This study seeks to determine what teacher attitudes are concerning the inclusion of students with disabilities in the general education classroom.

**Rationale:** Studies have emphasised that it is important to identify teacher attitudes because these attitudes are likely to affect teachers’ behaviour when working with students with disabilities in their classrooms (Avramidis, Bayliss, & Burden, 2000b). Therefore, it must be acknowledged that teacher attitudes towards inclusive education are central to the overall success of its implementation. Negative attitudes will negatively affect the success of inclusive education as well as leading to students with disabilities being treated unequally in comparison to their peers without disabilities (Alghazo, 2002). Research has also highlighted that there is a difference in the attitudes of special and general education teachers, with those of general education teachers being more negative (Charley, 2015; Cook et al., 1999; Familia-Garcia, 2001).

Therefore, this study seeks to investigate the attitudes of teachers regarding inclusive education and their attempts to support students with disabilities in general education classes.

**Research Questions:** The following research question guide the investigation of teacher attitudes from teachers’ perspectives:

4.1. What is the relationship between teacher attitude towards inclusive education and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)?

4.2.5 **Aim 5: Teacher knowledge**

**Aim:** To determine teachers’ perceptions of whether they have the knowledge to include students with disabilities in their classrooms.
This study aims to determine the extent of the differences between teachers’ responses according to their knowledge about including students with disabilities in their classrooms by analysing the level of knowledge on the inclusion of students with disabilities in their classroom.

**Rationale:** Research has highlighted the importance of maintaining teachers’ skills and knowledge base when working with students with disabilities (Al Khatib, 2007; Al-Zyoudi, 2006; Alahbabi, 2009). Teachers may have knowledge about inclusive education, but lack the required skills to apply their knowledge. In particular, a study conducted by Moore (2015) found that teachers with good knowledge of inclusive education who applied practice skills using their knowledge felt calmer and were able to apply the appropriate techniques when teaching students with disabilities in their classrooms.

The level of teacher knowledge is considered vital to the effectiveness of inclusive education of students with disabilities; therefore, an understanding of disability types, techniques and methodologies should be acquired by teachers (Agbenyega & Klibthong, 2014). From the teachers’ perspectives, a lack of knowledge and skills is a key concern in being able to cope with an inclusive classroom and being competent in addressing students’ needs (Forlin & Chambers, 2011; Forlin et al., 2015). It is unrealistic to address every student’s goals if the impact of their unique disability is not fully comprehended.

**Research Questions:** The following research questions guide the investigation of teacher knowledge from teachers’ perspectives:

5.1. What knowledge and skills related to inclusive education for students with disabilities do Jordanian teachers report that they have currently? And what would improve their knowledge?

5.2. What is the relationship between teacher knowledge towards inclusive education and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)
4.2.6 **Aim 6: Correlations amongst the research constructs**

**Aim:** To determine the overarching relationship among the following constructs (inclusive education policy, teacher preparation, resources, teacher attitudes, teacher knowledge).

This study seeks to understand the relationships among the five constructs.

**Rationale:** In researching the above constructs, and based on previous research, the interrelationships among those constructs are considered to be important for inclusive education practices (Avramidis et al., 2000a; Bērziņa, 2010; Forlin, 2010; Forlin et al., 2015; Korkmaz, 2011; Loreman, 2001; Sims, 2010; UNESCO, 2009; United Nations, 2006). This study seeks to obtain teachers’ perceptions towards their knowledge of teaching students with disabilities in their classroom. In addition to the duration of teachers’ experience; these vital factors will indicate which of the factors considered are most important for teachers to be able to include students with disabilities in their classroom, because inclusive education policy, resources, teacher preparation, teacher attitudes and teacher knowledge are cornerstones of the inclusive education framework.

**Research Question 6.1.** What are the relationships among the factors (Inclusive education policy, teacher preparation, resources, teacher attitude and knowledge)?

4.2.7 **Aim 7: Influence of the research constructs on teachers’ perceptions**

**Aim:** To determine which of the constructs (inclusive education policy, teacher preparation, resources, teacher attitudes and teacher knowledge) predict teachers’ perceptions regarding their capacity to teach students with disabilities.

**Rationale:** The research considered in the literature review indicates that successful inclusive education strategy is influenced by multiple factors such as inclusive education policy, teacher preparation, resources, teacher attitudes and teacher knowledge (Al-Zyoudi, 2006; Avramidis & Kalyva, 2007; Fayez et al., 2011; Forlin et al., 2015; Hadidi & Al Khateeb, 2015). Because there has been limited research on the interaction of these factors in
the Jordanian context it was considered critical to explore these interactions in the present study.

**Research Question 7.1.** What constructs are predicting teachers’ perceptions on their ability to teach students with disabilities in their classroom?

This study therefore aimed to show which factors are related to teachers’ perceptions and affect teachers’ ability to include students with disabilities in their classroom.

4.3 **Summary**

The five constructs identified within this chapter will be used to analyse teacher perceptions of current practice and the implementation of inclusive education in Jordan. They will also inform an analysis of current legislation and policy related to inclusive education. The following chapter will describe the methodology designed to address the research questions in this study.
5 METHODOLOGY

This chapter will provide an overview of the research methodology implemented in the study to address the specific research aims and research questions. The study employs an exploratory sequential mixed-method design comprising qualitative and quantitative methods (Creswell, 2014). This chapter will provide a rationale for the research design and outline the justification for using a mixed-method approach and examine its strengths and weaknesses.

A comprehensive description of the three phases of the study will now be provided detailing the associated participants, measures, procedures and approach to data analysis for each phase.

5.1 Research Design

An exploratory sequential mixed-method design can be defined as collecting, analysing and interpreting qualitative and quantitative data within one or a series of studies to investigate the same original phenomenon (Creswell, 2009). Using qualitative and quantitative approaches in combination provides a better understanding of the subject than either approach used alone (Creswell, 2014).

Adopting an exploratory sequential mixed-method approach in the current study is more likely to capture the essential factors that might affect teachers’ perceptions regarding the inclusive education of students with disabilities in the general classroom in Jordan.

The mixed-method design in the current research study was executed by sequential explanatory techniques in three phases: (1) an initial qualitative phase (interview); followed by (2) a quantitative phase (survey); followed by (3) a final qualitative phase (the analysis of the 2007 Law and Jordanian NSPD 2010-2015 as depicted in Figure 5.1). The research framework of this research was prepared as shown in Figure 5.1.
Research suggests that the difference between qualitative and quantitative approaches is that a qualitative approach emphasises conducting detailed examinations of cases, whereas a quantitative approach emphasises empirically measuring variables and testing hypotheses (Johnson, 2012; Neuman, 2006; Sosu, Mtika, & Colucci-Gray, 2010). Researchers can increase the reliability and validity of, and be more confident about, research results by not relying on a single method (Meng, 2008; Mukhopadhyay, 2014; Pajares, 1992; Wideen, Mayer-Smith, & Moon, 1998). In fact, due to the advantages of a mixed-method approach, researchers have been able to triangulate their research findings and have greater confidence in the conclusions drawn (Greenfield et al., 2016; Lelashvili, 2014; Malo-Juvera, 2015). Therefore, the current study also used a mixed method to enable triangulation of the data. On the other hand, it can be a time-consuming and complex method, as it requires skills in both quantitative and qualitative analysis and the synthesising of those data. However, it was determined that both dimensions were required to achieve a more complete exploration of the phenomenon under study. Hence, mixed method was the approach chosen.

**Figure 5.1. Exploratory Sequential Mixed-Method Design for the Current Study**
In addition, the variations within a study that uses different methods can be problematic, as when interpreting the results of qualitative (open-ended) and quantitative (closed-ended) questions (Robson, 2011; Roe, 2012). Further, the open-ended questions in the quantitative survey do not take the place of a qualitative method. However, they can significantly enhance the insight gained from the quantitative method. Nonetheless, the present study was designed using a sequential mixed-method approach due to the need for a broad scoping methodology to inform the survey phase, and to provide a more complete understanding of the research problem than would be possible through either method alone.

The interviews were used in the first phase and the survey was used in the second phase to compare and explore teacher perceptions of the factors that had emerged from the literature review as important to the inclusive education of students with disabilities. The analysis of the 2007 Law and the NSPD 2010-2015 was the final stage. The phases fell into clear, separate stages and the results were reported accordingly.

5.1.1 Design of Phase 1: Interviews

The first qualitative phase of the study was undertaken in order to gain clear insights into teachers’ personal experiences and how these shaped their current perceptions of inclusive education to allow the researcher to ensure that all relevant factors were included in the survey. The researcher sought to gain a comprehensive understanding of each teacher’s perceptions of the inclusive education of students with disabilities in the general classroom in Jordan, and the reasons behind his or her perceptions; this can best be achieved using a qualitative methodology (Nunan, 1992).

There are several ways to measure the perceptions of teachers regarding inclusive education. Researchers have determined that surveys and interviews provide valuable approaches to measuring teacher attitudes in the field of inclusive education (Greenfield et al., 2016; Lelashvili, 2014; Malo-Juvera, 2015). A semi-structured interview approach was chosen for Phase 1 to facilitate the discussion and identification of broad concepts and concerns that might not be captured through a structured interview. Interviews are used broadly in qualitative research as a method of data collection, and they may be structured, semi-structured or unstructured (Creswell, 2014). Structured interviews resemble surveys,
whereas predetermined questions in semi-structured interviews prompt discussion, allowing the interviewer to explore relevant themes during the enquiry (Robson, 2011). Unstructured interviews have the risk of discussing non-relevant issues. Hence, the semi-structured interview was selected. There was the additional purpose of using this method to discover different issues that are related to the problem (Neuman, 2006).

5.1.2 Design of Phase 2: Survey

The sequential exploratory design, in which qualitative data were collected first, permitted the researcher to find, understand and build upon initial qualitative results (Creswell, 2014; Driscoll, Appiah-Yeboah, Salib, & Rupert, 2007). This design then allowed the researcher to incorporate the comprehensive themes identified in the interviews, coupled with those identified in the literature, to construct an appropriate survey to address the research aims.

Neuman (2006) defined survey research as a method of sociological examination that uses questions to collect information about how people think and act within the framework of the research. The survey research method in the current study is designed to address and measure some of the factors that might influence the inclusive education strategy in Jordan. Fowler (2014) and Neuman (2012) state that using quantitative methods generates data that can be generalised to the population, whilst Creswell and Creswell (2017) consider the survey to be an excellent way of summarising a large amount of information.

Through surveys, the researcher can obtain information efficiently by distributing them to a large sample of the population of interest, thereby gaining input from a larger number of people than is possible through qualitative techniques (Creswell, 2009). A survey also allows researchers to discover fundamental factors that could be missed in an interview; it can be used to explore aspects of a situation or seek explanation go beyond simple description (Creswell & Clark, 2007).

According to Creswell (2014), however, a weakness of the quantitative approach is that the loss of some information can influence data reduction if the respondents ignore certain questions. Also, the instruments cannot be modified once the study begins because the research methods are inflexible. In addition, Bell (2010) added that a quantitative approach
cannot guarantee to measure the perceptions of teachers, due to the limited details gathered and the unnatural research situation that may isolate teachers if they misunderstand the questions or if the questions appear to be impersonal. However, Neuman (2006) argued that such a design focuses on finding relationships among variables and, therefore, makes it possible to find differences between the attitudes towards inclusive education of groups of teachers (e.g., between special and general education teachers).

Therefore, the survey method is well suited to establishing correlations among relevant factors (such as inclusive education policy, teacher preparation, resources, teacher attitudes and teacher knowledge), identifying differences between groups of teachers and determining the relative influence of particular variables or factors. The factors included in the survey arose directly from both the literature review and the interviews conducted as Phase 1.

No survey instrument to measure all the variables of interest, especially in the cultural context of Jordan in this study, was available from the literature. Therefore, a new survey instrument, the Malkawi Measure, named after the extended family name of the researcher, was developed for the survey. The details of this instrument are given in the implementation phase later in this chapter.

This method allowed the researcher in the current study to further explore teacher perceptions of the factors likely to affect inclusive education and to compare their responses based on a range of demographic variables.

5.1.3 Design of Phase 3: Policy analysis

Policy or document analysis is a qualitative approach whereby text is analysed to understand a particular subject (Menard, 1991). A qualitative research method was applied to obtain a meaningful understanding of the 2007 Law and NSPD 2010-2015 in Jordan and to evaluate the consequences of these policies on the current situation. Since policy analysis is considered the process of clarifying a policymaking challenge, analysing relevant information about the problems with a policy will yield a clear understanding of its nature (Menard, 1991; Neuman, 2006).
Bowe (2009) has outlined some of the strengths and weaknesses of document analysis. Such analysis is more efficient than other research methods, because many documents are available online and in the public domain and are thus easily accessed. In addition, document analysis covers a long time span and is stable. However, depending on the amount of time spent and the number of documents viewed, document analyses might not provide sufficient detail to answer specific research questions and may present incomplete collection of documents (e.g., if documents are missed or left out). This suggests selection bias (Brians, 2011; Krippendorff, 2004).

In Jordan, as was discussed in the literature review, there is less distinction between legislation and policy than in Western countries. For that reason, the analysis has been conducted on both the 2007 Law and the NSPD 2010-2015 based on Patton, Sawicki and Clark’s (2015) policy analysis method. Only the first four steps were considered for this analysis: the fifth and sixth steps which identify the preferred policy and its implementation are not relevant to the current study, but may be useful for future work. The first four steps that were used are: first, defining the problem; second, determining evaluation criteria; third, identifying alternative policies; fourth, evaluating alternative policies. Bowen (2009), Carley (1980) and Patton et al. (2015) have stated that document analysis can be undertaken through systemic procedures for reviewing and evaluating either electronic or printed documents.

5.2 Implementation of Phase 1: Interviews

5.2.1 Participants

The sample for Phase 1 included six teachers in total from six different schools in the city of Irbid, Jordan. Three of these teachers were from special schools (two females; one male), and three were from general education schools (two females; one male) as shown in Table 5.1.

<p>| Table 5.1. Teachers’ Background as Disclosed in the Interview | 82 |</p>
<table>
<thead>
<tr>
<th>Teacher</th>
<th>Gender</th>
<th>General / special education teacher</th>
<th>Teaching students with / without disability</th>
<th>Teaching experience (in yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Female</td>
<td>Special</td>
<td>With disability</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>B</td>
<td>Male</td>
<td>Special</td>
<td>With disability</td>
<td>&gt; 10</td>
</tr>
<tr>
<td>C</td>
<td>Female</td>
<td>General</td>
<td>Without disability</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>D</td>
<td>Male</td>
<td>General</td>
<td>Without disability</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>E</td>
<td>Female</td>
<td>General</td>
<td>Without disability</td>
<td>&gt; 10</td>
</tr>
<tr>
<td>F</td>
<td>Female</td>
<td>Special</td>
<td>With disability</td>
<td>&lt; 5</td>
</tr>
</tbody>
</table>

5.2.2 Measures

Based on the understanding reached from the review of literature, the researcher constructed 11 semi-structured interview questions to use in Phase 1 (see Appendix A: Interview questions in English and Appendix B: Interview questions in Arabic).

A semi-structured interview was conducted with the 11 questions looking at the teachers’ perception of inclusive education. Teachers were asked to comment on inclusive education policy, teacher preparation, resources, teacher attitudes and knowledge.

5.2.3 Procedure

A non-probability sample was obtained within the schools. Non-probability sampling is a technique whereby the samples are gathered in a process that does not give all the individuals in the population equal chances of being selected (Creswell, 2014). In Jordan, general education schools and government institutions are representative of the whole population of the country regardless of whether they are located in the city or rural areas. Therefore, with cooperation from the MOE and the MSD, through convenience sampling, the schools in one city were selected based on their close proximity to the researcher’s home.

From a list of local primary schools in the city of Irbid, three special education and three general education schools were invited to participate in the study, and one teacher from
each school was invited to be interviewed. The researcher had two phone conversations with each principal. Prior to the interviews, the principals were contacted by phone (first call) and provided with information on the aim of the study, the research process and the researcher’s identity and role as well as a description of how the findings would be used. The principals were also informed that the interviews would be audio-recorded and would last 30–45 minutes.

Inclusive education in Jordan has been considered a focus in the last 10 years and therefore, the researcher asked each principal to identify one teacher with fewer than five years or more than 10 years of experience who was willing to participate in the study after the principal had informed them of the aim and background of the study. The researcher also emphasised to each school principal that participation was voluntary, and responses would be de-identified.

Teachers who had graduated recently (within five years) and those who had graduated more than 10 years ago were invited to participate in the interview, in order to assess if the education system at the universities of the respective teachers differed and if the university courses had undergone change since the more experienced teachers had graduated. However, of the six teachers who agreed to participate in the study only two teachers had more than 10 years of experience. Gender was not a selection criterion.

The second phone call to the school principals was made after two days to check if one teacher had agreed to participate in the study. A convenient time was scheduled to meet with each teacher to talk to them about the aim of the interviews, and the information sheet was given at that time. Then, suitable locations were decided on to conduct the audio-recording of the interviews four teachers chose to be interviewed in school settings at their convenience, whereas two teachers requested interviews in their homes. The researcher later calculated that the average interview duration for five teachers was approximately between 35 and 45 minutes.

The researcher aimed to make all teachers feel relaxed through a short general conversation to establish rapport before initiating the interview, so that interviews would be as candid as possible. To ensure confidentiality and candid responses, the researcher allocated
each teacher a code rather than using his or her name. Also, to ensure that teachers were confident interacting in the interview, they were informed about consent and voluntary, anonymous, confidential and informed participation. This entailed the researcher adhering to established ethical processes by explaining to each teacher that: (a) they had the right not to participate in the study, they would not be paid and they could withdraw from the interview process at any time without giving a reason; (b) their names would not be used in the research document or stored on file; (c) the content of their interview would be kept confidential, used only for the purpose of the current research and reproduced only for analysis; and (d) they were able to read the consent sheet before signing of their own accord. A list of contacts was also provided (e.g., human ethics staff and supervisors). Finally, teachers were informed that a copy of the findings of the research study would be available upon their request. The information sheet and consent for Phase 1 can be found in Appendix C: Participant information sheet for interview English and Appendix D: Participant information sheet for interview Arabic.

5.2.4 Data analysis

Thematic analysis techniques were used to analyse the data generated from the interviews. Braun and Clarke (2006) define thematic analysis as “a method for identifying, analysing and reporting patterns (themes) within data. It minimally organizes and describes (the) data set in rich detail” (p. 79). Thematic analysis is considered one of the most common tools of analysis in qualitative research because it emphasises, pinpoints, examines and records patterns (themes) and meaning across a dataset. It aims to join a group of repeating ideas in the context to enable the researcher to answer the research questions (Vaismoradi, Jones, Turunen, & Snelgrove, 2016). Boyatzis (1998) and Creswell (2014) state that descriptive analysis assists the researcher to manage, shape and make sense of unstructured information from teachers’ responses, to gather insight and understanding, and to develop meaningful conclusions.

The significance of thematic analysis is that it allows researchers to organise and analyse the frequency of a theme within the context of all participants’ responses. In addition, researchers can move beyond the frequency of an identified theme and easily produce an
accurate representation of the themes in the data, which systematically illustrates the meaning of any aspect (Marks & Yardley, 2004).

Therefore, teachers’ responses were analysed and compared according to the research questions in Chapter four. Analysis began with listening to each interview and transcribing it verbatim (Bailey, 2008). Then the researcher read through all the transcripts, and made notes recording initial impressions of possible themes (Bailey, 2008). The researcher then read the transcripts again, one by one, and labelled the words and phrases that are relevant from the raw data through a process called coding (Strauss & Corbin, 1998). The researcher identified common themes in the text and classified these themes into different categories associated with the research problem in order to answer the research questions (Simon, 2011).

5.3 Implementation of Phase 2: Survey

5.3.1 Participants

A total of 341 teachers participated in Phase 2. As with Phase 1, all of the participants were employed in government schools and the study was conducted in Irbid.

A demographic profile of the participants is set out in Tables 5.2 to 5.9. A majority of the participants were female (n = 220, 64.5%), under 39 years of age (n = 145, 71.9%) and worked in primary education (n = 204, 59.8%). A majority of the participants did not have a formal qualification in special education (n = 183, 53.7%). The highest qualification attained by a majority of the participants was a Bachelor’s degree (n = 237, 69.5%). A majority of the participants worked as general education teachers (n = 186, 55%). There was an almost equal representation of participants who worked in regional (n = 177, 52.4%) and city areas (n = 161, 47.6%).

The average years of experience that the participants had in special education was 2.49 (SD = 3.78), and the average years of experience that the participants had in general education was 6.17 (SD = 7.77).

The participants were asked about the number of students they had taught in the past and the kind of disability that the students had. For all kinds of disabilities, the responses
were skewed towards having taught no students with disability to having taught 1–5 students with disability (i.e., the lower end of the spectrum).

Table 5.2
*Gender*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>121</td>
<td>35.5</td>
</tr>
<tr>
<td>Female</td>
<td>220</td>
<td>64.5</td>
</tr>
<tr>
<td>Total</td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 5.3:
*Age Group*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 29 yrs</td>
<td>108</td>
<td>31.7</td>
</tr>
<tr>
<td>30–39 yrs</td>
<td>137</td>
<td>40.2</td>
</tr>
<tr>
<td>40–49 yrs</td>
<td>65</td>
<td>19.1</td>
</tr>
<tr>
<td>&gt; 50 yrs</td>
<td>31</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 5.4:
*Level of Education Taught*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>204</td>
<td>59.8</td>
</tr>
<tr>
<td>Secondary</td>
<td>137</td>
<td>40.2</td>
</tr>
<tr>
<td>Total</td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 5.5:
*Formal Qualification in Special Education*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>183</td>
<td>53.7</td>
</tr>
<tr>
<td>Yes</td>
<td>158</td>
<td>46.3</td>
</tr>
<tr>
<td>Total</td>
<td>341</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 5.6:  
*Highest Qualification Attained*

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-year teaching diploma</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>237</td>
<td>69.5</td>
</tr>
<tr>
<td>Postgraduate diploma</td>
<td>46</td>
<td>13.5</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>56</td>
<td>16.4</td>
</tr>
<tr>
<td>PhD</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>341</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 5.7:  
*Current Teaching Role*

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>%</th>
<th>Valid %</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education teacher</td>
<td>186</td>
<td>54.5</td>
<td>55.0</td>
<td>55.0</td>
</tr>
<tr>
<td>Special education teacher in a support class in a general school</td>
<td>103</td>
<td>30.2</td>
<td>30.5</td>
<td>85.5</td>
</tr>
<tr>
<td>Special education teacher working as a consultant/support for general education teachers</td>
<td>12</td>
<td>3.5</td>
<td>3.6</td>
<td>89.1</td>
</tr>
<tr>
<td>Special education teacher working directly with students with disability from general education classrooms</td>
<td>19</td>
<td>5.6</td>
<td>5.6</td>
<td>94.7</td>
</tr>
<tr>
<td>Special education teacher in a special school for students with disability</td>
<td>18</td>
<td>5.3</td>
<td>5.3</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>338</strong></td>
<td><strong>99.1</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Missing</strong></td>
<td><strong>3</strong></td>
<td><strong>0.9</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>341</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5.8:
*Work Location*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
<th>Valid %</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>City/metropolitan area</td>
<td>161</td>
<td>47.2</td>
<td>47.6</td>
<td>47.6</td>
</tr>
<tr>
<td>Rural area</td>
<td>177</td>
<td>51.9</td>
<td>52.4</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>338</strong></td>
<td><strong>99.1</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>0.9</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>341</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.9:
*Number of Students with Disability Taught, by Type of Disability*

<table>
<thead>
<tr>
<th>Item</th>
<th>n</th>
<th>0 students</th>
<th>1–5 students</th>
<th>6–10 students</th>
<th>11–15 students</th>
<th>16+ students</th>
</tr>
</thead>
<tbody>
<tr>
<td>D9_1 - How many students with Physical Disabilities have you taught in your career?</td>
<td>142</td>
<td>124</td>
<td>42</td>
<td>21</td>
<td>12</td>
<td>3.52</td>
</tr>
<tr>
<td></td>
<td>10.4</td>
<td>41.64</td>
<td>36.36</td>
<td>12.32</td>
<td>6.16</td>
<td>3.52</td>
</tr>
<tr>
<td>D9_2 - How many students with Intellectual Disabilities have you taught in your career?</td>
<td>162</td>
<td>101</td>
<td>39</td>
<td>21</td>
<td>18</td>
<td>5.28</td>
</tr>
<tr>
<td></td>
<td>8.4</td>
<td>47.51</td>
<td>29.62</td>
<td>11.44</td>
<td>6.16</td>
<td>5.28</td>
</tr>
<tr>
<td>D9_3 - How many students with Sensory Disabilities have you taught in your career?</td>
<td>125</td>
<td>125</td>
<td>39</td>
<td>31</td>
<td>21</td>
<td>6.16</td>
</tr>
<tr>
<td></td>
<td>6.1</td>
<td>36.66</td>
<td>36.66</td>
<td>11.44</td>
<td>9.09</td>
<td>6.16</td>
</tr>
<tr>
<td>D9_4 - How many students with Behavioural Disabilities have you taught in your career?</td>
<td>184</td>
<td>86</td>
<td>42</td>
<td>20</td>
<td>9</td>
<td>2.64</td>
</tr>
<tr>
<td></td>
<td>9.2</td>
<td>53.96</td>
<td>25.22</td>
<td>12.32</td>
<td>5.87</td>
<td>2.64</td>
</tr>
<tr>
<td>D9_5 - How many students with Emotional Disabilities have you taught in your career?</td>
<td>204</td>
<td>77</td>
<td>37</td>
<td>14</td>
<td>9</td>
<td>2.64</td>
</tr>
<tr>
<td></td>
<td>10.0</td>
<td>59.82</td>
<td>22.58</td>
<td>10.85</td>
<td>4.11</td>
<td>2.64</td>
</tr>
<tr>
<td>D9_6 - How many students with Multiple Disabilities have you taught in your career?</td>
<td>211</td>
<td>65</td>
<td>40</td>
<td>15</td>
<td>10</td>
<td>2.93</td>
</tr>
<tr>
<td></td>
<td>6.1</td>
<td>61.88</td>
<td>19.06</td>
<td>11.73</td>
<td>4.40</td>
<td>2.93</td>
</tr>
</tbody>
</table>

5.3.2 Measures

The survey was constructed by the researcher and comprised five constructs. It included some open-ended questions, Likert-scale items and others that demanded categorical
responses. The survey took 20 to 30 minutes to complete (see Appendix E: Survey English final version and Appendix F: Survey Arabic final version).

The survey included six distinct sections:

1. Demographic information: this section consisted of nine questions seeking information about the teachers’ backgrounds, including gender, age, type of school they work in, special education qualifications, highest qualification obtained, background, recent area of work, years of teaching experience, and number of students with disabilities they have taught in their career.

2. Policy: this section explored aspects of teachers’ awareness of Jordan’s inclusive education policy.

3. Teacher preparation: this section encompassed questions about whether teachers perceived their university education course prepared them to include students with disabilities in their classroom.

4. Resources: this section sought information about the resources available in the school context and to what degree teachers were in need of funding, professional collaboration, special programs and equipment.

5. Teacher attitudes: this section considered whether students with different types and levels of disability impacted on the attitudes of both special and general education teachers.

6. Teacher knowledge: this section contained questions related to teachers’ confidence to educate students with disabilities in their classrooms.

Teachers’ demographic data are ranking scales and the questions on inclusive education were on Likert rating scales. These were coded according to a numerical system transposed based on the nature of the questions. Likert-scale data comprised five points:

1- Strongly disagree
2- Disagree
3- Neither agree nor disagree
4- Agree
5- Strongly agree
5.3.3 Procedure

As the surveys were to be distributed in hard copies, it was deemed appropriate to conduct the survey in one city only, Irbid. Irbid is the second-largest city in Jordan and has both city and rural areas. This was undertaken to enable personal collection of the completed surveys and thus reduce the financial cost. The first stage of data collection involved obtaining the list of special and general schools in the city of Irbid from the websites of the MOE and the MSD. The researcher telephoned each school’s principal to explain the scope and background of the research that was to be conducted.

Initially, 20 schools from the general education school list were chosen. All but one of the principals granted the researcher permission to conduct the survey. Twenty-five special education schools and institutions were also selected to participate in the study, and all the principals of these schools granted the researcher permission to conduct the survey.

A total of 650 copies of the survey were distributed to the principals of the schools in hard copy: 400 to the general education schools and 250 to the special education schools and institutions. The researcher arranged for the surveys to be accompanied by a clear, written information sheet explaining the nature and aim of the research study (see Appendix G: Participant information sheet for survey English and Appendix H: Participant information sheet for survey Arabic). In order to ensure confidentiality, teachers were asked not to provide their names or any easily identifiable data. Based on each principal’s advice about the number of teachers in their school, between 20 and 40 surveys were sent in sealed envelopes to each school in an attempt to obtain as many responses as possible from each school.

In addition, an empty sealed box was distributed to each school principal. Teachers were instructed by their school’s principal to deposit their responses in that box one to two weeks after receiving the survey. When the time period had elapsed and the responses had been collected, each principal sealed the box and all boxes were kept until the researcher returned in person to collect them. This strategy was adopted to ensure the confidentiality of teachers’ responses in the study.
5.3.4 Data analysis

All quantitative analysis was conducted using the most current version of SPSS Statistics (version 24). This software has proven to be consistently reliable in a variety of statistical analysis projects. For each item, the mean response was estimated using the ratings given by the participants. When the scale mean was required, the total of all responses of all items of the scale was estimated and mean calculated from it. The data analysis undertaken is described in the following sections.

5.4 Frequency counts and descriptive statistics

The frequency counts and percentages were calculated for all questions with a nominal or ordinal response, and descriptive statistics like Medians and Inter-Quartile Ranges were calculated for all questions with a continuous response.

5.4.1 Reliability

Cronbach’s alpha was calculated to establish reliability. An alpha value of 0.7 or above was considered reliable (Reynaldo & Santos, 1999). There are five scales used in the survey: Policy, Teacher Preparation, Resources, Attitudes, and Knowledge. Reliability was tested for all these scales.

5.4.2 Validity

The validity of a scale is the degree to which a scale measures what it is supposed to measure (Gay & Mills, 2015). Validity is a necessary quality of all forms of research (Creswell, 2017; Gay & Mills, 2015). There has been controversy recently, however, about types of validity (Miller, McIntire, & Lovler, 2011). The basic types of validity can be classified as content validity, criterion validity and construct validity (Carmines & Zeller, 1979; Groth-Marnat, 2009). Content validity concerns whether the assessment instrument represents the construct being measured (Groth-Marnat, 2009). Face validity is a form of content validity, which is established by asking teachers to review the content of the survey (Creswell, 2017).
In order to consider these issues, 23 teachers participated in a pilot study where they were asked to critique the survey and identify any ambiguities, confusions, replications, overlapping items or misunderstandings and to make additional comments about inclusion, exclusion or clarification of any item. In addition, they were asked whether the items in each scale addressed the issues. The participants did not report any difficulties in understanding and answering the survey. As a consequence, no modifications were made to the survey.

5.4.3 **Exploratory factor analysis**

Exploratory Factor Analysis (EFA) was performed using the 40 items from the Policy, Teacher Preparation, Resources, Attitudes, and Knowledge scales. The aim of this exercise was to identify the structural pattern of the items from the Policy, Teacher Preparation, Resources, Attitudes, and Knowledge scales which could represent the scales in terms of a smaller number of variables called scores. Additionally, the EFA also serves the objective of validating the scales used in the questionnaire.

The results of the factor analysis depend on the sample size, the number of variables and the structure of the correlation matrix. The sample size for this analysis is large (>300) and the number of items for factor analysis are also large (40). A Principal Components Analysis (PCA) approach has been used for extracting the factors from the EFA. If the researcher simply wants to reduce a large number of items to a smaller number of underlying latent variables PCA is a suitable technique.

Varimax is a common rotation option because it maximises the variance of the squared loadings of each factor on each variable, which has the effect of widely differentiating the variables with respect to the factor loadings. Using Varimax rotation, each factor has either a large or a small loading on each variable and the factor solution is easier to interpret (Zhang & Preacher, 2015). The Varimax rotation technique has been used in the EFA.

The following criteria were applied to interpret the rotated component matrix: a valid factor should have an eigenvalue > 1.0, contain one or more variable/s with minimal loadings of ±.5, and be theoretically justified.
Factor scores were calculated as per the results of the EFA. The operational and conceptual definitions of the factor scores are provided in the relevant section in Chapter Seven.

5.4.4 Correlation analysis

Spearman’s non-parametric rank correlation coefficient is appropriate when nominal or non-parametric variables are involved, and associations need to be tested for a pair of variables. Spearman’s correlation coefficient was used to explore any possible association between the subscales used in the research (i.e. inclusive education policy, teacher preparation, resources, teacher attitude and teacher knowledge) and years of experience in general and special education as well as the correlation between the constructs. Only the correlations which were statistically significant (at alpha < 0.05) have been reported.

5.4.5 Multiple linear regression

Regression is defined as a statistical technique to find the relationships among variables (Neuman, 2006). Regression is mainly used for prediction (where some variables predict others) and causal implication (Campbell & Campbell, 2008). The technique of multiple linear regression was utilised to gain insights into the drivers of the level of confidence that the teachers have in their capacity to teach students with disabilities.

5.5 Implementation of Phase 3: The Analysis of the 2007 Law and NSPD 2010-2015

Policy analysis is the technique used in the current research study to examine and evaluate the relevant documents outlining the legislation and inclusive education policy in Jordan in order to draw a conclusion and value the outcomes. Therefore, the researcher reviewed legislation and inclusive education policy in Jordan that emphasises the rights of persons with disabilities, starting with Article 3 of the Law for the Welfare of Disabled Persons (1993), which was replaced by Article (31) of the 2007 Law and is therefore not included in the current analysis. The researcher also reviewed the strategy items in the NSPD 2010-2015 and its implementation Which is also related to inclusive education in Jordan. The following documents were therefore used for the policy analysis:
a. The 2007 law, the *Law for the Welfare of Disabled Persons*.

b. The *National Strategy for Persons with Disabilities* NSPD documents 2010-2015, with special focus on strategy items implemented.

### 5.5.1 Data source and measures

A combination of printed and electronic documents related to inclusive education policy was used for analysing and reviewing legislation and inclusive education policy through the ERIC database and Google Scholar search engine. Different documents were reviewed from different Western countries such as the US, UK, Canada and Australia as well as the United Nations Girls’ Education Initiative UNGEI.

Systematic evaluation processes were used to analyse the inclusive education policy. The analysis of the policy was carried out by implementing a qualitative research method to provide a deep understanding about the implications of the analysis of the 2007 Law and the NSPD 2010-2015 in Jordan.

### 5.5.2 Procedure

The *Law for the Welfare of Disabled Persons (1993)*, the 2007 Law and the NSPD 2010-2015 were viewed, to identify the strengths of effective policies that could be followed and to highlight differences and aspects that need to be developed. Secondly, to gain an insight into models in other countries that could be applied in Jordan, the researcher looked at other perspectives from the UNGEI framework. Next, descriptive analysis, still utilising a comparative methodology, was used to compare historic legislation and policies with current documents in order to understand salient changes and improvements or deteriorations. Finally, key words were selected from the policies identified in order to understand areas of priority within regions and eras. The descriptive analysis was followed by evaluation and consideration of alternative solutions and recommendations.

The primary sources of data and information relating to the inclusive education of individuals with disabilities in the general classroom are the websites of the MOE and the
Higher Council of Affairs of Persons with Disabilities (HCAPD). Firstly, the researcher analysed the data available on the website to identify issues requiring further investigation.

In addition, the researcher considered the broader issue of including students with disabilities in the general classroom, the current context of the Jordanian education system to support inclusive education, and the ways in which the analysis of findings could be used.

### 5.5.3 Data analysis

The framework that was used in the analysis of the 2007 Law and the NSPD 2010-2015 is the UNGEI framework (2008) on equity and inclusive education in education, *Equity and inclusion in education: A guide to support education sector planning, preparation, revision, and evaluation* (UNGEI, 2008). This framework has been used previously to investigate students living with HIV and their inclusive education in the general classroom in countries affected by conflict. A detailed description of this tool which was adapted for this study is given below.

The tools that have been developed by the following organised groups: “UN Girls’ Education Initiative [UNGEI], the UNAIDS Inter-Agency Task Team on Education, the Global Task Force on Child Labour and EFA [Education for All], the EFA Flagship on the Right to Education for Persons with Disabilities, and the EFA FTI [Fast Track Initiative] Secretariat” (UNGEI, 2010, p. 4) contain a set of questions to help governments and education stakeholders to develop their education policy strategies to address equity and inclusive education for all, especially for children who are being excluded from the schools.

These tools are intended to support education stakeholders, governments and communities to identify early interventions to guarantee the primary education of all children without discrimination. Further, equity and inclusive education are considered within a rights-based approach, and the framework of these tools has been designed to serve such an approach (UNGEI, 2010). The UNGEI (2008) framework was adapted by the current researcher for the purpose of reviewing the current issues and approaches in Jordan’s inclusive education legislation—specifically, the Law on the Rights of Persons with Disabilities 2007 (hereafter ‘the 2007 Law’) and the NSPD 2010-2015. The questions in the tools can empower the Jordanian Ministry of Education (MOE) and the Higher Council of
Affairs for Persons with Disabilities (HCAPD) to address threats to inclusive education and guide them through a process of strengthening their vision to improve inclusive education.

5.5.3.1 How the UNGEI (2008, 2010) Framework Has Been Used

The UNGEI framework is intended to facilitate the gathering and analysis of data on equity and inclusive education, especially at the primary school level by:

- highlighting key questions to investigate the status of exclusion;
- proposing more specific questions for an assessment of the focus area regarding equity and inclusive education; and
- suggesting ways to prepare and modify the education system plan around access, quality and management.

The UNGEI (2008, 2010) framework has been organised to ask the right questions around 10 focus areas:

- baseline data on enrolment and completion, barriers to equity and inclusive education, policies, strategies to promote equity and inclusive education, institutional arrangements, schools, parental and community participation, teachers, curricula and budget and unit cost (UNGEI, 2010, p. 4).

The UNGEI framework suggests assessing equity and inclusive education with:

- targeted questions addressing education statistics; cultural, social, and economic barriers; enabling policies and effective strategies; institutional capacity and management; school level practices and support; parental and community participation; teacher preparation, supervision, and support; the curricula and monitoring and evaluation (UNGEI, 2010, p. 5).

5.5.3.2 The Strength of the UNGEI (2008, 2010) Framework

The results of an assessment utilising the framework are able to inform inclusive education policy and strategy development on evidence-based practices, including setting goals, selecting target populations and designing suitable interventions. The education
stakeholder can, at any time during the development process, revise or appraise the education plan to take another suggested strategy or approach. In Jordan, for example, after such an analysis all of these measures could be organised through working groups chaired by a representative from the MOE and comprising members who are willing to work together according to their area of interest to assess and respond to any concerns related to equity and inclusive education.

5.5.3.2.1 Adaptation of the UNGEI (2008) Framework to the current study

The main purpose of the UNGEI framework is to support equity and inclusive education for excluded children in educational institutions “while [education plans] are developed, revised and appraised” (UNGEI, 2010, p. 4). The framework was piloted in 2009 in different countries including Kyrgyzstan, Lesotho and Malawi (UNGEI, 2010).

In Kyrgyzstan it was piloted with people working in the fields of “girls’ education, children with disabilities and other vulnerable children” (UNGEI, 2010, p. 4). The UNGEI framework helped the education system by facilitating collaboration between the education stakeholders. In addition, it helped in reforming the education policy and strategies as well as the planning process in addressing the problems of equity and inclusive education.

In Lesotho the framework was piloted by different departments in the MOE and training and development partners such as the “World Food Program, Irish Aid, the World Bank, UNICEF and the Japanese International Cooperation Agencies” (UNGEI, 2010, p. 4). The framework enabled conversation on problems such as “gender-based violence, sexual abuse at schools and the adequacy of HIV prevention education curricula” (UNGEI, 2010, p. 4).

Malawi participated in the framework during the national process of forming the National Education Sector Plan. However, the benefits of the framework were limited, since Malawi had already finalised its plan (UNGEI, 2010).

The UNGEI (2008, 2010) framework contains three tools each with a set of questions. Tool A is mostly applicable to countries that are initially addressing equity and concerns around inclusive education. Tool B is applicable to plans already in place as a means of
reviewing and assessing the effectiveness of the implementation process. Therefore, it can be utilised to advance existing plans. Tool B will be more applicable to the Jordanian context (see later section). Tool C can be utilised to understand a country’s present situation but also related aspects as the plan unfolds. Therefore, Tool B will be applied to the analysis of the 2007 Law, situational analysis and NSPD 2010-2015 in Jordan, as this tool is seen to be relevant to the current study. The following section will explain in detail the UNGEI framework and the components of Tool B.

5.5.3.2.2 Components of Tool B


1. Situation analysis: focuses on information, particularly data on participation in education;

2. Enabling environment: covers policies, institutional structure, capacity, leadership and management, partnership and coordination;

3. Provision—access, quality, outcomes: focuses on access, quality and learning and other outcomes (institutional procedures and framework);

4. Resources—especially finance: includes cost projections, budget allocations, financing mechanism and outcomes; and

5. Monitoring and review: covers targets, indicators and system capacity and management and focuses on sector review processes.

Aspects such as teacher preparation might be considered under the category of “quality” yet could also be seen as part of training within the education sector. Such overlaps are to be expected.
The five sections in Tool B also focus on four categories. These four categories have been used as subheadings for each column in Table 9.1. They should be considered in relation to the above sections. The categories are (UNGEI, 2008, p. 13):

1. “Equity and inclusion”
2. “Specific issues” for students with different types of disabilities
3. “Evidence and evaluation”
4. “Priorities for planning” and recommendations.

The UNGEI (2008, p. 13) states that: This tool therefore moves from generic aspects of inclusion to specifics related to the four focal dimensions, and then moves onto guidance on recording, for particular countries and education sectors, the evidence, evaluation, and implications for priority setting.

In addition, UNGEI (2008, p. 14) indicated that Tool B: could be adapted for use in relation to other dimensions of equity and inclusion by substituting these in the second column. It could also be used to focus on one single aspect by making this the only subject of the second column.

Therefore, the five sections and the four categories will be applied to the 2007 Law in Jordan and NSPD 2010-2015 to provide useful prompts for such adaptation.

5.5.3.2.3 The use of Tool B

A complete plan can also be audited and reviewed using these questions to identify how, if at all, such aspects in relation to the 2007 Law and NSPD 2010-2015 have been addressed. It is this approach which will be applied for this analysis of the 2007 Law and NSPD 2010-2015.

The questions in Tool B: could also be used as starting points for review of the implementation of a plan through sector review over the plan period. It is however recommended that particular topics and questions are selected for each sector review. For example, a review could focus on the enabling environment across all the dimensions of
equity and inclusion, to capture synergies and gaps. Alternatively, an aspect of equity and inclusion, such as gender or child labour, could be assessed through review of data, enabling environment, student participation, quality of learning and learning outcomes, and resources allocated. One or more specific questions could also form the basis of particular evaluative studies. (UNGEI, 2008, p. 14). The HCAPD could utilise these questions in order to analyse and plan effectively. Furthermore, all stakeholders, and indeed, communities, can use the most relevant questions to aid their planning. In cases such as this where there is an obvious priority, Tool B can assist greatly by providing additional questions to assist in prioritising actions.

5.5.4 Ethical consideration

Approval was sought and obtained from the Western Sydney University Human Research Ethics Committee (WSUHREC) initially for the interview phase. The specific questions in the survey were then submitted and approved prior to commencement of the second phase of the research, with the same protocol number, H9641.

Due to the teachers being native Arabic speakers, the interview and survey questions were translated into Arabic. Both the Arabic and English versions of the interview and survey were lodged with the WSUHREC approval. The WSUHREC approved the conduct of the current research prior to commencement, with the protocol number H9641. Following this, approval was also secured from the Ministry of Education (MOE) and the Ministry of Social Development (MSD) in Jordan to conduct the research within Jordanian public schools in accordance with local ethics requirements.

5.6 Summary

This chapter has addressed the research design and the methods used to gather data about reviewing the 2007 Law and NSPD 2010-2015, teachers’ perceptions concerning including students with disabilities in their classrooms and has specifically addressed the research aims and questions. The chapter has explained and justified the choice of a sequential mixed-method approach and described the benefits that it yields. This chapter has
also provided detailed information on the participants and the research processes that were followed in relation to the participants’ responses. Finally, the overall research process was outlined in its different phases, highlighting flows and progression within this study. In the following chapters, results of the data analyses for each of the phases will be reported.
6 RESULTS: INTERVIEWS ANALYSIS

This chapter provides an analysis of interviews conducted with six teachers which explored their perceptions of including students with disabilities in their classrooms. Fusch and Ness (2015) defined data saturation in a qualitative research approach as follows: “there is enough information to replicate the study when the ability to obtain additional new information has been attained, and when further coding is no longer feasible” (Fusch & Ness, 2015, p. 1408). Therefore, in these terms, saturation was reached at six teachers and this comprised the sample size for Phase 1. The intent was to identify and confirm themes and issues which should be included in the survey phase of the study. However, the teachers’ responses are also of interest in what they reveal about their views of inclusive education. Four of these semi-structured interviews were conducted within the school environments in which the teachers worked with the remaining two teachers being interviewed in their homes. As already indicated, interviews ranged from 30 to 45 minutes.

The analysis is presented according to the constructs identified by researcher; inclusive policies and educational legislation in Jordan, teacher preparation, resources, teacher attitudes and teacher knowledge.

6.1 Inclusive Education Policy

_Research Question 1.2.1_ To what extent are teachers aware of the inclusive education policy?

_Research Question 1.2.2_ Do teachers believe that inclusive education is being implemented and, if so, with what impact?

This question was devised to determine the level of awareness that teachers held about the definition of inclusive education and its legislation. In general, the six teachers who
participated in the study defined the concept of inclusive education to include students with disabilities and students without disabilities in one classroom to achieve social equity. All the teachers’ responses indicated that, although they believe in inclusive education, they do not take responsibility for it. Their definitions of inclusive education, however, showed they had a sound understanding of what it means.

Male special education teacher (B) responded that the aim of inclusive education is to “provide an educational and social environment for students with and without disabilities in one classroom to achieve social equity.” Female special education teacher (C) said inclusive education is the “process” that provides some benefit for students with disabilities: “I like to say inclusive education is the process of including students with disabilities with their peers who are without disabilities in the same classroom to achieve social equity.”

The general education teachers had the same understanding as the special education teachers of the definition of inclusive education. Female general education teacher (E) defined it as “students with disabilities [learning] in general classrooms” while male general education teacher (D) defined it as “teaching students with disabilities inside the classroom with students without disabilities.”

It appears from the above responses that the special and general education teachers are very knowledgeable about the definition of inclusive education, although focus varied somewhat with some teachers considering inclusive education as more of a “process” whilst others envisaged it more as an “environment” Special education teachers described inclusive education as a process where teachers provide specific strategies to help students with disabilities to learn and participate effectively whilst general education teachers saw inclusive education as an acceptance of students with disabilities in the general classroom and in social interaction. The results showed a varying level of teacher awareness about the inclusive education policy. Female special education teacher (A) said (with a disappointed expression on her face)

“Legislation and policy support inclusive education but unfortunately, I am not fully aware of this legislation, because it is not applicable in our schools. I
can see it is too far from our education system and it will remain the same unless we change the whole education system.”

Similarly, another four of the teachers (B, C, D, F) reported that they do feel that legislation and policy support inclusive education, but they are not fully aware of it. Only one female teacher (E) from the general education sector did not know much about the legislation around inclusive education. This is an important finding – that teachers (E) admit to being “unfamiliar with inclusive education policies” – even more so as they are aware of its salience, yet lack knowledge of its everyday application.

Two special education teachers (A, F) were aware of specific inclusive education policies, but the four other teachers (B, C, D, E) felt that the policies around inclusive education in their schools are not clear and the processes are not in place to implement the inclusive education policy. The absence of actual action for students with disabilities was also strongly noted. Male special education teacher (B) said: “Legislation might be applicable to students with learning difficulties only but not for students with mental or severe disabilities.”

Female general education teacher (C) stated while shaking her head: “I can see this legislation only exists on a piece of paper, and I have never seen such legislation [applied] in reality.” In addition, male general education teacher (D) (with a disappointed face), described the inclusive legislation: “I wish [this legislation was] applicable even at least 10% but, unfortunately this is too far from reality in our education system.”

It is interesting to note that, although some teachers are familiar with some legislation, they feel it is not relevant to them due to the lack of application in practice. Teachers are central to educational change and reform. Teachers’ responses showed that if the government inclusive education policy were implemented this might have a significant effect on inclusive education outcomes.

The teachers showed great awareness that policy review is a central component of successful inclusive education. They pointed to a need for reform of the current situation. Female special education teacher (F) felt that: “Teachers’ awareness of the legislation around inclusive education would most effectively promote inclusion,” Furthermore, male
special education teacher (B) said: “The Ministry of Education and the Ministry of Social Development need to pay more attention to reviewing the inclusive education legislation and policy and reforming it from the beginning.” The above comments by teachers (F and B) emphasise that the MOE and the MSD must inform teachers as well as schools of their ongoing programs and missions.

In addition, teachers offered the view that more opportunities should be grasped by using successful policies surrounding inclusive education from other countries. By analysing the elements of such successful policies, the MOE could follow those policies, paying attention to contextual differences. Female special education teacher (A) remarked that current research around the world should be reflected in the area of inclusive education and this should be utilised to create a positive learning environment for students with disabilities in Jordan. Furthermore, referring to other research, she suggested: “Follow up the successful findings of global current research and [do] not worry about changing old methods.”

The key areas of concern cited were the absence of the implementation of the inclusive education policies in schools in Jordan and the lack of communication among teachers and their agencies; teachers considered that these must be provided by the MOE. Therefore, the teachers believed that greater reflection and research on successful international examples would aid Jordan in moving forward with its inclusive education legislation and policy.

Male special education teacher (B) stated: “it is necessary for inclusive education policy to be implemented for further successful inclusive education. This would unite comprehension and goals amongst families, neighbours and educators.” In addition to further training, he cited “community awareness” as a component of inclusive preparation.

It has become clear at this point that the framework objectives of the 2007 Law in Jordan should be comprehended by teachers and be applicable in their schools. It can be argued that the awareness of inclusive education policy will remain the same unless the MOE changes the practices of its education strategies, and some students with disabilities will continue to remain outside the schools. This is therefore an area that needs to be explored more fully in the survey and in the policy analysis itself.
The inclusive education policy has not been clearly understood by teachers and implemented in Jordanian schools. However, the philosophy of inclusive education exists in Jordan, that students with disabilities, regardless of their abilities, must be included in the general classroom. Although inclusive education policies and legislation emphasise the rights of all students with disabilities to learn regardless of their abilities, from teachers’ perspectives these do not equate to successful inclusive practices in the current school system. Difficulties continue to exist around the implementation of inclusive education practices.

6.2 Teacher Preparation

Research Questions:

2.1 According to Jordanian teachers, how adequate are teacher preparation courses in preparing teachers to include students with disabilities in their classrooms?
2.2 Are teachers prepared to include students with different types of disabilities?
2.3 What are the differences between Jordanian special and general education teachers in their perceptions of the adequacy of teacher preparation courses?
2.4 What additional types of preparation do Jordanian teachers require to deliver inclusive education?

A common thread amongst the responses of the three general education teachers was a lack of preparation to effectively implement inclusive education. Two general education teachers (C and D) reported that they have not had the chance to learn about inclusive education. Teacher preparation and skills in inclusive education were deemed to be important during pre-service and in-service training. Teachers felt that they did not learn much about students with different types and levels of disability during their education diploma.

Teacher (C) stated: “general information was given to us during my education course and it was only about students with disabilities, without paying any attention to focus on the type or level of disabilities” She added that: “As a general education teacher I do not have the ability to include students with disabilities because I did not receive any training.” This was reiterated by teacher (D). Furthermore, the general education teachers perceived that
there are no professional development programs to prepare them effectively. Interestingly, the special education teachers also did not feel adequately prepared, as stated by teacher (F):

“our training was not enough, and I am assuming, there is a lot of things I should be learning during the pre-service time and this is not our fault, but at the end of the day it’s the actual system’s fault.”

Evidently, teacher preparation, whether for general or special education teachers was seen as inadequate in preparing them to teach students with disabilities. Teachers with general education backgrounds did not have any preparation during their education courses. Therefore, these teachers do not have the abilities to include students with disabilities in their classroom. However special education teachers had some preparation, but not enough to cover all types and levels of disability. Thus, teachers did not have the required preparation to include students with disabilities.

Research Question 2.4 What additional types of preparation do Jordanian teachers require to deliver inclusive education?

A high-quality teacher preparation program is crucial to promote a successful inclusive education environment. Female general education teacher (B) stated:

“the education system must have pre-planned programs for the implementation of inclusive education. I haven’t said that means to forget about collaboration between teachers, administrators and the whole education system stakeholders.”

Whilst the above teacher described specific programs to be implemented for teachers to be competent in inclusive education, teacher (C) referred specifically to “pre-service training and revising and restructuring university curricula and focusing [on] appropriate programs to ensure the success of inclusive education.”

Educational and training programs for teachers at the universities were identified as inappropriate in the current education system in Jordan, due to insufficient training through teachers’ education course. Therefore, teachers suggested that, to change the teaching
approach to include students with disabilities, university programs must be restructured; and the level of preparedness through in-service training must also be considered. More specifically, they identified that the following changes need to be made:

- More training during pre-service courses
- Restructuring the curricula and plans at the universities

6.2.1 Training in inclusive education skills

Teachers identified that training in inclusive education needs to cover skills in managing an inclusive classroom, rather than just knowledge of disability types. Male special education teacher (B) mentioned:

“I only learned a little bit about teaching students with disabilities through my university study and unfortunately, I am not very experienced in the area of inclusive education but, I would like to add, as a teacher with long years of experience like me [...] I have learned a lot about how to teach students with disabilities but not how to include them in the general classroom.”

From teacher (B)’s point of view, the special education program taught at the university does not align with the inclusive education policy. Furthermore, female general education teacher (E) revealed:

“I studied for four years at the university and no subjects were related to any kind of students with disabilities. For example: I finished Mathematics, I am a mathematics teacher and I teach students without disability in their primary level. If one day I had a student with disability in my classroom, I am sure I would not be able to deal with him, even if I had all resources available in our school.”

Some of the teachers felt that they did not receive even the most basic training and, therefore, identified this as vital for the MOE to address. Female teacher (C) (with an unhappy expression) reported: “I might become familiar with inclusive education if I learn through training courses, if this is provided by the Ministry of Education.” In order to
prepare teachers in Jordan and move forward with inclusive education, teacher (D) suggested: “additional training and reviewing the education system in Jordan and the course outline at the universities could help successful inclusive education.”

The three general education teachers stated clearly that the general education courses at university do not address students with disabilities. The general education courses have no compulsory subjects on how to teach students with disabilities or the nature and impact of disability.

6.2.2 Adopting successful strategies from around the world

In addition to identifying the need for more pre-service training, specific in-service inclusive training and techniques by which to manage mixed classes, there were comments highlighting the need to follow examples of international success. Female special education teacher (A) stated:

“If we do really have inclusive education, our education system must follow the developments around inclusive education in the field of special education around the world. In addition, the education system must provide us with programs and schemes that have been successful all over the world.”

Female general education teacher (E) also commented:

“If we have inclusive education and policy support as the government stated, I would say just more input on how we can work and include students with disabilities into our classroom system. In addition, besides training, our education system must concentrate on the types of programs and strategies that general education must use for successful inclusive education systems.”

An interesting point came from general education teachers that if preparation toward inclusive education is a compulsory requirement in their field then they would be willing to include students with disabilities. On the other hand, more preparation was needed by special education teachers as well as some adaptation of strategies from different countries with success in the area of inclusive education.
6.3 Resources

Research Questions:

3.1 What kinds of resources do Jordanian teachers report as currently existing in schools to support inclusive education? And what additional types of resources do teachers need?

3.2 How does the existence of and the need for resources differ between Jordanian special and general education teachers?

6.3.1 The importance of resources in providing high-quality inclusive education

An overwhelming response to the issue of the provision of resources was that there simply are not enough to support effective inclusive education. Resources range from financial to personnel and will be further explored in this section. However, as a general notion, responses strongly identified this as an area of weakness. Female special education teacher (F) indicated that her particular school cannot support students with severe disabilities as “there is no funding, not enough staff and no teachers’ aides in our school.” Here the teacher is concerned about staffing ratios whereas male teacher (B), also from the special education sector, discussed the issue of resources as more complex, pertaining to several aspects. (With a serious face), he reported:

“I do feel there are a lot of things that need to be done around inclusive education. I do not think it will be easy to organise many things at once, for example, first we must put all factors around inclusive education in place where a lot of time, money and effort is needed.”

One female and one male teacher (C and D) from the general education sector shared the same comments regarding what is most needed for appropriate inclusive education. In order for inclusive education to be successful, they highlighted that experience, greater effort and support, appropriate environments and financial support are the most necessary. These factors will now be considered further.
Male general education teacher (D) made the poignant comment that it is ludicrous to consider aspects such as more experienced staff and administrative support when in Jordan there is not even the most basic materials and provisions: “I believe the basic requirements of resources for successful inclusive education are missing, so how do you expect to find teachers or administrators who would be able to offer their support when needed?”

Female general education teacher (C) was very much of the same opinion, adding:

“I am honestly confused. We are looking at the support from other teachers and administrators and totally forgetting about the important factors which are missing for the implementation of inclusive education. Basically, no need to talk about the supports before I feel the actual inclusive education is happening in my school.”

She added (with a sympathetic expression on her face): “I guarantee that none of our staff in the school can offer any help at this stage because of the missing basic resources.”

Undoubtedly, from teachers’ perspectives the model of inclusive education is not just about including students with disabilities, it is also about providing the right resources. Also, these teachers assert that they do not have the resources they need to implement inclusive education in their schools. Their comments suggest a lack of resources is witnessed in both special and general education. Therefore, an inadequacy of resources can be considered a major factor contributing to the lack of success in inclusive education in Jordan. In addition, it is important to keep in mind that adequate resources must be matched with what is espoused in the 2007 Law.

6.3.2 Physical environments for successful inclusive education

A school’s buildings, facilities and services must be accessible for students with disabilities. Male general education teacher (D) reiterated this point:

“any students with any type of physical disability for sure can be educated in the general classroom, if the school has accessibility such as ramps, elevators specially for those students in wheelchairs. Unfortunately, I doubt such things
will be available because there is no access for them even in the public places.”

Schools and classrooms have not been adapted to include students with physical disabilities; nor have the majority of public buildings in Jordan. With this in mind, it can seem farcical that more difficult and specific aspects of inclusive education are being considered before such basic requirements are in place. Female general education teacher (C) considered that, for successful inclusive education, “buildings should have the facilities and the necessary tools.”

Many of the teachers described appropriate amendments to the physical environment as key to realising inclusive education and held this in higher regard than teacher training. Female general education teacher (E), with more than 10 years of experience, felt that: “The design of the learning environment for both the educators and students will guarantee the success of support and inclusive education.” Similarly, teacher (D) shared this view of the importance of considering the classroom as a helping environment where teachers and students work towards meeting all students’ learning needs; yet he described his own classroom as “inappropriate” and “not supported with setting.” Teacher (C) added: “My general classroom is not appropriate for inclusive education as I don’t have accessibility for students with physical disabilities.”

The teachers highlighted factors that might promote the success of inclusive education, but female special education teacher (F) (with a disappointed face) observed:

“those factors are out of control because, even if we are trained well and do have the ability to help students with disabilities to be included, we still do not have the accessibilities to meet with the students’ needs, the physical environment is not appropriate.”

Female general education teacher (E) stated: “We need special buildings and tools as well.”

The teachers felt that, even with effective training and support for teachers, if the materials and adequate building specifications do not exist, inclusive education will not occur. They held the view that all students with disabilities should be included in the general
classroom if the placement is matched with inclusive education resources and teachers are prepared. Female special education teacher (A) commented: “I think if we have the right resources and programs for those students with mental disabilities inclusive education will become easy.” Female special education teacher (F) added:

“the biggest factors in our schools are the absence of the actual settings, resources and planning. Before anything, those factors should be there at the beginning.”

These were considered to be not only the factors that should be implemented first, but also as the most essential factors. The teachers are concerned that the physical buildings and classrooms – as well as the special materials and programs to meet students’ needs – are currently missing. This analysis accentuates the need to view inclusive education in terms of essentials and what must be implemented first and foremost.

6.3.3 Financial support

Financial support was also found to be a common factor contributing to the lack of resources, according to both groups of teachers. The teachers clearly articulated that schools must be financially supported by the MOE. Teachers (A) and (E) mentioned that financial support is very important, yet currently lacking. In addition, they do not believe that teachers will be able to effectively include and teach students with disabilities in the general classroom setting until this is amended.

Four teachers identified the need to change the education system, and thus for support from the MOE to provide adequate financial support to implement successful inclusive education. Female general education teacher (E) (with a frustrated expression) indicated: “The MOE must provide financial support to schools to meet all students’ needs if we want actual inclusive education to happen.” In addition, female special education teacher (F) suggested that “financial support is important, special programs and intensive courses around inclusive education are needed.”
Similarly, male special education teacher (B) commented: “We really need a lot of financial support from the MOE through changing the education system and providing the right materials, special programs and moral support.”

On the other hand, two females from the special education sector (A and F) were more positive and agreed that they will receive support from other teachers and administrators if the education system changes. Teacher (A) stated:

“I hope inclusive education will happen one day, so I would encourage education stakeholders to work hard for successful inclusive education and I am sure as a teacher if we were prepared in a good manner and have the right budget we will reach our goals and we will give all students their opportunities to learn in this life.”

The other teacher (F) said:

“I am sure they will have something hidden in their heads when I really need their help but, I do not think I will get too much support because the actual inclusive education is not happening and there is a big gap between practising inclusive education and the actual experience and the education system that we have right now.”

Interestingly, female general education teacher (E) whilst shaking her head stated: “I do not think we are financially supported by the government in my school, the right budget would be beneficial for all education stakeholders as well as the students.”

Male special education teacher (B) indicated that he finds there is hardly any financial support, because the education system does not support inclusive education in reality: “You hear about inclusive education and the budget they offer but, unfortunately you do not feel it.” Another teacher (A) added: “No doubt that our education system is financially not supported by MOE. I think if we were financially supported then I am sure I would try hard as much as I could to offer some help.”
Unfortunately, the inclusive education system in Jordan does not seem to be financially supported sufficiently by the MOE. This lack of adequate financial support impacts negatively on teacher attitudes towards the inclusive education of students with disabilities, as well as on the implementation of successful inclusive education, as promoted in the 2007 Law.

6.3.4 **Collaboration between teachers and all education stakeholders**

Collaboration was also a factor identified by the teachers as supporting successful inclusive education. A noteworthy comment came from female general education teacher (C) who mentioned a specific need for collaboration: “we need collaboration between special and general education teachers as well as [all] education stakeholders.” Female special education teacher (F) added: “collaboration can make inclusive education a lot easier.” According to the teachers, collaborative practices between teachers and other educational stakeholders are a key factor in achieving effective inclusive education.

Teachers were seen as resources and lack of resources affected collaboration, as some responses indicated. A male special education teacher (B) felt that teachers’ support for each other would enhance the success of their students’ learning in the general classroom: “If we are well trained and have all resources available, we could include those students.” However, the absence of resources and feelings of isolation tended to interfere with their attempts to obtain support. He also added:

“I think every teacher gets very busy in their own classroom but sometimes we work together as much as we can, share ideas, and you can find some good ideas from teachers if they have been trained in that area.”

The three teachers from the special education sector agreed that inclusive education needs collaboration to solve problems, generate actions and put these actions into practice. Female special education teacher (F) gave further insight into how a support team could be implemented effectively:

“you need to be open-minded to give and receive some other teachers’ suggestions. I also believe that as long as you want to find out about anything
related to any students in your classroom, as long as you seek help, then you will get responses back from other teachers. I myself have discussed a lot of different ideas with my colleagues and sometimes it was helpful but, unfortunately when it comes to having nothing in the way of resources and funding, we forgot about the ideas.”

The above comment from teacher (F) provides valuable suggestions as to how a support team could be beneficial; seeking help and being able to implement ideas with the right support are vital components of inclusive education. It is clear that teachers recognise that successful inclusive education could be achieved if teachers develop trust and respect each other as part of a supportive team. Effective administrators of collaborative programs are needed in order to provide supportive teams.

Teacher collaboration is key to successful inclusive education, not only in terms of capabilities but also in terms of its effects upon attitudes. This analysis of teacher collaboration identifies a common opinion amongst educators that they do not feel they are collaborating with each other. There is not only a gap in training about disabilities, but also an enormous gap in training teachers in the appropriate strategies to adopt and apply to specific students and educational environments. An important one of these is learning collaboration skills.

Two of the special education teachers were concerned about the role of the MOE system to improve collaboration in their schools. Female teacher (A) stated:

“I wish the MOE systems [would] pay more attention to the collaboration system in the school between professionals and education stakeholders, this will improve the inclusive education system in the school. Also, I would like to see more awareness about this group of professionals.”

All six teachers considered that they needed further experience and that they did not have the ability to include students with disabilities in the general classroom. They indicated that inclusive education will work only if other teachers are experienced and they have support. Two female special education teachers (A and F) considered that they would be able
to work with another teacher. Teacher (F) commented: “Of course it will help me to deal with students’ learning needs.”

However, teacher (F) also felt that “motivation is an important ingredient for the success of inclusive education, but additional support and skills between teachers will be needed to realise the goals teachers set for themselves and their classes.”

Teacher (A) added to this:

“collaboration and support between teachers involve commitment by the teachers who will be supporting each other, by their school administrators, by policies and the school system. It involves time, resources, curricula and the school setting. Successful inclusive education needs to ensure that all resources are available, including time, financial support and professional assistance.”

Clearly teachers’ support and collaboration will influence the effectiveness of inclusive education. Combined with their experiences, collaboration will enhance their confidence leading to more effective ways of meeting the learning needs of all students, irrespective of any type or level of disability.

In addition, all teachers showed that to have a well-trained team in their school is very important. All teachers considered indirectly that the lack of collaboration between teachers and professionals, as well as all stakeholders, would remain unless adequate funding was provided to meet the needs of all students and teachers for successful inclusive education. In addition, they stated that open and ongoing communication must exist among all involved in the education system. The teachers described collaboration between teachers as an important resource for successful inclusive education. Female general education teacher (C) felt that the team would need to be comprised of special education teachers, stating:

“I think the special education teachers maybe know the need for inclusive education more than us as general education teachers. Basically, special education teachers learned more about students with disabilities and their characteristics in depth during their university study.”
Yet again, teachers emphasise the importance of teacher preparation.

In addition, male general education teacher (D) felt that a support team would be of use, commenting:

“when students with disabilities have difficulty in the classroom, maybe with some help from other teachers, this will fix up the problem. I also would like to suggest that when the curricula aren’t working for students with disabilities, special and general education teachers must share ideas with the curricula developers to help them to establish the right curricula to meet the students’ needs, including those with disabilities.”

Additionally, female general education teacher (E) suggested that confidence could be achieved through greater collaboration amongst teachers and stakeholders. This currently is not happening, as there are not sufficient resources, and this is required for a support team. All but one of the teachers interviewed (A, B, C, D and E) reported that they agree with inclusive education, if there is teamwork, collaboration and resources required for it.

Both special and general education teachers expressed frustration about the education system, the current funding, and physical environment all of which affected their ability to collaborate. If inclusive education is to work, it is imperative that resources are allocated to address all aspects of inclusive education, not just teacher preparation and an inclusive education policy.

6.4 Teacher Attitudes

In Chapter 4 the following research questions were set out to explore the impact of teacher attitudes towards inclusive education.

Research Question 4.1 What is the relationship between teacher attitude towards inclusive education and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)?
The sample size does not allow these questions to be answered. Rather, the interviews provided an indication of whether these were factors that needed to be explored in the survey. The responses of the teachers suggest that teachers’ attitude towards the inclusion of students with disabilities in the general classroom is a central issue and one that is influenced by the factors in the research questions above.

6.4.1 The relationship between teachers’ training, level of confidence and attitudes

Despite the varying years of experience, level of confidence and educational background of both groups of teachers, they responded that their attitudes were also strongly influenced by their level of training. Female special education teacher (C) stated that “the more training I do, the more confident I will be to deal with students with disabilities in my classroom.” On the other hand, female general education teacher (E) stated that “I haven’t done any previous training so, I don’t think I will be able to have the confidence to deal with students with disabilities in my classroom.”

Basically, from teachers’ perspectives in the interviews the more training teachers receive, the more positive their attitudes would be. Effective training and education support teachers’ confidence, yet many teachers admitted to lacking in confidence. Two male and female special education teachers (B and F) with different years of experience expressed concern over the low self-esteem that most teachers experience as a result of their experiences around inclusive education. Male teacher (B) stated that this was an issue he experienced himself: “I am not very confident to deal with students with disabilities in the general classroom.” Female special education teacher (A) considered the most vital teacher characteristics to be “teachers’ confidence, working as a team and taking into consideration the capabilities of students with disabilities.”

Confidence is an ongoing theme throughout this analysis and was expressed by several teachers. It can be addressed by the provision of further training surrounding inclusive education. As confidence is named as a salient factor, this should receive further attention and so was an issue explored in the survey.
6.4.2 Teachers’ time constraints and attitudes

Only two general education teachers were opposed to inclusive education, primarily due to time constraints on teacher time. There were concerns that inclusive education would result in an increased workload and, therefore, greater time constraints and the potential inability to give students the desired attention. Female special education teacher (F), totally disagreed with the concept of inclusive education: “I do not agree with inclusive education because it needs a lot of effort and time and I do not have enough experience to ensure the success of the inclusive education.”

Again, whether or not teachers are in favour of inclusive education was influenced by their experience, although time constraints were also stipulated as a concern. However, despite teacher (F)’s experience, she added: “students with disabilities will need effort and both deserve more attention from us than what general classroom teachers can give them.” Evidently it is felt that inclusive education will ultimately have a detrimental effect on students with disabilities as they demand more time than a teacher can provide in the general education classroom. Despite this, female general education teacher (C) opposed such views:

“I think that students with disabilities, as long as they can be active and function in a general classroom, do not take too much time out of their classroom teacher. It really depends on the level of the students’ abilities as I believe students with moderate mental disabilities can function in the general classroom.”

The teachers are thus highlighting their beliefs that the level and type of student disability will have an effect on teachers’ time. Students with severe disabilities are perceived to require more instructional time from teachers, and this can affect teacher attitudes towards inclusive education.

6.4.3 Disruption on students without disabilities in the classroom can impact on teacher attitudes

Although some teachers felt that students without disabilities would benefit from inclusive education from the point of view of social interaction and acceptance, other teachers
voiced inclusive education as a potential disruption for students without disabilities. Female special education teacher (F) said: “Keep in mind, students with disabilities can be disrupting others and taking all of my time to help them out, and in the current situation in my school I cannot teach them.” Male general education teacher (D) added:

“I am sure there are some students with disabilities who need beyond what a general classroom teacher can do. Either way, students with disabilities disrupt the other students and this is not fair and will affect the learning outcomes, including for students with disabilities, students without disabilities and us as teachers.”

The teachers’ concern that students with disabilities may not only consume their time but also interrupt other students’ learning in the classroom also affects teacher attitudes. If this is a firm belief of teachers, it would undoubtedly have a negative impact on attitude. It would appear essential to address this view in order to expect and encourage teachers to move forward with inclusive education. This is therefore another issue that was explored in the survey.

6.4.4 Teacher experience and the availability of resources

The interviewed teachers’ responses illustrate that positive attitudes can be fostered by the provision of appropriate training, support, resources and practical experiences of successful inclusive education. This appeared to be the shared view in the interviews irrespective of each teacher’s background and specialty.

As reiterated by female special education teacher (A): “as teachers we are required to have access to such experiences and resources to help us to develop the necessary positive attitudes towards inclusive education.” Since many teachers spoke about the perceived lack of resources and training, the issue needs to be explored further.

From teachers’ perspectives in the interviews it is clear that the challenges that continue to affect collaborative outcomes, are due to the lack of sufficient funding. Some teachers commented on the diverse needs of students with disabilities, and the extent to which these needs are affected by the education system’s regulation and the absence of
resources and financial support. Male general education teacher (D) added: “Anyway, we are too far from inclusive education because we need the financial support and to change the whole education system for the success of inclusive education.” Female general education teacher (C) also felt strongly that “Financial support is not there, also ... but, one day I hope I receive the right support, financially, training courses and practicum practices. MOE must change their system.”

From teachers’ perspectives in the interviews, different factors in the current system in Jordan can have an impact on their attitudes towards inclusive education. This point will be considered further.

6.4.5 Type and level of the students’ disability

A common response of teachers was that the type and level of students’ disabilities would affect the success of inclusive education. They indicated that including students with physical disabilities would be much easier than including students with intellectual disabilities. They also added that each disability would have a different effect on the process of inclusive education. Some teachers considered the effect of more severe disabilities on the students without disabilities. Female general education teacher (E) stated: “Some students with severe disabilities can affect the learning of the students who [are] without disabilities.”

Female general education teacher (C) was also concerned about this issue:

“let us assume that we have all the facilities to include students with disabilities into our classroom but, students with severe disabilities might cause other students (without disabilities) not to learn because of distraction.”

Other teachers were more specific and referred to a particular type of disability, such as “severe cerebral palsy”, that would require too much time to be taken from teachers and therefore affect the learning of students without disabilities. Again, we are witness to this common thread of “distraction” but this time more as a concern in line with severe disability types. Teachers appear to be mainly concerned about the distraction of other students and the demands on their own time.
The degree to which teachers agreed to using the general classroom to develop the social life of a student with disabilities also appeared to vary with the type and level of disability; this was especially so if the student needed to receive more training in certain skills and if the student took more time from the classroom teacher. Male special education teacher (B) spoke specifically about mental disabilities:

“some students need one-to-one support if the students have a severe disability. In addition, the high number of students in the classroom will make inclusive education hard even if the student has a mild disability. I am not talking about blind students or students with a hearing disability, I mean students with severe mental disabilities.”

These contrasting views of the advantages and disadvantages of inclusive education reveal the need to consider both aspects in relation to educational needs, and to implement programs accordingly. Teachers’ views which relate to students’ needs reflected a wide range of concerns, from feelings of helplessness to meeting the needs of students with disabilities in Jordan and whether those students will affect the learning of their other students without disabilities. Teachers from both sectors were in favour of inclusive education, yet with awareness and concerns for the peers of the students with disabilities. Evidently the concerns voiced were rational and demand further investigation. From a positive perspective, teachers feel that not only will the students without disabilities develop a critical sense of tolerance, but the teachers themselves will as well. This is an aspect of inclusive education that was therefore addressed in the survey.

Yet in contrast, from an educational perspective, there seems to be an overwhelming concern about teacher attitudes, as well as classroom distraction for students without disabilities, not only by students with severe disabilities, but also due to the diversion of teachers’ time and attention and the lack of resources. In order to address these anxieties and to ensure that they do not eventuate, teachers need greater training and understanding of individual disability types so that they can enter the classroom with confidence and competence with regard to all disabilities.
Teachers appeared to share the same view in the interviews and they have somewhat positive attitudes irrespective of each teacher’s background and specialty. This suggests that there is a need for further training and resources across both education systems to improve teacher attitudes towards inclusive education. Therefore, due to teachers demanding the implementation of inclusive education policy in schools, teacher preparation must be extended to deal with all types and levels of disability and the right resources should be provided to enhance their attitudes.

6.5 Teacher knowledge

Research Questions:

5.1 What knowledge and skills related to inclusive education for students with disabilities do Jordanian teachers report that they have currently? And what would improve their knowledge?

5.2 What is the relationship between teacher knowledge towards inclusive education and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)

6.5.1 Teacher knowledge from initial training

Five out of the six teachers interviewed reported that they had learned about teaching students with disabilities in their initial graduate course. Most teachers reported that they had very limited knowledge about teaching students with disabilities and they did not learn about inclusive education or how to implement inclusive education. The interviews took place in the city of Irbid, and all teachers had completed their studies at the University of Jordan.

Female special education teacher (A) commented:

“through our study and at the beginning of each semester we were asked to fill out an application form to represent our interest in one of the following five areas which were: Mental Retardation (MR), Learning Disabilities (LD),
Autism Spectrum Disorder (ASD), Visual Impairment (VI), and Hearing Impairment (HI).”

She added that the practicum “was compulsory” at the end of their program study.

However, in spite of the different years of experience among the teachers, it appears that the teachers learned about how to teach students with a particular type of disability but not to include them. Female special education teacher (F) reported:

“I did my practicum through my study at the University of Jordan for 12 weeks...most of the training that I received was to teach students with ASD, I didn’t have the chance to cover and work with all types of disabilities...so how would you expect me to have a good background to include students with disabilities in my classroom.”

In addition, according to female general education teacher (E):

“I did not learn anything because there was no connection between special and general education throughout my university study, even though if there were some subjects which talked about disabilities and special education, we did not study it in depth and never went out for training because, training I believe was for special education teachers only.”

Furthermore, a female and a male general education teacher (C and D) indicated negative experiences and believed that none of the teachers and administrators had the right information or knowledge to offer when it came to including students with disabilities and imparting this knowledge.

In Jordan, it seems, from the teachers’ point of view in the interviews, that teachers are not trained well to work with students with disabilities; that they work with large numbers of students in the classroom; and that they are unsupported financially and are lacking in other resources and teachers’ aides.
6.5.2 Teachers’ desired knowledge

First and foremost, it was stated that teachers do not share a common purpose with, or have much understanding of, the framework of inclusive education and this was a central aspect needing amendment. Teachers in the interviews were keen to share their knowledge with the view of developing their attitudes towards inclusive education and also simply addressing demands for more training and preparation to improve their knowledge.

The three general education teachers (C, D and E) disagreed at this stage regarding receiving any support from their colleagues to include students with disabilities because of the lack of preparation, financial support and the education system, as mentioned above. Interestingly, the general education teachers emphasised that it is very important to be trained to be able to be effective at inclusive education.

Teacher knowledge is a foundation of inclusive education. The teachers interviewed stated that pre-service imparting of knowledge was insufficient preparation for the real world of teaching in inclusive settings. As previous sections have explored, teachers need a wider base of knowledge about varied types of disabilities and this should be incorporated into their pre-service training. Furthermore, not only is an understanding of disparate disabilities needed, but so is knowledge of techniques to manage an inclusive classroom. Therefore, teacher knowledge warranted further investigation in the survey.

6.6 Conclusion

This analysis has thrown light on many disparate aspects of teachers’ perceptions of inclusive education. Possibly the most poignant would be the views on current resources and how the teachers so astutely voiced that there are endless aspects of inclusive education being reviewed and discussed, yet such aspects are futile if the bare essentials are not in place. Perhaps, the most interesting comments are those that were least expected, such as inclusive education benefiting teachers by enhancing their patience and skills. However, this very aspect also resulted in negative attitudes due to a perceived lack of knowledge, preparation, and as a result, confidence.
Possibly the most concerning of the views expressed were those surrounding disability types and demands on teachers’ time – heavily influencing teacher attitudes. Teachers also voiced a lack of knowledge of disability types. The interviews pointed to the critical factors influencing inclusive education in Jordan. These were then included for deeper consideration in the survey.
7 RESULTS: EXAMINING THE PSYCHOMETRIC PROPERITIES OF THE SUBSCALES IN THE SURVEY

The current research study focused on teachers’ perspectives on including students with disabilities in the general classroom in Jordan. Three hundred and forty-one teachers from general and special education schools completed the survey. The survey was developed by the researcher based on the findings from the interview phase. In the survey, teachers’ demographic data were gathered and opportunities to comment on specific areas of interest were included. The survey addressed five constructs related to inclusive education using a ranking scale, or a 5-point Likert scale. These constructs were:

- Jordanian teachers’ perspectives on whether the government’s inclusive education policy was being implemented;
- teachers’ perceptions of their education to teach students with different types and levels of disability;
- resources that teachers saw as needed to support students with disabilities;
- teacher attitudes towards the inclusion of students with disabilities; and
- teacher knowledge of how to include students with disabilities in their classroom.

This chapter reports the results of the principal component analysis conducted to establish the factor structure of the 40 items that comprise the five constructs. Other tests of reliability and validity were conducted and are also reported. This evaluation was critical in order to determine whether the newly developed survey could be used to interrogate the substantive research aims of the study.
7.1 **Examining the Construct Validity of the Malkawi measure via Exploratory Factor Analysis**

The teachers were asked about the extent to which they agreed with a number of statements. Factor analysis was first conducted in order to:

- establish the factor structure of the items included in the survey;
- determine whether items in each subscale reflect a single factor; and
- reduce the data set to a more manageable size while retaining as much of the original information as possible (multi-collinearity) (Thompson, 2007).

Thus, items relating to each construct; Inclusive education policy, Teacher Preparation, Resources, Teacher Attitudes and Teacher Knowledge were initially factor analysed, using principal component analysis (extraction method) with Varimax orthogonal independent rotation. The primary aim of conducting factor analysis for all subscales was to identify simple item loadings of > 0.30 on only one factor that could be interpreted. It was assumed that items are factorable when: (a) the partial correlations among items are small, with a minimum of 0.30 with at least one other item, suggesting reasonable factorability; (b) the Kaiser-Meyer-Olkin measure of sampling adequacy tests is above the recommended value of (0.60); and (c) the Bartlett’s test of sphericity is significant ($p < 0.05$) to show that the correlation matrix is an identity matrix and that the factor model is appropriate (Dennis & Bocarnea, 2005).

7.1.1 **Results of exploratory factor analysis**

A solution with six factors, each with eigenvalues > 1 was extracted, explaining 68.36% of the variance (Table 7.1). An inspection of the factor loadings led to the conclusion that, because of the low loading (.448) of the “P2_1” item on Factor 3, it would be best to drop this item when calculating the respective factor score. Additionally, it was decided not to use Factor 6 as it comprised items measuring attitude and knowledge regarding inclusive education, and it was explaining a very small proportion of variance in the factor analysis. Finally, it was decided to calculate five factor scores corresponding to Factors 1 to 5 extracted from the exploratory factor analysis.
The results of the exploratory factor analysis are set out in Table 7.1.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Loadings from the Rotated Component Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2_1 - My school still requires more support from the government and legislation makers for successful inclusion.</td>
<td>Factor 1  34.01  Factor 2  10.47  Factor 3  8.97  Factor 4  6.25  Factor 5  5.41  Factor 6  3.25</td>
</tr>
<tr>
<td>P2_2 - The enrolment of students with disabilities in my school always follows the inclusion policy.</td>
<td>.786</td>
</tr>
<tr>
<td>P2_3 - All staff in my school take account of the inclusion policy when writing lesson plans.</td>
<td>.794</td>
</tr>
<tr>
<td>P2_4 - The inclusion policy provides easy access to inclusive programs for all students with disabilities.</td>
<td>.704</td>
</tr>
<tr>
<td>P2_5 - Our school principal and other senior staff always ensure that we are following the inclusion policy.</td>
<td>.770</td>
</tr>
<tr>
<td>P2_6 - Ongoing professional development around supporting students with disabilities is available.</td>
<td>.521</td>
</tr>
<tr>
<td>P2_7 - We have regular discussions at our school about how to implement the inclusion policy.</td>
<td>.762</td>
</tr>
<tr>
<td>P2_8 - Information about disabilities and related services is readily available.</td>
<td>.528</td>
</tr>
<tr>
<td>P2_9 - The inclusion policy is always followed in my school when designing assessment tasks</td>
<td>.798</td>
</tr>
<tr>
<td>P2_10 - The inclusion policy provides all the guidelines necessary to ensure inclusive education is achieved</td>
<td>.759</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Teacher Preparation</strong></td>
<td></td>
</tr>
<tr>
<td>TP4_1 - My teacher education course prepared me to: Teach students with a range of learning abilities together in a general classroom</td>
<td>.681</td>
</tr>
<tr>
<td>TP4_2 - My teacher education course prepared me to: Adjust lesson content to make it appropriate for students with disabilities</td>
<td>.800</td>
</tr>
<tr>
<td>TP4_3 - My teacher education course prepared me to: Use a variety of teaching strategies to meet the needs of all students</td>
<td>.746</td>
</tr>
<tr>
<td>TP4_4 - My teacher education course prepared me to: Develop individual education plans for students with disabilities</td>
<td>.776</td>
</tr>
<tr>
<td>TP4_5 - My teacher education course prepared me to: Manage the behaviour of students with disabilities</td>
<td>.793</td>
</tr>
<tr>
<td>TP4_6 - My teacher education course prepared me to: Collaborate with other professionals to support students with disabilities</td>
<td>.796</td>
</tr>
<tr>
<td>TP4_7 - My teacher education course prepared me to: Assess the learning needs of students with disabilities</td>
<td>.810</td>
</tr>
<tr>
<td>TP4_8 - My teacher education course prepared me to: Partner with families to support students with disabilities</td>
<td>.806</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td></td>
</tr>
<tr>
<td>R1_1 - My school has all the resources needed to include students with disabilities, including technology and equipment.</td>
<td>.745</td>
</tr>
</tbody>
</table>
Loadings from the Rotated Component Matrix

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1_2 - My school has trained special education teachers who are able to work with the students with disabilities and support other teachers.</td>
<td></td>
<td></td>
<td>.786</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R1_3 - Special education professionals visit our school regularly to support the inclusion of students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td>.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R1_4 - My school has a sufficient number of teachers’ aides to support teachers and students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.836</td>
<td></td>
</tr>
<tr>
<td>R1_5 - My school receives financial support from the government to support the inclusion of students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.813</td>
</tr>
<tr>
<td>R1_6 - My school is supported by consultants such as psychologists and therapists to help me as a teacher include students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.840</td>
</tr>
<tr>
<td>R1_7 - The principal and staff in my school collaborate to provide support for the inclusion of students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.714</td>
</tr>
</tbody>
</table>

Teacher Attitudes

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1_1 - I believe that all students with disabilities should be included in the general classroom.</td>
<td></td>
<td></td>
<td></td>
<td>.653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1_2 - I believe only teachers with a special education background should work with students with disabilities in the general classroom.</td>
<td></td>
<td></td>
<td></td>
<td>.623</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1_3 - I believe students with disabilities are better placed in a special classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.811</td>
<td></td>
</tr>
<tr>
<td>A1_4 - I believe the level and type of the student’s disability will affect the success of inclusion.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.802</td>
<td></td>
</tr>
<tr>
<td>A1_5 - I believe students with disabilities demand extra time and attention from the teacher.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.750</td>
</tr>
<tr>
<td>A1_6 - I believe the extra attention I give to students with disabilities will have a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.676</td>
</tr>
</tbody>
</table>
negative impact on the learning of students without disabilities.

A1_7 - I believe it is the role of every teacher to support every child, regardless of their level of educational needs. .632

Teacher Knowledge

K3_1 - I have the necessary knowledge and skill to: Teach students with a range of learning abilities together in a general classroom .595

K3_2 - I have the necessary knowledge and skill to: Adjust lesson content to make it appropriate for students with disabilities .580

K3_3 - I have the necessary knowledge and skill to: Use a variety of teaching strategies to meet the needs of all students .651

K3_4 - I have the necessary knowledge and skill to: Develop individual education plans for students with disabilities .776

K3_5 - I have the necessary knowledge and skill to: Manage the behaviour of students with disabilities .814

K3_6 - I have the necessary knowledge and skill to: Collaborate with other professionals to support students with disabilities .825

K3_7 - I have the necessary knowledge and skill to: Assess the learning needs of students with disabilities .827

K3_8 - I have the necessary knowledge and skill to: Partner with families to support students with disabilities .819
7.2 Variable Scoring and Operationalisation of the Constructs

The conceptual and operational definitions of the five factor scores that were derived from the results of the factor analysis are summarised in Table 7.2. The scores for the individual items relating to policy, teacher preparation, resources, teacher attitudes, and teacher knowledge were used to calculate a representative score for each of these constructs, and as per the definitions given in the table below. These scores have been utilised in subsequent analyses (e.g., regression analysis). These derived scores allow for easier interpretation of findings compared to dealing with a large number of individual items from the constructs. Details of how these scores can be interpreted are also provided in the table below.

Table 7.2:
Conceptual and Operational Definitions of the Five Factor Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Conceptual definition</th>
<th>Operational Definition</th>
<th>Items (n)</th>
<th>Computation</th>
<th>Interpretation of scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy score</td>
<td>Policies for inclusive education</td>
<td></td>
<td>9</td>
<td>Average score for all items</td>
<td>1=Low level, 5=High level</td>
</tr>
<tr>
<td>Teacher Preparation score</td>
<td>Teacher preparedness for inclusive education</td>
<td></td>
<td>8</td>
<td>Average score for all items</td>
<td>1=Low level, 5=High level</td>
</tr>
<tr>
<td>Resources score</td>
<td>Providing resources for inclusive education</td>
<td></td>
<td>7</td>
<td>Average score for all items</td>
<td>1=Low level, 5=High level</td>
</tr>
<tr>
<td>Attitude score</td>
<td>Attitudes towards inclusive education</td>
<td></td>
<td>6</td>
<td>Average score for all items</td>
<td>1=Low level, 5=High level</td>
</tr>
<tr>
<td>Knowledge score</td>
<td>Knowledge of inclusive education</td>
<td></td>
<td>7</td>
<td>Average score for all items</td>
<td>1=Low level, 5=High level</td>
</tr>
</tbody>
</table>
7.3 Examining Reliability (Cronbach’s Alpha) of the Survey

Reliability is the degree to which research instruments produce consistent results in a scale in a single construct (Cronbach, 1951). In social-science research, the benchmark for good reliability is usually considered to be > 0.70. The coefficient alpha is based on the average of all the items in the scale in one construct. If all the items in one construct are related to each other and measure the same construct, this means the scale is reliable. The closer the coefficient alpha is to 1.00, the greater the internal constancy of the items in the scale (Gliem & Gliem, 2003). Items with an alpha > 0.70 are considered to be good and any items > 0.80 are considered to be optimal.

7.3.1 Reliability of the subscales

The reliability coefficients for the five subscales used in the survey are shown in Table 7.3. Since all these Cronbach’s alphas are > 0.7, the items from the five scales were deemed fit (reliable) to be used in subsequent analyses.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Items</th>
<th>Cronbach's alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>10</td>
<td>0.908</td>
</tr>
<tr>
<td>Teacher preparation</td>
<td>8</td>
<td>0.941</td>
</tr>
<tr>
<td>Resources</td>
<td>7</td>
<td>0.941</td>
</tr>
<tr>
<td>Teacher attitudes</td>
<td>7</td>
<td>0.789</td>
</tr>
<tr>
<td>Teacher knowledge</td>
<td>8</td>
<td>0.917</td>
</tr>
</tbody>
</table>

The results of the validity and reliability analysis indicate that the items included in the survey are valid and reliable, non-repeating and representative of the various aspects of inclusive education – policy, teacher preparation, resources, teacher attitudes and knowledge – being measured. Therefore, the reliability and validity of the Malkawi measure are confirmed.
7.4 Summary

Initially, the factorability of the items in each construct was tested to see if those items measured the same factor in the construct. Specific items were extracted from some constructs because they did not contribute to a simple factor and failed to meet with the factor loading of 0.30 or above. This study contained five constructs (policy, resources, teacher attitudes, teacher preparation and teacher knowledge) and used 5-point Likert scales as responses for these constructs.

The responses of teachers to each question were hypothesised to present a construct that was also tested for reliability. The overall value of Cronbach’s alpha was very high ranging from $\alpha = 0.941$ for both the resources and teacher preparation constructs to $\alpha = 0.789$ for the teacher attitudes construct.

The validity and reliability of the survey have been confirmed and the results of the survey can be used with confidence to interrogate the research aims of the study.
8 SURVEY ANALYSIS

The purpose of this chapter is to address the research questions set out in Chapter 4 that relate to teachers’ perceptions of the inclusive education of students with disabilities in general classrooms in Jordan. The data analysed are those gathered from teachers through the survey conducted in Phase 2. The chapter commences by reporting on a screening of the data for the assumptions of normality to establish what kind of statistical techniques (parametric or non-parametric) should be used. Sections 7.2 to 7.6 of this chapter then address the research questions relating to the five constructs explored through the survey. These constructs are: inclusive education policy, teacher preparation, resources, teacher attitudes and teacher knowledge about inclusive education. The seventh section looks at the associations among the five construct scores, whilst the eighth section details a regression model which aimed to identify the predictors of teachers’ level of confidence to teach students with disabilities in the general classroom.

The survey of the general and special education schools achieved a 52.4% response rate. Of the surveys returned, 13 had substantial incomplete data and were disregarded during the analysis. Nine of the incomplete surveys came from the general education schools and four from the special schools. This resulted in a total of 341 surveys from teachers across the special and general education sectors.

8.1 Data Screening

Shapiro-Wilk tests of normality were conducted to determine if the various items and scores (i.e., the inclusive education policy score, teacher preparation score, resources score, teacher attitude score, and teacher knowledge score as derived from the EFA) can be assumed to be from a normally distributed population. The results of the analysis (Table 8.1) indicate...
that these scores are not normally distributed as the p-values of the tests are all less than .001. Therefore, non-parametric statistics and techniques have been used as and where applicable.

Table 8.1:

<table>
<thead>
<tr>
<th>Test of Normality of the Continuous Variables from the Research Data</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>P3 - On a scale of 1 to 10, to what extent is the inclusion policy being implemented in your school?</td>
<td>.917</td>
</tr>
<tr>
<td>TP2 - Overall, I feel that my teacher education course did not really prepare me to teach students with disabilities</td>
<td>.893</td>
</tr>
<tr>
<td>K1_1 - Overall, I feel confident in my capacity to teach students with disabilities</td>
<td>.904</td>
</tr>
<tr>
<td>K1_2 - I struggle to support students with disabilities</td>
<td>.881</td>
</tr>
<tr>
<td>Inclusive education Policy Score</td>
<td>.962</td>
</tr>
<tr>
<td>Teacher Preparation Score</td>
<td>.953</td>
</tr>
<tr>
<td>Resources Score</td>
<td>.944</td>
</tr>
<tr>
<td>Teacher Attitude Score</td>
<td>.952</td>
</tr>
<tr>
<td>Teacher Knowledge Score</td>
<td>.935</td>
</tr>
</tbody>
</table>

8.2 Inclusive Education Policy

Research Question 1.2.1 To what extent are teachers aware of the inclusive education policy?

A chi-square test of independence was conducted for each of the associations between teachers’ perceptions of awareness about inclusive education policy and all of the demographic variables. The following significant associations were found: secondary teachers had greater awareness of inclusive education policy than primary school teachers ($\chi^2(2, N = 340) = 10.157, p = .006$); special education teachers were found to have greater awareness than general education teachers ($\chi^2(2, N = 340) = 16.819, p < .001$) and those
employed in the special education sector were found to have greater awareness than those in the general education sector ($\chi^2(2, N = 337) = 9.242, p = .01$). No significant differences were found for gender, age, teachers’ level of qualification, teachers’ experience and location of the school.

**Research Question 1.2.2** Do teachers believe that inclusive education is being implemented and, if so, with what impact??

A Kruskal-Wallis test was conducted for the associations between teachers’ perceptions of whether the inclusive education policy is being implemented and their age groupings. Significant differences were found ($\chi^2 = 3, 11.272, p = .010$). Pairwise comparisons were then conducted using the Mann-Whitney U test and found that teachers in the less-than-29-years-of-age group rated the implementation of inclusive education policy more highly than the other age groups.

Mann-Whitney U tests were conducted for the associations between teachers’ perceptions of whether the inclusive education policy is being implemented and the remaining demographic variables. The following significant associations were found: primary school teachers rated the level of implementation more highly (Mdn = 4) than secondary school teachers (Mdn = 3), $U = 12234, p = .049$; special education teachers (Mdn = 5) than general education teachers (Mdn = 3), $U = 9401, p <.001$; teachers employed in the special education sector (Mdn = 5) than those in the general education sector (Mdn = 3), $U = 8844, p <.001$, and those who work in city areas rated implementation more highly (Mdn = 5) than those in rural areas (Mdn = 3), $U = 8541.5, p <.001$). No significant differences were found for gender, teachers’ experience and teachers’ level of qualification.

**8.2.1 Teachers’ comments on the open-ended questions related to the inclusive education policy**

The teachers were asked to complete the following statements:

1. The parts of the inclusive education policy which are working well are…
2. These things need to be changed in the inclusive education policy…
The results from the open-ended questions exploring their understanding of inclusive education policy are consistent with the results from the interviews conducted in phase one.

All of the 69 teachers who answered the questions, stated that they did not know whether the policy is working well. Out of those teachers, 45 were from the general education sector and 24 from the special education sector. Thus, for example, a male special education teacher stated: “I really do not know as we have never gone in depth to know what, what the policies are covering and not covering. All I know is students with disabilities have the right to learn in the general classroom.”

Similarly, a male general education teacher stated: “I honestly know nothing about such policies, so how am I supposed to know which ones are working well”.

However, some teachers had suggestions for improving inclusive education policy. A male special education teacher stated that: “teachers can play a crucial role in developing and reforming policies because they are getting more involved with students’ learning than others.” A female teacher added that “policy makers can review the effectiveness of the inclusive education policy from time to time to make sure that inclusive education goals are reached”.

From the teachers’ answers, it seems that they do not perceive that the inclusive education policy is being implemented. Furthermore, the responses to these open-ended questions revealed teachers’ frustrations regarding the lack of funding available to implement special programs and aid inclusive education. For example, a female teacher from the special education sector asked: “how can policy makers avoid providing us with special programs? Implementing clear inclusive education policy is the most debated factor for successful inclusive education.” Finally, general education teachers could not determine whether inclusive education policy is being implemented, as a female teacher from the general education sector stated: “I really cannot tell what is working and what is not working from these policies.”

Thus, the responses to the open-ended questions support the findings derived from the quantitative data. Importantly, whilst 61% of the teachers reported that they had heard about
inclusive education policies, the data equally suggest that teachers do not believe that they are being implemented. This is an area of concern.

8.3 Teacher Preparation

Research Question 3.1 According to Jordanian teachers, how adequate are teacher preparation courses in preparing teachers to include students with disabilities in their classrooms?

A Kruskal-Wallis test was conducted for the associations between teachers’ perceptions of whether teachers’ education preparation courses prepared them to teach students with disabilities and their age groups using the subscale that derived from the factor analysis. Significant differences were found between teachers’ age groups ($\chi^2 = 3, 31.507, p < .001$). Pairwise comparisons were then conducted using the Mann-Whitney U test and found that teachers in the less-than-29-years-of-age group reported a higher level of preparedness than did the other age groups.

Mann-Whitney U tests were conducted for the associations between teachers’ perceptions of whether their education preparation courses prepared them to teach students with disabilities and the remaining demographic variables. The following significant associations were found: female school teachers reported a higher level of preparedness (Mdn = 2.86) than male school teachers (Mdn = 2.43), $U = 11560, p = .044$; primary school teachers (Mdn = 2.86) than secondary school teachers (Mdn = 2.29), $U = 11943.5, p = .022$; teachers employed in the special education sector reported higher (Mdn = 3.14) than teachers in the general education sector (Mdn = 2.00), $U = 5611, p < .001$) and those who work in city areas (Mdn = 3) than those in rural areas (Mdn = 2), $U = 8066.5, p < .001$). No significant differences were found for teachers’ experience and teachers’ level of qualification.

A chi-square test of independence was conducted for the associations between teachers’ reports of whether their teacher education course included at least one unit of study about students with disabilities (reported as categorical data) and the remaining demographic variables. The following significant associations were found: female school teachers reported at a higher level that their education course had at least one unit of study about students with disabilities than male teachers ($\chi^2 (2, N = 341) = 16.328, p = .042$); primary school teachers
than secondary school teachers ($\chi^2 (2, N = 341) = 10.211, p = .006$); teachers employed in the special education sector than those in the general education sector ($\chi^2 (2, N = 338) = 77.829, p < .001$) and those who work in a city area than those in rural areas ($\chi^2 (2, N = 338) = 39.728, p < .001$). No significant differences were found for age, teachers’ experience and teachers’ level of qualification.

Also, a chi-square test of independence was conducted for the associations between teachers’ reporting of whether their teacher education course included a practicum (or professional experience) and the remaining demographic variables. The following significant associations were found: female teachers were more likely to report that their education course included a practicum (or professional experience) than male teachers ($\chi^2 (2, N = 341) = 11.474, p = .003$); primary school teachers than secondary school teachers ($\chi^2 (2, N = 341) = 12.155, p = .002$); teachers employed in the special education sector than those in the general education sector ($\chi^2 (2, N = 338) = 114.085, p < .001$) and those who work in city areas than those in rural areas ($\chi^2 (2, N = 338) = 63.137, p < .001$). No significant differences were found for age, teachers’ experience and teachers’ level of qualification.

Teachers were also asked to rate the extent to which their education courses did not prepare them to teach students with disabilities.

A Kruskal-Wallis test was conducted for the associations between this question and teachers’ age groupings. Significant differences were found between teachers’ age groups ($\chi^2 = 3, 13.794, p = .003$). Pairwise comparisons were then conducted using the Mann-Whitney U test and found that teachers in the less-than-29-years-of-age group were less likely to report that their education course did not prepare them to teach students with disabilities than other age groups.

Mann-Whitney U tests were conducted for the associations between teachers’ perceptions of the extent to which their teacher preparation course did not prepare them to teach students with disabilities and the remaining demographic variables. The following significant associations were found: female teachers were less likely to report that their course did not prepare them (Mdn = 3) than male teachers (Mdn = 4), $U = 10884, p = .004$; teachers employed in the special education sector (Mdn = 2) than teachers in the general
education sector (Mdn = 4), U = 8028.5, p < .001), and for those who work in city areas lower levels were reported (Mdn = 2) than those in rural areas (Mdn = 4), U = 9435, p < .001). No significant differences were found for level of schooling (primary and secondary), teachers’ experience, and teachers’ level of qualification.

**Research Question 3.2** Are teachers prepared to include students with different type of disabilities?

Table 8.2:

*The Effectiveness of Teacher Preparation Course to Teach Students with Different Types of Disabilities for Special education teachers.*

<table>
<thead>
<tr>
<th>My teacher education course prepared me to effectively teach students with:</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP3_1 - Physical Disabilities</td>
<td>3.25</td>
<td>3.00</td>
<td>1.13</td>
<td>1.00</td>
</tr>
<tr>
<td>TP3_2 - Intellectual Disabilities</td>
<td>3.24</td>
<td>3.00</td>
<td>1.18</td>
<td>2.00</td>
</tr>
<tr>
<td>TP3_3 - Sensory Disabilities</td>
<td>3.51</td>
<td>4.00</td>
<td>1.02</td>
<td>1.00</td>
</tr>
<tr>
<td>TP3_4 - Behavioural Disabilities</td>
<td>3.20</td>
<td>3.00</td>
<td>1.13</td>
<td>2.00</td>
</tr>
<tr>
<td>TP3_5 - Emotional Disabilities</td>
<td>3.16</td>
<td>3.00</td>
<td>1.16</td>
<td>1.75</td>
</tr>
<tr>
<td>TP3_6 - Multiple Disabilities</td>
<td>3.11</td>
<td>3.00</td>
<td>1.19</td>
<td>2.00</td>
</tr>
<tr>
<td>TP3_7 - Other Disabilities (please specify)</td>
<td>2.86</td>
<td>3.00</td>
<td>1.20</td>
<td>2.00</td>
</tr>
</tbody>
</table>

The median rating assigned by the special education teachers when asked if “My teacher education course prepared me to effectively teach students with sensory disabilities” was 4 (which corresponds to agree). For all the other types of disabilities questions, the special education teachers were neutral (i.e. a median of three which corresponds to neither agree nor disagree).

**Research Question 3.3** What are the differences between Jordanian special and general education teachers in their perceptions of the adequacy of teacher preparation courses?
Given that teacher education courses for special education and general education teachers are significantly different in terms of their focus, separate analyses were conducted to identify any differences in teacher perceptions according to this factor.

Thus, Mann-Whitney U tests were conducted for the associations between special and general education teachers’ perceptions of whether their education course prepared them to teach students with disabilities. A significant difference was found between special and general education teachers as special education teachers reported higher levels of preparedness (Mdn = 3.14) than general education teachers (Mdn = 2.00, U = 6493.5, p < .001).

A chi-square test of independence was conducted for the associations between whether special and general education teachers’ perceptions of whether their teacher education course included at least one unit of study about students with disabilities. A significant difference was found between special and general education teachers as special education teachers reported higher level than general education teachers’ level ($\chi^2(2, N = 341) = 93.74, p < .001$).

A chi-square test of independence was also conducted for the associations between special and general education teachers’ of whether their education courses included a practicum (or professional experience). A significant difference was found between special and general education teachers as special education teachers reported a higher level than general education teachers ($\chi^2(2, N = 341) = 120.916, p < .001$).

Finally, Mann-Whitney U tests were conducted for the associations between special and general education teachers’ perceptions of whether their education courses did not prepare them to teach students with disabilities. A significant difference was found between special and general education teachers as special education teachers reported a lower level (Mdn = 2) than general education teachers (Mdn = 4), U = 8633, p < .001).

8.3.1 Teachers’ comments on the open-ended questions related to teacher preparation

Research Question 2.4 What additional types of preparation do Jordanian teachers require to deliver inclusive education?
The teachers were asked to complete the following statements:

1. To better prepare teachers to support students with disabilities in regular classes, teacher education courses must…
2. The most important skill I gained from my teacher education course about teaching students with disabilities was…

The teachers’ responses to the open-ended questions were consistent with the quantitative findings. From the teachers’ perspectives, more training is needed.

For example, a male from the general education system stated: “I had no training during my university course.” The qualitative analysis showed that training for general education teachers to work with students with disabilities was not a compulsory part of their course, this was only so for special education teachers. A special education teacher claimed that their preparation was not enough and did not cover all types and levels of disability and she stated that: “University should give us sufficient training with different types of disabilities.”

Other teachers from the same sector stated that more practical experience is needed with one stating that “they are in need of longer time in training and practicum than theory learning from lectures” whilst another wrote “the longer the training the more awareness of inclusive education.”

In addition, all of the 100 teachers who responded to this question (56 from the general education sector and 44 from the special education sector) stated that, to better prepare teachers to deal with the learning of students with disabilities, it is necessary to modify and develop the education preparation courses at university.

In order to address teachers’ concerns as indicated in the above section, modifying and developing the education system at universities could not only serve to contribute to teachers’ ability to include students with disabilities in their classes, but also promote positive attitudes towards successful inclusive education and the benefits of this. Further, 33 teachers from the general education sector said that some compulsory subjects about inclusive
education would also assist in preparing them to optimise the learning of students with disabilities.

Thus, a male from the general education system stated: “if I have to do some compulsory subjects at the university, I will learn about teaching students with disabilities.” This was reiterated by a female teacher from the general education sector who added: “If we receive some training during our course I might be able to teach some students with disabilities other than blind students or students who are deaf.”

Teachers also commented on the need for increased practical experience with a female teacher from the special education sector stating: “I have done my practicum during my university study, but I think it was not long enough to be able to deal with all types of disabilities.”

Finally, a female special education teacher pointed to the need for training around specific disabilities, stating: “University should give us enough training with different types of disabilities, I think our education system will not be able to meet with all students’ needs.”

The findings, in conclusion, showed that general education teachers believe that they are unprepared to work with students with disabilities because of their education background at university. However, the special education teachers also felt that they had insufficient training. As a female teacher commented: “I can teach them some limited daily skills but, due to the limited time of preparation and practicum during my education course I did not work with all types and levels of disabilities.”

Extending the length of all teachers’ training (whether general or special education teachers) to deal with different types of disabilities was seen to be essential for successfully implementing inclusive education. This was also supported by the findings of the quantitative items in the survey and interviews. Teachers indicated that they cannot teach students with different types of disabilities, due to the insufficient duration of training during their education course.
8.4 Resources

Research Question 4.2 How does the existence of, and the need for, resources differ between Jordanian special and general education teachers?

Mann-Whitney U tests were conducted for the associations between the perceptions of special and general education teachers of the availability of resources in their schools. Significant difference were found between the two groups of teachers as special education teachers reported greater availability of resources (Mdn = 3.29) than general education teachers (Mdn = 2), U = 6280.5, p <.001).

8.4.1 Teachers’ comments on the open-ended question related to resources

Research Question 3.1 What kinds of resources do Jordanian teachers report as currently existing in schools to support inclusive education? And what additional types of resources do teachers need?

The teachers were also asked to complete the following statement:

1. The most important resource needed for successful inclusion in our school is…

This question was included to further explore not only the availability of resources but what teachers saw as critical for successful inclusive education. The responses to the open-ended question revealed that resources were very limited. This was seen as not only applying to funding, but also to the availability of teachers’ aides and collaboration between professionals and education stakeholders. It is interesting to note that 185 of the 341 teachers responded to this question: almost double the number who responded with respect to teacher preparations and almost triple the number who answered the open-ended questions on policy. This would then seem to be an area of considerable concern for them. All 185 teachers stated that funding, special programs and school accessibility are the most needed, of those 91 were from the general education sector and 94 from the special education sector.

Additional funding was seen as an obvious need as a female teacher from the special education stated that: “We need money support, this is the most needed.” This was also linked to accessibility. For example, a female teacher from the general education sector said:
“Our school is too old, and it is not accessible even for students without disabilities, funding is the first thing.”

Interestingly a number of teachers pointed to the need for greater collaboration and awareness between students with and without disabilities. A female teacher from the special education sector provided an interesting insight when she said that: “We need money, collaboration, and awareness between students without disabilities and community.” Community awareness and other students’ understanding the impact of disability seems to be important. Further, another female teacher from the special education sector added: “beside funding, collaboration with professionals and educational stakeholders.”

Other teachers pointed to the importance of ongoing professional development. A female teacher stated that: “We do not have any workshops or training during our employment. I usually depend on my own experience from previous students that I have taught.”

In addition, the need for greater collaboration between professionals and educational stakeholders as well as teachers was also raised by teachers. Twelve teachers cited collaboration as an important resource for successful inclusive education. Of those teachers, seven were from the general education sector and five from the special education sector. Interestingly, factors for successful inclusive education beside collaboration and awareness, such as sharing experiences between teachers, were found to be important. A female teacher from the special education sector stated that: “successful inclusion needs funding, training, and collaboration with professionals as well as teachers, because it is really important to share ideas and learn from each other.”

Finally, collaboration with professionals was found also to be a factor from general education teachers’ perspectives. A male teacher from the general education sector indicated that “I know nothing about inclusive education, but I think through collaboration and funding, I can learn from other teachers.”

The findings from teachers’ perceptions in the open-ended question showed that there was a lack of appropriate funding, training and collaboration which they considered to be
very necessary factors for improving inclusive education in Jordan. Such factors will need well-constructed planning to accommodate all students’ learning goals.

Thus, schools in Jordan remain inaccessible and require additional funding. However, schools need not only to be accessible, but the environment must be equipped with all necessary resources to meet all students’ learning goals. Furthermore, it should be understood that resources are not only about money, but also about teachers’ professional development.

8.5 Teacher Attitudes

Research Question 5.1 Is there a relationship between teacher attitudes towards inclusive education and teachers’ characteristics? (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)?

No significant differences were found between teacher attitudes and the demographic variables.

Table 8.3: Correlations Between the Attitudes Subscale and Experience Teaching Types of Disabilities

<table>
<thead>
<tr>
<th>Attitude Score</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>.155**</td>
<td>D9_1 - How many students with Physical Disabilities have you taught in your career?</td>
</tr>
<tr>
<td>.126*</td>
<td>D9_2 - How many students with Intellectual Disabilities have you taught in your career?</td>
</tr>
<tr>
<td>.057</td>
<td>D9_3 - How many students with Sensory Disabilities have you taught in your career?</td>
</tr>
<tr>
<td>.177**</td>
<td>D9_4 - How many students with Behavioural Disabilities have you taught in your career?</td>
</tr>
<tr>
<td>.090</td>
<td>D9_5 - How many students with Emotional Disabilities have you taught in your career?</td>
</tr>
<tr>
<td>.120</td>
<td>D9_6 - How many students with Multiple Disabilities have you taught in your career?</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).
As indicated in Table 8.3, the teachers were asked a number of questions about the level of experience (i.e., taught zero students with disabilities, one to five students with disabilities, six to 10 students with disabilities) with disabilities of different types and severity of disability. The Spearman’s correlations between the response to the questions about the level of experience with students with disabilities of different types and severities and attitudes towards inclusive education are shown in Table 8.3. There are significant positive correlations between attitude and number of students taught with Physical ($r = .155$), Intellectual ($r = .126$), Behavioural ($r = .177$), and Multiple Disabilities ($r = .120$). Teachers who have taught a large number of students with behavioural disabilities have the most favourable attitude towards inclusive education.

8.6 Teacher Knowledge

**Research Question 5.1** What knowledge and skills related to inclusive education for students with disabilities do Jordanian teachers report that they have currently? And what would improve their knowledge?

A Kruskal-Wallis test was conducted for the associations between teachers’ age groups and teacher knowledge of how to teach students with disabilities using the subscale score derived from the factor analysis. Significant differences were found ($\chi^2 = 3, 13.931, p = .003$). Pairwise comparisons were conducted using the Mann-Whitney test and found that teachers in the more-than-50-years-of-age group saw themselves as having a higher level of knowledge to teach students with disabilities than did the other age groups.

Mann-Whitney U tests were conducted for the associations between the knowledge scale and the remaining demographic variables. The following significant associations were found: female school teachers reported higher knowledge on how to teach students with disabilities (Mdn = 3.71) than male school teachers (Mdn = 3.57), $U = 11442, p = .032$; teachers employed in the special education sector (Mdn = 3.86) than those in the general education sector (Mdn = 3.29), $U = 8742.5, p <.001$), and those who work in city areas reported higher knowledge (Mdn = 3.71) than those in rural areas (Mdn = 3.57), $U = 11559, p = .003$). No significant differences were found between primary and secondary school teachers, teachers’ experience and teachers’ levels of qualification.
Research Question 5.2 What is the relationship between teacher knowledge towards inclusive education and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)

Mann-Whitney U tests were conducted for the associations between the knowledge scale and the two groups of teachers. As would be expected, significant difference were found as special education teachers reported higher knowledge on how teach students with disabilities (Mdn = 3.86) than general education teachers (Mdn = 3.29), U = 8897, p <.001).

Table 8.4:
Mean Rank for Special and General Education Teachers of Necessary Knowledge to Teach Students with Disabilities

<table>
<thead>
<tr>
<th>Ranking</th>
<th>General education teachers</th>
<th>Special education teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher education course</td>
<td>Experience teaching students with disabilities</td>
</tr>
<tr>
<td></td>
<td>Mean Rank = 2.45</td>
<td>Mean Rank = 2.87</td>
</tr>
<tr>
<td>2</td>
<td>Professional development whilst I have been a teacher</td>
<td>Professional development whilst I have been a teacher</td>
</tr>
<tr>
<td></td>
<td>Mean Rank= 2.83</td>
<td>Mean Rank= 2.90</td>
</tr>
<tr>
<td>3</td>
<td>Experience teaching students with disabilities</td>
<td>Teacher education course</td>
</tr>
<tr>
<td></td>
<td>Mean Rank = 3.04</td>
<td>Mean Rank = 3.04</td>
</tr>
<tr>
<td>4</td>
<td>Reading about how to teach students with disabilities</td>
<td>Reading about how to teach students with disabilities</td>
</tr>
<tr>
<td></td>
<td>Mean Rank= 3.46</td>
<td>Mean Rank= 3.08</td>
</tr>
<tr>
<td>5</td>
<td>Learning from a more experienced teacher</td>
<td>Learning from a more experienced teacher</td>
</tr>
<tr>
<td></td>
<td>Mean Rank = 3.49</td>
<td>Mean Rank = 3.25</td>
</tr>
<tr>
<td>W</td>
<td>.385</td>
<td>.387</td>
</tr>
<tr>
<td>Sig. Level</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Sample Size</td>
<td>183</td>
<td>158</td>
</tr>
</tbody>
</table>
The teachers were also asked to rank from most to least important, what has been helpful in giving them the necessary knowledge to teach students with disabilities in their classrooms. It was determined that Kendall’s Coefficient of Concordance provided the most useful technique for analysis since it enables examination of consistency of the ranking given by teachers in each group.

Whilst special and general education teachers were consistent in their ranking within their group they differed between the groups. Interestingly, teacher education course was ranked first by the general education teachers, but third by the special education teachers who saw experience teaching students with disabilities as most important, whilst the general education teachers rated that third. However, ‘professional development whilst I have been a teacher’, ‘reading about how to teach students with disabilities’ and ‘learning from a more experienced teacher’ were ranked similarly.

8.6.1 Teachers’ comments on the open-ended questions about their knowledge about inclusive education

The teachers were asked to complete the following statements:

1. My knowledge of how to teach students with disabilities would be improved by…
2. The most important thing I know about teaching students with disabilities is…

The result revealed that all of the 209 teachers who responded to the question wrote that they need training to improve their knowledge, of those 119 were from the general education sector and 90 from the special education sector. Additional training was seen as important to increase teacher knowledge. The following quotations illustrate this point.

A female teacher from the special education sector stated: “More training will increase my knowledge; will make me more confident to promote successful inclusive education, of course beside this is the ‘supports’ and the existence of other factors related to successful inclusive education.” Another special education female teacher added: “ongoing service and training are crucial to improve my knowledge, to walk side by side with what is going on the other side of the world.”
In addition, training to increase teacher knowledge was seen to be insufficient on its own if not combined with other factors such as teacher preparation and policy implementation for successful inclusive education as one male from special education sector added: “even if I have my knowledge increased, what are the benefits? And in reality, other factors for successful inclusive education do not exist.”

Interestingly, professional development was as important, with a female teacher from the special education sector stating that: “I can learn from other resources such as workshops, conferences and ongoing training.”

The results revealed that teachers believe that they can improve their knowledge from other resources. This means that all factors that have been mentioned by teachers need to be in place for inclusive education to work in Jordanian schools.

However, learning from different resources (such as; in-training, workshops from other experienced teachers) to increase teacher knowledge was another issue raised by teachers’ answers. Five teachers from the general education sector stated that university training programs must also be changed to increase their knowledge, a male teacher from the general education sector said: “My knowledge will be improved by changing the university program, training and collaboration with other professionals and special education teachers.”

Importantly, of the 138 teachers wrote that they knew ‘nothing’ about working with students with disabilities or including them, 125 were from the general education sector and 13 from the special education sector.

A male general education teacher said: “I do not know anything about students with disabilities that is why I cannot include them in my classroom because I did not learn anything about them.” A female teacher from the general education sector also added: “I learnt nothing about inclusive education because I am sure it will not happen in my class especially with these students with severe mental disabilities, but if I had the chance to learn anything about them I would.”
According to the teachers the areas in which they felt most competent in teaching students with disabilities in their classroom were visual communication, patience, behaviour management and daily living skills such as toileting, feeding and drinking. Daily living skills were mentioned by 79 teachers from the special education sector and eight teachers from the general education sector. In this connection, too, some teachers explained their knowledge of how to use visual communication methods to communicate with students with disabilities. A female special education teacher explained how she used her knowledge of being able to use cards with pictures to communicate with students, especially those with severe disabilities. She felt that this was her strongest skill, as it could be used in such a variety of contexts and stated: “I use some cards with pictures on them, to communicate with a student with autism in my class.”

Another special education teacher stated that she had knowledge only of being “able to interpret the students’ non-verbal communication and understanding when they need something and encouraging the students to respond, but not to include any students with disabilities in my classroom.” Communication plays a central role in any situation and the importance and difficulty of achieving this with students with severe mental disabilities should not be underestimated. Due to teachers’ limited knowledge they cannot work effectively with students with disabilities.

The results of the open-ended question on teacher knowledge is consistent with the quantitative findings. Teachers reported that they do not have the knowledge to teach students with different types and levels of disability in their classes, which is vital to include students with disabilities and enable successful inclusive education. Some teachers have limited knowledge and suggested strategies that might increase their knowledge to be able to include students with different types and levels of disabilities. Teacher knowledge is related to their preparation through pre-service courses as well as ongoing training or services which were seen to be insufficient for special education teachers and not available at all for general education teachers.
8.7 **Associations Between the Five Factor Scores**

**Research Question 6.1** What are the relationships among the factors (inclusive education policy, teacher preparation, resources, teacher attitude and knowledge)?

Spearman’s correlations were computed between the scales derived from the survey (i.e. inclusive education policy, teacher preparation, resources, teacher attitudes, and teacher knowledge). The noteworthy result is that all the scales used in this research are significantly and positively correlated with each other except for the correlation between the teacher attitude score and the teacher preparation score, and teacher attitude score and the resources score as shown in Table 8.5.
Table 8.5: Correlation among All Constructs Scores (Inclusive Education Policy, Teacher Preparation, Resources, Teacher Attitudes, Teacher Knowledge)

<table>
<thead>
<tr>
<th></th>
<th>Policy Score</th>
<th>Teacher Preparation Score</th>
<th>Resources Score</th>
<th>Attitude Score</th>
<th>Knowledge Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correlation Coefficient</strong></td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>341</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Correlation Coefficient</strong></td>
<td>.357**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>341</td>
<td></td>
<td>341</td>
<td>341</td>
<td></td>
</tr>
<tr>
<td><strong>Correlation Coefficient</strong></td>
<td>.528**</td>
<td>.567**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>341</td>
<td></td>
<td>341</td>
<td>341</td>
<td>341</td>
</tr>
<tr>
<td><strong>Correlation Coefficient</strong></td>
<td>.137*</td>
<td>.091</td>
<td>-.019</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.012</td>
<td>.092</td>
<td>.730</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>341</td>
<td></td>
<td>341</td>
<td>341</td>
<td>341</td>
</tr>
<tr>
<td><strong>Correlation Coefficient</strong></td>
<td>.393**</td>
<td>.421**</td>
<td>.362**</td>
<td>.209**</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>341</td>
<td></td>
<td>341</td>
<td>341</td>
<td>341</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

8.8 Predictors of Teachers’ Level of Confidence to Teach Students with Disabilities

**Research Question 8.1** What constructs are predicting teachers’ level of confidence to teach students with disabilities in their classroom?
A multiple linear regression model was developed with the level of confidence that the teachers have in their capacity to teach students with disabilities as the dependent variable and inclusive education policy score, teacher preparation score, resources score, teacher attitude score, teacher knowledge score, and teacher demographics (gender, age, primary or secondary, formal qualification in special education, highest qualification earned, current working sector, years of experience and location) as the independent variables. The results of the analysis (Table 8.6) indicate that the teacher knowledge score, teacher preparation score, the inclusive education policy score, formal qualification in special education (1-Yes, 0-No), highest education being Master's or More (1-Yes, 0-No), and years of experience in general education accounted for a significant proportion of the level of confidence that the teachers have in their capacity to teach students with disabilities, $R^2 = .428$ F $(6, 329) = 41.023$, $p < .001$.

Table 8.6: Final Regression Model

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-2.301</td>
<td>.663</td>
<td>-3.472</td>
<td>.001</td>
</tr>
<tr>
<td>Knowledge Score</td>
<td>1.111</td>
<td>.167</td>
<td>.328</td>
<td>6.641</td>
</tr>
<tr>
<td>Teacher Preparation Score</td>
<td>.524</td>
<td>.149</td>
<td>.178</td>
<td>3.515</td>
</tr>
<tr>
<td>Policy Score</td>
<td>.508</td>
<td>.164</td>
<td>.152</td>
<td>3.098</td>
</tr>
<tr>
<td>Formal Qualification in Special Education (1-Yes, 0-No)</td>
<td>1.719</td>
<td>.326</td>
<td>.271</td>
<td>5.278</td>
</tr>
<tr>
<td>Highest Education is master's or More (1-Yes, 0-No)</td>
<td>-.748</td>
<td>.356</td>
<td>-.088</td>
<td>-2.099</td>
</tr>
<tr>
<td>Years of Experience in General Education</td>
<td>.041</td>
<td>.020</td>
<td>.101</td>
<td>2.046</td>
</tr>
</tbody>
</table>

Note that the independent variables which were not significant to the dependent variable have not been reported in the above table as is the common practice for stepwise regression.
The equation for the model is: The level of confidence that the teachers have in their capacity to teach students with disabilities = -2.301 + 1.111 x Knowledge Score + 0.524 x Teacher Preparation Score + 0.508 x Policy Score + 1.719 x Formal Qualification in Special Education (1-Yes, 0-No) - 0.748 x Highest Education is master’s or More (1-Yes, 0-No) + 0.041 x Years of experience in General Education

The final model explains approximately 42.8% of the variance in the level of confidence that the teachers have in their capacity to teach students with disabilities.

The most important predictor of level of confidence is knowledge of inclusive education, followed by having formal qualifications in special education. One unit increase in the teacher knowledge of inclusive education will translate to 1.111 units increase in the level of confidence that the teachers have in their capacity to teach students with disabilities when all the other predictors are controlled; one unit increase in teacher preparedness for inclusive education will translate to 0.524 units increase in the level of confidence that the teachers have in their capacity to teach students with disabilities when all the other predictors are controlled; one unit increase in the favourable policy orientation towards inclusive education will translate to 0.508 units increase in the level of confidence that the teachers have in their capacity to teach students with disabilities when all the other predictors are controlled; having a formal qualification in special education will translate to 1.719 units increase in the level of confidence that the teachers have in their capacity to teach students with disabilities when all the other predictors are controlled; having a Master’s degree of more will translate to a -0.748 units decline in the level of confidence that the teachers have in their capacity to teach students with disabilities when all the other predictors are controlled; and one unit increase in the number of years of experience in general education will translate to 0.041 units increase in the level of confidence that the teachers have in their capacity to teach students with disabilities when all the other predictors are controlled.

The model described above has a medium effect size (R-square = 0.428) (Cohen, 1988). The two most important factors affecting the level of confidence that the teachers have in their capacity to teach students with disabilities have been found to be the knowledge of inclusive education and having formal qualifications in special education. Other factors which affect the level of confidence that the teachers have in their capacity to teach students
with disabilities are higher levels of teacher preparation about inclusive education, higher awareness of inclusive education policy, being highly educated (i.e. master’s degree or more) and a greater number of years of experience in general education.

8.9 Conclusion

The purpose of this chapter was to answer the research questions posed in the current study relating to the research aims on teachers’ perceptions towards the including of students with disabilities in the general classroom in Jordan. The screening of the data indicated that the data cannot be assumed to be from a normally distributed population, and hence, non-parametric techniques were used.

To summarise the result of the analysis:

- Most teachers had varying levels of awareness regarding the inclusive education policy, but believed that it was not being implemented properly in Jordanian schools.
- Teacher preparation was seen as inadequate by general education teachers. While, special education teachers reported insufficient preparation to allow them to deal with all types and levels of students with disabilities.
- The current availability of resources and collaboration to support inclusive education was found to be very limited and there is much room for improvement. Special education teachers reported that they had higher levels of resources and collaboration compared to general education teachers.
- The attitudes of the teachers towards inclusive education did not differ by education levels of teachers, region of the school (metropolitan or country), gender of the teacher, age group of the teacher, whether the teachers were primary of secondary or whether the teachers were general or special education teachers. Teachers who have taught a large number of students with behavioural disabilities were found to have the most favourable attitude towards inclusive education.
- The knowledge of the teachers about inclusive education was found to be very limited.
- An analysis of the association between the five factor scores indicated that all the scales used in this research are significantly and positively correlated with each other.
except the correlation between the attitude score and the teacher preparation score, and attitude score and the resources score.

The regression analysis revealed that, the two most important factors affecting the level of confidence that the teachers have in their capacity to teach students with disabilities have been found to be the knowledge of inclusive education and having formal qualifications in special education.
9 ANALYSIS OF THE 2007 LAW, SITUATIONAL ANALYSIS AND THE NSPD 2010-2015 IN JORDAN

In this chapter the results of analysis of Jordan’s inclusive educational policy in terms of the 2007 law and NSPD 2010-2015 are presented and described. The detailed method of this analysis has been given in section 5.4.3 above.

Table 9.1 below shows a list of the questions that were adapted from the original work in UNGEI’s 2008 document (UNGEI, 2008) to fit this analysis of the Jordanian context’s legislation and policy.
### Table 9.1: Tool B: Analysis of the 2007 Law, Situational Analysis and NSPD 2010-2015.

<table>
<thead>
<tr>
<th>Part 1: SITUATION ANALYSIS</th>
<th>Evidence and evaluation</th>
<th>Priorities for planning and recommendations</th>
</tr>
</thead>
</table>
| Questions on equity and inclusion | Specific issues for students with different types of disabilities | According to the latest report conducted by UNICEF (2014) on the number of students enrolled in the general classroom there are 16,870 students. However, no data are available in Jordan on the number of students with disabilities who are excluded and who are attending general education schools. This could be due to:  
- poor coordination between the ministries  
- no Ministry taking the responsibility to collect data  
- lack of funding. | The first priority is to find out how many students with disabilities are excluded and to determine why these groups of students with disabilities are excluded. Data collection through survey and interview can be conducted by:  
- Ministry of Education (MOE)  
- Ministry of Social Development (MSD)  
- Higher Council for Affairs for Persons with Disabilities (HCAPD)  
- Department of Statistics (DOS) |
| How many students with disabilities are currently excluded and are out of school? | How many of these students have physical, intellectual, sensory, behavioural, emotional or multiple disabilities? | The 2007 Law emphasises that inclusive education is for all students regardless of their abilities. However, many students with disabilities are still excluded and are not attending any schools. Data from 2005 indicate that only 13,275 students with disabilities were attending special education services. Out of these, 8,410 were in resource rooms in private and public schools (Al Jabery et al., 2005). | Funding support to collect data through family, schools and community might be the best means to gather such data and summarise trends to provide a national picture. Agencies such as the MOE, MSD, HCAPD or DOS could take on the responsibility of collecting ongoing data. |
| Are students with disabilities attending special or general education schools? | Do these data include all students with all types and levels of disability? | | |
Because there is no ongoing data collection these are the most recent data available.

| Are there any other major factors that might affect school attendance? If so, what are these factors? | Are these factors particularly related to the type and level of disabilities? | There is social stigma for the parent about their child's disability (hiding information about their child with a disability and their conditions) (Al Shoura & Ahmad, 2014; Hadidi, 1998). | Family and community awareness about students with disabilities and inclusive education can be promoted through meetings and presentations with the help of the MOE, HCAPD and MSD. |
| Are there any data on the family income, location and the levels and types of disabilities of students who are not attending schools? | Have such data been disaggregated regarding the type and level of the students’ disabilities? | No data are available about family income or the number of students according to location. This could be due to:  
- poor coordination between the ministries  
- no Ministry taking the responsibility to collect data  
- lack of funding. | Data collection through surveys and interviews can be conducted by:  
- HCAPD  
- MOE  
- MSD  
- DOS |
| Are there any other major factors apart from the ones above? | Are these factors significant for this situation? | Yes. Factors could be the education system not following the 2007 Law, due to the limited budget in the education system which limits the MOE’s provision of resources and facilities to schools. | Funding support. 
Ongoing monitoring of organisations and reassessing as needed by policymakers and the education system. |
<p>| Has any research been carried out on the main barriers to inclusive education in Jordan? | Has such research identified any barriers to inclusive education? | No specific research on the 2007 Law. However, several studies have been conducted on the Jordanian context and these studies revealed some of the barriers to transferring policy into practice and to collaboration between teachers and the education stakeholders (Al Jabery &amp; Zumberg, 2008; Al Khatib, 2007; Amr, 2011). These include inadequate resources and techniques, inadequate knowledge. | HCAPD must determine strategies to investigate those barriers through surveys, interviews and more detailed studies on specific barriers, such as: school environment, teacher knowledge, teacher preparation, in-service and pre-service teacher training and teacher attitudes. |</p>
<table>
<thead>
<tr>
<th>What are the main gaps in information about inclusion and exclusion from general schools and how should these be addressed?</th>
<th>Are there any particular gaps in relation to the type and level of students’ disabilities?</th>
<th>It is assumed that the barriers in relation to type and level of disabilities are due to lack of disaggregated data and information about the students’ background. The 2007 Law can also be a gap as there are no specifications regarding planning and implementation to meet with the needs of all students with different types and levels of disability as the current findings shed additional light on this and will be discussed in the following chapter. The actual education system at the university for pre-service teachers could be another gap to introducing the goal of the 2007 Law and NSPD 2010-2015. Financial support could be another gap (Al Khatib, 2007; Al Shoura &amp; Ahmad, 2014; Amr, 2011) School settings and accessibility could be a gap.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine strategies to put the 2007 Law and NSPD 2010-2015 into practice to address the above-mentioned barriers. The HCAPD, MOE, MSD should plan to address those barriers through strategies. The HCAPD should then apply the strategies and monitor and reassess as needed. Government should provide funding support to allow HCAPD, MOE and MSD to do so.</td>
<td>Prioritise HCAPD, MOE and MSD to analyse data gathered through monitoring and evaluation, surveys, interviews and document analysis to determine these gaps. Plan solutions. Apply solutions, monitor and reassess as needed. Financial support from government.</td>
<td></td>
</tr>
</tbody>
</table>
## Part 2: ENABLING ENVIRONMENT

<table>
<thead>
<tr>
<th>Questions on equity and inclusion</th>
<th>Specific issues for students with different types of disabilities</th>
<th>Evidence and evaluation</th>
<th>Priorities for planning and recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Is the 2007 Law and NSPD 2010-2015 applicable in the education sector? | What are the implications of the 2007 Law and NSPD 2010-2015 for strategies regarding the types and levels of disabilities? | The main goal of the 2007 Law is to ensure that all students with any type or level of disabilities have the right to education in general education schools. The 2007 Law and NSPD 2010-2015 are also designed to assure equality for people with disabilities in service provision, to facilitate their inclusion in the society. However, the results from the teacher interviews and surveys reveal that the 2007 Law is not being implemented and also that teachers are not fully aware of it. | Identify and establish well-organised strategies to connect the 2007 Law and NSPD 2010-2015 and their potential framework within and beyond the education system to meet the needs of students with disabilities. The MOE, HCAPD and MSD currently share the responsibility to provide education for students with disabilities. In addition, the MOE, HCAPD and MSD can enhance existing institutions and schools by developing their services and establishing new institutions and schools in order to expand services in the country and to meet all students need. Other recommendations are:  
- ongoing assessment and monitoring and reassessment as needed.  
- financial support.  |
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the 2007 Law and NSPD 2010-2015 link to international policies on</td>
<td>Does the 2007 Law emphasise the inclusive education of students with different types and level of disabilities?  The 2007 Law and NSPD 2010-2015 are linked to the work of UNESCO and the UN Convention on the Rights of Persons with Disabilities (1996a). It is also linked to the US’s Individuals with Disabilities Education Act (2004). Students with all levels and types of disability have the right to education according to the 2007 Law. Unfortunately, inclusive education for students with disabilities is still very limited to certain types and levels of disability as the current study has found. For example, students with severe mental disabilities might not attend any schools. The resource rooms in general education schools only exist to serve students with learning difficulties, and deaf and blind children. While the HCAPD is addressing gaps for these students those with intellectual disabilities still do not have adequate access to inclusive education. Develop the 2007 Law and NSPD 2010-2015 through the workplace to address the gaps that hinder the success of inclusive education for all students with disabilities in Jordan. Then, undertake planning and develop strategies to include all students with disabilities regardless of their abilities, monitor the plans and reassess. Follow international strategies that have been developed successfully and consider the contextual differences and budget level when applying them to Jordan’s context.</td>
</tr>
<tr>
<td>the right to learning of all students with disabilities?</td>
<td></td>
</tr>
<tr>
<td>Are any specific dimensions of inclusive education or specific types</td>
<td>What are the gaps in the 2007 Law and NSPD 2010-2015 in Jordan in relation to different types and levels of students’ disabilities?</td>
</tr>
<tr>
<td>and levels of disability identified? If so, which?</td>
<td></td>
</tr>
<tr>
<td>What kind of planning does government need to promote awareness about</td>
<td>Are there any particular issues that targeted groups (such as, teachers, community, parents and students without disabilities) need to be aware Government should provide education in diversity to all learners to raise awareness and increase the awareness of teachers and schools about the 2007 Law and its implementation.</td>
</tr>
<tr>
<td>the 2007 Law and its implementation?</td>
<td></td>
</tr>
<tr>
<td>Are there any particular issues that targeted groups (such as, teachers,</td>
<td></td>
</tr>
<tr>
<td>community, parents and students without disabilities) need to be aware</td>
<td></td>
</tr>
<tr>
<td>Government should provide education in diversity to all learners to raise</td>
<td></td>
</tr>
<tr>
<td>awareness and increase the awareness of teachers and schools about the</td>
<td></td>
</tr>
<tr>
<td>2007 Law and its implementation.</td>
<td></td>
</tr>
<tr>
<td>Awareness can be improved through strategies such as media promotion,</td>
<td></td>
</tr>
<tr>
<td>community meetings, conferences, and university courses to reach every</td>
<td></td>
</tr>
<tr>
<td>individual in the community.</td>
<td></td>
</tr>
</tbody>
</table>
of regarding to inclusive education?

Increase awareness of special and general education teachers about the 2007 Law through their education courses at universities.

Improve curricula and schools’ context and accessibility to meet students’ learning needs.

Improve awareness in the community, including students without disabilities.

Establish a framework for ongoing consultation in schools.

<table>
<thead>
<tr>
<th>Institutional procedures and framework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System</strong></td>
</tr>
<tr>
<td>What are the main institutional/school procedures for supporting the 2007 Law within the education system?</td>
</tr>
<tr>
<td>What are the institutional/school procedures in relation to inclusive education?</td>
</tr>
<tr>
<td>What kind of procedures and coordination need to be developed to implement inclusive education?</td>
</tr>
<tr>
<td>How effective are these procedures to promote inclusive education?</td>
</tr>
</tbody>
</table>
| Based on the 2007 Law, government schools and institutions must acknowledge the importance of access to education for all students with disabilities regardless of their abilities in the education system. However, the current study has found that the implementation of inclusive education for all types and levels of disability currently does not exist in schools, due to poor coordination and the following factors:
- no special programs and curricula to meet students’ needs |
| Government must: |
| - provide financial support to improve buildings to meet students’ needs, provide human and other resources |
| - spread awareness between in-service and post-service teachers |
| - make some changes to universities’ syllabuses |
| - plan strategically between government and policymakers after collecting data from pre- and in-service teachers, school principals and other education stakeholders |
| Schools | Do these supports include conducting a general assessment of students’ levels, and moving them, for example, from partial to full inclusion? | The only straightforward strategy of the 2007 Law is to include students with disabilities in the general classroom. But again, unfortunately, inclusive education is limited to deaf students, blind students and students with learning difficulties. Those students can be included in separate buildings not suitable for students with disabilities especially for those in wheelchairs no teachers’ aide in the school large numbers of students in the classroom teachers not being aware of the inclusive education policy teachers’ lacking knowledge of inclusive education no ongoing workshops to keep teachers aware of development and changes no financial support Such factors are very important for successful inclusive education. Inclusive education policy on its own cannot guarantee successful inclusive education without addressing these factors. | The 2007 Law must guarantee that all students with disabilities are fully included in general classrooms regardless of their abilities. For schools to become more effective at inclusive education, the MOE, HCAPD and MSD must identify how to develop schools’ implement plans, monitor and reassess as needed |
What sort of supports are available for special and general education teachers?

Classrooms called resource rooms in general education schools. Transitioning students with disabilities from the resource room to the general education classroom could happen on a daily basis for some of the time. In some cases, students can be moved from partial to full inclusion and this is very common for students with learning difficulties.

For instance, not all general education schools have a resource room, and learning materials and programs are very limited in the resource rooms.

Financial support is required.

| Partnership | Who are the main partners in developing inclusive education? | Do these partners focus on including students with particular types of disabilities in the general classroom? | The main partners are the HCAPD, MOE and MSD. Their aim is to include all students with disabilities. The surveys and interviews in the current study found that inclusive education is restricted to deaf students, blind students and students with learning disabilities. The HCAPD with the cooperation of the MOE and MSD implemented the 2007 Law and worked alongside each other to support inclusive education for all students with disabilities. However, some students with severe disabilities are currently attending systems according to the 2007 Law to improve inclusive education and transition procedures for all students regardless of their level and type of disability. There must be improvements in the capacity of the schools with special programs and materials and resources to meet all student’s needs. Financial support is required. | How do students with disabilities get involved in the community? | Do partners get involved with family, community and students with and without disabilities? | Determine the degree of involvement of each partner and gather data through raising community awareness and increasing parents’ support for and awareness of their child’s learning at home and school, as well as the awareness of peers without disabilities. Identify the role of each partner and what kind of contribution they can offer as well as what sort of support is needed. Identify which of these partnerships needs to be developed and how this will be |
special education institutions and schools run by the MSD. The partnerships’ procedures are to provide a framework for the 2007 Law, through communities and families, to develop opportunities for inclusive education of students with disabilities. But in reality, there are no signs of involvement between partners for developing such goals, as the current study found that inclusive education is limited to certain types of disability with limited transition and resources.

<table>
<thead>
<tr>
<th>Capability progress</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any data on initiatives to promote inclusive education in Jordan? If yes how and when was it collected?</td>
<td>Have there been any improvements or changes in the inclusive education system since then?</td>
</tr>
<tr>
<td>Yes. The Jordanian government in the last decade had an intensive focus on inclusive education. In 2007 Jordan signed the UN Convention on the Right of Persons with Disabilities. The government revised Article 4 of Law 12/1993 and replaced it with the Law on the Rights of Persons with Disabilities (Higher Council of Affairs for Persons with Disabilities, 2015). The HCAPD started planning to include all students with disabilities in the general classroom and the framework was set for addressed—possibly through training and financial support. Plan strategically to include all students in the general classroom through collaboration between the MOE, MSD and HCAPD. Financial support.</td>
<td></td>
</tr>
</tbody>
</table>

Government must identify the weaknesses and strengths of the previous plan to include all students in the general classroom by:
- determining what are the main barriers that need to be addressed.
- developing a new plan with a definite time for implementation.
- establishing a budget for the new plan.
- implementing the new plan.
- applying the new plan and monitoring, reviewing and reassessing it as needed.
The main goal was to guarantee the right of students with disabilities to be included in the general classroom as a human right. But, unfortunately despite the ambitious goals, inclusive education has not been improved and remains as it did prior to 2007.

An agreement was reached between the MOE and Swedish Individual Relief to develop 10 classrooms for students with severe mental disabilities in general schools (Higher Council of Affairs for Persons with Disabilities, 2010).

<table>
<thead>
<tr>
<th>What methods are currently being used for planning, implementing and monitoring inclusive education and teachers?</th>
<th>What types and levels of disability are being handled by teachers in the classroom?</th>
<th>Unfortunately, there are no current existing plans or programs to monitor schools or teachers’ implementation of inclusive education. There is poor coordination, duplication of services and work for students with disabilities is considered to be a waste of time and resources (Higher Council of Affairs for Person with Disabilities, 2010).</th>
</tr>
</thead>
</table>
| Government must identify the most needed interventions through surveys and interviews with school principals and teachers. Then:  
- determine the gaps  
- set up plans  
- set up goals for each plan  
- set up budgets for the plans  
- apply the plans  
- monitor and review the outcomes within set time frames and reassess as needed. |
What kinds of resources and information are provided to schools to promote inclusive education?

How do available resources and information cover types and levels of disabilities?

Unfortunately, resources and information are insufficient and very limited in schools and do not address all types and levels of disability.

Identify resources that are most needed through surveys and interviews with school principals and teachers.

Allocate funds for the most needed resources in the budget.

### Teachers' training

| Are pre-service teacher courses at university adequate? | What sort of training is provided for in-service and pre-service teachers? Does this training meet the needs of all students with disabilities? | The 2007 Law only looks at the education of students with disabilities as a human right. For this simple reason, it does not look at the teacher preparation courses at universities, which is a serious issue affecting inclusive education. The practicum training course for teachers in special education is very limited and not long enough to cover all types and levels of disability. Furthermore, general education teachers do not attend any training courses to learn about students with disabilities, as it does not apply to their field of study in the university. There is no continuing or ongoing training for in-service teachers. | Government agencies must conduct surveys and interviews to gather data from pre- and in-service teachers and review university syllabuses. In addition, they must identify the critical gaps in pre-service and in-service teacher training courses. They must also investigate training and strategies for teacher training courses to improve teacher knowledge and skills to be able to include all students with disabilities. Ongoing training and workshops are useful methods to keep teachers informed of changes and developments. |

Are in-service teachers provided with continuing training?
### Part 3: ACCESS FEATURES AND CONSEQUENCES

<table>
<thead>
<tr>
<th>Questions on equity and inclusion</th>
<th>Specific issues for students with different types of disabilities</th>
<th>Evidence and evaluation</th>
<th>Priorities for planning and recommendations</th>
</tr>
</thead>
</table>
| Access                           | How will such outcomes have an impact on students with different types and levels of disability? | Unfortunately, there is no evidence of any successful method that has been used by the government to include students with disabilities in the general classroom. The 2007 Law recognises the right of students with disabilities to be included in the general classroom, but students with disabilities in Jordan remain excluded and the actual education system is currently suffering from:  
  - shortage of resources  
  - lack of teacher knowledge and preparation to include students with disabilities  
  - poor school facilities  
  - no collaboration between teachers and professionals  
  - no financial support. | The government must review the outcomes of the 2007 Law.  
The aim is not simply to describe the goal of this law, without action. The government must build and maintain the strength of the actual education system to meet the needs of all students with disabilities. To do so, government must improve:  
  - ongoing collaboration between ministries and schools as well as professionals and teachers  
  - financial support  
  - school buildings  
  - facilities in schools (classroom size; number of students in the classroom; ramps, especially for students with wheelchairs; materials and special programs)  
  - human resources, by supplying more teachers’ aide and teachers  
  - teacher preparation |

Find the most effective methods and outcomes that have been implemented or identified for successful inclusive education
<table>
<thead>
<tr>
<th><strong>What additional procedures and methods are needed to include all students with disabilities in the general classroom?</strong></th>
<th><strong>Are these procedures relevant to the level and type of different disabilities?</strong></th>
<th><strong>Identify the importance of methods and how these methods are related to the 2007 Law.</strong>&lt;br&gt;Address all gaps in the current law by conducting interviews and surveys as well as document analysis.&lt;br&gt;Set up goals and plans for those gaps.&lt;br&gt;Apply the plan.&lt;br&gt;Review and monitor the plan over time.&lt;br&gt;Reassess the plan as needed.&lt;br&gt;Provide financial support.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish special training programs for in-service teachers.&lt;br&gt;Extend the length of training courses at the university.&lt;br&gt;Including compulsory training and learning about students with disabilities for general education teachers.&lt;br&gt;Ensure professional involvement at all times.&lt;br&gt;Design a special curriculum to meet students’ needs.&lt;br&gt;Establish early diagnosis centres.</td>
<td>Are these procedures relevant to the level and type of different disabilities?</td>
<td>How, if at all, does the curricula reflect particular types and levels of disability?</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td><strong>How can the curricula for students with disabilities (if there is one) differentiate between specific types and levels of disability?</strong></td>
<td><strong>The aim of the 2007 Law is to include students with disabilities in the general classroom. There is no evidence of an existing curricula for students with disabilities in the schools in Jordan, except for blind students using braille.</strong>&lt;br&gt;First conduct an assessment before implementing a curriculum.&lt;br&gt;Second, develop curricula and materials for learning to meet the needs of students with various types and levels of disability, involving teachers in the process.&lt;br&gt;Alternatively, select a curriculum that has been successfully implemented and tested in another country and provide it to students with disabilities in Jordan, with attention to the contextual differences.</td>
</tr>
<tr>
<td><strong>How can the curricula for students with disabilities (if there is one) differentiate between specific types and levels of disability?</strong></td>
<td><strong>How, if at all, does the curricula reflect particular types and levels of disability?</strong></td>
<td><strong>The aim of the 2007 Law is to include students with disabilities in the general classroom. There is no evidence of an existing curricula for students with disabilities in the schools in Jordan, except for blind students using braille.</strong>&lt;br&gt;First conduct an assessment before implementing a curriculum.&lt;br&gt;Second, develop curricula and materials for learning to meet the needs of students with various types and levels of disability, involving teachers in the process.&lt;br&gt;Alternatively, select a curriculum that has been successfully implemented and tested in another country and provide it to students with disabilities in Jordan, with attention to the contextual differences.</td>
</tr>
<tr>
<td>Question</td>
<td>Action</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Do curricula need to address specific daily life learning skills for particular types and levels of disability?</td>
<td>Finally, apply curricula, monitoring the progress of the students with disabilities and reassess as needed.</td>
<td></td>
</tr>
<tr>
<td>How can the curricula be fitted to the specific type and level of disability?</td>
<td>Identify the types and levels of disability that mean students might only need to learn social and daily life skills or academic skills. Provide students with the right curricula according to their ability after conducting the assessment. Prepare teachers and teachers’ aides. Monitor and review the implemented curricula and adjust if needed.</td>
<td></td>
</tr>
<tr>
<td>How can curricula at some stages include educational learning skills for particular types and levels of disability?</td>
<td>Identify types and level of the students’ disabilities and provide them with the right curricula, prepare teachers and teachers’ aide to apply these curricula, review implemented curricula, and adjust as needed.</td>
<td></td>
</tr>
<tr>
<td>Outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What objectives have been set to include students with disabilities?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Do these objectives include specific sub-objectives for students with different types and levels of disability? | Government must identify weaknesses and strengths in the previous plan in relation to including all students in the general classroom. Subsequently the government must:  
  - determine the main barriers |

- Readiness initiative, My School, to include all students with disabilities.  
- Establishment of 10 high-quality schools for deaf students, and six schools through the education development project (2010–2015), and seven classrooms for deaf students in government schools.
<table>
<thead>
<tr>
<th>What goals have been set for access to early diagnosis centres?</th>
<th>Do these goals include sub-goals for students with different types and levels of disability?</th>
<th>Unfortunately, in Jordan early diagnosis centres do not exist. There is some weakness in the link between diagnosis programs and early intervention (before school) (Higher Council of Affairs for Person with Disabilities, 2010).</th>
</tr>
</thead>
</table>
| • Allocation of budget in the MOE for 20 to 30 schools yearly to meet the needs of students with physical disabilities.  
• Ongoing development of speech and language modules for students with speech difficulties.  
• A special standard to recognise centres and institutions for students with disabilities (Higher Council of Affairs for Person with Disabilities, 2010).  
No other objectives or plans have been set out by the HCAPD following the 2010–2015 plan. Unfortunately, inclusive education in Jordan is still not happening and the plan did not achieve its goals. | • prepare a new plan with a set time for implementation within the budget limits  
• implement the new plan  
• apply the new plan, and monitor, review and reassess it during implementation as needed. | Government must check resources around the world and allocate a budget to support early diagnosis centres. If the government decides to rely on an international plan, the contextual differences must be considered. |
### Questions on equity and inclusion

<table>
<thead>
<tr>
<th>Specific issues for students with different types of disabilities</th>
<th>Evidence and evaluation</th>
<th>Priorities for planning and recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>What proportion of the overall education budget is currently allocated to support inclusive education? What sorts of resources are supported by this budget?</td>
<td>15 million JD according to the HCAPD Plan 2010–2015 (Higher Council of Affairs for Person with Disabilities, 2015). However, a calculation needs to be made based on the data available to the HCAPD, MOE and MSD.</td>
<td>Review the current resources and budget in the education system. Determine the most needed resources by collecting information from school principals and teachers through surveys and interviews. Determine budget limits for these resources and then identify trends in relation to expenditure. Apply, then monitor and reassess the plans as needed.</td>
</tr>
</tbody>
</table>

| What types of information and resources are available for inclusive education? | Are the information and resources enough to meet the needs of all students with disabilities? | Data on such information are likely to be limited, as the surveys and interviews in the current study show. It seems that resources such as funding, collaboration, teachers’ aide accessibilities and special programs and materials are very limited in schools. | Identify additional resources required through surveys and interviews. Determine the budget and costs, and implication for other costs. Implement plans and monitor and reassess as needed. |

### What allocation will be made for the plan? How will it be made? **Successful inclusive education does not rely only on the 2007 Law. Allocation should include:**

| Implement changes in teacher preparation courses at universities | | |
| Support priorities in planning for inclusive education? | • well-prepared teachers  
• resources  
• teachers’ aides  
• special programs  
• strategies and financial plans for schools  
• awareness in the community, and among parents and students without disabilities  
• teacher knowledge  
• financial support | Provide an inclusive education plan with special resources and programs.  
Provide each inclusive classroom with at least one main teacher and teachers’ aide.  
Ensure schools and classrooms are more appropriate for inclusive education and reduce the number of students in the classroom.  
Financial support |
<table>
<thead>
<tr>
<th>Questions on equity and inclusion</th>
<th>Specific issues for students with different types of disabilities</th>
<th>Evidence and evaluation</th>
<th>Priorities for planning and recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>What data are currently being collected on teachers, schools, quality and outcomes?</td>
<td>Are data collected and analysed in relation to all types and levels of disability?</td>
<td>There is no evidence of monitoring and review of the current system, in fact teachers are still struggling to include students with disabilities, and students with disabilities remain excluded in Jordan.</td>
<td>Identify gaps and collect data on them through surveys and interviews with the community, school teachers and family. Prepare teachers and expand their knowledge about students with disabilities. Prepare strategies and funds to implement new plans. Review and monitor within the timeframe of the plan.</td>
</tr>
</tbody>
</table>
| What are the main indicators related to inclusive education in general schools? | Are these indicators related to all types and levels of disability among students? | The 2007 Law has no indicators of successful inclusive education for any type or level of student disability. There is no ongoing monitoring by government to report on the progress of any school. | Identify gaps to implementing the 2007 Law. However, inclusive education must include additional factors beyond those outlined in the 2007 Law such as:  
  - teacher knowledge and attitudes  
  - teacher preparation to include all types and levels of student disability  
  - school settings and environments |
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- community, peer and family awareness
- financial support and plans
- special programs and curricula
- monitoring and review through planning and drawing conclusions to close gaps.
The findings, derivable from the above Table (9/1), are described below under two sections: The Reality of Governmental Action on Inclusive Education Legislation and Guidelines to Include Students with Disability in the General Classroom in Jordan.

9.1 **The Reality of Governmental Action on Inclusive Education Legislation**

As already stated, the overall aim of Tool B is to improve the quality of inclusive education planning in Jordan, by supporting the education system in monitoring, financing and implementing quality teaching.

The Jordanian government is committed to protecting the rights of persons with disabilities as evidenced by its issuance of the 2007 Law on the Rights of Persons with Disabilities 2007 (2007 Law) and assurance on international agreements to protect and enhance the rights of people with disabilities. Despite these legislative achievements, there are contradictions between some processes and the 2007 Law. For example, inclusive education will need significant improvement and some changes in daily instructional methods so that students’ educational priorities can be varied to meet their needs. However, a single instructional approach is not effective for all students encompassing different types of disabilities in the general classroom. With the need to teach different groups of students in one classroom, the students rather than the content become the focus of teachers’ planning. Changing the infrastructure of inclusive education and preparing teachers, as well as supporting an inclusive education system financially, will not change anything unless awareness is spread in the community and teacher attitudes are altered. Furthermore, there are still some gaps in the Jordanian context which may be hindering community awareness as well as organisational and institutional awareness with regard to legislation for persons with disabilities. His Majesty King Abdullah II approved the development of a national strategy for people with disabilities in the 2007 Law. However, 10 years since the amendment, it is very apparent that the 2007 Law has still not been implemented. In addition, due to the absence of resources, modification to the current education context is required.

The current context of the Jordanian education system includes financial support, human resources, programs and materials, schools’ environment settings, teacher preparation and the level of disabilities that students have. The analysis highlighted the circumstances of
the inclusive education system in Jordan and factors that promote the implementation of successful inclusive education. The 2007 Law requires schools to include students with disabilities and provide them with specific programs, materials and curricula that meet their needs, but unfortunately in some aspects of inclusive education, students with disabilities remain excluded.

9.2 Guidelines to Include Students with Disability in the General Classroom in Jordan

Despite the promises regarding the rights of students with disabilities to be included in the general classroom in Jordan, practical actions for implementing and creating inclusive education policies are not yet clear. There is a lack of decision making and guidance on how to form inclusive education policy and what sort of processes must be considered. Despite suggestions being made, as discussed, there remain numerous gaps in the inclusion of all students with disabilities in the general classroom within educational authorities, schools, parental support, the community and teacher training (Alodat et al., 2014; Amr, 2011).

The MOE’s services are in contrast to what has been offered by international legislation such as the US’s Individuals with Disabilities Education Act (1990) (IDEA) (Hornby, 2012). According to a study conducted by Yu, Su and Liu (2011), policymakers must follow specific guidelines for students with disabilities as well as their families. It is stated that policymakers need to emphasise screening and evaluate policy before implementation. Factors such as teacher preparation and training, financial support and management, resources and valid evaluation of policy need closer scrutiny before implementation. In addition, Farrell (2010) states that early intervention for students with disabilities encompasses support by medical teams, psychologists, speech therapists and occupational therapists. This evidence-based practice between medical and educational members, according to previous research, has proven its success in supporting students with disabilities in their learning life (Farrell, 2010).

It is evident that the inclusive education system in Jordan needs to highlight the most important procedures that can ensure the necessary instructional reforms, including enacting new legislation. To help teachers’ development in order to include students with disabilities,
legislation must include the necessary arrangements and materials for the process of implementing inclusive education. Recent inclusive legislation considers that all schools in Jordan are for all students, including students with disabilities (Amr, 2011). However, such legislation does not include the role of schools and institutions and what kind of services will be offered for students with disabilities. Moreover, there is a lack of consideration of what the role of the teacher should be and what kind of settings schools must have.

Since 2007, legislation on inclusive education has been adopted to include all students with disabilities in general education schools. But, as the current analysis has shown, such practices in general education schools vary widely between schools in terms of material, programs, services and teacher preparation.

Current deficits in legal guidance and policy coherence in the Jordanian system for students with disabilities leave schools to develop their own educational practices by depending on their own, possibly limited, understanding. However, the literature shows that this type of learning needs special accommodation and support, which can be achieved by specific processes and policy implementation (Forlin & Chambers, 2011; Moore, 2015; UNESCO, 2008c).

The UNESCO policy guidelines (2009) suggest:

Inclusive education is “a process” to teach all learners regardless of their abilities in the same general classroom in their communities (p. 8).

Further, enhancing inclusive education means encouraging positive attitudes and developing governance structures and educational plans (UNESCO, 2009).

It is therefore evident that the 2007 Law and inclusive legislation as discussed above need to be adhered to with more specificity and unity in order to move forward with inclusive education in Jordan. Based on the current legislation and policy existing in Jordan, the following statements can be made (Table 9.2) about its strengths and weaknesses, opportunities and risks.
Table 9.2:

**Strengths and Weaknesses of the Inclusive Education Strategies**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The Jordanian royal family and international organisations support special education programs.</td>
<td>• The weakness of vision around the concept of inclusive education and its practices.</td>
</tr>
<tr>
<td>• Authentication and recognition of the UN Convention on the Rights of Persons with Disabilities by the 2007 Law, based on Article 5 item (O) of the education legislation to include special education.</td>
<td>• Inclusive education is limited for some types of disabilities and focuses on resource rooms instead of inclusive education programs in the general classroom.</td>
</tr>
<tr>
<td>• The existence of programs for students with learning difficulties who are already included in 550 resource rooms in the general education sector which are distributed around Jordan.</td>
<td>• The lack of human resources for successful inclusive education (such as psychologists, sociologists and occupational therapists).</td>
</tr>
<tr>
<td>• The existence of schools for students with visual impairments (Abdullah Bin Um Maktoom, and the secondary school for blind students) which serve 233 students; as well as 10 schools for deaf students, which serve 800 students in total (Higher Council of Affairs for Person with Disabilities, 2010, p. 54).</td>
<td>• Limited configurations and environmental modifications in general education schools.</td>
</tr>
<tr>
<td>• The existence of special programs for students with hearing impairments in general education classrooms; there were 10 classrooms for students from years one to four, who are later transferred to public schools (Higher Council of Affairs for Person with Disabilities, 2010, p. 54).</td>
<td>• Limited configurations to the curricula and teaching methods.</td>
</tr>
<tr>
<td>• The modification of pass/fail marks for secondary students who are deaf and visually impaired and the assessment of students with learning difficulties.</td>
<td>• Limited programs for families’ involvement.</td>
</tr>
<tr>
<td>• The provision of private transport for students with disabilities.</td>
<td>• No training programs or pre-service preparation for general education teachers for successful inclusive education.</td>
</tr>
</tbody>
</table>


It seems from the above table that the national strategy in Jordan is clearly emphasising inclusive education for specific types of disabilities, especially for those with learning difficulties, or who are blind or deaf.
9.3 General Aim of Jordanian Inclusive Education Practice

After reviewing the aim of the national practices and strategy for inclusive education legislation, we can conclude that students with disabilities have the right to education in their community in Jordan, in the same way as students without disabilities. The national priorities according to HCAPD (2010), are the following:

1. Changing education legislation in accordance with the UN Convention on the Rights of Persons with Disabilities (2006);

2. Enhancing inclusive education programs for people with disabilities and appointing qualified professionals in the MOE to undertake:

   • Early diagnosis, especially before commencing school;

   • Diagnosis of the type of disability and clarification of the role of the resource room’s teacher;

   • Implementation of best-practice teaching methods, developing relationships with families, and monitoring learning outcomes, family and community awareness; and

   • Review of curricula and provision of facilities.

   • Providing teachers and school principals with the resources to meet the needs of students with disabilities in schools around the country.

The analysis of documents concurs with the above statements on what is required to be done at national level on a priority basis.

9.4 The Strategy of the HCAPD

It is without doubt that the HCAPD has many strengths in working towards an inclusive community, such as its focus on additional programs for students who are already included in resource rooms. However, as the previous analysis has shown, additional measures for resource rooms must be put in place for students with disabilities to progress.
Additionally, although special education programs are being implemented for students with physical disabilities in general schools, transport is only provided for students who are deaf, visually impaired or have mental disabilities. This again highlights the need for further funding as transport that is specifically adapted to accommodate students with physical disabilities entails additional costs and complex logistics. Not only do these factors present limitations for students with physical disabilities, risks are also evident within the HCAPD. For example, early intervention has been found to suffer due to weak links between intervention and diagnosis. In addition, once intervention has been established, facilities are scarce and restricted in terms of resources and opportunities. The financial support and expertise within special education also highlights a gap in inclusive education and specifically within the HCAPD. Finally, learners with visual and hearing impairments are excluded due to restricted programs, and learners from rural areas are also excluded due to a lack of transport provision.

However, as poor coordination is still highlighted as an issue and potential risk, the HCAPD presents several potential opportunities, namely up to 30 more schools annually to address the needs of students with physical disabilities (Higher Council of Affairs of Persons with Disabilities, 2015). In addition, the HCAPD has established an initiative with Jordanian King Abdullah II bin Al-Hussein to found schools catering for students with visual impairments. It also aims to establish educational programs to improve the quality of education, in order to enhance society’s knowledge of inclusive education and the economic benefits. Moreover, 16 schools for students with hearing impairments, and increased classrooms to cater for this, have already been approved and established. A further 30 schools, which have received finance approval, will specifically cater for students with physical disabilities.

9.5 Developing Policy Solutions

Three years have passed since 2015—the end date of Phase II of the national strategy plan. Unfortunately, it seems there is still a lack of implementation and monitoring and a failure in the quality and capacity of services provided for students with disabilities. A fair society centres on justice for humanity and is measured by its daily manifestations in all walks of life. The principles of diversity and equity should combine to ensure fairness in the
community. These principles were put in place in order to position all members of a community as equals, ensuring the equal provision of services and education and advancing individual lives. Furthermore, those principles, in addition to justice, have aided research within the United Nations (UN) over the last half a century together with the rights of persons with disabilities (UNESCO, 2008b).

9.5.1 **Infrastructure of Jordan’s inclusive education system**

The Jordanian education system should provide all students with disabilities with appropriate educational programs and services to maximise the learning potential of these students. This may entail changing the infrastructure of the inclusive education system and increasing involvement to grow the chances of every student to learn equally. For successful inclusive education in any country, it is important to underline the key factors that relate to these goals (Rieser, 2012).

Inclusive education must include students with all types and levels of disability, regardless of their ability. It is not enough to include students with disabilities in the general classroom, they must be provided with activities and goals that are meaningful for them and their learning needs.

9.6 **Summary**

This summary of policy analysis aims to provide an understanding of inclusive education in Jordan and related issues by reviewing the *Law for the Welfare of Disabled Persons 1993* (Higher Council for Affairs of Persons with Disabilities, 2015). This review has explored the main challenges for the inclusive education system and concludes that students with disabilities are not receiving adequate education opportunities. Effective implementation of Article 4 of the 2007 Law, which comprises provision of the basic facilities of learning such as resources, including programs and equipment, finance, human resources (trained teachers) as well as positive attitudes towards inclusive education, has not occurred. Having reviewed not only the 2007 Law, but also current practice and thought, it is clear that a holistic approach must be applied to inclusive education in order to meet the objectives outlined within this analysis. Having reviewed the potential reasons why so many discrepancies still exist, and outlined distinct failures in the system, this researcher believes
that if such insights were indeed heeded, inclusive education would be able to move forward effectively for the benefit of all people with disabilities in Jordan.
10 DISCUSSION

The ultimate aim of this study was to advance understanding of teachers’ perceptions of inclusive education for students with disabilities in the general classroom in Jordan, and to identify the central factors at play. In doing so, the study also sought to create a new survey and confirm its strong psychometric properties for future use in Jordan. This chapter seeks to discuss and synthesise the results of the current, multi-method study to respond to the posited research aims and questions and thus contribute new knowledge to the under-investigated context of inclusive education in Jordan. An analysis of the implications of the results of this study for Jordanian inclusive education policy, resources, teacher preparation, teacher attitude and teacher knowledge towards the inclusive education of students with disabilities in the general classroom in Jordan is presented, as well as implications for future research.

The results are aligned to the ecological model of Bronfenbrenner (1994), which provides the theoretical framework for this research. This chapter begins with the results of the study in relation to the specified aims of the study, and then compares these findings with previous studies. Having examined the specific constructs above, the strengths and limitations of the research study overall are then outlined. The recommendations that can be made from this research are specified and implications for future practice in Jordan are stated. Finally, the areas requiring further research are identified in order to advance knowledge about inclusive education in Jordan.
10.1 Discussion of Findings

10.1.1 Validity and reliability of the new Malkawi measure

Reliability and validity are essential concepts in statistics. The Malkawi measure was confirmed to be reliable and valid.

The reliability and validity analyses confirm all five constructs within the measure: policy, teacher preparation, resources, teacher attitudes and teacher knowledge. Thus, the Malkawi measure has been confirmed as valid and reliable and was used with confidence in the current study. Reliability coefficients were above > 0.70, which is considered satisfactory by Gliem and Gliem (2003). In addition, validity was indicated above a factor loading of > 0.30 on each factor and this is considered to be valid (Dennis & Bocarnea, 2005) (see Chapter Seven).

There were no pre-existing psychometrically sound measures for use in Jordan to measure the five constructs together (inclusive education policy, teacher preparation, resources, teacher attitude and teacher knowledge). As a result, the researcher developed the new 40-item measure and analysis resulted in 37 items being retained. Thirty-seven items out of 40 were found to be related to the intended subscales in the survey, with all items retained for teacher preparation and resources and with one item removed from each of the policy, teacher attitude and teacher knowledge subscales. Results indicate that the Malkawi measure was the first measure to have five constructs with acceptable validity and psychometric properties and should be valuable for future studies in Jordan as well as around the world when investigating teachers’ perceptions of inclusive education.

10.1.2 Aim 1: Inclusive education policy

Inclusive education policy and its practices are very important to improve the learning of students with disabilities in general classrooms as a human right (Haihambo & Lightfoot, 2010). Students with disabilities have the right to be educated equally as student without disabilities. Therefore, developing policies and national strategies for inclusive education is considered to be an important starting point to achieve inclusive education for all.
Research Questions:

1.1. What is the scope of the inclusive education policy in Jordan? What provisions are set out for the implementation of the policy?

1.2.1 To what extent are teachers aware of the inclusive education policy?

1.2.2 Do teachers believe that inclusive education is being implemented and, if so, with what impact?

The critique of the 2007 Law and NSPD 2010-2015 in the policy analysis chapter (see Chapter Nine) aimed to provide a review of the two main inclusive education policies in Jordan in order to address this research aim. The results drawn from teachers’ perspectives and policy analysis explored the main challenges involved in the inclusive education system, concluding that the 2007 Law and NSPD 2010-2015 are not applied in schools as they are presented in inclusive education policy. Effective implementation of article 4 of Law12/1993, which sets out the basic facilities required for learning, such as resources, including programs and equipment; finance; human resources (trained teachers); and positive attitudes towards inclusion of students with disabilities in general classrooms, has not occurred. Having reviewed not only the existing 2007 Law, but also the current practices of the NSPD 2010-2015, it is without doubt that implementation of the practices must be improved to meet the standards and objectives espoused in the current inclusive education policy.

In fact, the result from the survey and interviews showed that, inclusive education policy and the NSPD 2010-2015 require inclusive education to be implemented in Jordanian schools, however in reality it is not implemented in a manner that meets the learning needs of all students. As the policy analysis shows, the government does not collect data on the number of children with disabilities who are not attending schools. In addition, inclusive education appears to be only available to students with limited types of disabilities (such as blind and deaf students, as well as students with moderate physical disabilities), but not for students with severe intellectual disabilities.

Unfortunately, the inclusive education policy and the NSPD 2010-2015 did not recognise that teaching students with disabilities is the responsibility of both special and
general education teachers. According to these strategies, it is a requirement that students with disabilities are educated by teachers with a special education background. Therefore, results from the survey and interviews showed that university teaching courses are failing to adequately prepare general education teachers to teach students with disabilities in the general classroom. Such systematic shortcomings undermine the success of inclusive education in Jordan. This study has indicated that, in reality, the Jordanian government is implementing a special education approach rather than one of inclusive education.

The main findings of the survey in Phase Two (see Chapter Eight) revealed that the majority of teachers (61%) were aware of inclusive education policy, but believed it is not being implemented in their school. The findings of the survey highlighted also that secondary school teachers were more aware of inclusive education policy than primary school teachers, but that secondary school teachers rated the level of implementation as lower than primary school teachers. In addition, special education teachers and teachers employed in the special education sector were found to have a greater awareness of inclusive education, considered the level of its implementation to be higher than general education teachers and those working in the general education sector. This may be due to the fact that general education teachers are not required to receive training in working with students with disabilities, or to cover any subject relating to students with a disability, in the course of their teacher education training. These topics are exclusively covered in the curricula provided to special education teachers.

Another interesting finding was that more teachers who work in city areas reported that implementation of the policy was occurring than teachers working in rural areas. However, no difference in awareness was found. This is an area of interest for further investigation. These findings also demonstrate that younger teachers in Jordan hold greater levels of awareness of inclusive education, and believe it is being implemented at a higher level, than older teachers.

This is the first study to investigate Jordanian teachers’ awareness of the inclusive education policy and their opinions about its implementation. Further investigation of apparent disparities is warranted, for example the differences in responses between city and rural areas and between primary and secondary school teachers. However, the study suggests
a positive step forward in inclusion with evidence of more recently trained teachers holding a greater awareness of inclusive education policy than teachers trained in the past. However, no significant differences were found between teachers’ perceptions of awareness, or their perceptions of the extent of implementation of inclusive education policy, based on the teacher’s gender, age, level of qualification, or experience. This study has revealed that, lack of proper infra-structure policy, diagnosis methods, train teachers and clearly schools’ environment are not equipped for the full inclusion.

Another essential point to note, revealed in the interviews conducted in Phase One (see Chapter Six), was that the majority of teachers felt that policies do support the right to learning for students with disabilities. However, teachers reported they were unfamiliar with specific legislation enforcing this right. Nevertheless, inclusive education policies were not implemented, despite teacher knowledge and awareness, and the open-ended responses in the survey were found to be consistent with the interview findings.

In the interviews (see Chapter Six), special education teachers revealed they were unsatisfied with the support available to implement the inclusive education policy, but they had sufficient awareness to be able to suggest amendments. In contrast, general education teachers described inclusive education policy as ‘not being implemented’. This suggests that while within both the special and general education sectors at the university, teachers are exposed to inclusive education policy its implementation is not commonplace in either education sector. This is likely due to the failure to implement the 2007 Law and its practices in schools as a consequence of the limited budget of the education system.

The findings of the current study thus indicate that Jordan’s adoption of the philosophy of inclusive education has not led to effective implementation at any level: this is a cause for concern. It was also noted that inclusive practices within the Jordanian education system are concentrated on students with specific types of disabilities, such as deaf and blind students. However, if inclusive education is to be successfully implemented in Jordan, planning and changes to the infrastructure of the education system are required. This can be achieved by adequately preparing both special and general education teachers and offering financial support to provide schools and teachers with the right materials and special programs to meet all students’ learning needs. In addition, data must be collected on the
number of students with disabilities who are not attending school; strategies must be
developed; and ongoing assessment, monitoring and reassessment must be implemented.
Further investigation is required to determine how these measures can be used to support
teachers in practice.

In conclusion, this study found that teachers perceived inclusive education policy as
not applicable to students with all types of disabilities, and that educational goals and
strategies were unclear. In terms of supportive policies, almost none of the teachers from
either the general or special education sectors could cite specific policies that were being
implemented successfully. Although most teachers identified that they were aware of the
inclusive education policy, the depth of their awareness was very limited and the
implementation of policy within schools appeared, in many cases, non-existent.

10.1.2.1 Exploring inclusive education policy results in relation to existing research

UNESCO (2008c) states that the purpose of inclusive education policy is to provide
the education system and all education stakeholders with the required expertise and resources
for better practices for education for all students. Thus, policies guarantee engagement
between policy-makers, education stakeholders, family and communities as well as the
challenging work of implementing a successful inclusive education environment (UNESCO,
2008c). It is evident from earlier and current findings that in Jordan, there is minimal practical
implementation of the 2007 Law and NSPD 2010-2015. As yet there is no effective
engagement between educators and the education system on the inclusive education policy.
Improvement in the implementation and practice of the inclusive education policy in schools
in Jordan, and improvement in teacher training courses at universities for both special and
general education teachers, will enhance teachers’ knowledge of the policy and its regulation.
This was evident from the study conducted by Moore (2015), whose findings highlighted the
ways in which high-school teachers in Southern New Jersey gained knowledge of inclusive
education law and regulations in the course of training, which consisted of three sessions
lasting 45 minutes to one hour.

However, some Asian countries, such as Australia, have inclusive education policies
in place with an emphasis on the right to education for all. Yet, they exhibit gaps between the
inclusive education policy and its implementation due to a lack of understanding of the policies, misappropriation of the term, negative practices and inadequate education and professional development for educational stakeholders to facilitate inclusive education (Cologon, 2013). The findings in Cologon’s study were consistent with the findings in the current study, revealing that in both Australia and Jordan inclusive education policies are in place and most teachers are aware of them, however they are not being implemented in practice.

These findings should be investigated further to drive forward teacher training and awareness of inclusive education policy. This study has outlined the increased focus on the implementation of the inclusive education policy by the Jordanian government since the amendments to the 2007 Law, followed by the NSPD 2010-2015. Increased awareness of inclusive education policy is critical for teachers to work effectively towards the successful implementation of inclusive education.

In specific response to the research questions regarding inclusive education policy:

**Research Question 1.1** What is the scope of the inclusive education policy in Jordan?
What provisions are set out for the implementation of the policy?

In reality, while the philosophy of inclusive education policy is enshrined in the legislation, unfortunately this is evidenced by the lack of recent data collected by the government on students with disabilities. In addition, the implementation of inclusive education is hampered by its limited delivery to students with a narrow range of disabilities and the perception that teaching students with disabilities is only the responsibility of special education facilities.

**Research Question 1.2.1** To what extent are teachers aware of the inclusive education policy?

**Research Question 1.2.2** Do teachers believe that inclusive education is being implemented and, if so, with what impact?
The majority of teachers were aware of inclusive education policy, however the findings have shown that the inclusive education policy can be considered to be unrecognised because inclusive education policy is not being implemented properly and therefore, it is not practised to the desired extent in Jordanian schools. The Ministry, possibly with some support from donors, coordinating agencies or civil society organisations, could take the lead to organise, plan and report on the implementation. These working groups could support the “inter-ministerial dialogue” on matters of equity and inclusive education and invite families or members of the Ministry of Social Affairs to participate (UNGEI, 2010, p. 5). In addition, at the early stages of the process, these groups could debate “a work plan, timeframe, scope, costs, and responsibilities”, as they can also review the goals of the framework and adapt it according to the existing context as necessary (UNGEI, 2010, p. 5).

An ecological model can be applied to inclusive education as inclusive education can be treated as the environment of the students with disabilities. This model specifically deals with proximal processes of inclusive education for students with disabilities in the general classroom. Therefore, to achieve this, the four layers (microsystem, mesosystem, exosystem and macrosystem) were identified in the current study. The environments of school, inclusive education policy and students’ level and types of disabilities increase the chances of students being excluded if the student does not receive support. This is one way of directly applying ecological theory to inclusive education.

In conclusion, a consideration of Bronfenbrenner’s ecological model for human development, which informed the current study, leads to the conclusion that changes are needed at the macrosystem layer as policy is known to varying extent and among a select few of the teachers and is not being consistently implemented. This is revealed through the policy analysis and teachers’ responses to the surveys and interviews. The proper implementation of the inclusive education policy is very important for the success of inclusive education as the macrosystem plays a key role in influencing other layers within the ecological system and ultimately child development.

Although the majority of teachers indicated that inclusive education policy is not being implemented, and reported the policy as not existing in practice, two groups of teachers described inclusive education policy as playing a role in their classrooms – younger teachers
and special education teachers. Such a finding could be due to sector exposure and experience in the university-education system. This study has also shown that younger teachers felt policies were being implemented to a greater extent than older teachers. This may be due to awareness through training in the last decade. More current training in educating students with disabilities might have an impact, as policy has been refined over the last 10 years. As a result, the more recently trained teachers would be aware of some inclusive education policy, its applications and whether or not it was being applied in practice.

10.1.3 Aim 2: Teacher preparation

The discussion of the following section on the effectiveness of teacher preparation for including students with disabilities in the general classroom as well as an evaluation of teacher education courses has been highlighted below.

Research Questions:

2.1 According to Jordanian teachers, how adequate are teacher preparation courses in preparing teachers to include students with disabilities in their classrooms?

2.2 Are teachers prepared to include students with different types of disabilities?

2.3 What are the differences between Jordanian special and general education teachers in their perceptions of the adequacy of teacher preparation courses?

2.4 What additional types of preparation do Jordanian teachers require to deliver inclusive education?

In the interview findings, it was evident that teacher preparation courses according to special and general education teachers were inadequate in preparing teachers to include students with disabilities in their classrooms. According to general education teachers, there was no coverage of working with students with disabilities as part of their pre-service courses. Special education teachers reported that, although their course included components about disabilities, their preparation courses were not adequate to effectively work with all students with different types of disabilities, and this finding was consistent with the open-ended questions in the survey. Of the 155 teachers, 120 reported that there was at least one
unit of study focusing on students with disabilities and that they were involved with practicums on working with students with disabilities. But the breadth of teacher preparation time seems to be inadequate for teaching students with disabilities in the inclusive education setting, as demonstrated in both the interview and open-ended question responses in the survey.

The results from the interviews showed that teachers did not believe they had enough training to work with students with different types of disabilities and this was cited by all three special education teachers. Teachers were also more comfortable working with students with sensory disabilities (such as blind and deaf students), rather than students with severe intellectual disabilities. This was consistent with the survey findings when teachers responded favourably to working with students with sensory disabilities.

It was apparent in the survey results that teachers’ qualifications in special education training were key to driving their perceptions of feeling unprepared. Nevertheless, positive responses relating to adequate preparation mostly came from teachers within special education and those who had worked in the special education sector. Those who felt the least prepared to teach within an inclusive classroom or even to teach students with disabilities at all were the general education teachers. The study found that there were no major differences in the responses of teachers who hold higher qualifications with a formal special education degree, and those without one, with regard to the adequacy of their preparation. Further, no correlation was found between teachers’ perceived adequacy of preparation and the amount of teaching experience they held.

The findings of the survey also showed that female teachers and teachers who work in the city held more favourable views about their level of preparation, and this was reflected in the policy findings. This is a surprising finding as gender and the location of the school played no part in teachers’ perceptions towards inclusive education and both gender and working location were not distinguishing factors in the types of training received in teachers’ university courses. Furthermore, in terms of age, more younger teachers referred to their education courses as ‘effective’ than older teachers. The youngest age group of teachers provided the most positive responses towards their preparation courses. This could be
explained by the modernity of training as the younger teachers would have undergone more current training encompassing current perspectives and issues, such as inclusive education.

In addition, despite inadequate education preparation courses, teachers in the interviews and open-ended questions in the survey suggested some key factors that would influence their perceptions of being prepared to work effectively with students with all levels of disabilities. Teachers considered more training for inclusive education and extended practicum time to cover all types of disabilities to be essential. Special education teachers requested more experience specifically in the inclusive education setting to be able to manage an inclusive education classroom. On the other hand, the three general education teachers recommended amendments in the whole education system at universities (i.e., syllabus, training to be compulsory for all teachers) to work effectively with students with disabilities.

10.1.3.1 Exploring teacher preparation results in relation to existing research

The findings of the current study indicate that general education teachers feel that they are not prepared to include students with disabilities in their classroom and special education teacher have inadequate preparation. This is consistent with a previous study conducted on Japanese pre-service teachers by Forlin, Kawai, and Higuchi (2015). Another study conducted in the Republic of Korea by Hwang and Evans (2011) claimed that teachers must have the necessary preparation skills in order to effectively enable them to teach students with disabilities. The importance of appropriate preparation cannot be emphasised strongly enough. Within this study, teachers have expressed dissatisfaction due to their limited preparation, knowledge and experience of inclusive education. In Slovenia teacher preparation and support are commonly inadequate and lacking (Suc, Bukovec, Zveglic, & Karpljuk, 2016). Further, a study conducted by Avramidis and Kalyva (2007) in one region in Northern Greece showed that teachers with appropriate training in teaching students with disabilities have more positive attitudes than those who have little or no training about inclusive education. Such findings must be heeded to equip teachers appropriately for teaching students with all types of disability in the inclusive classroom.

Teacher preparation can be facilitated by receiving appropriate education prior to commencing a teaching career and ongoing professional development thereafter. Achieving
competence in including all students regardless of their abilities requires well-prepared teachers and thus facilitates successful inclusive education (Monsen & Frederickson, 2003). It has been argued that training must provide teachers with the right preparation to work with all students with different types of disabilities in order for them to understand all individual needs (Forlin, 2010). However, teacher preparation should not stop with methods of teaching students with different types of disabilities, it should also include methods to meet their learning goals. In other words, teacher preparation courses do not contain all the essential components for preparing teachers to teach in inclusive classrooms. This is supported by a previous study conducted by Amr (2011) on teacher preparation in Jordan. The deficits in theoretical understanding may be related to the observations of the study conducted in Jordan by Hadidi (1998) that the courses taught and workshops did not cover the topics in sufficient depth, and that pre-service academic programs and did not deal with methods of teaching students with different types of disability effectively. Unfortunately, this study confirms that teacher preparation courses continue to be as problematic as Hadidi found them to be in 1998 (Hadidi, 1998). In addition, the study conducted by Amr (2011) also claimed that teacher preparation courses were inadequate due to limited financial support in Jordan. These findings concur with other studies that suggest teachers’ pre-service training is not adequate to teach students with different types and levels of disability in their classes (Horne & Timmons, 2009; Idol, 2006; Khochen & Radford, 2012).

Furthermore, a study conducted on teacher preparation via in-service training programs with two groups of general primary school teachers (Kurniawati, de Boer, Minnaert & Mangunsong, 2016) found that the teachers held more positive attitudes about students with disabilities and teaching strategies after finishing the 34-hour face-to-face training program. In addition, the study found an increase in these teachers’ knowledge and preparation regarding teaching strategies for students with specific types and levels of disability, such as Attention Deficit Hyperactivity Disorder, intellectual disabilities and Autism Spectrum Disorder. Such findings clearly indicate that it would be difficult to include students with disabilities in the general classroom without a coherent plan for teachers’ training programs through their preparation period. Such a coherent plan for teacher training programmes is currently lacking in Jordan.
The findings of this study where teachers have stipulated the need for greater preparation and ongoing development of teacher preparation programs were consistent with research conducted by Al Shoura and Ahmad (2014) that found special education programs for special education teachers in Jordan were inadequate. Further, a study conducted by Loreman, Sharma and Forlin (2013) in three countries in Asia and one in Europe, which was built on previous work by the same researchers on teacher attitudes towards inclusive education, showed that a strong international difference exists, due to the variation in levels of a number of factors: knowledge about inclusive education policy; previous interaction with students with disabilities; and confidence levels and experience in teaching and working with students with disabilities. Thus, the evidence again indicates that teacher education programs at universities in Jordan need to be revised. This shortage will continue unless new education system for teachers are implemented to improve the quality of their training to cove this acute shortage.

Similarly, a study conducted by Forlin, Loreman, Sharma and Earle (2009) with 603 pre-service teachers who took a one-semester unit of work learning about inclusive education, showed that teachers’ concerns decreased, and their attitudes improved after training. Their findings were consistent with another smaller Australian study conducted by Sharma (2012) which found that the completion of a one-semester in-service education course on inclusive practices significantly improved teachers’ beliefs and attitudes about inclusive education and resulted in fewer concerns around addressing the needs of students with disabilities. Therefore, teacher education programs must be implemented to support teachers’ responsibilities to enhance all students’ learning (Florian & Linklater, 2010).

To answer the research questions around the teacher preparation construct:

**Research Question 2.1** According to Jordanian teachers, how adequate are teacher preparation courses in preparing teachers to include students with disabilities in their classrooms?

**Research Question 2.2** Are teachers prepared to include students with different types of disabilities?
The results revealed that special education teachers regard their teacher preparation courses in inclusive education as insufficient, and teacher preparation courses for general education teachers did not include inclusive education as part of their education at the university.

**Research Question 2.3** What are the differences between Jordanian special and general education teachers in their perceptions of the adequacy of teacher preparation courses?

Teachers’ education training courses to teach students with disabilities is limited to special education teachers, it is not extended to general education teachers. Therefore, special education teachers reported higher preparedness than general education teachers.

**Research Question 2.4** What additional types of preparation do Jordanian teachers require to deliver inclusive education?

Teachers believe that longer periods of practicum time in the field to cover all types and levels of disability are required to boost feelings of preparedness. Special education teachers requested more training specifically in inclusive education settings. However, general education teachers requested changes to the infrastructure for the whole education system at universities.

Bronfenbrenner’s social ecological model was applied in the current study to analyse factors that might impact the success of inclusive education. The teacher and teacher characteristics are central components of the model with teacher preparation situated in the macrosystem layer. There is a strong need for changes at the macrosystem layer because, as the findings showed, teacher preparation was inadequate.

To conclude, special education teachers responded that they felt more prepared to teach students with disabilities than did general education teachers. Training for general education teachers to teach students with disabilities was not a compulsory component of their education courses and therefore, general education teachers did not report that they received any training at all through their teacher education courses. However, special education teachers reported that their education courses prepared them, but they reported that
their training was inadequate. Previous research suggests that adequate training for both special and general education teachers will effectively improve teachers’ perceptions towards inclusive education for all students with different types of disabilities. If the Jordanian education system continues to target only special education teachers in regard to preparing teachers for teaching students with disabilities, inclusive education will never be achieved.

10.1.4 Aim 3: Resources

Resources are another important factor for successful inclusive education. Different types of resources include either physical or human resources namely, funding, materials and collaboration between professionals. In this section, the available resources that teachers currently have and those that are most needed from teachers’ points of view have been highlighted.

Research Questions:

3.1 What kinds of resources do Jordanian teachers report as currently existing in schools to support inclusive education? And what additional types of resources do teachers need?

3.2 How does the existence of and the need for resources differ between Jordanian special and general education teachers?

The findings from the interviewed teachers in this study (see Chapter Six) illustrate the urgency of the need for greater resources to support inclusive education. The vast majority of teachers cited additional resources as a priority, citing collaboration between education stakeholders, as well as financial support and special programs and materials. Greater focus and research into successful existing practices will help and will also create more effective collaboration between general and special education teachers and other stakeholders. The six teachers highlighted collaboration as important, and these insights should be acted upon. If the above is observed, this could serve to increase teacher confidence through effectively amended preparation. It therefore became an important factor to consider more fully in the survey: questions related to collaboration were thus included.
Furthermore, teachers expressed in the interviews that teacher aides are vital if they are to successfully include students with disabilities in their classroom. These findings were also reflected in the open-ended questions in the survey (see Chapter Eight) where teachers reported that there was insufficient funding and no collaboration between professionals to effectively include students with disabilities. Teachers reiterated that the simplest requirements, such as materials and special programs in schools, were lacking, making inclusive education impossible even for those with mild physical disabilities, despite the policy goals of inclusive education ‘for all’. Teachers also raised the need for increased collaboration. Therefore, further research is needed around collaboration.

The survey results showed that special education teachers were in more need of increased resources to successfully teach students with disabilities than general education classroom teachers. Special education teachers explained in the interviews and open-ended questions in the survey that resource rooms, schools and classrooms were ‘inadequate’ and unable to meet with students’ learning needs. For example, they frequently described a lack of staff such as teachers’ aides in the classroom, poor classroom layout, a lack of special programs and materials, and inaccessible facilities for students with physical disabilities. This suggests that there is a need for further resources across both education systems, and that to implement inclusive education more effectively based on their answers, these issues need to be addressed regardless of teachers’ views on inclusive education and the impact of their specialty.

10.1.4.1 Exploring results about resources in relation to existing research

Teachers in the current study suggested that it will be impossible to achieve inclusive education without providing special resources and support. The current findings found that inadequate resources and teacher programs have persisted since the study conducted by Al Shoura and Ahmad (2014), who investigated special education programs in Jordan and found the lack of resources, such as financial support, techniques and instructional support, was a major issue affecting the inclusive education system in Jordan. The lack of financial support in Jordan was previously highlighted by the study conducted on special education programs by Al Jabery and Zumberg (2008) and the study on teacher education for inclusive education in Jordan conducted by Amr (2011). This is consistent with other literature showing similar
findings, such as the studies by Chiner and Cardona (2013) in Spain and by Hintz, Urton, Krull, Wilbert and Hennemann (2015) in Germany. Both studies suggested that teachers’ material resources and personal support for inclusive education were deemed to be insufficient. In the study conducted by Cambridge-Johnson, Hunter-Johnson and Newton (2014), the lack of resources, such as funding, support and minimal opportunities for training, was identified as a negative impact on teacher attitude towards inclusive education. Further, studies have found that a lack of teacher education, experience and collaboration were barriers to successful inclusive education (Fuchs, 2010; Slavica, 2010).

In the current study, a serious concern around inadequate resources was raised by Jordanian teachers and this seems to be a major problem, from teachers’ perspectives, preventing effective inclusive education in the country. This reflects other research indicating a lack of resources affects the implementation of successful inclusive education (Al-khateeb, Hadidi, & Elyyan, 1996; Bērziņa, 2010; Forlin & Chambers, 2011; Rajovic & Jovanovic, 2013). The negative effect of insufficient resources on the implementation of inclusive education was pointed out by Al Shoura and Ahmad, (2014).

Inadequacies in the physical environment can also prevent students with disabilities from attending inclusive classes in general classrooms (Bērziņa, 2010; Pivik et al 2002). In addition, teachers’ levels of acceptance of inclusive education can also depend on physical accessibilities, as was noted by Al-Zyoudi (2006) in Jordan. Yet, the findings of this study also showed that schools in Jordan are inaccessible for students with disabilities, especially for those with physical disabilities. A similar finding was made in the study conducted by Oyugi, Wang, Singer and Okamoto (2011) in Kenya, namely, inaccessibility was an issue in schools for students with disabilities, especially for students who use wheelchairs, as the schools were constructed only for students without disabilities. The findings of Oyugi et al. (2011) suggested that schools should have ramps, and the classroom should have wider doors and accessible toilets. However, access to all resources and support from stakeholders for teachers and students with disabilities would assist the implementation of successful inclusive education (Fuchs, 2010; Hwang & Evans, 2011; Muhanna, 2010; Slavica, 2010).

Further, the findings showed that teachers expressed a need for collaboration among education professionals and general and special education teachers in order to implement
inclusive education and prevent concerns and confusions between teachers. This was consistent with the study conducted in England by Ainscow, Booth and Dyson (2004). Carpenter and Dyal (2007) stressed the need for sharing responsibilities in order to offer good learning goals through collaboration in planning, classroom management, and evaluation in inclusive education. However, collaboration, for some teachers with limited skills to deal with inclusive classes, may lead to failure to interact with professionals in a team (Carrington, 1999). Therefore, understanding the learning needs of students with disabilities requires creative thinking and teaching methods. Both frustration and satisfaction are possible, depending upon the success or failure of collaboration. Success will motivate teachers, and collaboration makes this success more frequent as noted by a number of researchers (Anderson & Antonka, 1992; Monahan, Marino, & Miller, 1996; Simpson, 2005).

In the findings of Sims (2010) collaboration, consisting of exchanges of strategies between professionals, increased the understanding of all students' needs. Stronger instructional programs grounded in general education content for students with disabilities resulted in increased acceptance of students with disabilities by their peers as well as teachers. Shared tasks and responsibilities between education stakeholders are considered an example of good collaboration which creates good inclusive environments (Ainscow, Booth, & Dyson, 2004). Therefore, collaboration between all professionals in inclusive education is essential for planning, developing teaching methods and programs to meet with students’ learning needs.

Furthermore, numerous studies have pointed out that the effectiveness of the abovementioned strategies depend on collaboration among teachers within a group of professionals in order assist them, both to impart knowledge and to give them experiences with students with disabilities accompanied by professional support (Blecker & Boakes, 2010). Therefore, implementing successful inclusive education requires an effective implementation system, special programs and professional development and support (Laluvein, 2010; Loreman, 2001; Orr, 2009; Winzer & Mazurek, 2011).

Further, previous research has shown that teacher aides are a significant asset in inclusive education and have provided essential support for students with disabilities (Giangreco, Edelman, Broer, & Doyle, 2001). Teacher aides can help special and general
education teachers to reach all learners with disabilities, and use teaching strategies which can make dramatic differences in reaching students with disabilities’ goals (Werts, Zigmond, & Leeper, 2001).

It was evident from the current findings that the lack of resources in the form of funds, facilities like resource rooms, the physical accessibility of schools, supportive teaching materials and collaboration were of concern to teachers, as revealed in the interviews and in the open-ended questions in the survey. The abovementioned previous studies were consistent with the findings of the current study – in particular insufficient resources was deemed to be an area of concern from teachers’ perspectives.

**Research Questions:**

3.1 What kinds of resources do Jordanian teachers report as currently existing in schools to support inclusive education? And what additional types of resources do teachers need?

The findings clearly showed that missing resources were considered an important concern according to teachers. Teachers claimed that the resources in their schools were inadequate. The need for collaboration, financial support and physical accessibility in the school context were reported to be most urgent needs from teachers’ perspectives.

3.2 How does the existence of and the need for resources differ between Jordanian special and general education teachers?

Jordanian special education teachers felt that there is greater urgency for financial support, collaboration and special programs, than did general education teachers.

The absence of resources (including, funding, collaboration, special materials and programs and teacher aides) can have a negative impact on the inclusive education of students with disabilities in the general classroom in Jordan. Based on Bronfenbrenner’s (1994) ecological model the exosystem refers to multiple settings that do not comprise the learner as an active participant, and this is the case in the current study, where students with disabilities do not interact directly with current available resources, but this may still have an effect on
their inclusive education. However, all highlighted resources were an example of the
exosystem in Bronfenbrenner’s ecological model, catering for the needs of students with
disabilities to learn in an inclusive education classroom, but unfortunately the absence of
resources were experienced as barriers to students’ learning.

The findings showed strong evidence that resources and teacher preparation courses
are still inadequate. Therefore, there is a strong indication that changes are required at the
exosystem layer, as this layer has consequences for the other layers of Bronfenbrenner’s
social ecological model.

In conclusion, current resources in Jordan were limited in terms of effectiveness and
quantity. Although responses varied according to the category of teacher, overall teachers
cited a lack of facility adaptations, collaboration and insufficient funding. Due to financial
constraints in Jordan, the majority of schools were deemed unable to provide appropriate
resources. Given that it can be assumed that inadequate resources cause considerable barriers
to inclusive education, this research study set out to investigate the current situation with
respect to resource allocation for inclusive education in Jordan. Amendments to physical
environments, not just the classroom, but all school facilities, were clearly identified as the
most necessary. One pertinent finding, mentioned earlier, was that special education teachers
feel there is great urgency for increased resources. This difference was expected and suggests
that effective additional training and expertise during pre-service courses facilitates teachers’
understanding of the kinds of resources they require and a greater understanding of the need
for inclusive practices and techniques and allows them to be more perceptive of the lack of
resources. Another likely interpretation of this finding is that general education teachers have
no compulsory training in their pre-service courses to assist students with disabilities,
therefore, they would be less aware of what is missing and most required.

10.1.5 Aim 4: Teacher attitudes towards inclusive education

As demonstrated in the literature review chapter, the success of inclusive education is
largely dependent on positive teacher attitude. Many factors can influence teacher attitudes
and the current study sought to investigate the nature of these factors for the first time with
Jordanian teachers.
Research Question 4.1 what is the relationship between teacher attitude towards inclusive education and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)?

There were no clear differences in survey responses between teachers’ attitudes towards inclusive education according to demographic characteristics. The survey results illustrate that differences do not exist between teacher attitudes according to different age groups, genders, primary or secondary teachers, special and general education teachers, employment, experience, level of qualification or location within Jordan. However, one finding from the survey can be highlighted, which is that there was a positive correlation between the attitudes of special education teachers and the number of students taught with physical disability, intellectual disability, behavioural and multiple disabilities. Thus, those who have taught a large number of students with behavioural disabilities have the most favourable attitude towards inclusive education. This is an area of concern that requires further investigation.

The study found through the interviews that the main influences upon negative attitudes to inclusive education were: concerns surrounding the role of inadequate training; teachers’ time constraints; lack of resources; disruption of students without disabilities; experience; and type of disability. Amongst the latter the disabilities of greatest concern were cerebral palsy and severe intellectual disabilities. Mild learning disabilities were deemed as most manageable within the inclusive classroom.

10.1.5.1 Exploring teacher attitude results in relation to existing research

The findings related to research question 5.1 are surprising as previous research conducted in Jordan by Al Zyoudi (2006), in Israel by Romi and Leyser (2006) and Scotland by Boyle et al., (2013) found that there were significant differences in teacher attitudes towards the inclusion of students with disabilities in the general classroom depending on teachers’ gender, age, teaching experience, and primary or secondary school workplaces. Another study conducted by Costello and Boyle (2013) on 193 pre-service teachers from Australian National University who enrolled in postgraduate courses showed that they held
more positive attitudes than did teachers in the undergraduate course. Authors argued that teachers’ training and experience may have impacted on their attitudes, however the findings of the current study show no difference between teachers’ levels of qualification. In addition, no significant differences between teachers’ gender, age, teaching experience, primary and secondary school workplaces or location of the school were found among Jordanian teachers.

Previous researchers have emphasised that the success of inclusive education depends generally on teacher attitude and how willing teachers are to include students with disabilities in their classrooms (Avramidis & Norwich, 2002; Forlin, 2001). In a study conducted by Al Khatib (2007) on general education teachers in three different districts in Jordan, female teachers were more positive in their attitudes towards inclusive education than male teachers. The study showed more positive attitudes among female teachers than male teachers due to their higher knowledge and preparation and resources. Many other researchers have also supported the finding that female teachers tend to have more positive attitudes than male teachers (Boyle, Topping, & Jindal-Snape, 2013; Park, Chitiyo, & Choi, 2010; Romi & Leyser, 2006). A study conducted in the UK by Avramidis and Norwich (2002) found that teachers’ attitudes were largely positive and contributing factors were age, gender and experience. Their study showed that female teachers were more positive in their attitude to the idea of inclusive education than male teachers. However, in contrast a study conducted by Al Zyoudi el al. (2011) comparing the attitudes of 300 teachers between Jordan and UAE found there were no differences in attitudes between the genders.

Gal, Schreur, and Engel-Yeger (2010) and Parasuram (2006) found that younger teachers with the least years of experience were more positive about inclusive education than more experienced and older teachers. Furthermore, a study conducted in the UAE by Alahhabi (2009) found that teachers’ schooling level, whether early childhood, elementary or secondary, was one of the factors that predicted teacher attitude. Secondary education teachers felt that teaching students with disabilities would generate a problem. The results of the current study were inconsistent with these previous findings.

Previous studies have reported that general education teachers hold more negative attitudes than special education teachers (Charley, 2015; Cook, Semmel, & Gerber, 1999; Familia-Garcia, 2001; Forlin, 2001). General education teachers may consider the education
of students with disabilities as the sole responsibility of special education teachers, as was noted by Al Khatib (2007) and Amr (2011). This leads to a lack of collaboration between the two types of teachers, which was very evident in Jordan (Al Jabery & Zumberg, 2008) and this was consistent with the findings of the current study, which also found a lack of collaboration between teachers and education stakeholders.

Some researchers have suggested that the types and levels of the students’ disabilities can influence teacher attitude (Al-Zyoud, 2006; Avramidis & Kalyva, 2007; Avramidis & Norwich, 2002; Forlin & Chambers, 2011). A study conducted by Avramidis et al. (2000b) in the UK found that, regardless of the overall acceptance of the inclusive education concept, teachers were more stressed when teaching students with emotional and behavioural problems than students with other types of disabilities. In contrast, a study in Uganda conducted by Kristensen, Omagor Loican and Onen (2003) found that teaching students with hearing disabilities is more difficult than teaching students with other types of disabilities, followed by severe intellectual disabilities. In the current study, the effect of the type of disability was measured only for the number of students taught by teachers and their ability to teach such students. Students with behavioural, intellectual and multiple disabilities were rated as more difficult to handle and a higher level of disability complicated the problems. If teachers have to teach more of such students, their attitude will become less positive.

Yet, the majority of teachers expressed favourable attitudes possibly because of their training and experience, as was noted by De Boer, Pijl, and Minnaert (2011) and student-related factors (Avramidis & Norwich, 2002) may be implicit in experience. Therefore, it is possible, from the finding of the current study, to conclude that the current pre-service teacher training in the Jordanian university-education system does not develop teachers’ knowledge of working with students with different levels and types of disability. Therefore, the absence of the inclusive education policy and its practices, inadequate resources and inadequate preparation, which has been highlighted in the current findings, have impacted on teacher attitudes.

Research highlighted that teacher attitude towards inclusive education can be changed through teachers’ experience (Cook et al., 2000). UNESCO (2009) and Cagney (2009) showed that the main determiner of teacher attitude was teacher training, and the support that
teachers received from education stakeholders. In addition, Walker (2012) indicated that professional development can impact on teachers’ attitudes, preparation, experience and resources and materials as does other research (Ahmmed et al., 2012; Al-khateeb et al. 1996; Yell & Katsiyannis, 2003).

To answer the research questions around the teacher attitude construct:

**Research Question 4.1** What is the relationship between teacher attitude towards inclusive education and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)?

The study has shown no significant relationships exist between teacher attitudes and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school).

Special education teachers who have taught a large number of students with behavioural disabilities have the most favourable attitude towards inclusive education. Overall teachers, irrespective of their education background held generally positive attitudes, although special education teachers were the more positive. However, the role of training, teachers’ time constraints, resources, disruption on students without disabilities, practical experience and the type of disability have impacted negatively on teacher attitudes as indicated in the interviews.

The layer of Bronfenbrenner’s (1994) mesosystem in the current study includes teachers’ attitudes towards inclusive education. The mesosystem in Bronfenbrenner (1994) can be described as a set of microsystems which continually act with one another. Teacher attitude comprises the interrelationships between the other layers in Bronfenbrenner’s ecological model where the students with disabilities in the general classroom actively participate and can be affected directly by teacher attitude. All other layers in the ecological model will affect the mesosystem, therefore, factors such as the inclusive education policy, teacher preparation, resources and teacher knowledge will impact on teacher attitude. The
results from the interviews in the current study indicated that many factors impacted on teacher attitudes and these were more systemic issues, while the survey showed that teacher characteristics made little difference. The lack of support in resources from the education system and the inclusive education policy can impact on teacher attitude as well as the types and levels of the students’ disability in the microsystem layer which will be discussed in the following section. Therefore, these factors can have a negative impact on the inclusive education system in Jordan. Due to the above factors, teacher attitude is very important for successful inclusive education based on the ecological model. However, there is a strong indication that changes are needed at the mesosystem layer to improve teachers’ attitudes as all layers in Bronfenbrenner’s theory will influence each other. The findings in the current study suggest that teachers’ attitudes overall were positive and teachers are more in favour of inclusive education than it would appear, but due to factors discussed above, teachers are reluctant to put inclusive education into practice despite believing it is the appropriate form of education for all.

10.1.6 Aim 5: Teacher knowledge

Effective inclusive education might be achieved through teacher knowledge (Al-Khatib, 2007; Moore, 2015). Special education teachers are expected to hold expert knowledge on how to include students with disabilities in their classroom by the end of their education course.

Research Questions:

5.1 What knowledge and skills related to inclusive education for students with disabilities do Jordanian teachers report that they have currently? And what would improve their knowledge?

5.2 What is the relationship between teacher knowledge towards inclusive education and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)?
Unfortunately, Jordanian special education teachers reported that the knowledge they gained from their education courses was very limited and most teachers gained their limited knowledge from teaching experience. Findings and recommendations for improving teacher knowledge are discussed below. The teachers in the study also indicated that they believe they do not have the knowledge to include students with disabilities in their classrooms. Yet, the findings in the survey illustrate that general education teachers considered preparation courses in teaching students with disabilities as the most important contributing factor for improving their knowledge. However, experience teaching students with disabilities was seen to be most important for special education teachers.

In addition, the most central finding in this aspect of the study was that over half the teachers felt they needed additional training. They appeared to be unprepared to teach students with different types of disability due to a lack of knowledge, which is essential to include students with disabilities and enable successful inclusive education, and this was consistent with the findings of the open-ended questions in the survey.

The data from the survey revealed that teachers were more confident in their ability and struggled less to teach students with physical or sensory disabilities but were less confident about teaching students with intellectual or behavioural or multiple disabilities.

The main finding was that special education teachers and teachers who had been employed in the special education sector reported the highest level of knowledge, compared to general education teachers. These findings seem unsurprising as teacher preparation courses, the need for resources and experience would inevitably produce related skills.

In addition, this study showed a range of patterns amongst teachers. Firstly, female teachers tended to have a higher perceived knowledge of how to teach students with disabilities than male teachers. This mirrors the finding that female teachers have a higher perceived level of preparation than males, as well as a greater need for resources than male teachers. Both these findings warrant further investigation as the males’ and females’ training did not differ, therefore gender is a predictor of perceptions of capabilities surrounding inclusive education.
The current study demonstrates that the youngest age group reports being more aware of inclusive education policy, preparation courses and the availability of resources than other age groups. However, teacher knowledge showed an opposing view where the 50+ age group reported they were more knowledgeable on how to teach students with disabilities in their classroom than the other age groups. This may illustrate that teachers are getting their knowledge from their years of experience. On the other hand, no significant differences were found between teachers’ experience and any other variables in the survey. Thus, this is an area of concern for further investigation.

Special education teachers reported they did not have enough knowledge to teach students with different types of disabilities. This showed that despite reported inclusive education policy is not being implemented, insufficient preparation, resources and knowledge but the finding in the interviews data showed that most teachers are having a positive perception towards inclusive education.

In conclusion, teachers believe they do not possess the necessary knowledge to include students with disabilities in their classroom. Teachers have highlighted what might improve their knowledge. Some teachers reported the lack of resources and support from the education system meant that their knowledge was very limited. Others reported that their knowledge was improved because of their experience but that they were suffering from the lack of resources. Therefore, resources support, changes in teachers’ education courses, teacher training and preparation are required.

10.1.6.1 Exploring teacher knowledge results in relation to existing research

The finding of the study revealed that teachers perceived their knowledge to be inadequate to include students with disabilities in their classrooms. The extent of teacher knowledge is viewed as essential to the effectiveness of inclusive education, the specific skills required include an understanding of disability types and teaching strategies (Agbenyega & Klibthong, 2014). From teachers’ perspectives in the current study, lack of knowledge was a serious issue in being able to teach in an inclusive classroom and feel competent in addressing students’ needs, and the findings were consistent with previous studies conducted in Asia by Forlin and Chambers (2011) and Forlin et al. (2015). It is
unrealistic to meet every learner’s goals if teachers do not have the right knowledge. Moreover, a study conducted by Moore (2015) found that teachers with knowledge of inclusive education, where teachers applied their practical skills, felt more comfortable in their work and were able to apply the appropriate techniques to students with disabilities in the classroom.

Avramidis et al., (2000a) reported that knowledge and attitudes play a crucial role in successful inclusive education. However, teacher attitudes were often not positive, and thus due to teachers’ limited knowledge about types of student disability, their methods did not meet or adapt to students’ needs. The Avramidis et al., study was consistent with another study conducted in Jordan by Al Zyoudi (2006) and found that teachers’ perceptions were strongly influenced by the types and severity of the students’ disabilities. The current study has shown that teachers felt their knowledge was inadequate and teachers have expressed dissatisfaction in their limited knowledge about inclusive education. Rather, inclusive education required effective practices and skills from teachers who were adequately knowledgeable. Yet, Smith and Tyler (2011) in their study were convinced that students with disabilities will not learn unless these practices were being implemented in the inclusive classroom.

The challenge of achieving practices for successful inclusive education is yet to be solved in the current education system in Jordan. Inclusive education in the US has been in place for the last two decades, but unfortunately teachers consistently felt that did not have the knowledge to meet all students’ learning goals (Cook, Cameron, & Tankersley, 2007; Cook, Tankersley, & Landrum, 2009). Thus, the connections between knowledge and practice can make inclusive education more significant and it is important to add more substantial programs for educators and professionals to keep them well-informed (Smith & Tyler, 2011). Despite literature emphasising teachers as the most important factor in the inclusive education process, the practical problems in Jordan of preparing teachers, through their pre- and in-service training, to work effectively towards inclusive education are yet to be solved.

217
**Research Question 5.1** What knowledge and skills related to inclusive education for students with disabilities do Jordanian teachers report that they have currently? And what would improve their knowledge?

The most central finding in this aspect is that teachers perceived their knowledge to be inadequate. Overall, teachers felt they needed additional training to improve their knowledge, which is essential to include students with disabilities.

**Research Question 5.2** What is the relationship between teacher knowledge towards inclusive education and teachers’ characteristics (gender, age, schools’ education (primary and secondary), special and general education teachers, employment place, teachers’ level of qualification, teachers’ experience and the location of the school)?

Special education teachers reported a greater level of knowledge than general education teachers in inclusive education and this is to be expected as special education teachers are the only teachers who receive training through their education courses.

General education teachers did not feel that they held sufficient knowledge or skills to be fully competent in the area of inclusive education due to their education course, their insufficient knowledge and preparation. This finding suggests an amendment in pre-service and in-service training is required in order for general education teachers to receive training, and to collaborate and learn directly from experienced special education teachers. This is something that general education teachers wanted from the government in their interviews.

On the other hand, special education teachers reported a greater level of knowledge than general education teachers. Special education teachers attributed this to their formal educational training but also to the roles in which they work and have worked where their experience has clearly contributed to their knowledge and skill base. These findings, and the findings above, therefore suggest that greater teacher exposure is key to enhancing teacher competencies regarding inclusive education practices. Working with students with different types of disability, but in a supportive and controlled environment, can be achieved through training and collaboration to improve teachers’ experience for better inclusive education.
Again, the layer of Bronfenbrenner’s (1994) mesosystem in the current study includes teacher knowledge. The mesosystem in Bronfenbrenner (1994) can be defined as a set of microsystems which constantly interact with one another. More effective learning environments for students with disabilities to be included in the general classroom involve the interrelationships between other layers in Bronfenbrenner ecological model. As indicated previously all other layers in the ecological model will affect the mesosystem, therefore, factors such as inclusive education policy, teacher preparation and resources will impact on teacher knowledge as well as teacher attitudes as both constructs are falling in the mesosystem layer.

According to the application of Bronfenbrenner’s (1994) ecological model as people go from outer to inner layers, from macrosystem to microsystem, factors affecting the inclusive education of students with disabilities in the general classroom move from the most remotely connected to the student’s immediate environment (mesosystem) to the outermost (macrosystem). It is necessary for all factors from outermost (macrosystem) to the innermost (microsystem) to be properly in place to ensure the successful inclusive education of students with disabilities.

According to Odom and Diamond (1998) the ecological theory can be applied to disability research to study children with disabilities, as the model provides for unique regions in the environment that differentially influence children with specific positive or negative characteristics like disabilities. In a direct application to education of students with disabilities, this study uses the ecological systems theory of Bronfenbrenner as a conceptual framework for a review. Variables proximal to the program (i.e., microsystem and mesosystem levels) like classroom practices, children's social interactions, teacher beliefs, teacher knowledge and professional collaboration as well as other variables (i.e., exosystem and macrosystem levels), like families' perspectives, social policy, community and culture, were reviewed.

The direct application of the ecological theory to inclusive education was also highlighted in the study conducted by Hackett, Hudson, West, and Brown (2016). The authors used the theory to analyse the results of interviews, classroom observations and student work samples. In another study Ruppar, Allcock, and Gonsier-Gerdin (2017)
applied the theory to examine the factors supporting or restricting access to the general curricula for students with significant disabilities. Using the ecological model, school-level factors relating to effective implementation of inclusive education were studied by Pavlović Babić, Simić, and Friedman (2017). Therefore, the current study used Bronfenbrenner’s ecological model to investigate Jordanian teachers’ perception towards inclusive education in regard to: inclusive education policy, teacher preparation, resources, teacher attitude and teacher knowledge. The current study found that the success of inclusive education in Jordanian schools was related to the abovementioned aims, but unfortunately the findings showed that, from teachers’ perspectives, the aims have fallen short of their goal.

10.1.7 Aim 6: Correlation amongst the research constructs

The above constructs were found to be necessary to achieve successful inclusive education. Inadequate competences in any of these constructs will have a negative impact on the inclusive education process in the Jordanian context. This section will highlight the finding of the correlation results.

Research Question 6.1 What are the relationships among the factors (inclusive education policy, teacher preparation, resources, teacher attitude and knowledge)?

Whilst both inclusive education policy and knowledge were found to be significantly correlated with the other three constructs, teacher attitude did not correlate with either teachers’ perception or resources.

10.1.7.1 Exploring the correlation of results among the research constructs in relation to existing research.

The findings of Avramidis and Norwich (2002) are consistent with the current study – successful inclusive education policy is related to teachers’ perceptions towards the including of students with disabilities in the general classroom. On the other hand, Haihambo and Lightfoot (2010) opined that educational policies alone do not guarantee the success of inclusive education. The findings of Johnstone and Chapman (2009) showed that in Lesotho schools, where inclusive education was successfully implemented, perceived teacher knowledge and skill were strong predictors of success. Also, teachers had somewhat positive
attitudes toward students with disabilities. Such relationships were absent in poorly implemented schools. Thus, policy implementation, teacher knowledge and teacher attitude could be inter-related. Campaigns to promote awareness of inclusive education and policies and special training for all teachers to work effectively with students with disabilities were two of the recommendations made by Garuba (2003) with respect to inclusive education in Nigeria. Here, too, successful implementation depends on policy implementation and teacher knowledge. The current study was also consistent with the study conducted in South Africa by Engelbrecht, Nel, Smit, and van Deventer (2016) as the current inclusive education policy does not exist due, to poor coordination of the policy and its implementation. Therefore, inclusive education policy on its own cannot guarantee successful inclusive education without addressing the constructs that has been highlighted in the current study.

The literature has shown that teacher attitudes become more positive when teachers have more preparation and resources when working with students with disabilities in their classrooms (Avramidis & Kalyva, 2007; Horne & Timmons, 2009; Idol, 2006; Khochen & Radford, 2012; Kurniawati et al., 2016). Teachers with appropriate training in teaching students with disabilities have more positive attitudes than those who have little or no training about inclusive education. Such findings must be heeded to prepare teachers appropriately to teach students with disabilities in the general classroom. However, the current study found unusual relationships teacher attitudes not being correlated with teacher preparation and resources. This is an area of concern requiring more investigation. In addition, it may be that implementing inclusive education policy enhance teacher preparation, resources, teacher attitudes, and teacher knowledge.

Sharma, Forlin, and Loreman (2008) also suggested that increasing the level of teacher knowledge can improve teacher attitude towards inclusive education. However, the current study revealed that the opportunity to increase teacher knowledge to include students with disabilities in the general classroom has been very limited and this was consistent with the findings of a Loreman, McGhie-Richmond, Kolupayeva, Taranchenko, Mazin, Crocker, and Petryshyn, (2016) study on teachers in Ukraine.

Teachers’ knowledge and attitudes were deemed to be corelated with each other and it found to be crucial for successful inclusive education, this was highlighted by Avramidis et
al., (2000b) and Orr (2009). A study conducted by Al Zyoudi (2006) in Jordan also found that teachers attitudes were influenced by teachers' knowledge.

Teachers need resources to work effectively in the inclusive education classroom. The Cambridge-Johnson et al., (2014) findings showed that a lack of resources such as funding, support and training was identified as a negative impact on teacher attitude towards inclusive education. Other resources, such as collaboration and experience, were also found to have an impact on teachers’ attitudes (Fuchs, 2010; Slavica, 2010). Instructional programs beside collaboration between professionals and teachers will increase teacher knowledge and therefore will enhance teachers’ attitudes as found in the study conducted by Sims (2010). The findings of the current study showed that insufficient resources can easily impact on teachers’ attitudes as well as the whole inclusive education system. Thus, there is general support for the correlations among different constructs in this work. Nevertheless, the unusual correlations such as teacher attitude with teacher preparation and the availability of resources need further examination.

10.1.8 Aim 7: Factors predicting teachers’ confidence in teaching students with disabilities in inclusive classes

Research Question 7.1 What constructs are predicting teachers’ level of confidence to teach students with disabilities in their classroom?

Results presented (in Chapter Seven) indicate that teachers’ level of confidence is mostly predicted by teacher knowledge, teacher preparation, awareness of inclusive education policy, formal qualifications in special education (the highest qualification being master’s or more) and years of experience in general education.

A significant finding highlighted in the current study was the relationship between teacher confidence and teacher experience, preparation and knowledge.

This study showed that teachers with formal qualification in special education have more confidence than general education teachers. Thus, formal qualifications in special education and knowledge are the strongest predictors of the confidence level of teachers in their capacity to teach students with disabilities.
The study also found that teacher confidence was less affected by inclusive education policy. Incomplete awareness and implementation of inclusive education policy were more common than a complete absence of knowledge of the policies, according to the survey and interview findings. This gap becomes a barrier to effective implementation of inclusive education.

10.1.8.1 Exploring the factors predicting teachers’ confidence in teaching students with disabilities in inclusive classes in relation to existing research.

The current findings identified that the effectiveness of inclusive education was influenced by teachers’ level of confidence, and the services and support that teachers are currently receiving from the government. These findings are consistent with the Avramidis et al. (2000b) study, which showed that overall general education teachers’ perceptions were positive towards inclusive education, but different factors may have an effect on teachers’ perceptions of teaching students with disabilities in an inclusive setting, such as the support that teachers receive, opportunity for collaboration and teachers’ lack of confidence to teach students with disabilities in general classrooms. Therefore, providing teachers with the right resources, support, and increasing their preparation and knowledge will improve the outcomes of inclusive education.

Another study conducted in Australia by McFadden (2014) investigated teachers’ experiences including students with Down Syndrome into their general classrooms in the early years of schools. The results indicated a relationship between teachers being willing to effectively include and the depth of their understanding of disability, professional development and collaboration. Also, a recent study conducted in Edinburgh by Maciver, Hunter, Adamson, Grayson, Forsyth, and McLeod (2017) in high schools found that teachers’ perceptions were influenced by the physical environment of the schools and teacher attitudes. Nevertheless, in Jordan a study conducted by Al Zyoudi (2006) found that teachers’ perceptions were strongly influenced by the types and levels of disability of the students. This also was consistent with the current findings as the types and knowledge of disability impacted on teachers’ perceptions. Therefore, teachers’ confidence in teaching students with disabilities in inclusive classes has not changed confirming that the inclusive education system remains in need of change.
Previous studies conducted in four countries (Canada, Australia, Hong Kong and Indonesia) by Loreman, Sharma and Forlin (2013) and Shade and Stewart (2001) were found to also be consistent with the current findings as teacher knowledge and preparedness were found to be essential to teaching students with disabilities in the general classroom.

Ideally, teachers need to be prepared to teach all student disabilities in inclusive classrooms (Mergler & Spooner-Lane, 2012). The findings showed that special education teachers did have not enough preparation or knowledge to teach all students with different types of disability. Clearly, lack of training and knowledge can reduce the confidence of teachers in teaching students with disabilities even in special schools or general classroom.

This means, that it is important for the Jordanian government to provide pre-and in-service training to both groups of teachers on inclusive education. In their interviews, many teachers expressed the need for both more effective special education programs at the pre-service level of teachers’ education courses and the need for this to continue through in-service training.

10.2 Strengths of the Study

The current study was one of the only studies, and the most current, that has considered the Jordanian context to investigate the relationships between a range of constructs (including inclusive education policy, teacher preparation, resources, teacher attitudes and teacher knowledge). Further, the use of Bronfenbrenner’s social ecological theory to explore the factors affecting the implementation of inclusive education not only has allowed their relative importance to be identified but also points to those areas requiring change if inclusion is to be successful.

A major strength of the study was the use of the UNGEI (2008, 2010) framework to analyse the 2007 Law and the NSPD 2010-2015 in Jordan. The framework has been piloted in different countries for the purpose of equity and inclusion. Tool B in the framework was specifically chosen because this tool is applicable to plans already in place, namely the 2007 Law and NSPD 2010-2015. This tool helps the education system to review and assess the implementation process of the 2007 Law and the NSPD 2010-2015.
The development and validation of the new measure (the Malkawi measure) to investigate teachers’ perceptions towards inclusive education was another strength of the study. Its development both enabled a considered exploration of teacher perceptions on inclusion and offers a tool for further research.

The use of a mixed-method allowed triangulation of the data with the sequential explanatory design increasing the rigour of the study. The triangulation method approach gave the researcher the opportunity to capture essential factors and answer more complex research questions that influenced teachers’ perceptions towards the inclusive education of students with disabilities in the general classroom in Jordan. Important here too was the third phase (the analysis of the 2007 Law and NSPD 2010-2015), which allowed the researcher to determine research gaps by developing a new tool for analysing policy based on the UNGEI (2008, 2010) framework.

Finally, although this study was conducted in one region in the city of Irbid, the results may be generalizable to other areas around the country. As all government, educational schools and special education institutions in Jordan operate under the Ministry of Education and the Ministry of Social Development, it is logical to generalise for other cities besides Irbid. The findings suggest that this approach would also be beneficial in other sectors such as private schools and institutions. In addition, the large sample size (of 341 teachers) was crucial to the current research study, as the sample was more representative of the population, allowing for a more sophisticated analysis and yielding statistical significance and confidence in the results.

10.3 Limitations of the Study

Although the study is based on a rigorous design and contributes substantial new knowledge, it is not without limitations. The study investigated teachers’ perceptions and did not collect objective behaviour data to answer the research aims or questions. Tourangeau (2000) warns that measuring teachers’ perceptions using self-reporting through survey and interview can be misleading and may affect the results. Therefore, this could lead to systemic errors which are referred to as social desirability and recall biases. In other words, where the respondents may not be accurate, by over-reporting, good behaviour or underreporting bad
behaviour when it comes to sensitive topics like perception or attitudes (Creswell & Poth, 2018; Fusch & Ness, 2015).

Another potential limitation of this study was limiting the interviews to six teachers from the special and general education sectors. Although saturation of themes was reached, it may be that had the interviews been carried out with other educational stakeholders, such as school principals, and policy makers, the survey questions may have been improved to provide a better understanding of the phenomena.

10.4 Recommendations for inclusive educational practice and policy in Jordan

The current study has shown insufficient teacher preparation, resources and teacher knowledge have impacted teacher attitudes, and that inclusive education policy has not been interpreted practically and implemented appropriately, due to the limited budget in the Jordanian education system. The Jordanian approach is still seen to be focussing primarily on special education for learners with special education needs. This approach focuses on some specific types of disabilities and thus cannot be considered as inclusive education. Students with disabilities could be sitting separately to their peers or in an inclusive classroom, but not receiving any support.

The implications of improving inclusive education outcomes, and meeting the needs of all students with disabilities, are listed below:

- Awareness and sufficient training on inclusive education should be a compulsory component for all teachers regardless of their field of study. In addition, government should make improvements by giving clear strategies, planning, and monitoring the implementation of inclusive education policies in the classroom. To do this, all teachers need to follow a common inclusive education program, starting with their university studies, which must encompass field experience with students with all different types and levels of disability, and ending with proper practical strategies. Such a notion would reduce complications in different teachers receiving different levels of training and different courses focusing on different elements. An inclusive certificate for all would simplify future teacher training for inclusive education and ensure that all teachers are prepared adequately and equally.
• Extending the period of training for pre-service teachers to allow them to work effectively with all types of disabilities and to improve teacher knowledge. To increase teachers’ confidence in an inclusive educational setting, teachers’ education programs must ensure curricula differentiation and teaching strategies to meet with students’ needs. However, teachers can observe students from their own experience and knowledge and apply their skills to enhance the students’ learning goals in the form of teaching practices.

• Ongoing training for teachers through workshops and conferences to enhance in-service training. This is an essential practice to ensure that all teachers are similarly able to access ongoing practices and professional development in order to build and maintain their initial pre-service skills to be able to work effectively with students with disabilities in their classroom.

• Government must provide greater resources (such as funding, collaboration between education stakeholders and professionals, teacher aides, improved classroom layouts, special programs and materials and accessibility in the school context, especially for students with wheelchairs).

• All of the abovementioned implications were found to be important in enhancing teacher attitudes. Teacher attitude was also found to be an important factor in the success of inclusive education practices. Therefore, it is very important to examine and facilitate these factors in the development of teacher attitude towards inclusive education.

Teachers are vital for educational change and revision. Therefore, improving teachers’ perceptions of inclusive education policy and its implementation would greatly enhance the overall impact on inclusive practices. However, if inclusive education policies are not currently held in high esteem and if the teachers have no optimism or respect for inclusive education policy, the progress of inclusive education in Jordan will be slowed. It is necessary to implement an effectively adapted framework with clear implementation plans for inclusive education policy, provide adequate teacher preparation, enhance teacher knowledge and attitudes and provide financial support as well as regular monitoring. Effective inclusive education policy does not only enhance educational delivery, but also ensures quality of education with provision for all types of students with disabilities. If inclusive education is to
be successful in Jordan, a process needs to be put in place to regularly evaluate the implementation of the policy and to adapt or make changes to educational practices as indicated.

10.5 **Recommendations for further research**

Based on the findings of the current study, the following areas for future research are suggested.

- In the study teacher attitudes were not correlated with teacher preparation and resources. This is an area of interest that requires more investigation.
- The newly developed and valid tool (the Malkawi measure) in the current study can guide other researchers in Jordan and other similar cultural contexts for future and larger studies (i.e. on education stakeholders) to build on the results of the current study, which will help researchers to improve the evaluation of the process.
- More screening and data collection about students with disabilities are necessary before training programs and policies can be adapted and implemented. Improving the current methods of data collection on students with disabilities and their educational needs is a vital step to implementing inclusive education goals. Currently in Jordan, most of the data surrounding inclusive education is unreliable, due to societal stigmas causing families to hide their children with disabilities from communities, school and certainly governmental statistics. Data guides the development of plans and objectives and without such statistics, it is unlikely that any change will occur.
- The need for collaboration was raised as an important resource, therefore, further research is needed around collaboration.
- Teachers’ working locations (city or rural) needs further investigation, as teachers who work in the city showed a better understanding of the implementation of inclusive education policy. They are also better prepared, indicated a greater need for resources and were more knowledgeable.
- Gender differences (female and male) require more investigation, as female teachers showed a better understanding of inclusive education policy and were more prepared and had more knowledge than male teachers.
• Younger teachers showed a better understanding of the policy, were better prepared and indicated a greater need for resources than older teachers, except for the knowledge construct, as older teacher showed a higher level of knowledge than younger teachers. This is an area of concern that needs more investigation.

• Further investigation comparing primary and secondary school teachers to determine why primary school teachers are more in favour of inclusive education in Jordan than secondary school teachers is required.

10.6 Conclusion

In conclusion, the results of this study have shown that confusion in inclusive education policy and its implementation are major barriers to successful inclusive education in Jordan. In addition, the lack of teacher preparation aimed at inclusive education, inadequate resources, and insufficient teacher knowledge were also found to have a negative impact. However, despite these major obstacles, teachers were still found to hold somewhat positive attitudes to inclusion. This would be further enhanced if the Jordanian government were to mitigate these barriers by addressing the issues identified in the education infrastructure.

The findings of the current study therefore have the potential to assist education administrators in Jordan to identify a workable framework for inclusive education and, through its implementation, improve the educational outcomes of all.
APPENDICES
APPENDIX A: INTERVIEW QUESTIONS IN ENGLISH

1- What does inclusive education mean to you?

2- How do you feel about inclusive education? Agree OR disagree and why?

3- How do you feel about the legislation that supports inclusive education? Are you aware of this legislation?

4- What things do you think will promote the success of inclusive education for students with disabilities in your classroom and within your school?

5- Did you learn about teaching students with disabilities in your initial graduate course, and how much?

6- As a classroom teacher who must include students with disabilities in the classroom, do you think you will receive support from education stakeholders? Why?

7- What type of training would you like to receive in order to improve your ability to include students with disabilities in your classroom and within the school?

8- Would working with another teacher support you in including students with disabilities in your classroom? Why?

9- How would you feel if you had a well-trained team in your school to support you in delivering inclusive education? And what would you specifically want from this team?

10- Will the type of disability affect the success of inclusive education? How?

11- Any additional comments?
APPENDIX B: INTERVIEW QUESTIONS IN ARABIC

أسئلة المقابلة

1- ماذا يعني التعليم الدامج بالنسبة لك؟
2- ما هو رأيك بالنسبة للتعليم الدامج؟ هل تؤيد أم لا؟
3- ما هي وجهة نظرك بالنسبة للقوانين والتشريعات التي تدعم التعليم الدامج؟ وهل انت على دراية بهذه القوانين؟
4- لإنجاح عملية التعليم الدامج في صفك والمدرسة التي تعمل بها من وجهة نظرك ما هي الأشياء المطلوبة لإنجاح هذه العملية؟
5- هل تعلمت عن كيفية تدريس الطلاب من ذوي الاحتياجات الخاصة في دراستك الأولية الجامعية وكم انت على ثقة من ذلك؟
6- كمدرس في إحدى الصفوف التعليمية من الواجب عليك دمج الطلاب من ذوي الاحتياجات الخاصة هل تعتقد بانت ستحصل على الدعم من الكادر التعليمي؟
7- ما هو التدريب أو التأهيل الذي تحتاجه في صفك ومدرستك للزيادة في قدراتك على دمج الطلاب من ذوي الاحتياجات الخاصة؟
8- هل تعتقد أن العمل مع مدرس أخر سيؤدي إلى نجاح التعليم الدامج للطلاب من ذوي الاحتياجات الخاصة؟ وكيف ذلك؟
9- كيف تستشعر إذا كان في مدرستك كادر تعليمي مدرج جيدا لدعمك لإنجاح التعليم الدامج؟ وما الذي ستحتاجه تحديدا من هذا الكادر؟
10- هل ستؤثر نوع الإعاقة على نجاح عملية التعليم الدامج؟ وكيف ذلك؟
11- هل تحتاج لإضافة أي شيء آخر؟
APPENDIX C: PARTICIPANT INFORMATION SHEET FOR INTERVIEW ENGLISH

Participant Information Sheet

Title: “The inclusion of students with disabilities in Jordan: The Impact of Teachers’ Attitudes, Beliefs, Knowledge and Resources”

You are invited to participate in a study conducted by Mahmoud Muhamma Malkawi to meet the requirements of Doctoral study in Education under the supervision of A/Prof. Christine Johnston; phone (+61 2 4736 0782) Dr. Danielle Tracey phone (+61 2 9726 6738) from the School of Education at the University of Western Sydney.

The purpose is to investigate the education school teachers on including students with disabilities into general classroom in Jordan. The study may benefit all teachers as well as the whole education system in Jordan.

The study will involve a 40 minutes interview to be completed and might be audio recorded, all participation in this project is voluntary and you may withdraw from the project at any time. You will be given the opportunity to preview results before they are used. You will also be given the opportunity to withdraw any information at the end of the interview without negative consequences.

All aspects of the study, including results, will be confidential and only the researchers will have access to information on participants. Participation is entirely voluntary. Participants are not obliged to be involved and if you do participate you can withdraw at any time without giving any reason and without any consequences.

After participants finishing reading the information sheet the researcher will answer any questions that participants need or they can contact Associate professor Christine Johnston on +61 2 4736 0782 C.Johnston@uws.edu.au and Dr Danielle Tracey on +61 2 9772 6738 D.Tracey@uws.edu.au.

This study has been approved by the University of Western Sydney Human Research Ethics Committee. The Approval number is (H9641). If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services on Tel +61 2 4736 0229 Fax +61 2 4736 0013 or email humanethics@uws.edu.au. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
APPENDIX D: PARTICIPANT INFORMATION SHEET FOR INTERVIEW ARABIC

توضيح موجز البحث

اسم البحث: تزود مدرس المدرسة العربية والتعليم في دعم طلاب ذوي الاحتياجات الخاصة في الصفوف المنتظمة في

الآذان

تقوم كلية التربية جامعات غرب سيدني بالتنافس على رسالة الدكتوراه للطالب محمود محفوظ. إن الموضوع من هذه الدراسة المحصلة ومثلة درجة الدكتوراه في التربية الخاصة تحت إشراف البروفيسور كريستين جونسون (لخبر) 2 4736 0782 (+61 2 9772 6738) والدكتور نانسي تريسي (لخبر) 2 61 (+61 2 9772 6738)

تهتم الدراسة في ركود مدرس العربية والتعليم في دعم طلاب ذوي الاحتياجات الخاصة في الصفوف المنتظمة في

الآذان.

يختلف هذا البحث عن مقابلة شخصية قد تستغرق حوالي 40 دقيقة. و هذه المقابلة قد تسجل سسيا و هذا يعتمد على

موثوقية أن المشارك في هذا المشروع سوف يطمع في كل النفسية وكأنما يكون التوقف عن المشاركة في

البحث في أي وقت. كما سيكون بإمكانك الإفلاج على الانتاج أو نقص المقابلة قبل استخدامها و يكون للحق في

سحب أي معلومات تخصك عند نهاية المقابلة و بدون أي تعاون سليمة. إن هذا البحث ربما يكون ذو فائدة كبيرة للمدرسين

والدعم الرقمي في الأعرق في حالة إعامة.

إن المشاركة في هذه الدراسة ستكون في منتهي السرية و الخصوصية كما أن النتائج النهائية للدراسة لن تتضمن أي

أسماء حقيقية أو أي معلومات شخصية ربما تعرّف على هويات أشخاص الحقيقين كما أن الباحث هو الشخص

 الوحيد المعني على هذه المعلومات. كما ستكون من المشاركة في هذا البحث أن يكون لديك أي نوع من التوتر و التلقى

عندك التحديد عن تجارب شخصية الماضية المتعلقة بالتعليم البدائي.

إن المشاركة في هذه الدراسة ستكون سرية و أنه بإمكانك مصعب شاركك بالبحث في أي وقت بدون أي تأثير جاني.

كذلك عند أن تلتقي ورقا المعلومات سيطلب الباحث لبيب عن أي سؤال تحاججه أو الأفكار مع البروفيسور بريسي

جونسون (لخبر) C.johnston@uws.edu.au (+61 2 4736 0782 (+61 2 9772 6738)

الدكتور نانسي تريسي (لخبر) D.trace@uws.edu.au (+61 2 9772 6738)

إذا كانت لديك أي شكاوى أو تحركات حول سلوكات البحث فعليه الاتصال بجامعة الأعجازات البدائية على الرقم

0782 (+61 2 473600229) أو إجلاع (+61 2 473600229) كما يمكنكم أيضًا استشارة مع مراقبة ونظام التحق وحولها بشكل كامل و إعلامها بالتفصيل.

مع فرق الشكر و الاحترام

محمود محفوظ

مراجع

هذا المشروع المعني في موجز البحث قد تشمل عنايا من قبل هذا أخلاقيات البحث البدائي في غرب سيدني. إذا كنت لديك أي شكاوى أو تحركات حول

استمرار البحث فعليه الاتصال بجامعة الأعجازات البدائية على الرقم (+61 2 473600229) أو إجلاع (+61 2 473600229) كما يمكنكم أيضًا استشارة مع مراقبة ونظام التحق وحولها بشكل كامل و إعلامها بالتفصيل.

234
APPENDIX E: SURVEY ENGLISH

Supporting students with disabilities

Inclusive education involves embracing human diversity and welcoming all children and adults as equal members of an educational community. This involves valuing and supporting the full participation of all people together within mainstream educational settings (Avramidis & Newnich, 2002).

What is this study about?

This study investigates teachers’ perceptions of including students with disabilities in the general classroom in Jordan. All teachers have different experiences about inclusive education. This survey is concerned with looking at your experience of including students with disabilities and the support available.

- This survey should take you no more than 10 minutes to complete.
- Your responses are anonymous.
- Completing the survey is taken as your consent to take part.

Who is doing this study?

This study is being conducted by Maha Al Mahama who is a candidate for the degree of Doctor of Philosophy under the supervision of Associate Professor Christine Johnston and Dr. Danielle Tracey. If you would like more information please contact Christine either at cjohnston@usw.edu.au or on Tel: 2-4736 0742.

What if I have a complaint or concern?

This study has been approved by the University of Western Sydney Human Ethics Committee (Protocol Number 91641). If you have any complaints or reservations about the ethical conduct of this research, you may contact the UWS Ethics Committee through the Office of Research Services on Tel 02-4736 0815 or email humanethics@usw.edu.au. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

If you know of anyone else who might like to do the survey, please give them the link.

Thank you for sharing your experiences and ideas.

Maha Al Mahama, Christine and Danielle

SECTION ONE: INFORMATION ABOUT YOU

1- Gender:  □ Male  □ Female

2- Age:  □ <29  □ 30-39  □ 40-49  □ 50+

3- You work in  □ Primary  □ Secondary

4- Do you have a formal qualification in Special Education?  □ Yes  □ No

5- Highest qualification you have earned:
   □ 2 Years diploma after HSC  □ 3 years teaching diploma  □ Bachelor Degree
   □ Postgraduate Diploma  □ Masters Degree  □ PhD

6- You work now as a:
☐ General Education teacher

☐ Special Education teacher in a support class in a general school.

☐ Special Education teacher working as a consultant/support at general education schools.

☐ Special Education teacher working directly with students with disability from general education classrooms.

☐ Special Education teacher in a special school for students with disability.

7. Years of experience in:

☐ Special Education ________ (insert number of years)

☐ General Education ________ (insert number of years)

8. You work in:

☐ A city/metropolitan area

☐ A country area

9. How many students with disability have you taught in your career?

Please respond for each type of disability.

<table>
<thead>
<tr>
<th>NO</th>
<th>Type of disability</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Physical Disabilities</td>
<td>☐ 0   ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16+</td>
</tr>
<tr>
<td>2</td>
<td>Intellectual Disabilities</td>
<td>☐ 0   ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16+</td>
</tr>
<tr>
<td>3</td>
<td>Sensory (e.g. Vision or Hearing)</td>
<td>☐ 0       ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16+</td>
</tr>
<tr>
<td>4</td>
<td>Behavioural (e.g. Autism)</td>
<td>☐ 0   ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16+</td>
</tr>
<tr>
<td>5</td>
<td>Emotional (e.g. Anxiety)</td>
<td>☐ 0   ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16+</td>
</tr>
<tr>
<td>6</td>
<td>Multiple Disabilities</td>
<td>☐ 0   ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16+</td>
</tr>
<tr>
<td>7</td>
<td>Other (specify below)</td>
<td>☐ 0   ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION TWO: POLICY:

Inclusive education is mandated by the government in Jordan through the Higher Council for people with disabilities affairs.

1. The following questions ask you to think about how these policies are being implemented in your school.

<table>
<thead>
<tr>
<th>Have you ever heard about these policies?</th>
<th>☐ Yes</th>
<th>☐ No</th>
<th>☐ Not sure</th>
</tr>
</thead>
</table>

236
3. Please indicate how much you agree or disagree with the following statements under the government's inclusive education policy:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My school still requires more support from the government and legislation makers for successful inclusive education.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2</td>
<td>The employment of students with disabilities in my school always follows the inclusive education policy.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>All staff in my school takes account of the inclusive education policy when writing lesson plans.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4</td>
<td>The inclusive education policy provides easy access to inclusive programs for all students with disabilities.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5</td>
<td>Our school principal and other senior staff always ensure that we are following the inclusive education policy.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6</td>
<td>Ongoing professional development around supporting students with disabilities is available.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7</td>
<td>We have regular discussions at our school about how to implement the inclusive education policy.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8</td>
<td>Information about disabilities and related services is readily available.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9</td>
<td>The inclusive education policy is always followed in my school when designing assessment tasks.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10</td>
<td>The inclusive education policy provides all the guidelines necessary to ensure inclusive education is achieved.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

4. On a scale of 1 to 10, to what extent is the inclusive education policy being implemented in your school?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

5. Please fill these sentences:

1. The parts of the inclusive education policy which are working well are:
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

2. These things need to be changed in the inclusive education policy:
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

3.

237
SECTION THREE: TEACHER PREPARATION:

These questions ask you about the training you received in your course to become a teacher:

1. **My teacher education course included:**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. At least one unit of study about students with disabilities</td>
<td>□ Yes □ No □ Do not remember</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. A practicum (or professional experience) where I worked with students with disabilities</td>
<td>□ Yes □ No □ Do not remember</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Overall, I feel that my teacher education course did not adequately prepare me to teach students with disabilities. [Strongly Disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly Agree]

3. **My teacher education course prepared me to effectively teach students with:**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Physical Disabilities</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Intellectual Disabilities</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Sensory (e.g. Vision or Hearing)</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Behavioral (e.g. Autism)</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Emotional (e.g. Anxiety)</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Multiple Disabilities</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Other (Specify below)</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **My teacher education course prepared me to:**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teach students with a range of learning abilities together in a general classroom</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Adjust lesson content to make it appropriate for students with disabilities</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Use a variety of teaching strategies to meet the needs of all students</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Develop individual education plans for students with disabilities</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Manage the behavior of students with disabilities</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Collaborate with other professionals to support students with disabilities</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Assess the learning needs of students with disabilities</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Partner with family to support students with disabilities</td>
<td>□ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Please finish these sentences:

1. To better prepare teachers to support students with disabilities in general classes, teacher education courses must:

2. The most important skill I gained from my teacher education course about teaching students with disabilities was:

SECTION FOUR: RESOURCES:

1. Please indicate how much you agree or disagree with the following statements

<table>
<thead>
<tr>
<th>NO</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My school has all the resources needed to include students with disabilities, including technology and equipment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>My school has trained special education teachers who are able to work with the students with disabilities and support other teachers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Special education professionals visit our school regularly to support the inclusive education of students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>My school has a sufficient number of teachers' aides to support teachers and students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>My school receives financial support from the government to support the inclusive education of students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>My school is supported by consultants such as psychologists and therapists to help me as a teacher include students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The principal and staff in my school collaborate to provide support for the inclusive education of students with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Please finish the following sentence:

1. The most important resource needed for successful inclusive education in our school is ____________________________________________.

SECTION FIVE: ATTITUDES:

1. Please indicate how much you agree or disagree with the following statements

<table>
<thead>
<tr>
<th>NO</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I believe that all students with disabilities should be included in the general classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I believe only teachers with a special education background should work with students with disabilities in the general classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I believe students with disabilities are better placed in a special classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I believe the level and type of the student's disability will affect the success of inclusive education.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>----</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither agree nor disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Physical Disabilities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2</td>
<td>Intellectual Disabilities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>Sensory (e.g. Vision or Hearing)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4</td>
<td>Behavioural (e.g. Autism)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5</td>
<td>Emotional (e.g. Anxiety)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6</td>
<td>Multiple Disabilities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7</td>
<td>Other (Specify below)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

SECTION SIX: KNOWLEDGE

1. These questions ask you about your confidence to teach students with disabilities. Where (1) is NOT CONFIDENT AT ALL and (10) IS EXTREMELY CONFIDENT.

<table>
<thead>
<tr>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

3. I have the necessary knowledge and skill to:

<table>
<thead>
<tr>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>
2. Rank from most important to least important, what has been helpful in giving you the necessary knowledge to teach students with disabilities?

<table>
<thead>
<tr>
<th>No.</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher education course</td>
</tr>
<tr>
<td>2</td>
<td>Professional development whilst I was a teacher</td>
</tr>
<tr>
<td>3</td>
<td>Experience teaching students with disabilities</td>
</tr>
<tr>
<td>4</td>
<td>Learning from a more experienced teacher</td>
</tr>
<tr>
<td>5</td>
<td>Reading about how to teach students with disabilities</td>
</tr>
<tr>
<td>6</td>
<td>Other</td>
</tr>
</tbody>
</table>

5. Please finish these sentences:

1. My knowledge of how to teach students with disabilities would be improved by:

________________________________________________________________________________________

2. The most important thing I know about teaching students with disabilities is:

________________________________________________________________________________________

________________________________________________________________________________________

Thank you for completing the survey!
دعم طلاب نوى الاحتياجات الخاصة

التعليمي: هو التعليم الذي يتضمن دمج الطلاب من نوى الاحتياجات الخاصة مع آرائهم من غير نوى الاحتياجات الخاصة في الصفوف المنظمة (Avramidis & Norich, 2002).

أهمية الدراسة:

جاءت هذه الدراسة لتبث عن ردود فعل المعلمين من عملية دمج الطلاب من نوى الاحتياجات الخاصة في الصفوف المنظمة نظرًا لاختلاف وجهات النظر بين المعلمين في عملية التعليم النموذجي. ونتجت هذه الاستبانة لاستيعاب من خبرات المعلمين وعن مدى الدعم المتوفر لهم من قبل المؤسسات المعنية.

- هذه الاستبانة تحتاج إلى 20 دقيقة لتعينها.
- لن يتم الإفصاح عن إسماء المشاركين.
- تعين هذه الاستبانة يعني الموافقة على المشاركة.

من هو القائم على هذه الدراسة:

القام على هذه الدراسة هو طالب الدكتوراه محمود مها ملكاوي تحت إشراف البروفسور كريستين جونستون والدكتورة دانيال تريسي من جامعة غرب سيدني في أستراليا. لزيادة من الاستفادات ترشي التواصل مع البروفسور كريستين جونستون على البريد الإلكتروني c.johnston@uws.edu.au أو الأتصال على هاتف 02 4736 8924 أو محمود مها ملكاوي على البريد الإلكتروني malkawi_m@hotmail.com أو الأتصال على هاتف 0461099991.

ماذا لو كان لديك شكاوى؟

هذه الدراسة موافق عليها من قبل لجنة القيم الإقتصادية والأخلاقية في جامعة غرب سيدني في أستراليا (رقم البروتوكول HR/20641). إذا كان لديك أي شكاوى أو تحفظات على السلوكيات الأخلاقية من هذا البحث، برجي التواصل مع لجنة القيم الإنسانية والأخلاقية لجامعة غرب سيدني على الهاتف 02 4736 8933 أو عبر البريد الإلكتروني humanethics@uws.edu.au وسوف يتم التعامل مع أي شكاوى بسرية تامة. وسوف يتم إبلاغهم بالحول.

شاكرين لكم تبادل المعلومات والخبرات.

محمود مها ملكاوي، كريستين جونستون ودانيال تريسي.

الجزء الأول:

معلومات عامة:

<table>
<thead>
<tr>
<th>رقم</th>
<th>جنس</th>
<th>العمر</th>
<th>عنصرين</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>أنثى</td>
<td>49-40</td>
<td>أكثر من 50</td>
</tr>
<tr>
<td>2</td>
<td>ذكر</td>
<td>39-30</td>
<td>أقل من 29</td>
</tr>
</tbody>
</table>

1
3. أنا أعمل كمدرس في المرحلة: □ الأسامية □ الثانوية
□ التربوية
4. هل لديك مهارات علمية في التربية الخاصة؟ □ تعلم □ لا
5. أعلا تحصيل علمي لدي: □ ماجستير □ بكالوريوس □ دكتوراه
6. أنا أعمل حالياً:
□ مدرس عام
□ مدرس تربية خاصة في مدارس التربية الخاصة
□ مدرس تربية خاصة في غرفة المصحاب الموجودة في مدارس التعليم المنتظم
□ مدرس تربية خاصة في مرحلة اجتماعي للطلاب المدارس المنظمة
□ مدرس تربية خاصة يعمل مباشرة مع طلاب من ذوي الاحتياجات الخاصة الموجودين في المدارس المنظمة.
7. سنوات الخبرة:
□ مدرس تربية خاصة (عدد سنوات الخبرة)
□ مدرس تربية عام (عدد سنوات الخبرة)
8. أنا أعمل في مدرسة موجودة في:
□ مدينة
□ قرية
9. من خلال الجدول التالي، كان عدد طلاب ذوي الاحتياجات الخاصة الذين درستهم خلال سنوات خبرتي هو:

<table>
<thead>
<tr>
<th>نوع الاعاقة</th>
<th>عدد الطلاب</th>
<th>رقم</th>
</tr>
</thead>
<tbody>
<tr>
<td>عاقلة حركية</td>
<td>11-15</td>
<td>6-10</td>
</tr>
<tr>
<td>عاقلة عقلية</td>
<td>11-15</td>
<td>6-10</td>
</tr>
<tr>
<td>عاقلة سمعية</td>
<td>11-15</td>
<td>6-10</td>
</tr>
<tr>
<td>عاقلة جسدية</td>
<td>11-15</td>
<td>6-10</td>
</tr>
<tr>
<td>عاقلة اجتماعية</td>
<td>11-15</td>
<td>6-10</td>
</tr>
<tr>
<td>متعددة</td>
<td>11-15</td>
<td>6-10</td>
</tr>
<tr>
<td>أخرى (عدد)</td>
<td>11-15</td>
<td>6-10</td>
</tr>
</tbody>
</table>
الجزء الثاني:

القوانين والتشريعات:

حرص نظام الدولة والتعليم في الأردن على تقديم أفضل الخدمات والاستراتيجيات اللازمة لتجهيز عملية التعليم الدامج في الصفوف المتقدمة من خلال المنسق الأعلى للشؤون القانونية من أجل الامتثال الخاص.

1. هل ترى أن التدريس بقانونية التشريعات الخاصة بالتعليم الدامج؟
   - [ ] نعم
   - [ ] لا
   - [ ] غير متأكد

2. يرجى الإجابة على العبارات التالية من خلال وضع إشارة (✓) في المرفق المناسب:

<table>
<thead>
<tr>
<th>الاسم</th>
<th>لا</th>
<th>لا أوافق على</th>
<th>أوافق</th>
<th>موافق</th>
<th>محذوف</th>
</tr>
</thead>
<tbody>
<tr>
<td>النظام الذي أصلها يمكن تكوينه في قبر الوزارة وصانع</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>القانون والتشريعات الخاصة بالتعليم الدامج لتجهيز عملية التعليم الدامج</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>يتم البت قانون التعليم الدامج في المدرسة التي أصلها في ستة سنوات</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>أي طالب من طلبة الاحتياجات الخاصة</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>التعليم الدامج عند كلية الامتحانات</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>توفر القوانين والتشريعات الخاصة بالتعليم الدامج سهولة الوصول إلى البرامج الخاصة لدعم طالب ذوي الاحتياجات الخاصة في الصحف المتقدمة</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>التدريس بالقائمة التي أصلها الموظفين على أساس قانون التعليم الدامج</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>النظام الذي أصله يمكن تكوينه في قبر الوزارة وصانع</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>نظام الاستمرارية في التعليم لدعم الطلاب من ذوي الاحتياجات الخاصة</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>التعليم الدامج في المدرسة التي أصلها بدعم من علماء وعلماء لمناقشة سبل تطوير عملية التعليم الدامج</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>التعليم الدامج لدى المدرسة التي أصلها الوكالات والمعلومات عن جميع أنواع</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>إذا كان مطلباً قانونياً التعليم الدامج في المدرسة التي أصلها بدعم الحفاظ على</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>التعليم الشامل</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
- 3

<table>
<thead>
<tr>
<th>10</th>
<th>9</th>
<th>8</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 4

الخطة النهائية للعمل النهائي:

1. برإكم، أي البريد الأكثر فعالية والمطابقة جيداً من القوائم والتشريعات الخاصة بالتعليم الدائم؟

2. من وجهة نظرك، ما هي التحديات والواجبات التي تقابل القوائم والتشريعات الخاصة بعملية التعليم الدائم لتحسينها؟

الجزء الثالث:

- جاهزية المدرس لتعليم الدائم:

في هذا الجزء من الاستمارة سيتم الاستفسار عن التدريب للتعليم الدائم الذي حصل عليه خلال مراحل الدارسة ما بعد الثقافية للدكتور مرسا.

- 1 من خلال مرحلة دراسة الجامعية في الكليات المتوسطة

| 1 | لا لا ذوي الاحتياجات الخاصة
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>لا لا تم دراسة مادة واحدة على الأقل عن طلاب</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>لا لا تدريب ميداني (أو خبرة اختياري) في المكان الذي يجري الصناعية مع طلاب من</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ذوي الاحتياجات الخاصة</td>
</tr>
</tbody>
</table>

245
3- من خلال دراستي حصلت على التأهل الكافي لقيم بتدريس طلاب من ذوي الإعاقات التالية:

| الاعاقة | لا أتفق على الإطلاق | محدود | محيد | أتفق بشدة | أتفق
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

4- من خلال دراستي حصلت على التأهل الكافي لقيم بالتعليم التالي:

| الاعاقة | لا أتفق على الإطلاق | محدود | محيد | أتفق بشدة | أتفق
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>
 firearms

1. تطور قدرات ومهارات المعلمين ليصبحوا قادرين على دعم طلاب من ذوي الاحتياجات الخاصة، يجب على الجامعات والكليات القيام بما يلي:

2. ان من أهم المهارات المكتسبة التي حصلت عليها أثناء دراستي والتي تمكنتي من تعليم طلاب ذوي الاحتياجات الخاصة كانت:

الجزء الرابع:

الموارد:

الرجاء الإشارة إلى مدى موافقتك على الاعتراف التالية من خلال وضع إشارة (✓) في المربع المناسب:

<table>
<thead>
<tr>
<th>الرقم</th>
<th>الاعتراف</th>
<th>موافق</th>
<th>موافق بشدة</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>مدرستنا لديها التجهيزات الكافية من مصاعد وممرات وأبواب واسعة لنبذة الاحتياجات الطبية من ذوي الاحتياجات الخاصة.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2</td>
<td>مدرستنا قامت بتدريب معلمي التربية الخاصة وتمكينهم من العمل مع الطلبة من ذوي الاحتياجات الخاصة ودعم المعلمين الآخرين.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>يقوم المختصون بإشراء مدرستي بشكل منتظم لإشراف على دعم طلاب ذوي الاحتياجات الخاصة الممتوحون.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4</td>
<td>مدرستي لديها عدد كافٍ من مساعدي المعلمين لدعم المعلمين والطلاب من ذوي الاحتياجات الخاصة.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5</td>
<td>تلقي مدرستنا الدعم المادي من الحكومة لدعم عملية التعليم الدائم للطلاب ذوي الاحتياجات الخاصة.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6</td>
<td>مدرستنا مدعومة من قبل المستشارين وعلماء النفس والمحامين الراشدين لمساعدتي في التدريس للاجتهاء عملية التعليم الدائم.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7</td>
<td>في مدرستنا هناك تعاون بين الإدارة والمعلمين الآخرين لدعم التعليم الدائم.</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
الرجاء اكمال الجملة التالية:

1- أهم المصادر التي احتاجها في المدرسة التي أعمل بها لإنجاح عملية التعليم الدائم هي:

__________________________
__________________________
__________________________
__________________________

الجزء الخاص:

الموافق وردو الفعل

الرجاء الإشارة إلى مدى موافقتك على العبارات التالية من خلال وضع شارة (✓) في العدد المناسب:

<table>
<thead>
<tr>
<th>رقم</th>
<th>لا أوافق</th>
<th>أوافق</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

عاملاً بشدة
أوافق
لا أوافق
محاذير

1- القيادة الكافية للتعليم الطلاب الذين لديهم:

<table>
<thead>
<tr>
<th>رقم</th>
<th>لا أوافق على الاطلاق</th>
<th>لا أوافق</th>
<th>أوافق بشدة</th>
<th>محاذاة</th>
<th>أوافق</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>اعتراف حركية</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>اعتراف عالية</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>اعتراف حسية مسال (بصرية وسمعية)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>اضطرابات سلوكية مسال (توحد)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>عاطفية</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>معاوضة</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>أخرى (اختياري)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2- لدى المعرفة والمهارات اللازمة ل:

<table>
<thead>
<tr>
<th>رقم</th>
<th>لا أوافق على الاطلاق</th>
<th>لا أوافق</th>
<th>أوافق بشدة</th>
<th>محاذاة</th>
<th>أوافق</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>تعميم الطلاب لديهم قدرات مختلفة على التعلم في الصف</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ضبط محاور التدريس لجهاز متعدد للطلاب من ذوي الاحتياجات الخاصة</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>استخدام استراتيجيات متعددة في التدريس ذاتية احتياجات الطلاب</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>تصوير برامج التعلم الفردية للطلاب من ذوي الاحتياجات الخاصة</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>إضافة القيادة من ذوي الاحتياجات الخاصة</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>التعاون الجماعي مع المختصين لدعم الطلاب من ذوي الاحتياجات الخاصة</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>تنفيذ إحتياجات التعلم للطلاب من ذوي الاحتياجات الخاصة</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>التعاون مع أسر الطلاب من ذوي الاحتياجات الخاصة</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4- رتبة من الأكتر إلى الأقل أهمية، ما كان مفيداً في إعطائك المعرفة اللازمة لتعليم طلاب ذوي الاحتياجات الخاصة في الجدول التالي:

<table>
<thead>
<tr>
<th>رقم</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

5- الرجاء تعبئة الجمل التالية:

1- يمكن تطوير قدراتي التعليمية على كيفية تدريس طلاب من ذوي الاحتياجات الخاصة من خلال:

   __________________________________________

   __________________________________________

   __________________________________________

   __________________________________________

2- أهم ما أعرفه عن نظم الطلاب من ذوي الاحتياجات الخاصة هو:

   __________________________________________

   __________________________________________

   __________________________________________

شكراً جزيلاً لتعاونكم
APPENDIX G: PARTICIPANT INFORMATION SHEET FOR SURVEY ENGLISH

Participant Information Sheet

Title: “The inclusion of students with disabilities in Jordan: The Impact of Teachers’ Attitudes, Beliefs, Knowledge and Resources”

You are invited to participate in a study conducted by Mahmoud Muhanna Malkawi to meet the requirements of Doctoral study in Education under the supervision of A/Prof. Christine Johnston; phone (+612 47360782) Dr. Danielle Tracey phone (+61 2 9726738) from the School of Education at the University of Western Sydney.

The purpose is to investigate the attitudes, beliefs and knowledge of the schools’ teachers on including students with disabilities into general classroom in Jordan. The study may benefit all teachers as well as the whole education system in Jordan.

The study will involve a 20 minutes survey to be completed, all participation in this project is voluntary and you may withdraw from the project at any time. You will be given the opportunity to preview results before they are used. You will also be given the opportunity to withdraw any information at the end of the survey without negative consequences.

All aspects of the study, including results, will be confidential and only the researchers will have access to information on participants.

After participants finishing reading the information sheet the researcher will answer any questions that participants need or they can contact Associate professor Christine Johnston on +61 2 4736 0782 C.Johnston@uws.edu.au and Dr Danielle Tracey on +61 2 9772 6738 D.Tracey@uws.edu.au.

This study has been approved by the University of Western Sydney Human Research Ethics Committee. The Approval number is (H9641) If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services on Tel +61 2 4736 0229 Fax +61 2 4736 0013 or email humanethics@uws.edu.au. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
APPENDIX H: PARTICIPANT INFORMATION SHEET FOR SURVEY ARABIC

Human Research Ethics Committee
Office of Research Services

Appendix H participant information sheet for survey in Arab

Title: Methodology for the research

The research is conducted in Arabic and is to be carried out with the approval of the Human Research Ethics Committee. The purpose of the research is to investigate the attitudes towards gender and cultural issues in Arab societies. The data collected will be used to inform future research in this area.

The researcher may contact the participant at any time during the research process to discuss the results of the study. The participant will be given an opportunity to review and comment on the findings of the research.

If you have any questions or concerns about the research, please contact the researcher at:

Dr. Johnston (email: dr.johnston@uws.edu.au)

Dr. Trace (email: dr.trace@uws.edu.au)

If you wish to withdraw from the research, you may do so at any time. Your consent will be considered as withdrawn from the study.

If you have any concerns about the conduct of the research, please contact the Human Research Ethics Committee at:

Humanethics@uws.edu.au

This is an anonymous research study, and all responses will be kept confidential. The data collected will be stored securely and will not be shared with any third parties.

Thank you for your participation in this research.
### APPENDIX I: SUMMARY OF THE INTERVIEW THEMES, SUBTHEMES AND QUOTES

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of what inclusive education is</td>
<td>Defining inclusive education as a: Process</td>
<td>“...I like to say inclusive education is the process of including students with disabilities with their peers who are without disabilities in the same classroom to achieve social equity.”</td>
</tr>
<tr>
<td></td>
<td>Combined learning in one classroom</td>
<td>“...provide an educational and social environment for students with and without disabilities in one classroom to achieve social equity.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“...teaching students with disabilities inside the general classroom with students without disabilities.”</td>
</tr>
<tr>
<td>Awareness of inclusive education policy</td>
<td>Unaware</td>
<td>“...unfamiliar with inclusive education policies.”</td>
</tr>
<tr>
<td></td>
<td>Aware but not applicable</td>
<td>“...Legislation and policy does support inclusive education but unfortunately I am not fully aware of [this] legislation, because it is not applicable in our schools. I can see it is too far from our education system and it will remain the same unless we change the whole education system.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Legislation might be applicable to students with learning difficulties only but not for students with mental or severe disabilities.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I can see this legislation only exists on a piece of paper, and I have never seen such legislation [applied] in reality.”</td>
</tr>
<tr>
<td>Teachers’ preparedness</td>
<td>Lack of preparation</td>
<td>“As a general education teacher, I do not have the ability to include students with disabilities because I did not receive any training.”</td>
</tr>
</tbody>
</table>
“…general information was given to us during my education course and it was only about students with disabilities, without paying any attention to focus on the type or level of disabilities.”

“…our training was not enough and I am assuming, there were a lot of things we should have been learning during the pre-service time and this is not our fault, but at the end of the day it's the actual system’s fault.”

“…additional training and reviewing the education system in Jordan and the course outline at the universities could help successful inclusion”.

“…the education system must have pre-planned programs for the implementation of inclusion. I haven’t said that means to forget about collaboration between teachers, administrators and all education system stakeholders.”

“If we do really have inclusion our education system must follow the developments around inclusion in the field of special education around the world. In addition, the education system must provide us with programs and schemes that have been successful all over the world.”

“…our education system must concentrate on the type of programs and strategies that general education must use for successful inclusion systems.”

“Buildings should have the facilities and the necessary tools.”

“Any students with any type of physical disability for sure can be educated in the general classroom, if the school has accessibility such as ramps, elevators specially for those students on wheelchairs. Unfortunately I doubt such things will be available
<p>| Absence of materials and programs in classroom | because there is no access for them even in public places. |
| Absence of financial support | “We need special buildings and tools as well.” |
| The importance of collaboration | “My general classroom is not appropriate for inclusive education as I don’t have special programs or materials.” |
|  | “…those factors are out of control because, even if we are trained well and do have the ability to help students with disabilities to be included, we still do not have the resources such as special programs, curricula and teacher aides.” |
|  | “I think if we have the right resources and programs for those students with mental disabilities, inclusive education will become easy.” |
|  | “The MOE must financially support schools to meet all students’ needs if we want actual inclusive education to happen.” |
|  | “…financial support is important, special programs and intensive courses around inclusive education are needed.” |
|  | “I do not think we are financially supported by the government in my school, the right budget [would] be beneficial [for] all education stakeholders as well as the students.” |
|  | “…we need collaboration between special and general education teachers as well as all education stakeholders.” |
|  | “…collaboration with professional and extra staff such as teachers’ aid in the classroom can make inclusive education a lot easier.” |
| Teacher attitudes | Teachers are not confident |
|  | “…the more training I do, the more confident I will be to deal with students with disabilities in my classroom.” |</p>
<table>
<thead>
<tr>
<th>Teachers' time constraints</th>
<th>“I haven’t done any previous training so, I don’t think I will be able to have the confidence to deal with students with disabilities in my classroom.”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“I am not very confident to deal with students with disabilities in the general classroom.”</td>
</tr>
<tr>
<td></td>
<td>“I do not agree with inclusion because it needs a lot of effort and time and I do not have enough experience to ensure the success of the inclusion.”</td>
</tr>
<tr>
<td></td>
<td>“Keep in mind, students with disabilities can be disrupting of others and take all teachers’ time to get help.”</td>
</tr>
<tr>
<td></td>
<td>“Some students with severe disabilities can affect the learning of the students who [are] without disabilities.”</td>
</tr>
<tr>
<td></td>
<td>“Some students need one-to-one if the students have a severe disability. In addition, the high number of students in the classroom will make inclusion hard even if the student has a mild disability. I am not talking about blind students or students with a hearing disabilities, I mean students with severe mental disabilities.”</td>
</tr>
<tr>
<td></td>
<td>“Financial support and good experience about inclusion is not available, also financial support to change the whole education system for the success of inclusion.”</td>
</tr>
<tr>
<td></td>
<td>“Let us assume that we have all the facilities to include students with disabilities into our classroom but, students with severe disabilities might cause other students (without disabilities) not to learn because of distraction and due to poor teachers’ experience.”</td>
</tr>
<tr>
<td>The type and level of the student disability</td>
<td>“I did my practicum through my study at the University of Jordan for 12 weeks…most of the training that I received was to teach students with disabilities at the pre-school level.”</td>
</tr>
<tr>
<td>Teachers experience</td>
<td></td>
</tr>
<tr>
<td>Poor connection between special and general education courses at the university</td>
<td>ASD, I didn’t have the chance to cover and work with all types of disabilities…so how would you expect me to have a good background to include students with disabilities in my classroom?</td>
</tr>
<tr>
<td>Lack of pre-service training</td>
<td>“As a general education teacher, I didn’t learn anything about special education or students with disabilities.”</td>
</tr>
<tr>
<td></td>
<td>“The special education course is completely different to the general education course”</td>
</tr>
<tr>
<td></td>
<td>“I don’t go to any training during my service as a teacher.”</td>
</tr>
<tr>
<td></td>
<td>“No workshops through my employment services.”</td>
</tr>
</tbody>
</table>
APPENDIX J: HUMAN ETHICS RESEARCH APPROVAL

UWS HUMAN RESEARCH ETHICS COMMITTEE

22 June 2012

Associate Professor Christine Johnston,

School of Education

Dear Christine,

I wish to formally advise you that the Human Research Ethics Committee has approved your research proposal **H9641 “The Inclusion of Students with Disabilities in Jordan: The Impact of Teacher’s Attitudes, Beliefs, Knowledge and Resources”**, until 31 December 2013 with the provision of a progress report annually and a final report on completion.

Please quote the project number and title as indicated above on all correspondence related to this project.

This protocol covers the following researchers:

Christine Johnston, Danielle Tracey, Mahmoud Muhanna.

Yours sincerely

Dr Anne Abraham
Chair, UWS Human Research Ethics Committee
c.johnston@uws.edu.au
99208846@student.uws.edu.au
APPENDIX K: LETTER TO MINISTRY OF EDUCATION

Locked Bag 1797
Penrith NSW 2751 Australia

Ministry of Social Development
Ministry of Education
Amman, Jordan

TO WHOM IT MAY CONCERN

Mr. Mahmoud Muhanna Malkawi is currently enrolled in the Doctor of Philosophy degree in the School of Education at the University of Western Sydney, Australia.

He is undertaking this project as part of his Doctoral Study project titled "The Inclusion of Students with Disabilities in Jordan".

I am the Principal Supervisor of Mr. Muhanna during this candidature for his degree study. Dr. Danielle Tracey is his associate supervisor.

I am seeking your approval for Mr. Muhanna to undertake research as part of this project in the Ministry of Social Development and the Ministry of Education institutions in Jordan. A copy of the approval given to this project by the University of Western Sydney Human Ethics Committee is attached.

Should you have any questions please do not hesitate to contact me at c.johnston@uws.edu.au

Thank you for considering this request

Yours Sincerely

Associate Professor Christine Johnston PhD
APPENDIX L: PARTICIPANT CONSENT SHEET ENGLISH

Participant Consent Sheet

Title: “The inclusion of students with disabilities in Jordan: The Impact of Teachers’ Attitudes, Beliefs, Knowledge and Resources”

I, ....................................................., consent to participate in the research project titled “The Inclusion of Students with Disabilities in Jordan: The impact of teachers’ perception”.

I acknowledge that: I have read the participant information sheet [or where appropriate, ‘have had read to me’] and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

I understand that my involvement is confidential and that the information gained during the study may be published but no information about me will be used in any way that reveals my identity.

I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher/s now or in the future.

Name of the participant:

Date:

Signature:

Name of the researcher:

Date:

Signature:

This study has been approved by the University of Western Sydney Human Research Ethics Committee. The Approval number is (H9641). If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services on Tel +61 2 4736 0229 Fax +61 2 4736 0013 or email humanethics@uws.edu.au. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.
APPENDIX M: PARTICIPANT CONSENT SHEET ARABIC

ورقة الاشتراك في البحث

اسم البحث:

رحبًا فعل مدربى التربية والتعليم في دمج طلاب ذوي الاحتياجات الخاصة في الصفوف المختلقة في الأورين

أنا الموقع أعددت أنني موافق على المشاركة في هذه الدراسة وأوافق التالي:

أولاً: أن قرأت (أو قرأنا لي) الصفحة المتعلقة بمحادثات المشاركة في الدراسة واعترفت لفرصة المشاركة في هذه المعلومات ومشاركتي في الدراسة مع الباحث.

ثانيًا: أوافق على نشر البيانات.

ثالثًا: أنا مدرك بأن مشاركتي في هذه الدراسة تكون سريًا وأن المعلومات المستخرجة من خلال البحث قد تنتشر على نطاق واسع.

رابعًا: أنه يمكنني الإسهام من المشاركة بالبحث في أي وقت دون التأثير على علاقتي بالباحث حاليا أو مستقبلا.

الاسم الكامل للمشارك:

التوفيق:

الاسم الكامل للباحث: محمود مها مكاكي

التوفيق:

هذا المشروع البصري قد تمتص الصياغة على الأسفل لتحديد اتفاقات البحث البشري في جامعة عرب ميداني. إذا كان لديك أي مشاكل أو تحفظات حول

استفهبت أعلى للمزيد من المعلومات حول إتفاقية البحث المعنية على الرقم (2934) 473600223 (متوافق: 612 47360032) فاتصل بالهاتف (612 47360023) أو حصل على معلومات ما تتحمل بسرعة تلبية الطلب على نشر التفاصيل حوله. مكتب الشرق بالنحو: humanethics@uws.edu.au
REFERENCES


Cagney, T. L. (2009). *Attitudes of general education teachers toward including students with special needs*. (Masters thesis) Retrieved from https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1854&context=etd


pq_origsite=primo


267


Engelbrecht, P., Nel, M., Smit, S., & van Deventer, M. (2016). The idealism of education policies and the realities in schools: the implementation of inclusive education in


Gliem, R. R., & Gliem, J. A. (2003). Calculating, interpreting, and reporting Cronbach’s alpha reliability coefficient for Likert-type scales. Presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH. Retrieved from https://scholarworks.iupui.edu/handle/1805/344


271


Lelashvili, A. (2014). *Examining the impact of in-service training module in inclusive education on developing positive attitude and awareness of vocational education*


McFadden, A. T. (2014). *The experiences of teachers teaching children with Down syndrome in the early years of schooling* (Doctoral dissertation, Queensland University of


280


UNESCO. (2008b). *UNESCO and inclusion*. Retrieved from https://pdfs.semanticscholar.org/28ac/7a7b57c0b9068fa5cf1edd95c01f87d71a72.pdf


BIBLIOGRAPHY


