

**INSTITUTIONAL AND PROFESSIONAL READINESS FOR
INCLUSIVE EDUCATION: PERCEPTIONS OF TEACHERS IN
SCHOOLS OF HITHADHOO, ADDU ATOLL, REPUBLIC OF
MALDIVES**

By

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DECLARATION

I, Mariyam Shareefa, declare that the Master by Education thesis entitled “Institutional and professional readiness for inclusive education: Perceptions of teachers in schools of Hithadhoo, Addu Atoll, Republic of Maldives” is no more than 40,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Signature:.....

Date: 27th November 2014

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May Allah (SWA) accept our deeds and grant us Jannthul Firdhaus.

DEDICATION

This thesis is dedicated to my two loving children, *Ruhy* and *Mahil*, who made me to understand the true meaning of dedication, hard work and faith.

Abstract

According to the Inclusive Educational Policy of Maldives (Ministry of Education, 2013), all students should be given equal educational opportunities regardless of their physical, intellectual, social, emotional or other conditions. The aim of this study is to understand what teachers believe, perceive, and feel about their institutional and professional readiness for inclusive education. The study also aims to investigate the main challenges that deter inclusive practices in the schools of Hithadhoo, Addu Atoll. The study used a mixed approach with survey and focus group interview methods. The survey questions were taken from the “Quality Indicators for Effective Inclusive Education Guidebook” by NJCIE (2010), and the “Scale of Teachers’ Attitudes Toward Inclusive Classrooms” developed by Cochran (1998). A total of 153 teachers participated in the survey and 10 teachers joined in the focus group interview.

The findings of the study show that teachers have a positive view towards all the readiness factors related to inclusive education. The findings reveal that teachers perceive school leadership, school climate, curriculum instructions and individual student support is adequately provided in the schools. Furthermore, it shows that the attitude, knowledge and skills are also adequately manifested in the teachers. Thus, overall, it could be understood that in the perception of teachers, schools of Hithadhoo, Addu are ready for inclusive education. The findings also show that the schools selected for the study have some areas that need to be improved in order to enhance their overall readiness for inclusive education. These areas include school leaders providing more pedagogical support to teachers, teachers providing more individual support for students by increasing the effort of adapting and modifying curriculum, schools facilitating a physically safe climate for all the students, and providing opportunities for teachers to acquire more knowledge and skills needed for teaching Special Education Needs (SEN) students in the mainstream classes.

The findings also revealed substantial challenges that impede successful implementation of inclusive education. These challenges are lack of knowledge and skills, lack of facilities, lack of awareness among all stakeholders, curriculum difficulties and time restrictions. These results indicate the complexity of developing and implementing inclusive education in schools.

Chapter 1: Introduction

Advocacy from global community regarding the needs of people with disabilities are increasing (Groce, 1999). There is a growing demand for fundamental policy changes that shift the focus on to the on the Rights importance of developing inclusive education to all members of the society. Examples of such policy documents are Article 24 of the United Nations Convention on the Right to Education for Persons with Disabilities (UN, 2006), The Convention of the Child (UN, 1989), and Salamanca Statement and Framework for Action (UNESCO, 1994). All these documents advocate for inclusive education at a global level, and the consequent influence has created a worldwide trend. In Maldives too, a variety of new strategies and initiatives are being introduced recently in the field of education. One of these initiatives is to provide mainstream education to all children regardless of their individual differences and abilities, a concept known as inclusive education.

Inclusive education is commonly associated with the education of children with disabilities or special educational needs in mainstream schools (Cummings, Dyson, & Millward, 2003). In practice, inclusive education means the integration of learners who are considered as children with special needs and who are often taught in special classes or schools to be taught in mainstream schools or classes. The guiding principle of inclusive education is that all schools should accommodate all learners regardless of their physical, intellectual, social, emotional or other conditions (Motitswe, & Mokhele, 2013).

As mandated by the Inclusive Education Policy of Maldives (MOE, 2013) and *Barabaru School Indicators* (Ministry of Education, 2010), schools have to provide inclusive educational opportunities for all students regardless of their differences and needs. As stated in both these documents, students with disabilities (physical, mental, psychological and various learning disabilities) must get equal access to formal education. The general aim of education is enabling the child to grow to his/her full potential and be a successful citizen in the society regardless of any physical, social or mental disadvantages (Ministry of Education, 2010).

Hence, schools are expected to be more inclusive with teachers who care, nurture, and support education of all students. This is easier said than done. Achieving the goals of these policies seem highly challenging; particularly inclusion of disabled children in mainstream

schools is challenging as most of the educators do not have the readiness needed for inclusive practices (Pasha, 2012). To make inclusive education possible, teachers as well as the whole school as an institution need to be ready and fully equipped with all the necessary facilities and teaching strategies. Effective and lifelong learning comes from collaboration of everyone working together to achieve student success (Pasha, 2012).

This study was aimed to assess and understand the school and teacher readiness for inclusive education in terms of six main areas. These areas are leadership, school climate, curriculum instruction, individual student support, and teachers' knowledge, skills and attitudes. The study employed a mixed method design using both a survey questionnaire and focus group interviews. Participants for the study were selected from the four government-run schools of Hithadhoo, Addu.

Rationale and Significance of the Study

According to the Human Rights Commission of the Maldives (2012), there are 2,250 children with disabilities registered in the Maldives. Out of these children, only 230 have access to education. Due to this lack of accessibility, the government has legislated a Disability Act (People's Majlis, 2012), followed by an Inclusive Education Policy (Ministry of Education, 2013) that assures opportunities for students with special needs.

For the successful enactment of the aforementioned Inclusive Educational Policy and the Disability Act, it is important to find out how ready the schools are for the implementation of the inclusive practices. To understand the readiness of schools for inclusive education, it is essential to assess teachers' perceptions about the current status of various aspects of the school such as the school leadership practices, school climate, curriculum instruction, individual student support, teachers' knowledge and skills, and teachers' attitudes towards inclusive education. According to Khan (2011), teachers' views, perceptions and knowledge are of primary importance in making any changes in their classroom practices. Khan argues that these attributes are important because the knowledge and the attitudes they have may affect their ability to adapt, and to perform in the classroom. Moreover, determining the level of teacher readiness will play a major role in successfully planning the implementation of inclusive education (Hay, Smith, & Paulsen, 2001).

Hence, the significance of this study arises from the need to understand how ready schools are to practise inclusive education. The findings of this study will have an impact on educational reforms, particularly at school level, in relation to enhancing schools' ability to become inclusive in educational practices.

This study conceptualizes that “school readiness” and “teacher readiness” are essential for effective inclusive education in schools. What is meant by these terms are detailed later in this chapter. School readiness encompasses concepts or factors related to leadership, school climate, curriculum instruction and assessment, and individual student support. Teacher readiness includes knowledge, skills, and teachers' attitudes towards inclusive education, and these concepts are also given later in this chapter.

Statement of the Problem

Inclusive education is often considered as the education of children with disabilities in mainstream schools (Cummings et al., 2003). It allows the inclusion of education with normal children and children with special needs by employing them together in mainstream classes, to be taught and instructed by mainstream teachers (Ali, Mustapha, & Jelas, 2006).

While schools are expected to incorporate inclusive education, they are unaware how ready the schools are to undertake inclusive education. They do not know whether the teachers are ready to adopt the method of inclusive education in their classrooms. Consequently, to adopt the principles of inclusivity, the knowledge of teacher and school readiness is important to prepare schools to move forward. Hence, it is anticipated the information gathered from this study would enhance schools' ability to deliver inclusive education to some extent.

In addition to the above, understanding the key challenges that educators face in trying to provide inclusive education in schools are also important. Since the concept of inclusive education is rather a new concept in Maldives, successful implementation of inclusive practices might experience numerous challenges. Schools might not have sufficient teaching-learning resources needed for inclusive practices. Teachers might not be well trained or they might be unaware of the ways and means of delivering meaningful inclusive practices at school level. These are some examples of challenges, and educators must be wary of all such potential barriers before attempting inclusion in schools.

This study addresses the above problems, with the purpose to understand how ready schools in Hithadhoo / Addu are for inclusive education. It is a descriptive study that tries to understand what teachers believe, perceive, and feel about how ready their schools are for inclusive education, with regard to the school leadership, school climate, curriculum instructions, individual student support, and teachers' knowledge, skills and attitudes towards inclusive education. The study also tries to identify the main challenges that deter inclusive practices in these respective schools.

Research Questions

The study is addressed to answer the following two research questions:

1. What are the perceptions of teachers regarding their schools' institutional readiness as well as their own professional readiness for inclusive education in terms of leadership, school climate, curriculum and assessment, individual student support, teacher attitudes, teachers' knowledge and skills needed for inclusive education?
2. What are the main challenges that educators face in trying to provide inclusive education in schools of Hithadhoo?

- Sub questions of the research arising from the above are:

1. Does the school leadership foster practices that are required for inclusive education?
2. Is the school climate conducive for inclusive educational practices?
3. Are the instructional curriculum and assessment practices supportive of inclusive education?
4. Are there mechanisms to support individual needs of students with special needs?
5. How positive are the teachers' attitudes towards inclusive education?
6. Do the mainstream teachers have adequate knowledge and skills required for inclusive education?

Definition of Key Words

The following are the definitions of important key words used in this study.

Inclusive Education. Inclusion is generally believed to mean the extent to which a school or community welcomes children with special needs as full members of the school and

values them as regular children (Chireshe, 2011). Mthembu (2009, p. 6) defines inclusive education as “as a system of education that accommodates all children, regardless of their physical, intellectual, social, emotional, linguistic or other conditions”. This definition implies placing children with physical disabilities, behavioural or academic challenges or social concerns together with regular children in mainstream classrooms (Khan, 2011).

School readiness for inclusive education. Kagan and Rigby (2003) defines school readiness as a match between the readiness of the child and the readiness of the environments that serve young children. They state that “... the contemporary understanding of readiness acknowledges that the sources of readiness are not only the child’s emotional, cognitive, linguistic, and social abilities, but also the contexts in which children live and interact with adults, teachers, and other community members” (p. 3). Schools have a responsibility to provide a quality public education in the least restrictive environment, to all individuals with various needs (Hayes, Baylot, Williamson, Black, & Winsor 2013). School readiness implies teacher training, curriculum development, local capacity building and community involvement (UNESCO, 2013).

Mainstream classes. As given on the oxforddictionaries.com, “mainstream” means a school or class for pupils without special needs. Ladbrook (2009) states that mainstreaming is related to the concept of integration of students with special needs and regular students. This study considers mainstream classes as classes which are allocated for regular students - for students who are not in the category of special education.

Leadership. Anwer and Sulman (2012) defines leadership as one that ensures the success of an inclusive program with his or her patronage. Mthembu (2009) stated that school leaders or principals have a key role to play when trying to provide inclusive practices. Mthembu argues that as instructional leaders or principals, they have to have clear school missions, promote an instructional climate, manage curriculum and instruction, supervise teaching and monitor student progress in order to foster inclusive education in schools.

School climate. UNESCO (2001) defines an inclusive school climate as the one that demands “a climate of tolerance and respect, encouraging the development of democratic culture” (p. 20). Such an instructional climate promotes inclusive education in schools

(Mthembu, 2009). According to Fazal (2012), the school climate needed for inclusive education comprises four elements: successful classroom management, effective instructional techniques, appropriate accommodative practices, and instructional flexibility.

Curriculum instruction and assessment. Pellegrino (2006) defines curriculum instruction as the knowledge and skills in subject matter areas, and the method of teaching and learning activities. According to Pellegrino, “assessment is the means used to measure the outcomes of education and the achievement of students with regard to important competencies” (p. 2). Rieser (2008) argues that the national curriculum should be a flexible and innovative in which school systems at national, regional and school level must develop means of making the curriculum materials accessible to all students with special needs.

Individual student support. As given by NCSE (2013), individual student support includes “...additional teaching and care supports, visiting teacher service, early intervention, assistive technology, special transport scheme, specialist equipment, school building adaptations, enhanced levels of capitation grants, and the extended school year scheme” (p. 60). Klein (2013) states that strengthening general education to support all students requires the development of a unified "whole school" approach. In such a system, general education interventions as well as special education adaptations, interventions and supports are provided in the general education setting (Klein, 2013).

Teacher readiness for inclusive education. According to Hay, Smith, and Paulsen (2001) teacher readiness implies a period of “ready-ing” a teacher for change. They say that it may be translated as the “state of readiness” of a teacher for inclusive education (i.e., has the teacher been prepared with regard to skills, and the cognitive and emotional level for the anticipated inclusive education?). Teacher readiness entails an attitude of willingness as well as having skills and knowledge in advance; and being able to go over into action without effort (Spies, 2013).

The Conceptual Framework of the Study

The study has two main areas that are addressed. They are school readiness and teacher readiness. School readiness is divided into four categories. They are leadership, school climate, curriculum instruction and assessment, and individual students support. Teacher readiness

depicts two major areas. They are knowledge, skills, and attitude. All these areas are delineated in the light of literature together with the outcomes of the investigation of this study.

The following diagram presents the conceptual framework of the study.

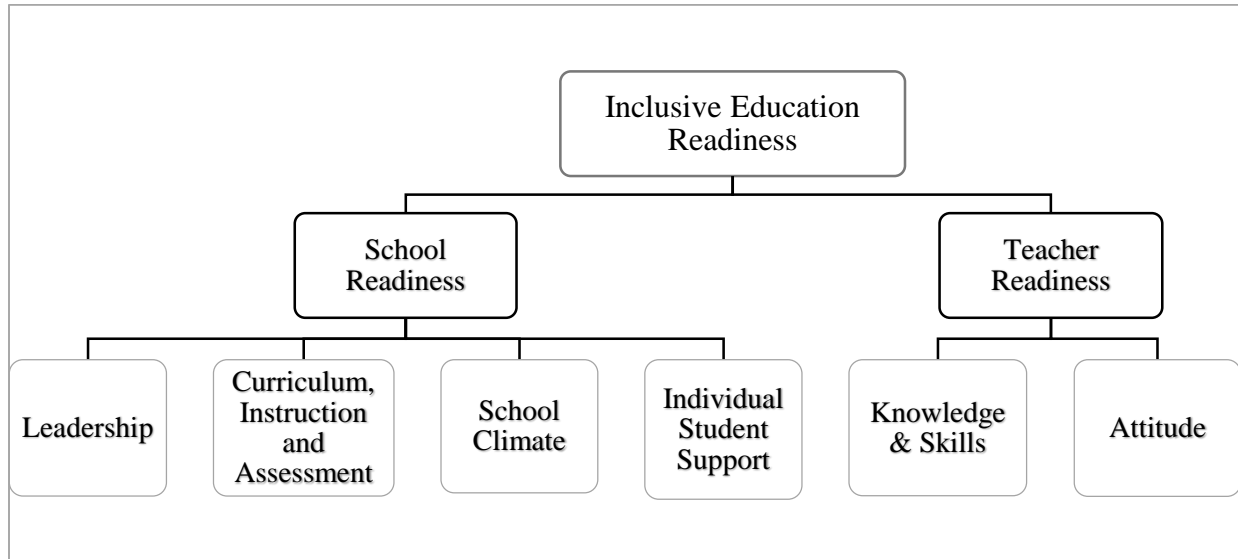


Figure 1. The conceptual framework of the study

Overview of the Study

This study consists of five main chapters. Chapter 1 presents a brief introduction to the background and significance of the study including definitions of important key terms. Chapter 2 provides literature related to inclusive education and some theoretical underpinnings that are relevant to inclusive education. Chapter 3 delineates the research methodology used in the study. Chapter 4 presents the results of both qualitative and quantitative investigation of data collected for the study. Chapter 5 discusses the findings of the study followed with some recommendations for practice as well as future research on inclusive education in Maldivian schools.

Summary

This chapter presented an explanation of the problem, problem statement, rationale and significance of the study, the aims of the research and research questions. It also outlined the definition of the important keywords used in the study. Further course of the study will be presented in the following chapters.

Chapter 2: Literature Review

Introduction

The concept of inclusive education has gained momentum during the last few years. It has become a global agenda and countries are striving to achieve the goal of inclusive education (Pasha, 2012). It has also become a major challenge facing school systems throughout the world (Ainscow, 2004). In economically poor countries the priority is to provide access to schooling for the millions of children who never have the opportunity to see the inside of a classroom (Ketovuori, & Ketovuori, 2013), while developed countries have legal frameworks which recognize ‘comprehensive schooling for all’ and lay down the standards for inclusion (Pasha, 2012).

In some countries, inclusive education is considered as an approach to serve special educational needs of children within general education settings. Inclusive education is about placing children with physical disabilities, behavioural or academic difficulties or social concerns together with regular children in mainstream classrooms (Chhabra, Srivastava, & Srivastava, 2010; Wilczenski, 1992). Correspondingly, this study considers inclusive education to be a means of providing educational opportunities for all children, including children with special needs in the mainstream classes. However, according to Barton (1997), “[inclusion] is not merely about placing disabled pupils in classrooms with their non-disabled peers ... Rather, it is about how, where and why, and with what consequences we educate all pupils” (p. 234). Inclusive education includes setting individual goals, adapting learning content, teaching methods and teaching media according to the pace of learners (Naicker, 2008). However, Rozenzweig (2009) states that teachers often report feeling unprepared or not ready to undertake the role of providing inclusive education, and this is common to both novice and experienced teachers.

This chapter presents an overview of literature related to the area of study. The chapter starts with a brief introduction to inclusive education together with an explanation of theories of inclusive education. Next an outline of school and teacher readiness for inclusive education is presented. What follows next are some important factors needed for effective inclusion in schools. These factors include leadership, school climate, curriculum, student support, teacher

attitude, and knowledge and skills. These factors form the conceptual framework (see Fig. 1) of the study. The effectiveness of inclusive education depends on leadership, school climate, curriculum, student support and ability of teachers. Literature on factors that relate to effective inclusive education (see Fig. 2) was reviewed to develop the framework and the discussions in this chapter.

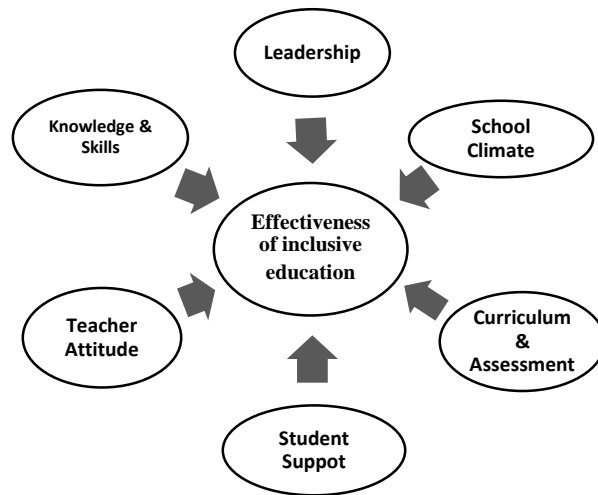


Figure 2. Factors that relate to effective inclusive education

In addition to the above, the chapter also examines some of the plausible challenges that might impede successful implementation of inclusivity in schools. These challenges are derived from reviewing literature and the factors related to inclusive education discussed above. The chapter ends with a brief summary.

Inclusive Education

Inclusion is an approach that looks into how to transform education systems in order to remove the barriers that prevent pupils from participating fully in education (UNESCO, 2013). Inclusion may mean different things to different people, but it is generally believed to mean the extent to which a school or community welcomes children with special needs as full members of the group and values them as regular children (Chireshe, 2011). It is a dynamic process which evolves constantly according to local cultures and contexts (UNESCO, 2001).

Mthembu (2009) defines inclusive education as a system of education that accommodate all children, regardless of their physical, intellectual, social, emotional, linguistic or other conditions. Inclusive education practice means placing children with physical disabilities, behavioural or academic challenges or social concerns together with regular children in mainstream classrooms (Khan, 2011). The guiding principle of inclusive education is that all children have a right to learn in mainstream schools, together with regular students (Chireshe, 2011). According to Bui, Quirk, Almazan, and Valenti (2010), long term research shows that inclusion of students with disabilities in mainstream classrooms results in favorable outcomes. They reiterate that inclusion brings about positive outcomes to not only students with mild disabilities, but even to those with low incidence disabilities too. Further, Eason and Whitbread (2006) argue that there is a strong research base to support the education of children with special needs together with their nondisabled peers.

Theories of Inclusive Education – A Paradigm Shift

In order to understand successful implementation of inclusivity, educators need to understand the trends, issues and the resulting influence of inclusive ideology and practices. According to Spies (2013), The Salamanca Statement on Principles, Policy and Practice in Special Needs Education, together with its accompanying Draft Framework for Action (UNESCO, 1994) mark the emergence of a paradigm shift regarding inclusive education. A paradigm is a framework for identifying, explaining and solving problems (Barnes, 2011), and a paradigm shift therefore “is a radical change in somebody's basic assumptions about or approach to something” (Spies, 2013, p. 20).

Special Education can be divided into two major paradigms - psycho-medical paradigm, and sociological paradigm (Alevriadou & Lang, 2008), and these paradigms dominate inclusive education theory (Skidmore, 2004). Understanding about these paradigms or theories is important as they help to enhance knowledge about the perceptions and practices that have taken place in the recent history of inclusive education (Spies, 2013).

The psycho-medical model focuses on diagnosis and treatment (Barnes, 2011). According to this theory, disabilities are seen to arise from shortfalls within the individual, and the proposed starting point is diagnostic testing for an individual-based solution (Skidmore,

2004). Khan (2012) states that this model was more prevalent in the 1950s and 1960s and he describes the psycho-medical model as follows:

It can be considered as a system of broadly medicalised ideas which essentially saw disabilities as “deficits” and in turn advocated special (or separate) education for individuals with disabilities. In this model, disabilities are viewed as individual pathologies which need medical treatment. (p. 20).

As seen from these conceptions, disabilities are viewed as individuals’ problems which need medical treatment. Barnes (2011) notes that when this model is applied to education, students with any type of difference or disability are singled out and it is believed that the cause or origin of the difference is located within the child himself. “There is much criticism of the medical model and many view it as problematic in understanding education today” (Barnes, 2011, p. 13).

Khan (2011) stated that as a result of the above perception on disabilities, segregated schools were formed for special needs children. However, Khan reiterated that, in the 1970s new approaches emerged due to the focus of educational psychology which suggested a supporting role in developing the fields of special and inclusive education. In this new perception, the focus is changed from the individual child to the system. The focus is creating a system that accommodates individual’s specific needs not only in the community, but accommodating the children in the schools, in the planning of the classroom setup, as well as catering their needs through specific teaching methods (Spies, 2013). In other words, these new approaches advocated for special needs children to be taught in schools rather than in alternative or segregated institutions (Long, Wood, Littleton, Passenger, & Sheehy, 2011).

In contrast to the psycho-medical paradigm, the sociological paradigm shifts the focus from the individual child to external factors (Naseer, 2012). The social model emerged with the idea that the child is no longer the problem. Some people considered that children with disabilities were not at fault, but the society was (Watson, 2012). According to Alevriadou and Lang (2008), in the social model, the social environment plays a crucial role, and the model presents the idea that it is society that disables people, hence disability is considered as a social construct. The new paradigm focused on “the way that social, cultural and environmental

structures, practices and barriers, and in particular adult behaviours can exacerbate the problems faced by disabled children” (Watson, 2012, p.1). The result of this perception has had a profound effect on mainstream education and special education. (Ladbrook, 2009).

As Spies (2013) delineates, the social model of disability demands schools to recognise the fact that learners have diverse needs, and that students should be accommodated according to their needs. Spies articulates that

...schools should accommodate the learners' learning styles and learning rates. Quality education should be ensured by using an appropriate curriculum, as well as appropriate teaching strategies and resources. Necessarily organisational arrangements should be made if needed (p. 25).

Hence, the above paradigms or theories have shown a vital concept in the delivery of inclusive education. It is understood that the cultural constructions of differences that are represented in personal beliefs, attitudes and values, shape how teachers interact with students (Carrington, 1999). How prepared or ready schools are for inclusive education depends on the social environment and cultural understanding of the phenomenon. The attitude of the teachers are shaped by culture and the environment.

School Readiness for Inclusive Education

Many definitions and conceptualizations of school readiness are being used by educators. According to a manual by UNICEF (2012), school readiness is currently defined by three interlinked dimensions: a) ready children, b) ready schools, and c) ready families. The ‘ready schools’ dimension focuses on the school environment. It includes practices that: a) foster and support a smooth transition for children to primary school and beyond, and b) promote learning for all children. The document states that teachers are among the most crucial factors in building effective schools and ensuring school readiness.

Schools have a responsibility to provide a quality public education in the least restrictive environment to all individuals with various needs (Hayes et al, 2013). School readiness also has implications for teacher training, curriculum development, local capacity building and community involvement (UNESCO, 2013). Further, establishing a shared vision of preferred

conditions for the future of the students would be the first and, perhaps, primary steps for creating an inclusive school (Mthembu, 2009).

Teacher Readiness for Inclusive Education

According to Hay, Smith, and Paulsen (2001), teacher readiness implies a period of “ready-ing” a teacher for change. They say that it may be translated as the “state of readiness” of a teacher for inclusive education (i.e. has the teacher been prepared with regard to skills, and the cognitive and emotional level for the anticipated inclusive education?). Teacher readiness entails an attitude of willingness as well as having skills and knowledge in advance, and being able to go over into action without effort (Spies, 2013). Successful implementation of inclusive education involves teachers to have the necessary knowledge, skills, competencies and support to accommodate a wide range of diversity among learners in an inclusive classroom (Mthembu, 2009). Making use of available resources to support learning at the heart of the process of inclusion is also among these indicators.

Factors that Relate to School Readiness for Inclusive Education

Factors necessary for inclusive education are leadership, school climate, curriculum instructions and assessment, individual students support, teacher attitude, knowledge, and skills. The following pages present literature reviews on these factors.

Leadership. School leadership is fundamental in moving closer to a more inclusive society, and in terms of a child’s experience of school life (Ruairc, Ottesen, & Precey, 2013). According to Anwer and Sulman (2012), the school principal or the school leader has to ensure the success of an inclusive program with his or her backing. Anwer and his colleague stated that in order for students with disabilities to be successfully included in school, the leader must be receptive to new and creative special education initiatives that promote integrated regular education in classroom settings. A similar view is echoed by Spies (2013) on the importance of school leadership. He notes:

It is apparent that the leadership within the inclusive school is one of the most important factors for the success of a programme. The principal of a school has a responsibility in setting the tone of acceptance and care. If the principal does not believe in the philosophy

and principles of inclusion, he will affect not only the attitudes of the teachers, but will permeate through to the learners and to the perception of the society the school is in about inclusion. (p. 27)

Additionally, the role of school leaders is explained by Salisbury and McGregor (2005) by reiterating that schools principals serve like catalysts for the key stakeholders. They highlighted the unique role by stating that principals have to help students, staff, and parents to think and act more inclusively by guiding and supporting the course of change, drawing together the resources and people necessary to be successful. “These changes may focus on organisational resources like schedules, the use and assignment of personnel, strategies used to assign students to classes, resources available for professional development, and the focus on the type of professional development activities” (Salisbury & McGregor, 2005, p. 4). Moreover, Billingsley, Mcleskey and Crockett (2014) also argue that school principals have a critical role in making schools an inclusive community that is responsive to the diverse needs of the students. According to Billingsley et al., in inclusive schools, principals have to ensure that all members of the school community welcome and value students with disabilities, and they encourage everyone to collaborate and share their expertise so that students with disabilities are getting opportunities to achieve improved outcomes in school and post school life.

Furthermore, after an empirical study on investigation of primary school educators’ readiness for inclusive education, Mthembu (2009) elucidated that school leaders or principals have a key role to play when trying to provide inclusive practices. Mthembu argued that the principals are in a critical position to influence the change process, and he delineated that as instructional leaders or principals, they have to have clear school missions, promote an instructional climate, manage curriculum and instruction, supervise teaching and monitor student progress in order to foster inclusive education in schools. Further, according to Naicker (2008), the principal’s leadership style should be such that he actively embodies the democratic values of inclusive education and supports educators by taking cognizance of their beliefs, feelings and perceptions.

School climate. Inclusive education demands close attention to creating classroom and school communities which are warm and welcoming for all students (Sapon-Shevin, 2013). He

advocates making the school climate conducive for inclusive educational practices. A school climate conducive of inclusion has the ability to respond to the self-identified needs of teachers, parents and learners with special educational needs (Mthembu, 2009). “School climate is the holistic context of the life, vigor and quality of the social connectedness, physical elements, and supportive practices that nurture inclusion and safeness” (Coulston & Smith, 2013, p. 1).

The school climate needed for inclusive education comprises four elements: successful classroom management, effective instructional techniques, appropriate accommodative practices, and instructional flexibility (Fazal, 2012). These elements help to create “a climate of tolerance and respect, encouraging the development of democratic culture” (UNESCO 2001, p. 20). Such a supportive climate is essential in an inclusive school (Strømstad, 2003).

After examining the relationship between school-climate-related research findings on the educational policy, school improvement practice, and teacher education, Cohen, McCabe, Michelli, and Pickeral, (2009) offered an explanation on what an effective school climate entails.

A sustainable, positive school climate fosters youth development and learning necessary for a productive, contributive, and satisfying life in a democratic society. This climate includes norms, values, and expectations that support people feeling socially, emotionally, and physically safe. People are engaged and respected. Students, families, and educators work together to develop, live, and contribute to a shared school vision. Educators model and nurture an attitude that emphasizes the benefits of, and satisfaction from, learning. Each person contributes to the operations of the school and the care of the physical environment. (Cohen, et al., 2009, p. 182).

The importance of probing and modifying the classroom’s physical and social-emotional environment was pointed out by Broderick, Mehta-Parekh, and Reid (2012). They explained that flexible grouping of students demand environments that allow all students to move freely. In such an environment, materials should be reachable, charts and bulletin boards are at eye-level, and books are in cubbies rather than on high shelves. Further, besides the physical environment, they highlighted that teachers need to show a positive attitude towards disability as it greatly influences how students treat each other. They articulated that “teaching about diversity- race, class, ethnicity, ability, etc.—should be an integral part of the curriculum” (p.198).

Coulston and Smith (2013) concur with the above notion of physical and social environment. They argued that it is important for a school to ensure that inclusion happens on all levels of interaction-between students, between adults, and between students and adults. “Inclusion must be the expected practice in the very way the school functions” (Coulston & Smith, 2013, p.2). Hence, a successful inclusive school climate depends on the attitudes and actions of the principal, a supportive school community, and shared values and language of the stakeholders (Zoller, Ramanathan, & Yu (cited by Pivik, McComas, & Laflamme, 2002).

Curriculum instruction. Curriculum instruction play an integral part in providing inclusive educational practices to students. According to the “Commonwealth Guide to Implementing Article 24 of the UN Convention on the Rights of People with Disabilities” (Rieser, 2008), the national curriculum should be a flexible and innovative one and school systems at national, regional and school level must develop means of making the curriculum materials accessible to all students with special needs. Schools have to “...make sure the curriculum and how it is taught is accessible to all with a range of learning situations, styles and paces, e.g.” (p.32). In this respect, Eason and Whitbread (2006) reiterate that the types of quality instructional strategies such as peer tutoring, cooperative learning activities and differentiated instructions that occur in the classroom have been shown to be beneficial to all learners.

Fisher, Frey, and Thousand (2003) emphasized the importance of interrelating curriculum to students both with and without disabilities. They make the argument that schools need special educators who can interrelate curriculum and communicate with others by providing instruction and assessment to all students and facilitating collaborative problem solving when difficulties arise. “The role of the inclusive educator is to create accommodations and modifications that maintain the integrity of the lesson while addressing the unique learning needs of the student” (Fisher, Frey, & Thousand, 2003, p. 46). Villa, Thousand, Nevin, and Liston (2005) offered a lucid, value-based explanation of an example to illustrate a curricular modification.

To illustrate, a curricular modification that goes beyond mastery of the specific academic content in science would be when a student with a significant disability is not expected to demonstrate understanding of the periodic table of the elements, but instead has as goals the proper handling of materials and following of three-step directions from a peer

partner in a lab situation. Clearly, the more interactive, differentiated, and hands-on the instructional activity, is the less likely it will be that any major modifications will be necessary. (p. 38).

In this respect, Naseer (2012) argued that “curriculum becomes an obstacle to inclusion when it is extensive, demanding or centrally designed and rigid, leaving little flexibility for teachers to adapt, and its content is distant to the children’s real life” (p. 40). Foreman (as cited in Naseer, 2012) shares a parallel view on flexibility and modification. He views modifications to the curriculum as a necessity in order to allow and increase participation by all learners.

According to Koga and Hall (2004) adaptations of curriculum in integrated mainstream classrooms often take place when teachers differentiate instruction. Examples of those adaptations include “providing differentiated activities, homework and evaluations, and using adapted or different instructional materials and activities for individual students” (p. 6). Koga and Hall argue that adaptation of curriculum should be practised when teachers determine that a particular student has the capability to learn the same content knowledge as other students if a slight alteration is made to modify conceptual difficulty. However, Beech (2010) argues that teachers should only use task adaptations in the initial stages of instruction and then leave them slowly so that the student has the opportunity to acquire the concept or skill at the required level of proficiency.

Broderick, Mehta-Parekh, and Reid (2012) claim that people often consider modification of the typical content and pace—or other aspects of the instructional process as an unfair burden on the classroom teacher. They delineated that modification and adaptation of curriculum may result in isolation and stigmatization of disabled students. However, in an inclusive classroom which offers an environment in which students could “fit in” and become compassionate about one another’s needs, peer-mediated and differentiated instruction can be seen as salient instructional practices (Villa et al., 2005).

Assessment. Inclusion is about the presence, participation and achievement of all students, and the ‘achievement’ is about the outcomes of learning across the curriculum (Ainscow, 2004). Students with disabilities currently drop out at higher rates than non-disabled students, because of the high stakes on test performance which serve to encourage more students

with disabilities to drop out instead of 'motivating' them to achieve' (Agran, Alper, & Wehmeyer, 2002).

With regard to performance assessment, according to Allbritten, Mainzer, and Ziegler (2004), students with disabilities to be tested at the grade level of their age mates would be the ideal way. However, these authors note that in the real world, such testing is not necessarily appropriate as grade-level testing does not accurately reflect student progress and achievement of all students. Their recommendation was to use pre-test to post-test improvement method to measure the learning progress of students with disabilities. They articulated that these methods are more appropriate for both general curriculum students and students with disabilities than are single-standard tests.

Beech (2010) explains that the length or complexity of the practice or test items can be minimized by using task adaptations as it makes assignments or test items more accessible. Beech (2010, p. 16) gave two examples of practical task adaptation to be used when assessing student performance. These two examples are:

- 1 - Making assignments or assessments less complex, such as by crossing out one of the options on a multiple-choice question so that a student only has to pick from three options instead of four.
- 2 - Providing hints or clues to correct responses on assignments and tests, such as the page number in the book where the answer to the question can be found.

Further, according to Fisher et al., (2003) when assessing students' performances, the special educator needs to accomplish three main responsibilities. They are: grading students' performance, developing appropriate exhibitions and demonstrations, and administering educational tests. The assessment strategies used by educators need to suit the levels and abilities of the learners. If these strategies are not adapted, learners with special needs are likely to feel demotivated (Naicker, 2008). Thus, to assess students' achievement, teachers must be given the flexibility in assessment, examination and evaluation (UNESCO, 2003) to promote inclusive education.

In addition to the above, Reiser (2008) argues that the assessment of students' learning should be continuous, flexible and formative. The primary goal of formative assessment is

“providing feedback to students and teachers about the targets for learning, where students are in relation to those targets, and what can be done to fill in the gaps” (Andrade, 2010, p. 1).

Individual student support. Individual student support is also essential for successful implementation of inclusive educational practices (Pasha, 2012). It can be understood that by definition, children with special needs require support. Students with special needs benefit more if the teaching is directed to their particular needs (UNESCO, 2001).

Klein (2013) states that strengthening general education to support all students requires the development of a unified "whole school" approach. In such a unified system, general education interventions and supports, as well as special education adaptations are provided in the general education setting (Klein, 2013). The school leaders should encourage positive attitudes toward inclusion by encouraging the development of support groups within the school for other students or parents (Pivik, McComas, & Laflamme, 2002). Providing individual student support includes additional teaching and care supports, visiting teacher service, early intervention, assistive technology, special transport scheme, specialist equipment, school building adaptations, enhanced levels of capitation grants, and extended school year schemes (NCSE, 2013). According to Giangreco, Broer, and Edelman (1999), “individuals such as guidance counsellors, classroom teachers, school administrators, the school nurse, bus drivers, cafeteria workers, building maintenance staff, parent volunteers and other students are all examples of people who can provide natural support in a school” (p. 283).

Furthermore, Broderick et al., (2012) argued that teachers, along with those who support them in the classroom need to collaborate with other stakeholders - students, parents, community members, school leaders - to ensure that all students are truly integrated, valued, and become effective members of the classroom community. Broderick and his team articulated that collaboration inside the general education classroom can become an important medium for differentiation.

Hunt, Soto, Mailer and Doering (2003) have carried out an empirical study to investigate the effectiveness of collaborative teaming process on the academic and social participation of individual students. In this study, they used a strategy of ‘individualized unified plans of support’ whereby an educational team that included general and special education personnel and the

students' parents were used to support the students with special needs in the classroom. Their findings have shown that consistent implementation of the plans of support by team members in the classroom was associated with increase in students' academic skills, engagement in classroom activities, interaction with peers, and student-initiated interactions.

Additionally, teachers' understanding of the students' Individual Educational Plan (IEP), and a comprehension of the curriculum and its standards are among essential knowledge which is necessary for successful inclusive education (Fisher et al., 2003). According to Eason and Whitbread (2006) "the IEP is an individualized document, written for each student, memorializing the educational program that is designed to meet each child's unique needs" (p.25). These educators advocate that all students who receive special education services must have an IEP. Moreover, Eason and Whitbread reiterate that the IEP must be developed during a meeting held with the full participation of the parents and the student, when he or she is old enough to contribute. These continuous practices such as interdisciplinary teams developing IEPs promote success by helping students with disabilities to meet both academic and behavioural expectations in their schools (Fisher et al., 2003). Further, in an inclusive classroom the basis for the lesson planning is planning for the whole class, and setting the IEP that complement the lesson plan to ensure that the learning outcomes are achieved for all the students (UNESCO, 2001).

Teachers' attitude. The main responsibility for the education of the Special Educational Needs (SEN) students in the inclusion format puts the responsibilities on the regular education teacher. "Statements of rights and government policies may set aims but it is individual teachers who can make inclusive education a success or a failure" , notes UNESCO (2001, p. 33). As regular teachers are the most important service providers in teaching students with special needs in the inclusive classroom, their attitude towards inclusion is a contributing factor to its success or failure (Kern, 2006).

Barco (2007) concluded that teacher attitude plays a vital role in the success of any program in education, especially in the practice of inclusion. That is, teachers' attitudes and beliefs toward inclusive practices impact school learning environments and equal learning opportunities for students with various needs. Moreover, Khan (2012) emphasized the

importance of teacher attitude, and in fact, she argued that it as a major factor in the worldwide movement towards inclusive education. Mthembu (2009) reiterated that the success of inclusionary programs depends very much on the attitudes of the educators who are involved in the program. Mthembu concluded that "...issues of access and integration are strongly related to educators attitudes towards inclusion" (p.21).

After an examination of the elements that may influence teacher attitudes in a positive manner toward including students with special needs, Walker (2012) identified that the school principal's support in the form of *emotional*, *instrumental*, and *informational* support, and professional development had a positive impact on teachers' attitudes toward including students with special needs. From these findings, he made the following four recommendations.

1. Principals should examine the importance of their support of teachers attempting to include students with disabilities and in what aspects that support should take place.
2. Principals and teachers should collaborate to determine teachers' areas of need when planning professional development activities as teachers need professional development activities that directly help with inclusion.
3. The school needs to increase collaboration time between regular and special education teachers who deal with SEN students.
4. Special education teachers need to be allowed time and access to co-teach and team teach with their regular education teacher counterparts (Walker, 2012).

Kern (2006) states that, "teachers who are ill-prepared or uncomfortable with the concept of inclusion may pass that discontent onto the students, which in turn can undermine the confidence and success of those students" (p. 3). However, on the other hand, Kern affirms that teachers who support and have faith in the concept of inclusion can provide special education students with confidence and a comfortable learning environment. Moreover, teachers with a positive approach towards meeting a variety of learners is an encouraging indicator for teachers' readiness towards inclusive education (Pasha, 2012). Hence, all these literature indicate the impact of teachers' attitude needed for successful provision of inclusive education.

Numerous studies on teachers' attitudes toward inclusion echo the need for training and resources for teachers (Hemmings & Woodcock (2011), Khan (2011), Naseer (2012), Rahamn &

Dean (2012)). Studies indicate that general education teachers receive minimal special education training as a component of their pre-service training (Kern (2006). Hence, in order to improve their skills in working with students with disabilities, teachers must have the opportunity to get themselves intensive training programs (Anwer & Sulman, 2012).

According to UNESCO (2001)'s guide for teachers, the biggest obstacle to inclusion is usually the negative attitudes of concerned stakeholders. As the guide describes, normal children may not be comfortable with other children who look and behave in a different way. Parents may also be concerned about 'lowering the standards' if children with special needs are included in regular classrooms. Hence, teachers' attitude and approach are crucial in developing positive attitudes among pupils, parents and, of course, other teachers (UNESCO, 2001).

After an empirical investigation done on the developments of inclusive education, Singal (2008) emphasised the importance of teachers exhibiting proper attitude towards inclusive education. Singal argued,

There is not only a need to provide stakeholders with the knowledge and skills for developing inclusive teaching practices, but also a need to challenge existing values, beliefs and attitudes to ensure the full participation of all children in the curriculum and culture of their school setting. (p. 1).

Concurring with the above, Naicker (2008) argues that teachers who are well informed about special education are more prepared to implement inclusive education. Naicker reiterates that teachers' attitude is proportionately related to their knowledge in the field of special needs education.

Knowledge and skills. To become an effective teacher in an inclusive classroom, teacher's knowledge and skills play a major role (Geldenuys & Pieterse, 2005). Smith and Tyler (2011) also believe that merely placing students with disabilities in inclusive school settings is not enough for them to achieve their educational goals without knowledgeable and skillful teachers. It is clear from past research that teachers' personal knowledge and skills are important as they play a crucial role in instructional delivery (Kuyini & Mangope, 2011).

In an investigation on primary school educators' readiness for inclusive education, Mthembu (2009) claims that successful implementation of inclusive education requires educators

to have the necessary knowledge, skills, and competencies to accommodate a wide range of diversity among learners in an inclusive classroom. It was apparent that educators need to be trained with the necessary skills and knowledge in order to make inclusive practices successful. These skills and competencies refer to “the abilities, knowledge, expertise or technique a person has” (Mthembu, 2009, p. 13). If teachers’ competency level is increased, the inclusive education programme could be successfully implemented (Ali, Mustapha, & Jelas, 2006). Moreover, according to Kapinga (2014), the training of teachers for inclusive education is important as “the success of inclusive education rests on quality teacher preparation gearing towards inclusive education” (p. 52). Kapinga argues that how teachers are prepared is fundamentally linked to the quality of education provided in the schools.

Upgrading the skills and knowledge of teachers and principals will require not only addressing outdated content but also implementing innovative enhancements to the way teacher education is delivered (Smith & Tyler, 2011). Fundamental knowledge and skills needed for teachers of SEN students include understanding needs and abilities of children with special needs and pedagogic skills such as instructional accommodation and activity differentiation (Nguyet & Ha, 2010). Teachers are required to have knowledge regarding the methods for development and implementation of individualized education programs and possess the skills for collaborating with other stakeholders (Sucuoğlu, Bakkaloğlu, Karasu, Demir, & Akalın, 2013). Moreover, if teachers lack the knowledge and experience regarding the exceptional learners in their mainstream classes, it affects their attitudes too (Naicker, 2008).

The Context of the Study: Inclusive Education in Maldives

Similar to the experience of developing countries, education of students with SEN in mainstream classes is a new area in the Maldives. Until 1985, students with disabilities did not have access to education within the formal education system (Human Rights Commission of the Maldives, 2010). Education for students with disabilities began with the introduction of a special class for a group of students with hearing impairment, in one of the primary schools in the capital. About two decades later, in 2006, the government started establishing SEN units within regular schools, with a vision to set up at least one school in each atoll that enrolls students with

SEN (Naseer, 2012). Initially, this was started in the form of SEN classes (i.e, special classes) and it was started in four ordinary schools around the country.

According to a news article on the website of Human Rights Commission of the Maldives (2012), at present there are 10 SEN classes in the Maldives; two schools in Male' and eight schools in the atolls. The article says that statistics of 2009 show that, there are 2,250 children with disabilities registered in the Maldives and of these children, only 230 have access to education. Owing to this lack of accessibility, a Disability Act was passed in the parliament in 2009 and the final and amended version of the bill has been ratified by the President on 25th October 2012. According to this Act (People's Majlis, 2012), all the rights of persons with disabilities are protected, and the government has to provide equal access to education for children with disabilities regardless of their individual differences.

These steps indicate that as with other developing countries, Maldives is moving towards inclusion. It is, however, a new phenomenon in the Maldives and recently, some steps have been taken to enhance inclusive education in the country (Ministry of Education, 2008). According to Ministry of Education (2008) children with special needs have been brought to the forefront through the formulation of a national policy on disability - 'Inclusive Education Policy of Maldives'.

The Inclusion Policy (Ministry of Education, 2013) was ratified by the Minister of Education in January 2013 and it was sent immediately to schools for the implementation. According to this policy, students with disabilities such as physical, mental, psychological and various learning disabilities must get equal access to formal education. As evident from the policy document, the following are the three main principles on which the policy is based on.

- To provide equal learning opportunities to all children within the formal education system as every child has the right to learn.
- To establish an adaptive system in which the thoughts, ideas and feelings of the students are referred to, and which would include all children as far as their capabilities allow them, to be included in all education related matters.
- To bring about all the necessary modifications to teaching methods when achieving national curriculum objectives, and establish an inclusive education system.

The inclusive education policy is the first of its type for students with special needs in Maldives, and it aims to establish a mechanism to ensure that all such students are provided with educational opportunities. According to the policy, such a mechanism must include developing physical facilities of schools, developing and training teachers, and establishing an early identification and intervention programme for students who are diagnosed with various disabilities in early childhood.

As addressing the educational needs of children with special needs in mainstream classes is a new area in Maldives, the researcher was able to find only a few of published research on the topic. Among these few studies, one was by Shiuna and Sodiq (2013) on improving the education system in the Maldives. This report was produced following a nation-wide discussion forum held in June 2012. According to their findings, there are no mechanisms established within the education sector to identify or address the needs of students with disabilities in terms of curriculum and resources. The findings also show that the teachers are often unaware or untrained to deal with disability, and there is much to be done in the field of integration or inclusion for students with special needs into the wider learning environment.

Naseer (2012) gave similar verdicts about inclusive and special education in Maldives. According to her case study of one major school which has a special SEN unit, in spite of recognized efforts towards inclusion, a range of exclusionary practices were still observed in schools. She reiterates that these practices include:

lack of collaboration between the SEN (Special Educational Needs) and the general staff, limited knowledge, awareness and positive understanding about inclusion, scarcity of resources and support services. Factors such as large classes, undifferentiated curriculum, and rigid time tables also negatively affected the developmental process. (p. 4).

These findings indicate the challenges of developing inclusive education in Maldives.

Challenges for Effective Inclusive Education

Implementing inclusive practices is not without challenges. Literature notes that teachers all over the world experience difficulties on different levels when trying to implement inclusive education (Spies, 2013). Yet, “when teachers take on the challenge of making their classrooms

and schools more inclusive they become more skillful and better practitioners” (UNESCO, 2001, p. 34). According to Khan (2011), many studies found the following areas as barriers for effective inclusive education especially in the developing countries.

- a lack of relevant research information
- inadequate support services
- lack of appropriate facilities and materials and
- inadequate training programs and ineffective policies and legislation (p.22).

Thus, educators need support to be equipped to cope with these challenges associated with inclusive education (Naicker, 2008). The challenges discussed below relate to leadership, school climate, curriculum, and teachers’ ability.

The most common barriers for inclusive practices for students with physical disabilities were identified in a study done by Pivik, McComas, and Laflamme (2002). The barriers at the school level were divided into four categories: (a) the physical environment (e.g., narrow doorways, ramps), (b) intentional attitudinal barriers (e.g., isolation, bullying), (c) unintentional attitudinal barriers (e.g., lack of knowledge, understanding, or awareness), and (d) physical limitations (e.g., difficulty with manual dexterity). Among these, attitudinal barriers were found by the students as the most deleterious of their school experiences.

In addition to the above, Rea, McLaughlin, & Walther-Thomas, (2002) also articulated four factors that are identified as barriers to student success. They are: lower expectations, uninspiring and restricted curricula focused on rote or irrelevant tasks, incoherence from general education curricula, and negative student attitudes resulting from school failure and stigmatizing segregation. Further, Pasha’s (2012) descriptive study on school readiness reveals a list of challenges that impede successful implementation of inclusive education. These challenges include:

lack of commitment towards inclusive education in schools’ mission statement, lack of professional development opportunities for teachers and administration, lack of inclusion supportive admission policy, lack of school administration’s knowledge about current researches, lack of collaborative planning practices, lack of encouraging family-schools

& community partnerships, unfriendly school infrastructure for disabled pupils, non-availability of written information about teachers' roles, responsibilities and required skills to teach and support all students including disabled pupils. (p.115).

Nonetheless, schools can do a lot in overcoming the above mentioned challenges. According to Barnes (2011), one way is providing students, teachers and staff members a “sense of belonging”. Barnes argues that in such an environment, it is easier to deal with daily challenges because there is a sense of unity and support.

A review by Travers et al., (2010) noted practices and policies that help to mitigate the challenges and barriers to inclusion. They describes these practices at a number of levels: the school level, the teacher/class level and the child/family/community level. Under all these levels, they listed a total number of 34 specific recommendations that would help to overcome the challenges. Most of the recommendations require a change in attitude, practice and policy at the level of the school which can be incorporated within existing structures. Furthermore, they reiterated that “addressing the challenges and barriers to inclusion is a continuous process that involves the re-culturing of the education system so the values and principles of inclusion are embedded and not just added on” (Travers, et al., 2010, p. 286).

Summary

Inclusion is not just physically placing a disabled student into a regular classroom. It is unfair when it is done to reduce special education services. All children cannot be expected to learn in a similar way and regular education teachers cannot be expected to teach children with special needs without the needed support (Keenan, cited by Kern, 2006). Similarly, educators must be prepared to change their beliefs, practices and expectations and be prepared to align themselves with inclusive education positively (Naicker, 2008). Educators have to focus on important factors that help to promote inclusive culture and practices in schools.

This chapter reviewed literature related to inclusive education. The review has explicated some factors needed for effective inclusive education. These factors include leadership, school climate, curriculum, student support, teacher attitude, and knowledge and skills. According to the literature, all these factors play a significant role in providing effective inclusive practices in schools.

The chapter also explored the development of inclusive education in Maldives. This includes a focus on some research done regarding inclusive education in the context of Maldives. Finally, the chapter examined some of the plausible challenges that might impede successful implementation of inclusive education.

The next chapter is on the research design and research methodology.

Chapter 3: Methodology

Introduction

The previous chapter delineated some theoretical aspects of teacher and school readiness for inclusive education. The aim of the researcher was to establish further understanding of the topic through a study of literature associated with inclusive education.

In this chapter, the research methodology used to investigate teachers and schools readiness for inclusive education will be described. First, it describes the method and design used in the study, followed by important details of the preparations for the research. Next, the procedures of the data collection is explained followed by an explanation of the procedures of data analysis. The chapter ends with important aspects related to validity and reliability together with a summary of the chapter.

Method and Design

The study was centered on a mixed paradigm with a positivist and relativist approach to research. It tried to generate an overview of the result from a larger sample while getting an in-depth understanding through a detailed study of specific cases. Hence, it employs a mixture of both quantitative and qualitative approaches using methods of survey and a focus group interviews. Mixed methods research is the type of research in which the researcher combines elements of qualitative and quantitative approaches for the purpose of breadth and depth of understanding and validation (Johnson et al. cited by Angell & Townsend, (2010). According to Caracelli and Greene (2010), mixed-method designs include at least one quantitative method (designed to collect numbers) and one qualitative method (designed to collect words) where neither type of method is inherently linked to a particular inquiry paradigm or philosophy.

In this study, the quantitative data collection from the survey will be followed with focus group interviews. According to Cameron (2009), this type of progressive designs are called explanatory sequential design. Cameron explains that the explanatory sequential design has two main phases (e.g. using the quantitative method first and then the qualitative method). The outcomes of the first phase will allow additional areas or questions for the second phase. In harmony to this notion, the results of the survey of this study provided areas to focus more

during the second phase of the data collection (focus group interviews). The latter provided more complementary inferences, as delineated by Cameron (2009).

In addition to the above, Greene et al. (cited by Caracelli & Greene, 2010) identified five purposes for mixed-method evaluation. They are: triangulation, complementarity, development, initiation, and expansion. Hence, a mixed method of qualitative and quantitative approaches could be considered as the most appropriate method for this study, as the model would obtain an in-depth insight into the field with a rich description. The data collected is easy to verify and specify (Poetschke, 2003). Further, the researcher also has the assumption that conducting a survey method with focus group interviews on the topic would enhance the validity of the findings as data could be triangulated.

Preparation for the Research

Permission. Before starting the data collection process, permission to conduct the study was obtained from the Ministry of Education (MOE). Upon the researcher's request letter (Appendix A), permission was received from MOE (Appendix H) without much delay. Once permission of MOE was granted, a letter (Appendix B) to all the school heads of Hithadhoo, Addu were delivered for their permission before approaching the teachers. Similarly, teachers' consent was obtained through a consent form (Appendix D) before their participation in the study.

Selection of the participants. The study was conducted in Hithadhoo, Addu. The target population was defined with regard to the following aspects.

- Geographical area: Hithadhoo, Addu
- Type of schools: All government-run primary and secondary schools
- Population: All teachers
- Age: 18 years and above
- Gender: Male and female
- Years of teaching: 1 year and more

In accordance with the above characteristics, schools selected for the study include one primary school with classes from grades 1 to 7, two primary-secondary schools with classes from

grades 1 to 10; and a high school with grades 11 and 12. The following table presents summary information about these 4 schools. Individual school's names are protected to save their identity.

Table 1

Information about schools' population

School	No. of students	No. of teachers	No. of SEN students	No. of SEN teachers
School A	1084	112	30	8
School B	921	97	2	2
School C	417	51	0	0
School D	150	13	1	0
Total	2572	273	33	10

The student population of all the four schools was 2572 and they had a total of 273 teachers. In order to produce statistically dependable results, of these 273 teachers, the study used a sample size of 160 teachers for the survey. This sample size was determined using an existing survey sample calculator available on <http://www.surveysystem.com/sscalc.htm>. These 160 teachers were selected proportionately based on the total teachers in each school, and the sample has a confidence level of 95% with a margin error of 5%. The following table shows how these 160 teachers were distributed among the four schools.

Table 2

Total number of teachers selected from each school for the study

<i>School</i>	<i>No. of teachers selected from each school</i>
School A	66
School B	57
School C	30
School D	7
<i>Total</i>	<i>160</i>

To select teachers for the survey, the researcher obtained a list of teachers from the four schools, and then names of teachers were selected randomly. For the survey, the number of teachers selected from each school was in proportion to the total number of teachers serving in that particular school.

For the focus group interview, a total number of 10 teachers were selected using purposive sampling method. The main reason for using purposive sampling method was to maximize the diversity of participants. It is evident that purposive sampling is more representative than a random sample. Participants selected include four experienced trained teachers who had been working in the four respective schools for the last five years, four leading teachers who worked closely with the mainstream teachers, and two SEN teachers who worked exclusively with SEN students. The diversity of these participants reflected the breadth of information regarding the situation in their schools. According to Tongco (2007), purposive sampling technique is most effective when one needs to study a certain cultural domain with knowledgeable experts within the study. Tongco states that “the inherent bias of the method contributes to its efficiency, and the method stays robust even when tested against random probability sampling” (p. 147).

The Research Instruments

For the purpose of empirical investigation of the variables of the study, two specific types of instruments were used: one for the survey and one for the focus group interviews. According

to Mathers, Fox and Hunn (2007), questionnaires can produce valid and meaningful results if the questions are clear and precise and if they are asked consistently across all respondents. Mathers, and colleagues argue that questionnaires can be either devised by the researcher or they can be ready-made. The instrument used for the survey of this study was developed with a set of questions adapted from “Quality Indicators for Effective Inclusive Education Guidebook” by New Jersey Coalition for Inclusive Education (NJCIE, 2010). As mentioned in the Guidebook, the quality indicators used in the manual have been identified through an extensive review of research literature and examination of similar documents developed by eight US states that have successfully used the quality indicators to advance inclusive education practices in their schools. The Guidebook also states that those indicators were acquired from administrators and teachers across the state and piloted in schools in five New Jersey districts.

The aforementioned indicators of New Jersey Coalition for Inclusive Education have been used in some other studies too. Examples of such studies are ‘Participation in Inclusive Education – A Framework for Developing Indicators’ composed by European Agency for Development in Special Needs Education (2011), and ‘Readiness of Urban Primary Schools for Inclusive Education in Pakistan’ by Pasha (2012). In both these studies, the indicators were modified and adapted to the local context of the countries.

The survey questionnaire used in this study had questions related to leadership, school climate, curriculum instruction and assessment, individual student support, teacher attitude, and teachers’ knowledge and skills (Appendix E). Survey questions in the categories leadership, school climate, curriculum instruction and assessment, and individual student support were adapted from the above mentioned guidebook by NJCIE (2010). The researcher has added ‘teacher attitude’ and ‘knowledge and skills’ as additional categories. As reiterated by Walker (2012), teacher’s attitudes toward including students with special needs is an important variable in creating a successful inclusive classroom. Likewise, teachers’ knowledge and skills were also highlighted in many of the research investigations (Ali, Mustapha, & Jelas, 2006; Kuyini & Mangope, 2011; Mthembu, 2009; Nguyet & Ha, 2010; & Sucuoğlu, et al., 2013).

Questions used for teacher attitude category were taken from the “Scale of Teachers’ Attitudes Toward Inclusive Classrooms” (STATIC) set by Cochran (1998). Cochran’s STATIC has 20 items, and of these 20 items, 10 items were used in this study.

In addition to the survey instrument, a self-made semi-structured interview questionnaire for focus group interviews was used in this study. The focus group interview questionnaire has 10 predetermined open questions (Appendix F) which helped to obtain rich data from the participants.

Administering the Survey Questionnaire

When administering the survey questionnaire, the following procedure was followed.

- Before starting the study, the researcher obtained the approval of MOE.
- Once the approval of MOE was received, the researcher informed schools in writing, and introduced them to the research and the purpose of the study.
- After getting the consent of the school heads, the researcher collected a full list of the school teachers, and then random samples were selected for the survey.
- According to a set schedule, the researcher met the participants and explained them about the purpose of the research. When participants were ready to complete the questionnaire, the researcher distributed the instrument to the participants and gave instructions with an explanation on the ratings of the statements.
- Participants were given a duration of one week to complete the questionnaires, and they returned them to the researcher within the due time-frame. Approximately 96% of the questionnaires were returned for analysis.

Administering the Focus Group Interview

When conducting the focus group discussion, first the researcher set a date, time and location for the meeting. During the meeting, the researcher demonstrated the role of a moderator and she started a disclosure of engagement and asked exploratory questions that provided data for the study. The purpose of the interview was to generate an open discussion of opinions and perceptions regarding the teacher and school readiness on inclusive education. The main questions asked in the interview were derived from the findings of the survey which was held

prior to the focus group discussion. These guiding questions were then followed with some probing questions.

The duration of the meeting was about 45 minutes. During the meeting, group members were agreed to the recording of the discussion. The following procedure were used during the focus group interviews.

- **Introduction:** Researcher introduced herself to the respondents. After that she explained the purpose of the research and why their opinion was important for the study. Researcher has assured the interviewees about their anonymity and confidentiality of the information to be gathered.
- **Ground Rules:** Participants were told about the anticipated length and some ground rules of the interview and information about the types of reporting that would result from the data.
- **Questions and Probes:** Researcher had prioritised the interview questions beforehand and asked the 'must ask questions' first followed with secondary questions. These major questions were started to lead on to more focused questions later.
- **Thanking Participants:** When the focus group interview was completed, researcher thanked participants and expressed appreciation for contributing to the study.

Analysis of Data

The study consists of both quantitative and qualitative analysis using descriptive statistics. Descriptive research was employed with the aim of identifying teacher and school readiness for inclusive education from the perspective of a large number of participants. Descriptive research is one of the research methods used to investigate a person or persons scientifically in the educational situation (Maxwell, 2008). When descriptive statistics is used in research, the focus is on the figures to explain the situation as it is, without the intervention of the researcher (Naicker, 2008). Further, descriptive statistics help us to analyse a collection of data in a widely understood way (Jaggi, 2011).

In this study, descriptive statistics is used to analyse data collected from the survey questionnaires and the transcriptions of the focus group interviews. The survey questionnaire used in the study was designed in a way that all the statements were provided for respondents to

express their opinions, in terms of levels of disagreement or agreement. A five point Likert rating scale was used: 1- Strongly Disagree (SD), 2- Disagree (D), 3-Neither Agree nor Disagree (NAND), 4-Agree (A), 5-Strongly Agree (SA). Likert scales are widely used in various domains of behavioral sciences, and when responding to a Likert scale, participants specify their level of agreement to statements with various levels of response (Winter & Dodou, 2012).

After the data collecting process, all information were retained in a format which allowed them for analysis and interpretation. Data obtained from the questions of the survey instrument was analyzed based on the frequency distribution of responses to each question. Data from these survey forms were transferred to the Statistical Programme for Social Science (SPSS) for analysis. For each question the researcher has determined how many participants responded to each of SD, D, NAND, A and SA. After that, the total score for each question was determined, and that indicated the collective tendency of participants' perspective on the issue addressed in the particular question. The survey questionnaire which comprises 43 specific variables serve among the primary measures for school and teacher readiness for inclusive education. The results of these questions were presented in tabular forms. Overall score for individual categories were presented in a chart.

The data of the focus group interviews were analyzed qualitatively. The method of content analysis were used to analyze the transcriptions of data from the focus group interviews. Content analysis was done through coding and categorizing, considering sentences as units, since "the sentence as a unit is the best choice, as it provides more contextual material" (Poetschke, 2003, p. 13). The methods of coding and categorizing generated themes and concepts. Once themes and concepts of sentences were derived, narrow categories were assigned to different broader categories to get a general overview. Later, they were interpreted in the light of literature findings. Some of the views expressed by participants were summarized and quoted in paragraphs for comparison with others.

Validity and Reliability

Validity and reliability are the two criteria most commonly used to determine whether or not an instrument is usable (Kembera & Leung, 2008). Validity is established if the instrument provides a measure of what it intends to measure (Kembera & Leung, 2008) and how truthful the

research results are (Golafshani, 2003). Reliability is the degree to which a measurement procedure produces similar outcomes when it is repeated (Zhu & Hu, 2010). Golafshani (2003) argues that “although reliability and validity are treated separately in quantitative studies, these terms are not viewed separately in qualitative research. Instead, terminology that comprises both, such as credibility, transferability, and trustworthiness is used” (p. 600).

The study was carried out to ensure a high degree of validity and reliability. The research method, samples, the analysis, and the instruments used in the study had been validated earlier. NJCIE survey indicators used in this study have content validity as it was developed by group of experts, and it has also been used in several other research. Examples of such studies are ‘Participation in Inclusive Education – A Framework for Developing Indicators’ composed by European Agency for Development in Special Needs Education (2011), and ‘Readiness of Urban Primary Schools for Inclusive Education in Pakistan’ by Pasha (2012). Use of this instrument in research published in refereed journals is indicative of the strength of the instrument.

Similarly, Cochran (1998) explained that statistical calculations have been undertaken to determine validity and reliability of the STATIC survey instrument used to measure the attitude of teachers. Cochran (1998, p. 8) states;

Reliability studies on the STATIC consistently indicate a Cronbach alpha reliability coefficient of .89 held constant for the total group as well as for individual groups of regular and special education teachers, and elementary and secondary teachers. Item-to-total correlations range from .26 to .70 with a mean of .51, standard deviation of .11, and a standard error of measurement of ± 0.04 .

Further, the study employs two different methods of data collection, and hence it has a high degree of triangulation. “Triangulation is typically a strategy (test) for improving the validity and reliability of research or evaluation of findings” (Golafshani, 2003, p.603). Moreover, to ensure statistical validity, 95% confidence level with a margin error of 5% was used for the survey sample sizes. Sample size of 95% would provide a precise and an accurate interval in which the true population mean lies (Johnsen & Christensen, n.d)

Limitations of the Investigation

The investigation of this study was constrained by some factors that might affect the reliability and validity. The following are some examples of such factors.

- There is a possibility that some of the participants might not reveal the truth about their views regarding the status of inclusive practices observed in their schools. They might not be answering the questions truthfully as for having some inhibition for a possible identification, even though anonymity was assured.
- Although teachers were asked to fill in the survey confidently, there is chance that teachers could have discussed the questionnaire with others and arrived a common response.

Summary

This chapter presented information about the research design used in the study. Specific details include explanations about the method and design, preparation for the research, the research instruments, administering the survey questionnaire, administering the focus group discussion, and analysis of data. Further explanation about the validity, reliability and limitations of the investigation is also given in this chapter.

In the following chapter, the data obtained from the completed questionnaires of the survey and the focus group interviews will be presented and analysed.

Chapter 4: Data Analysis

Introduction

As discussed in Chapter 1, the purpose of the study is to determine teachers' perceptions about their individual and institutional readiness for inclusive education. The readiness is evaluated in terms of six main areas pertaining to teacher and school readiness. These six areas are; leadership, school climate, curriculum instruction and assessment, individual student support, teacher attitude, and knowledge and skills.

Data collected from the completed survey questionnaires and the transcriptions is analyzed and reported in this chapter using descriptive and interpretive methods. The chapter presents findings of the results in two main sections. The first section presents analysis of quantitative data from the survey questionnaires. The second section presents analysis of the qualitative data obtained from focus group interviews. The interview answers were categorized using codes and themes. The main themes derived from the interviews were linked to the main factors related to teacher and school readiness, as outlined in the conceptual framework of the study. Furthermore, the major challenges that teachers encounter in providing inclusive practices that emerged from qualitative data are also presented in the chapter. The chapter ends with a brief summary of the analysis.

Findings of the survey questionnaires

This section presents results of the quantitative data collected from the survey questionnaires. The section comprises two main parts. They are (1) description of the demographics and (2) statistical analysis of the Likert Scale.

The descriptive data collected for the study included statistical data derived from the survey forms ($n = 153$). Data from these survey forms were entered to the Statistical Programme for Social Sciences (SPSS) for analysis. The survey questionnaire which comprises specific 43 variables serve among the primary measures for school and teacher readiness for inclusive education.

Data from the survey forms were entered in two parts. Part 1 depicts all the demographic information provided by the participants. Part 2 showed the Likert rating scale responses

received from the survey sample. Data obtained from these questions were analyzed based on the frequency of responses to each question. Subsequently, a score of 1 to 5: 1 for Strongly Disagree and 5 for Strongly Agree is assigned to each variable. After that, the overall score for each question was determined, and that indicated the collective tendency of participants' perspective on the issue addressed in the particular category.

Survey forms revealed that some of the participants had not completed all parts of the questionnaire, and thus, the information presented in this section is based on the number of subjects who had completed the respective items of each category.

Demographics. The study was conducted in Hithadhoo, Addu City. The target population comprised all the primary and secondary teachers of the island. During the course of the data collection, there were a total number of 273 teachers in the four selected schools of the island. Of these 273 teachers, 160 survey questionnaires were given to randomly selected teachers, and 153 of the questionnaires were returned which constituted 96% return rate. The following are some of the demographic characteristics of the participants.

Age of the respondents.

Table 3

Frequency distribution according to the age of the respondents

	Age Categories	Frequency	Percent	Valid percent	Cumulative Percent
Valid	20-29	62	40.3	40.5	40.5
	30-39	68	44.2	44.4	85.0
	40-49	18	11.7	11.8	96.7
	50 and above	5	3.2	3.3	100.0
	Total	153	99.4	100.0	
Total	153	100.0			

Table 3 shows age range of the participants. Age categories 20 to 29, and 30 to 39 comprised majority of the respondents. In fact, the age group 30 to 39 years' category showed

the highest with a percentage of 44.2% in overall. Further, there were only 5 teachers who were in the range of 50 and above years.

Years of teaching experiences.

Table 4

Frequency distribution according to the total number of years of teaching experience

	Years of Experience	Frequency	Percent	Valid percent	Cumulative Percent
Valid	5 years and below	62	40.3	41.6	41.6
	6 - 10 years	46	29.9	30.9	72.5
	11 - 20 years	41	26.6	27.5	100.0
	Total	149	96.8	100.0	
Missing		4	3.2		
Total	153	100.0			

Table 4 shows the total number of years that respondents have been working as teachers in the profession. Forty three percent of teachers have less than 5 years of experience in the field. About 30% of teachers have teaching experiences of 6 to 10 years, and it can be considered as remarkably high.

Qualifications of the teachers

Table 5

Frequency distribution according to the qualification level of the teachers

	Qualifications	Frequency	Percent	Valid percent	Cumulative Percent
Valid	Certificate or Diploma	55	35.7	40.4	40.4
	Degree	29	18.8	21.3	61.8
	Masters or above	52	33.8	38.2	100.0
	Total	136	88.3	100.0	
Missing		17	11.7		
Total	153	100.0			

Table 5 depicts frequency distribution according to the qualification level of the teachers. As shown in Table 5, participants at certificate or diploma level and Master’s level are at an equal split. There are 33.8% of teachers with at least Master’s degree. However, none of the teachers were without any teacher training at all.

Training in special education

Table 6

Frequency distribution according to teachers’ trainings in special education

	Training on Sp. Education	Frequency	Percent	Valid percent	Cumulative Percent
Valid	Short term PD training	41	26.6	33.1	33.1
	UG in Sp Ed	4	2.6	3.2	36.3
	MEd in Sp Ed	2	1.3	1.6	37.9
	None	70	45.5	56.5	94.4
	other	7	4.5	5.6	100.0
	Total	124	80.5	100.0	
Missing		29	19.5		
Total		153	100.0		

Table 6 represents frequency distribution according to the teachers' training in special education. Approximately, 46% of the teachers did not have any training related to special education. Only 4 out of the 153 respondents have undergone undergraduate courses with a major in special education, and 2 teachers with Masters of Education (special education). Rest of the teachers have only attended short term professional development programmes related to special education.

Statistical analysis of the Likert Scale. The Likert scale used in the survey questionnaire has 6 main categories which were identified as main factors related to teacher and school readiness. The tables 7, 8, 9, 10, 11, and 12 present the results of individual items of each factor separately. Each item's percentage score is seen from these tables. The scores on the 'Agree' and 'Strongly Agree' indicate a favourable view towards the statement discussed in the respective item.

Leadership

Table 7

Frequency distribution according to the items of the category 'Leadership'

Items	Strongly disagree (%)	Disagree (%)	NAND (%)	Agree (%)	Strongly Agree (%)
Q1. The school promotes education to all students through vision statement, mission statement and school goals.	7(4.6)	16(10.5)	6(3.9)	71(46.4)	53(34.6)
Q2. School leader involves all stakeholders to make inclusion work.	8(5.2)	24(15.7)	22(14.4)	70(45.8)	26(17.0)
Q3. School leader advocates acquiring resources through additional funding from all sectors, for resources to support effective inclusion.	8(5.2)	23(15.0)	29(19.0)	72(47.1)	21(13.7)

Q4. School leader ensures that IEPs are set by teachers for students with special needs in their classrooms and encourage them to review and implement the IEPs regularly.	8(5.2)	40(26.1)	26(16.9)	61(39.9)	16(10.5)
Q5. The school leader is proactive, committed and visible in efforts to support teachers in their inclusive efforts and ensure successful inclusion in the school.	12(7.8)	25(16.3)	23(14.0)	64(41.8)	29(19.0)
Q6. School leader communicates that all staff are responsible for all of the children in their school so that students with special needs are not helped by only special education staff.	6(3.9)	22(14.4)	35(22.9)	57(37.3)	31(20.3)
Q7. The school leader is knowledgeable about and involved in the design and implementation of current curriculum, instruction, and assessment practices.	10(6.5)	16(10.5)	29(19.0)	73(47.7)	23(15.0)
Q8. Teachers are evaluated on whether they are using ongoing formative assessments to identify and cater for students with special needs.	5(3.3)	47(30.7)	24(15.7)	59(38.6)	17(11.1)
Total	64(41.7)	213(139.2)	194(125.8)	527(344.6)	216(141.2)

Table 7 shows the frequency distribution and percentage according to the items used in the category of 'Leadership'. As evident from the table, most of the participants agreed with the statements.

The first question in the category asks about the school leader promoting inclusivity through the vision and mission statement, and the school goals. A total of 81% teachers agreed with this, and in fact 35% of them showed strong agreement with the statement. Similarly, over 60% of teachers believed that their school leader involves all stakeholders to make inclusion work in their schools. Nearly the same number of teachers agreed that the school leader advocates acquiring resources to support effective inclusion. Further, more than 60% of teachers noted that their leaders are proactive, committed and visible in efforts to support teachers in their inclusive efforts and ensure successful inclusion in the school.

However, when teachers are asked about the school leader ensuring that IEPs are set for students with special needs and encouraging them to implement the IEPs, only 50.4% of teachers agreed to it. Likewise, to the statement, “Teachers are evaluated on whether they are using ongoing formative assessments to identify and cater for students with special needs”, only 49% of teachers agreed. Even though majority of teachers agreed with these two statements, the number is relatively less compared to the other statements in the category. This shows that though school improvement and reform efforts at policy level emphasize inclusivity, school leaders are less prepared with necessary elements required for successful inclusive education including provision of technical and pedagogical guidance given to teachers. The findings show that in terms of policy, securing resources, advocating and communication, school leadership is supporting inclusive practices. Where the readiness is less is in providing inclusive pedagogical support and guidance for teachers. Hence, regardless of this aspect, it could be said that overall teachers feel that their school leadership is ready for the implementation of inclusive education.

School climate

Table 8

Frequency distribution according to the items of the category ‘School Climate’

Items	Strongly disagree (%)	Disagree (%)	NAND (%)	Agree (%)	Strongly Agree (%)
Q1. The school environment is one that celebrates diversity and staff members work to create an	6(3.9)	20(13.1)	13(8.45)	81(52.9)	33(21.6)

atmosphere where students' differences are understood and appreciated.					
Q2. There is a school-wide approach to building positive relationships among all students (including special needs students) across all activities (academic and non-academic) and all settings.	7(4.6)	22(14.4)	12(7.8)	85(55.6)	26(17.0)
Q3. There is a school-wide effort to promote awareness on active participation and responsibility regarding inclusion in the society.	7(4.6)	30(19.6)	20(13.1)	68(44.4)	27(17.6)
Q4. School management and teachers have an understanding of disabilities and the special needs that having a disability can create.	8(5.2)	26(17.0)	25(16.3)	74(48.4)	17(11.1)
Total	28(18.3)	98(64.1)	70(45.6)	450(290.3)	103(67.3)

Table 8 shows frequency distribution and percentage of the items used in the category related to 'school climate'. The results of the four items in this category show similar pattern in terms of percentages for the response choices. For example, the response choice of 'Agree' has the highest percentage score for all the statements; the percentage attributed to this response is within the range of 68 to 85 percent.

The first two items of the category which mention the school climate on promoting diversity and inclusivity got more than 70% of agreement from the respondents. Likewise, the third statement about school-wide effort to promote awareness on active participation and responsibility regarding inclusion in the society had more than 60% of participants in agreement. The final statement asks about school management and teachers' understanding of disabilities and the special needs. Majority of teachers were in agreement with that statement.

The findings reveal that according to teachers' perceptions, school climate is ready in terms of promoting diversity and having positive relationships among all students, demonstrating a school-wide effort to promote awareness of disabilities and special needs is successful. In this respect, teachers seem to believe that schools are ready for inclusive education.

Curriculum instruction and assessment

Table 9

Frequency distribution according to the items of the category 'Curriculum Instruction & Assessment'

Items	Strongly disagree (%)	Disagree (%)	NAND (%)	Agree (%)	Strongly Agree (%)
<u>Curriculum Instruction & Assessment</u>					
Q1. Teachers incorporate visual, tactile and kinaesthetic materials and activities to meet a variety of learners' needs	5(3.3)	15(9.8)	19(12.4)	91(59.5)	22(14.4)
Q2. Teachers use class-wide routines and procedures to support classroom management and learning of all students.	2(1.3)	10(6.5)	17(11.1)	84(54.9)	39(25.5)
Q3. When a student with disabilities requires a modified curriculum, teachers modify curricular goals and classroom instruction to adapt curriculum to the needs special needs students.	12(7.8)	24(15.7)	32(20.9)	68(44.4)	17(11.1)

Q4. Teachers use multiple strategies to provide instruction such as individual, pairs, small groups and whole class.	4(2.6)	6(3.9)	13(8.5)	83(54.2)	44(28.8)
Q5. Teachers involve students with disabilities by regularly using strategies that support complex thinking rather than making the curriculum way too simple.	4(2.6)	17(11.1)	43(28.1)	72(47.1)	15(9.8)
Q6. Teachers regularly plan lessons involving materials to supplement the text.	6(3.9)	7(4.6)	11(7.2)	68(44.4)	61(39.9)
Q7. Teachers measure student understanding, and refine instruction using a variety of ongoing assessments.	3(2.0)	11(7.2)	22(14.4)	71(46.4)	44(28.8)
Total	36(23.5)	90(68.8)	147(102.6)	537(350.9)	242(158.3)

Majority of teachers agreed that their curriculum instructional strategies are streamlined with the students' needs. The data shows that most teachers incorporate visual, tactile and kinaesthetic materials and activities to meet a variety of learners' needs. More than 80 % of them said that teachers use multiple strategies to provide instruction in their lesson delivery. Further, nearly 70 % of teachers claim that teachers do measure student understanding, and refine instruction using a variety of ongoing assessments.

A relatively fewer teachers note that when a student with special needs requires a modified curriculum, teachers modify curricular goals and classroom instructions to adapt them

to the needs of SEN students. In fact, only 55.5% of teachers agreed with the statement. Similarly, the number of teachers who agree that teachers involve SEN students in the lessons by using strategies that support complex thinking rather than making the curriculum too simple is also relatively less. Nearly 57% of the respondents showed agreement. Thus, despite these two points, in overall, the analysis shows that majority of teachers believe that students' needs are met with curriculum instruction and assessment strategies.

Individual student support

Table 10

Frequency distribution according to the items of the category 'Individual Student Support'

Items	Strongly disagree (%)	Disagree (%)	NAND (%)	Agree (%)	Strongly Agree (%)
<u>Individual Student Support</u>					
Q1. Where it is determined that a student's goal cannot be effectively addressed within an existing class activity, the staff ensures that an alternative method is used.	6(3.9)	15(9.8)	10(6.5)	84(45.9)	38(24.8)
Q2. School management members and teachers demonstrate knowledge of the general education classroom practices which support inclusion.	3(2.0)	22(14.4)	27(17.6)	83(54.2)	18(11.8)
Q3. School management members and teachers have knowledge of writing IEPs for students with special needs.	14(9.2)	22(14.4)	48(31.4)	52(34.0)	15(9.8)
Q4. School management members and teachers are knowledgeable	14(9.2)	38(24.8)	27(17.6)	54(35.3)	18(11.8)

about types of disabilities and theories about special education.					
Q5. As needed, teachers use a variety of technology to ensure meaningful participation in instructional activities.	2(1.3)	17(11.1)	21(13.7)	81(52.9)	32(20.9)
Total	39(25.6)	114(74.5)	133(86.8)	354(222.3)	121(79.1)

Table 10 depicts frequency distribution of the items used in the category ‘Individual Student Support’. Just like other categories, this group also shows that majority of teachers agree with all the given statements. Teachers noted that their school management members as well as teachers do understand and demonstrate the provision of individual support to those students who have special needs.

More than 70% of respondents agreed that when a student’s goal cannot be effectively addressed within an existing class activity, teachers use an alternative method. Likewise, 66% of teachers agreed that school management members and teachers demonstrate knowledge of the general education classroom practices which support inclusion. Further, nearly 74% of teachers noted that teachers use a variety of technology to ensure meaningful participation in instructional activities.

On the other hand, the items concerning knowledge of IEPs, as well as types of disabilities and theories, (items 3 and 4) had agreement less than the rest. Though these two statements have got agreement from majority of teachers, only 44% of participants agree that school management members and teachers have knowledge of writing IEPs for SEN students. Approximately 57% of them believe that school management members and teachers are knowledgeable about types of disabilities and theories about special education. These results indicate the absence of knowledge on the technical aspect of inclusive education among teachers and management members. However, with regard to all the aspects of providing individual student support for students, the findings show that, overall, schools are ready for inclusive education.

Teacher attitude

Table 11

Frequency distribution according to the items of the category 'Teacher Attitude'

Items	Strongly disagree (%)	Disagree (%)	NAND (%)	Agree (%)	Strongly Agree (%)
<u>Teacher Attitude</u>					
Q1. My educational background has prepared me to effectively teach students with cognitive delays and deficits.	5(3.3)	27(17.6)	19(12.4)	77(50.3)	23(15.0)
Q2. I feel comfortable in working with students with special needs in my classroom.	4(2.6)	17(11.1)	32(20.9)	78(51.0)	21(13.7)
Q3. I am willing to help other teachers with issues which may arise when students with special needs are in their classrooms.	2(1.3)	7(4.6)	15(9.8)	77(50.3)	51(33.3)
Q4. I believe that all efforts should be made to educate students who have special needs in regular classrooms.	3(2.0)	6(3.9)	11(7.2)	67(43.8)	63(41.2)
Q5. I am willing to make the changes required in the classroom setting to help integrate students with disabilities.	3(2.0)	10(6.5)	13(8.5)	71(46.4)	55(35.9)
Q6. I feel supported by school management when faced with challenges presented by	3(2.0)	14(9.2)	46(30.1)	62(40.5)	28(18.3)

students with various disabilities.					
Q7. I believe that students with disabilities can show improved social skills if mainstreamed.	4(2.6)	7(4.6)	18(11.8)	69(45.1)	53(34.6)
Q8. Although children differ intellectually, physically and psychologically, they can learn in most environments.	9(5.9)	16(10.5)	13(8.5)	72(47.1)	43(28.1)
Q9. Students with special needs have higher academic achievement in the regular education classroom.	12(7.8)	32(20.9)	29(19.0)	52(34.0)	27(17.6)
Q10. I feel that self-esteem of children with special needs is increased when included in the regular education classroom.	25(16.3)	19(12.4)	25(16.3)	56(36.6)	27(17.6)
Total	70(45.8)	155(101.3)	221(144.5)	681(445.1)	391(255.3)

Table 11 depicts frequency distribution of the items used in the category ‘Teacher Attitude’. Just like other categories, the response ‘Agree’ had the highest percentage for all the items used in this group too.

Majority of teachers agreed that students with special needs benefit when they are taught in general classroom settings. Eighty five percent of teachers believe that all efforts should be made to educate students who have special needs in regular classrooms. Similarly, 84% of teachers said that they are willing to help other teachers with issues which may arise when students with special needs are in their classrooms. Further, 82.3% of teachers agreed that they are willing to make the changes required in their classroom setting to help in integrating students with disabilities.

However, the number of teachers who agreed that students with special needs get high academic achievement when included in the regular classroom is fewer. Only 51.6% teachers show agreement on this issue. Likewise, a total of 45.8% teachers do not agree that self-esteem of children with special needs is increased when they are included in the regular classes. Nevertheless, regardless of the above mentioned issues, it can be said that most teachers are to a large extent ready to accommodate individuals with special needs in their classrooms. Though teachers agree that school leadership and climate are ready for inclusive education, relatively less endorsement is provided by teachers for total immersion of special needs students in mainstream classrooms.

Knowledge and skills

Table 12

Frequency distribution according to the items of the category 'Knowledge and Skills'

Items	Strongly disagree (%)	Disagree (%)	NAND (%)	Agree (%)	Strongly Agree (%)
Q1. I have been adequately trained to meet the needs of children with disabilities.	17(11.1)	44(28.8)	27(17.6)	43(28.1)	17(11.1)
Q2. I have sufficient knowledge about various types of disabilities a child can have.	16(10.5)	29(19.0)	23(15.0)	70(45.8)	9(5.9)
Q3. I am aware of what an IEP is.	20(13.1)	27(17.6)	21(13.6)	70(45.8)	11(7.2)
Q4. I have knowledge about instructional strategies that are effective in an inclusive classroom.	8(5.2)	29(19.0)	21(13.7)	78(51.0)	12(7.8)
Q5. I can demonstrate skills needed to teach a student with special needs.	14(9.2)	33(21.6)	37(24.2)	59(38.6)	7(4.6)

Q6. In my school, student IEP goals and objectives are addressed in academic and non-academic activities.	10(6.5)	33(21.6)	53(34.6)	44(28.8)	10(6.5)
Q7. The school promotes awareness, knowledge and adoption of best practices needed for inclusive education.	18(11.8)	26(17.0)	46(30.1)	42(27.5)	17(11.1)
Q8. I am aware of the Disability Act of Maldives and the Inclusive Education Policy of MOE.	19(12.4)	30(19.6)	39(25.5)	52(34.0)	9(5.9)
Total	122(79.8)	251(164.2)	267(174.3)	458(299.6)	92(60.1)

Table 12 shows the frequency distribution and percentages of the items used in the category ‘knowledge and skills of teachers’. In contrast to all other categories of the analysis, this category shows substantial differences in most of the items. For example, majority of the respondents said that they have not been adequately trained to teach children with disabilities. Similarly, only 35% of teachers agreed that student IEP goals are addressed in academic and non-academic activities in their respective schools. Majority of teachers did not show agreement on the issue that, schools promote awareness, knowledge and adoption of best practices needed for inclusive education. Further, only 43% of them had the efficacy to demonstrate skills needed to teach a student with special needs, whereas, only 51% of teachers had sufficient knowledge about various types of disabilities a child can have. Moreover, 60.1% of teachers agreed that they did not have information about the Disability Act and the Inclusive Education Policy of Ministry of Education.

As the results from the above table show, even though some of the items had got majority of responses, this category had received relatively less agreement compared to other categories of the analysis. However, overall, it could be said that to some extent teachers are ready for inclusive education in terms of their knowledge and skills.

Overall results of the Likert scale questions. Figure 3 represents overall proportional score for each category of the variables that are related to inclusive education. In each of the categories, most teachers showed agreement with the items.

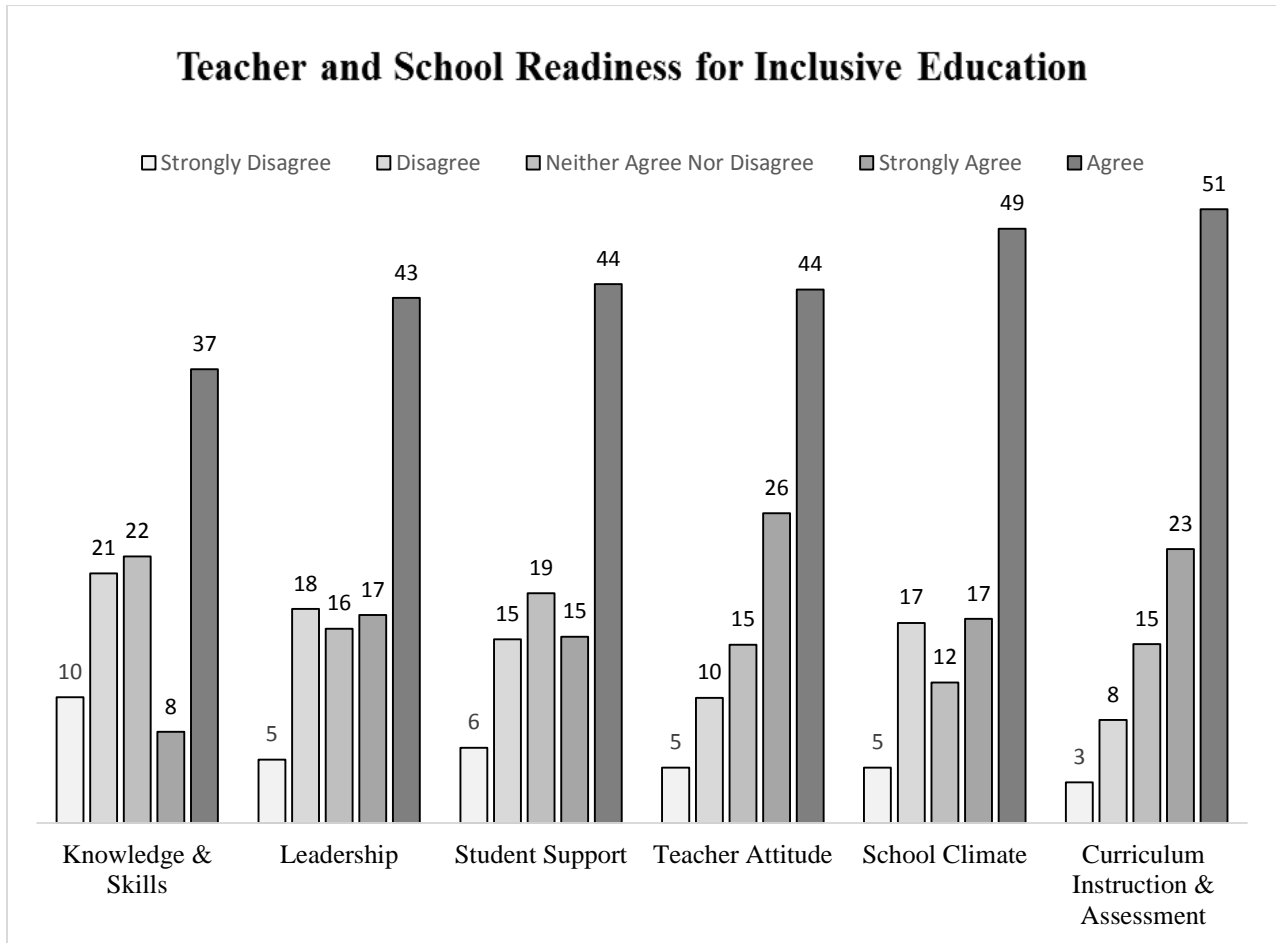


Figure 3. Overall proportional score of the variables related to inclusive education

When we combine the score of the response of ‘Agree’ and ‘Strongly Agree’ and consider the combined percentage as indicative of ‘agreement’, the results illustrate a high level of agreement in all categories. The lowest of agreement was for ‘Knowledge and Skills’ (45%), whereas the highest is for ‘Curriculum Instruction and Assessment’ (74%). Sixty percent of teachers consider leadership in schools as having the readiness for inclusive education. Further, 66% of teachers agree that the school climate is conducive to inclusive education. It shows that more than half (59%) of teachers agree that individual student support is given to SEN students

in the schools, and more than two-thirds (70 %) of teachers have the right attitude towards inclusivity in their classrooms.

Hence, the collective tendency of participants' perspective on the items presented on the questionnaire shows that teachers and schools are ready to accommodate inclusive practices in their schools.

Findings of the qualitative data. The data collected from the focus group discussion was analysed qualitatively using a thematic approach. The interview were recorded and the responses were then translated and transcribed verbatim in order to enhance analysis.

During the formal analysis, three main phases took place. In the first phase, the data were categorised. The categories derived from raw data were then related to the categories of the conceptual framework of the study. After that, coding was conducted on the basis of the categories. And in the final phase, significant themes that emerged from the codes were noted. The following is an explanation of the themes that emerged from the coding of the data.

Theme 1: Inadequacy of technical and pedagogical support for teachers from the school leadership

As mentioned by most of the members of the focus group, their school leaders lack technical and pedagogical support to promote inclusivity. Participant E stated:

I couldn't say that much effort is put on promoting inclusivity so far by this leadership. When we requested for some individualized academic practices for students with learning disabilities, they were not approved.

A similar concern was noted by Participant B: "The present leadership focuses more on mainstream students in completing curricular goals, but not for SEN students". Another participant remarked:

In a normal classroom too, there are some kids who need special attention though they do not have physical or mental disabilities, but these students are often overlooked and not attended with much differences...teachers are not guided to conduct differentiated instructions.

Participant H also agreed: "...for classroom teaching, so far I don't remember any effort from the principal...no discussions took place regarding involvement of all students in teaching sessions".

However, the teachers mentioned that, two of the principals joined the schools very recently, and hence it is not possible for them to give a comment on their leadership style. One of the participants explained this in detail. She stated:

As our leader joined the job very recently, he needs to study all about inclusive practices. First he has to understand and be familiar with the concept, then only he'd be able to assist us teachers,...to help us to plan lessons in a way that they cater to all the needs of students... to push us towards inclusion. So, at the moment the leader's pedagogical commitment is less, but in the previous leadership, there were some who did support and show commitment to a great extent.

Hence overall, it could be deduced that teachers are seeking school leaders to provide a higher level of commitment on pedagogical support to promote inclusivity.

Theme 2: Inappropriateness of school infrastructure for students with special needs

School climate is the second variable of the school readiness factors shown on the conceptual framework of this study. However, this aspect was not addressed adequately in the questionnaire discussed above. During the focus group interview it became obvious that teachers are concerned about lack of inclusive-education related physical infrastructure. When asked about the school climate, teachers raised their concerns about the physical conditions of schools. Teachers explicated that all of the schools do not have wheelchair accessibility and the infrastructure of the schools are not developed to accommodate SEN students. Participant B stated:

Accessibility is not there to move from place to place. The school infrastructure is not developed in a way that it provides accessibility for all students, especially for students with disabilities. The way walkways are paved is not safe...not even for teachers.

Another participant added: "I also cannot say that our schools is physically safe. If a child in wheelchair comes to the school, he might find it really hard to move from place to place".

Participant D said that in her school, the toilet allocated for SEN students is too far away and it should be situated in a nearby place to those students. Another participant stated that "...as the school library is on the first floor of the building, the child on the wheel chair cannot go to the library too."

As seen from their discussions, the situation is more or less the same across all the schools. Teacher H who comes from a significantly small school also stated: "physically there are many challenges. Students with physical disabilities cannot have accessibility to all areas of the school".

Theme 3: Meagerness of adapting curriculum instruction to the needs of SEN students

As shown in the conceptual framework of the study, curriculum instruction and assessment is the third variable of the school readiness factors. The data from the focus group interviews reveal that teachers' philosophy is highly based on the student needs. Teachers noted that identifying the needs of students and then adapting the curriculum are crucial. Yet, most of the teachers agreed that though their philosophy is dedicated to helping individual students, their daily classroom teaching sessions do not reflect much of an individualized focus. Most of them believed that inclusivity is not focused at the whole school level.

Teachers explicated that similar strategies are used for both mainstream and SEN students who are in the mainstream classes in their schools. Participant H stated "it's not modified as such...and it's not even discussed in coordination meetings too." Respondent A agreed with this notion:

Frankly speaking... we do not have much of student focused lessons. Our lessons are not set for specific individual students. Rather, it's just for the majority of students, lesson plans are set at a single level. It's the traditional ways of teaching; not differentiated instructions. We carry out same activities for the gifted learners as well as the weaker ones.

Participant B agreed with Participant A: "That's true. There isn't much of curriculum modification. It's not happening as such. Even for those who come for inclusion in the mainstreamed classes, the students are taught the same thing".

However, it was noticed some teachers use differentiated curriculum only at a minor level. Participant C asserted that “Yes, mostly same curriculum is taught. But when I explain the lesson, I try to make it as simple as possible so that the weakest ones can understand it.” Another participant said that though curriculum adaptation does not happen at whole school level, she helped her students by conducting remedial classes.

Participant D who was from a school which has a separate SEN unit informed:

SEN students are sent to mainstream classes which are appropriate to their ability levels. So the same content is taught to all students and they are assessed in the same manner as normal students.

Similar to the teaching methods, assessment of students’ learning is also undertaken in a similar way. Participant G reported, “We give exactly the same test papers or the same assessment tasks to all students. And the results are also reported using similar strategies.”

Hence, overall, the findings revealed that teachers need to put more effort to adapt and modify the curriculum and assessment to the needs of individual students.

Theme 4: Inadequacy of individual support to student with special needs

Provision of individual student support is one of the major variables of the school readiness factors shown in the conceptual framework of the study. According to the outcomes of the analysis, though individual support is given to some extent, it is not done at a significant level in most of the schools.

Participant B asserted:

We do not have many differences. Same tasks are carried out by all students. Nothing special is done for SEN students in normal classes. Often we could not even monitor what additional assistance is needed for those students.

Participant B also added, “for example, for those with learning disabilities in normal classes, we teachers do not use different methods...not much extra support is given to those students.” Participant C also agreed with B. She asserted that,

we cannot use different methods, I would also say not much of additional support is given to those students with special needs in the mainstream classes.

Another teacher F, added:

I believe that individual support is given to some extent...but I am still not happy with the amount and level of the support... and it has to be improved. Actually I want totally differentiated activities to happen in my classes...activities that are based on the level of individual students. But we could not spend that much of time for the preparation.

Participant G presented a different opinion. She said that in her class the support is given fairly. She stated that whenever time is available she tries to give more explanation to those who need.

Even though some of the interview group members have differing opinions, most teachers believe that providing individual support is not happening as it should be in schools. Overall, the findings of the focus group interviews revealed that teachers need to improve giving extra support to individual students than what they do now.

Theme 5: Positive attitude of teachers towards inclusive education

Teacher attitude is the first variable of the teacher factors explained in the conceptual framework of this study. Findings of the qualitative data revealed that teachers have a positive attitude towards inclusive education. All teachers agreed that SEN students with mild and moderate level of disabilities can be taught in mainstream classes. However, most of them asserted that to have an inclusive setting, it would be difficult without an assistant in the classroom. Participant D explained her stand.

If it is only one child, and depending on the child's severity, I would take in him... if he is at mild or moderate level, I can handle him. And if I'm supposed to teach a SEN student in my class, I would request the school management to send me an assistant to work with me in the class. But even without an assistant too, I would accept him and give my help as much as possible.

Participant H also has nearly the same views. She elucidated, “if the child is not severe, I can manage him. And I would also say that teaching SEN students with normal students is better...but only one teacher alone cannot do that.”

It was found that despite the lack of knowledge and skills, teachers are willing to accept special needs students in their classes. Participant C is among these. She asserted:

I would say that even though I lack knowledge and skills, anyhow I will try to manage the child...I would accept him and try my level best in attending to the child’s needs.

Participant H had similar views. She said:

Education is important for those students too. So I believe the best way is keeping them together, if we can manage. I would also put my best effort in helping the kids.

Data revealed that teachers manifest proper attitude and approach towards inclusive education in the four respective schools.

Theme 6: Teachers’ eagerness for knowledge and skills needed for inclusive education

As seen from the conceptual framework of the study, ‘knowledge and skills’ is the second variable of the teacher factors. According to the data, members of the focus group highlighted lack of knowledge and skills and emphasized the need for more training and exposure for teaching SEN students in the mainstream classes.

Participant F explained:

I don’t believe that I have enough knowledge and skills needed to teach a SEN student. It would be really difficult for me. I firmly believe that I have to be trained and specialised to teach students with special needs in the mainstream classes.

A similar view is presented by participant H:

I would also say that one has to be specialised to become a SEN teacher if you have to teach a SEN student. And I don’t believe that I have acquired enough knowledge and skills.

Teacher G also agreed, “Same here. I also don’t feel that I have enough knowledge and skills needed to do that”.

Further, some of the participants highlighted the importance of strengthening teacher training courses. Participant A stated:

I believe that in teacher training courses, teachers must be made aware of what is differentiated teaching, what is inclusive education...they need to be much more aware of these concepts...How they can cater the needs of all students...how to plan for diversity ...all these have to be included in teacher training courses.

In addition to the above, teachers who had undergone some training also claimed that it is not adequate. Participant F elucidated:

I also have knowledge to some extent as I’m currently undergoing some teacher training ...but I would also say that one has to be specialised to become a SEN teacher if you have to teach a SEN student. And I don’t believe the knowledge I have is enough to be a SEN students’ teacher.

Hence, the findings show that teachers lack adequate knowledge and skills required for successful inclusive education, and they desire more training in inclusive education.

Challenges for inclusive education

One of the objectives of this study is identifying the challenges that teachers encounter in trying to provide inclusive education in schools of Hithadhoo. Hence, participants of the survey and the focus group interviews were queried about the challenges that impede successful inclusion in the four mainstream schools. Participants expressed a list of numerous obstacles. Once the list is analysed, the following five major themes emerged from the data.

- Teachers’ lack of knowledge and skills
- Lack of facilities in schools
- Awareness of inclusive education among all stakeholders
- Difficulties in completing curriculum
- Time constraints

The following are some explanations about each of these obstacles.

Teachers' lack of knowledge and skills. As explained by most of the teachers, lacking adequate knowledge and skills is the most vital barrier for inclusivity. "Teachers' awareness is most important...if they lack knowledge they cannot treat them fairly...so teachers' knowledge and skills is the biggest challenge", stated a participant of the focus group. Another participant delineated, "we teachers do not know how to cater for the needs of those students. And ultimately we label them as very weak students".

When talking about acquiring knowledge and skills, many teachers stressed on the opportunities for special education training. One of the participants from the survey group highlighted the importance of training by saying that "...not all mainstream teachers are equipped with the knowledge and skills to deal with such students." The training is important because, "special needs students should be cared for in a special way, in a special environment with a special strategy", reported another member. Participants stated that knowledge and skills acquired from such trainings would help teachers to implement differentiated teaching strategies, as well as managing and catering the needs of those students.

Lack of facilities in schools. Lack of resources and facilities is also identified as one of the major challenges for inclusive education. Participants identified inadequate human resources, inadequate classroom materials / equipment, and the physical classroom layout as major obstacles for the provision of inclusive educational practices in the classrooms. "Teachers won't be able to cater to the needs because the facilities are not available", stated one participant. Such facilities include materials required for differentiated teaching targeted. In addition, as explained earlier, teachers elucidated that schools do not have accessibility for most of the SEN students to move from place to place. "Our school environment is not fit, toilets are not appropriate, walkways are not accessible," explained a participant.

Lacking awareness among all stakeholders. As expressed by many participants of the study, lacking awareness of inclusive education among key stakeholders is also a significant barrier for inclusivity. These stakeholders include school management members, parents, and normal students of the mainstream classes. One of participants highlighted, "at times it's difficult to convince parents that those kids are worth special needs. In my class too, there are parents

who are difficult to convince.” Another added: “and some parents of normal students do not agree to accommodate SEN students in the mainstream classes”.

According to the teachers, awareness and general understanding of inclusive education by normal students is a challenge. One participant reported, “there might be the problem of the special needs students not being accepted by other students in the class.” As told by these teachers, those students might be discouraged by other students in the class, and as a result, “SEN students might find themselves left out,” said a participant. Adding to this, another teacher said, as a result of mainstreaming SEN students, “friction between special and normal students would start to raise”.

Difficulties in completing curriculum. Students in the mainstream classes have to achieve the curricular goals within a set time frame. However, when students with special needs are combined in those classes, achieving these goals become a big challenge. According to most of the teachers, achieving objectives of the lessons would be difficult for SEN students. “It would be very difficult for SEN students to grasp ideas with the mainstream students,” stated a participant. Another added, “Special needs students cannot follow the curriculum due to their lack of intellectual power.” “They need a different approach, and according to their level the curriculum should be taught” said a participant. It is because, “their thinking will be totally different from a normal child,” said another participant.

Hence achieving the curriculum targets is also a significant challenge when implementing inclusive education.

Time Constraints. Many teachers who participated in the study explicated ‘time’ as a significant barrier for inclusive education. According to these teachers, to cater to the diverse needs of the students, they need to spend lots of time in planning and preparing for the lessons. Activities set for SEN students should be different from other students. As SEN students’ attention span is short, “it is difficult to prepare all the materials needed for them,” said a participant. Another participant added, “time is not sufficient for the mainstream teachers to take good care of them.” One teacher explained that “those students also need exposure to wider variety of challenging activities,” and “within the short time period, all cannot be implemented,” added another teacher.

To sum up, according to the teachers who participated in this study, teachers encounter substantial obstacles in their effort to provide inclusive practices in mainstream settings. These obstacles or challenges include teachers lacking knowledge and skills, lack of facilities in schools, awareness of all stakeholders, curriculum difficulties and time limitations.

Summary

This chapter described the results from quantitative and qualitative data. From both these two types of data, it was found that generally teachers perceive the school readiness factors positively. Overall findings showed that according to the perception of teachers, schools are ready for inclusive education.

However, despite the positive views of teachers, the findings showed many areas that need to be improved if inclusive education is to be successful. It was found that school leaders need to provide more pedagogical support for teachers. Equally, teachers need to put more effort in providing individual support for students with special needs. Teachers also need to increase their effort in adapting and modifying curriculum to the needs of students with special needs. It was also found that the schools' physical climate is not ready to accommodate and cater for students with special needs. Similarly, the findings show that teachers lack essential knowledge and skills needed for teaching SEN students in mainstream classes.

In addition to the above, the findings revealed some significant challenges that might impede inclusive education in schools. These challenges include: lack of facilities in schools, awareness of all stakeholders, curriculum difficulties, and time constraints.

The next chapter will present a discussion of the findings in the light of literature and theoretical framework.

Chapter 5: Discussion

Introduction

The aim of this study is to understand what teachers believe, perceive, and feel about their schools' readiness for inclusive education, and identifying the common challenges that hinder provision of inclusivity in schools. It is evaluated with regard to six main areas pertaining to school and teacher readiness.

The focus of this chapter is to interpret and discuss the findings of the study in relation to the literature review. The chapter starts with this introduction together with a brief summary of the findings. Next, the findings of the study are discussed in detail with reference to literature and theory. This discussion will be followed with a summary of the limitations encountered in this study. Finally, recommendations for future research and practices in the field of inclusive education are outlined.

Summary of the Main Findings

As the study embraces a mixed approach, two different types of data were obtained from two forms of data collection. The data were collected by conducting a survey and a focus group interviews with the participants. All the questions used in the survey and interview were related to the main factors pertaining to teacher and school readiness for inclusive education.

The findings showed that, overall, teachers have a positive view towards all the readiness factors related to inclusive education. Specifically, teachers consider their schools' leadership as committed and dedicated towards the implementation of inclusive education. Teachers also believe that school climate is conducive to embrace inclusivity in all activities. They also believe that curriculum instruction and assessment are adapted and modified to cater for the needs of SEN students, and individual support is lent to SEN students when and where necessary. Moreover, teachers portray the right attitude when it comes to teach a SEN student in their mainstream classes. Teachers also claim to have skills and knowledge to some extent, which are necessary for inclusive education. Thus, overall, it could be understood that in the perception of teachers, schools of Hithadhoo are ready for inclusive education.

However, the finding also discovered that even though teachers perceive the readiness factors positively, these respective schools have some areas that need to be improved in order to enhance readiness for inclusive education. These areas include school leaders providing more pedagogical support to teachers, teachers providing more support for students by increasing the effort of adapting and modifying curriculum to the needs of individual students, schools facilitating a physically safe climate for students with special needs, and lastly providing opportunities for teachers to acquire more knowledge and skills needed for teaching SEN students in the mainstream classes. The results also indicated that while schools and teachers show readiness for inclusive education, teachers are not yet entirely convinced of the benefits of total immersion of special needs students in mainstream classrooms.

The findings also showed that there are substantial challenges that might daunt successful implementation of inclusive education in the schools. According to the participants of both the survey and focus group interview, there are six major challenges that would impede inclusive education. These challenges are: teachers lacking knowledge and skills, lack of facilities in schools, awareness of all stakeholders, curriculum difficulties, and time limitations.

Discussion of the Findings

A detailed discussion of the findings of teachers' overall perceptions are discussed in the following paragraphs. The discussion will present school-readiness related factors separately as explained in the conceptual framework of the study.

Leadership. Many educators and experts believe that in developing an inclusive society, school leadership is crucial and complex (Anwer & Sulman, 2012; Mthembu, 2009; Naicker, 2008; Salisbury & McGregor, 2005; Spies, 2013; & Ruairc, Ottesen, & Precey, 2013). Spies (2013) noted that the leadership of a school is one of the most important factors for the success of any programme conducted within a school. Likewise, Spies articulates that if the school principal does not believe in the philosophy and principles of inclusion, it will not only affect the teachers' attitudes, but will affect the students as well as the society at large. Hence, as Salisbury and McGregor (2005) states, the school principal serves like a catalyst for the key stakeholders of the school community.

With regard to the school leadership, majority of teachers participated in this study view leadership of their schools as mostly positive towards inclusive education. According to the findings of the study 60% of teachers of the survey perceive their school principals as proactive, committed and visible in the effort to implement inclusive education. Teachers also believe that school leadership is ready in terms of policy, securing resources, advocating and communicating with other stakeholders.

In addition to the above, the survey findings reveal that more than 80% of teachers believe that inclusion is stressed in the schools' vision and mission statements. Literature shows that, the schools' mission and vision statements must mirror the effort of inclusivity within the schools, for successful implementation of inclusive education. After an empirical study, Mthembu (2009) reiterated that as instructional leaders school principals have to have clear school missions in order to foster inclusive education in their schools. Further, Billingsley et al., (2014) also elucidates that in several settings, effective principals engage parents as part of a group that developed and shared a vision for inclusive schooling with stakeholders both inside and outside of the school. Hithadhoo schools have provided the right leadership for inclusive education in this respect.

Billingsley et al., (2014) explained that in an inclusive school, principal or the school leader has to ensure that all members of the school community welcome and value students with special needs, and everyone is encouraged to collaborate and share their expertise so that SEN students are getting opportunities to achieve improved outcomes in school and post school life. This study has shown that majority of teachers believed that their school leader involves all stakeholders to make inclusion work in their schools. Therefore, Addu Atoll school leadership readiness can be considered high in this regard as well.

However, as shown from the findings, the readiness of school leadership in providing pedagogical support for teachers is found to be relatively less prevalent. According to the teachers' views, the technical or pedagogical support, encouragement and guidance of school leaders is relatively less compared to other aspects related to school leadership and inclusive education. This guidance includes teachers getting support in setting IEPs for SEN students, as well as the assessment of SEN students. In the study, only 50% of teachers said their school

leader ensured that IEPs are set by teachers for SEN students in their mainstream classes and encouraged them to review and implement the IEPs regularly. Similarly, a large numbers of the survey participants did not agree that teachers were evaluated by their leaders on assessing whether they were using ongoing formative assessments to identify and cater for students with special needs. The qualitative data also indicate that teachers desire principals to provide higher level of pedagogical support for them in inclusive education. This is an indication that while political and social leadership for inclusive education are high among school leadership, pedagogical leadership and support need to be strengthened.

As research suggests, school principals' pedagogical support and commitment is essential for inclusive education. According to Bui, Quirk, Almazan and Valenti (2010) an inclusive school culture begins with the committed pedagogical leadership of principals. If the principals are not supportive and committed pedagogically, and if they do not have the proper attitude, inclusion will not work properly, because "their attitudes are critical factors that shape the experiences of students with disabilities" (Bui et al., 2010, p.10). Moreover, the principals' help is necessary as it identifies and approves changes that support more inclusive practices within the school (Salisbury & McGregor, 2005)

School climate. The school climate is one of the main indicators of school readiness for inclusive education. As explained by Sapon-Shevin (2013) inclusive education demands close attention to creating classrooms and school communities which are warm and welcoming for all students. Students with special needs require acceptance, fairness and recognition from all members of the school community.

Majority of the teachers participated in this study agree that their schools are socially and emotionally safe for students with special needs. The findings show that school climate is ready in terms of promoting diversity, having positive relationships among all students, demonstrating a school-wide effort to promote awareness, and having an understanding of disabilities and the special needs. Similar characteristics were highlighted in an empirical study done by Barnes (2011). As argued by Barnes, such elements or characteristics of the school culture can create environments where inclusion can grow and flourish.

According to Coulston and Smith (2013), it is equally important for a school to ensure that inclusion happens on all levels of interaction-between students, between adults, and between students and adults. “Inclusion must be the expected practice in the very way the school functions” (Coulston & Smith, 2013, p.2). In this study, approximately, 73% of teachers admit that there is a school-wide approach to building positive relationships among all students (including special needs students) across all activities (academic and non-academic) and all settings. Hence, the findings show that teachers and regular students accept and care for SEN students in school activities. Thus, correspondingly, Broderick et al., (2012) concluded that to promote inclusivity, teachers need to show a positive attitude towards disability as it greatly influences how students treat each other.

Nonetheless, the findings of this study reveal that, with regard to physical aspect and facilities, schools need to improve a lot if inclusivity is to be practised in the schools. Teachers of the focus group explicated that all the four respective schools do not have wheelchair accessibility and the infrastructure of the schools are not developed to accommodate and cater for students with disabilities. With regard to that, Broderick et al., (2012) had argued that to develop inclusivity, schools need to establish environments that allow all students to move freely. As elucidated by them, in such an environment, materials should be reachable, charts and bulletin boards are at eye-level, and books are in cubbies rather than on high shelves. Yet, participants of the study conceded that physically, schools lack safety, fairness and protection. For instance, as revealed by the teachers, in most of the schools, important rooms such as school library and laboratories are located on the upper floors of high storey buildings. As a result of this, wheelchair students and others with physical disabilities cannot get access to these rooms. If the school climate is inclusive, it must represent the holistic context of the life, vigour and quality of the social connectedness, physical elements, and supportive practices that cultivate inclusion and safety within the school (Coulston & Smith, 2013).

Curriculum instruction and assessment. Curriculum instruction and assessment is one of the school readiness factors for inclusive education. According to the participants of this study, majority of teachers do modify curricular goals and classroom instruction to adapt to the needs of SEN students. Some, 74% of the participants of the survey conceded that teachers incorporate visual, tactile and kinaesthetic materials and activities to meet a variety of learners’

needs. These teachers also agreed that teachers use class-wide routines and procedures to support classroom management and learning of all students.

With regard to the above findings, the importance of curriculum instruction and adaptation for students with special needs is highly emphasized by many experts. For instance, as mentioned on the “Commonwealth Guide to Implementing Article 24 of the UN Convention on the Rights of People with Disabilities”, by Rieser (2008), there should be a flexible and innovative national curriculum and, school system must develop means of making the curriculum materials accessible to all students with special needs. Rieser reiterates that schools have to “make sure the curriculum and how it is taught is accessible to all with a range of learning situations, styles and paces, e.g. mixed ability.” (p.32). Moreover, according to Fisher et al., (2003), schools need special educators who can interrelate curriculum and communicate with others by providing instruction and assessment to all students and facilitating collaborative problem solving when difficulties arise.

Additionally, even though that majority of teachers of this study agreed that curriculum modification and adaptation happens in their schools, it still has a long way to go before achieving success in establishing a complete inclusive setting. For instance, the survey findings indicate that though majority shows agreement, a relatively less number of teachers agree that when a student with special needs requires a modified curriculum, teachers modify curricular goals and classroom instruction to adapt them to the needs of special needs students. In fact, only 55.5% of teachers agree with the statement. It is understandable that adaptations usually require lots of teacher effort and time (Koga & Hall, 2004). However, Fisher et al., (2003) argue that it is the responsibility of the inclusive educator to create and provide accommodations and modifications that cater for the unique learning needs of all students. Besides, these researchers state that “successful special educators have an extensive knowledge base of curriculum accommodations and modifications on which to draw and are creative in using specific adaptations with students” (p. 46). A similar position is also supported by Villa et al., (2005).

With regard to the assessment of students with special needs, teachers of the survey stated that they measure student understanding using a variety of ongoing (formative) assessments that are different from regular methods given to normal students. Yet, the focus

group interviews revealed that assessment of students' learning is done in similar ways as with regular students. As reported by the participants, they give exactly the same test papers or same assessment methods to all students, and the results are also reported using similar strategies. This clearly shows the need for change in assessment methods to care to the needs of those students with "special needs".

Nonetheless, according to Allbritten et al., (2004), with regard to performance assessment, students with disabilities to be tested at the grade level of their age mates is not necessarily appropriate as grade-level testing does not accurately reflect student progress and achievement of all students. Their recommendation was to use pre-test to post-test improvement method to measure the learning progress of students with disabilities. They articulated that these methods are more appropriate than single-standard tests. Further, according to Beech (2010), adaptations of curriculum tasks would reduce the length or complexity of the practice or test items and make assignments or test items more accessible to students with special needs.

Individual student support. Individual student support is one of the school readiness factors of inclusive education. Just like other factors, teachers' support given to individual students also has achieved highest agreements from the participants of the survey. A large number of the teachers participated in the survey noted that individual support is lent to SEN students in their respective classes. Likewise, teachers of the focus group interviews also confirmed that the support is given to those who are in need. These findings resonate with the conclusion made by Mthembu (2009) that individual support given to students is a key factor in moving towards inclusion.

Data obtained from the survey revealed that, to render assistance to students, teachers should ensure that alternative methods are used where it is determined that a student's goal cannot be effectively addressed within an existing class activity. Specifically, more than 70% of teachers agree with this statement. Nearly same number of teachers said that as needed, teachers use a variety of technology to ensure meaningful participation of all students in instructional activities.

According to Broderick et al., (2012), collaboration inside the general education classroom can become an important medium for differentiation and support. Broderick and his

team articulate that teachers, along with those who support them in the classroom, need to collaborate with other stakeholders to ensure that all students are truly integrated, valued, and become effective members of the classroom community. Providing individual student support includes additional teaching and care, visiting teacher service, early intervention, assistive technology, special transport scheme, specialist equipment, school building adaptations, enhanced levels of capitation grants, and the extended school year scheme (NCSE, 2013).

Comparatively a less percentage of teachers (44%) agreed that their school management members and teachers had knowledge of writing IEPs for students with special needs. Similarly, more than half of the teachers (53%) did not agree that the school management members and teachers are knowledgeable about types of disabilities and theories of inclusive education. As highlighted above, school leadership needs to increase their effort in providing pedagogical support for teachers, especially on writing and evaluating IEPs. Hence, it can be understood that if teachers do not have a proper understanding on planning an individualized instruction, they cannot give their full support to students. A similar finding is reported by Pasha (2012), who did an empirical study to understand the readiness of urban primary schools for inclusive education in Pakistan.

According to the literature, knowledge about substantial concepts like students' IEP and types of disabilities are crucial for educators working in the field of inclusive education. According to Fisher et al., (2003), understanding of the IEP, and a comprehension of the curriculum and its standards are among essential knowledge necessary for successful implementation inclusive education. They noted that continuous practice of interdisciplinary teams developing IEP promote success by helping students with disabilities to meet both academic and behavioural expectations in their schools.

Additionally, as highlighted in the findings, relatively less teachers agreed that management members and teachers of the schools have sufficient knowledge about disability types and theories related to special education. Yet, literature emphasizes the crucial role of acquiring knowledge on disabilities. For instance, Pivik et al., (2002) stressed the importance of all teachers having knowledge and awareness about various types of disabilities which would greatly facilitate a more equitable learning environment. Likewise, Pivik and the team suggested

to involve teachers and parents in the effort of promoting awareness on disabilities. Further, as explained by UNICEF (2011), knowledge about disability is very important, as it can be understood very differently across different communities and cultures. As given in the guideline, knowledge is required in order to pursue a coherent approach to address inclusive education for children with disabilities.

Teacher attitude. Teacher attitude is also one of the school readiness factors for inclusive education. Given that regular teachers are the most important service providers in teaching students with special needs in the inclusive classroom, their attitude towards inclusion is a contributing factor to its success or failure (Kern, 2006). For this reason, there is rich literature relating teachers' attitudes to effective inclusive education in various contexts. For instance, after an empirical investigation, Barco (2007) concluded that teachers' attitudes and beliefs toward inclusive practices impact school learning environments and equal learning opportunities for students with various needs. Further, Mthembu (2009) delineates that the success of inclusionary programs very much depends on the attitudes of the educators who are involved in the program. Kern (2006) concluded that teachers who support and have faith in the concept of inclusion can provide special education students with confidence and a comfortable learning environment. Moreover, teachers with a positive approach towards meeting a variety of learners is an encouraging indicator for teachers' readiness towards inclusive education (Pasha, 2012).

In congruent with the above findings, the results of this study show that teachers of the schools selected for the study hold a relatively positive attitude towards inclusive education. According to the results of the survey as well as the focus group interviews, teachers depicted a positive and encouraging view regarding teaching students with special needs together with mainstream students. These teachers agree that students with special needs benefit when they are taught in general classroom settings. Specifically, 85% of teachers noted that all efforts should be made to educate students who have special needs in regular classrooms. Further, nearly the same number of teachers said that they are willing to make the changes required in their classroom settings to help integrate students with special needs. These teachers are also willing to help other teachers with issues which may arise when students with special needs are in their classrooms. These findings are consistent with many research studies done to identify teachers'

attitudes towards inclusive education (Anwer and Sulman (2012); Ali et al., (2006); Fazal (2012); Kern (2006), & Khan (2011)).

Despite the above confirmatory statements from teachers, there are certain points that need to be highlighted from the findings of the study. One of the statements of the survey questionnaire was to find out their views about the support received from their school management when faced with challenges presented by students with various disabilities. Only half of the participants indicated agreement that enough support was given to teachers. Walker (2012) discovered that the school principal's support in the form of *emotional*, *instrumental*, and *informational* support, and professional development had a positive impact on teachers' attitudes toward including students with special needs. Walker reiterates that the school principal's support works as a key element of how teachers view including students with disabilities in their classrooms.

In spite of the fact that teachers portrayed a positive attitude, their answers for the open ended questions given for the survey questionnaire revealed an issue about the provision of inclusivity in schools. The findings show that (despite their positive approach), 77% of them said that with regard to the current situation of schools, the ideal way to teach students with special needs is segregating them from regular students. Though they believed that inclusivity works effectively for SEN students, their thinking was separating severe SEN students works even more effectively than keeping them in the mainstream classes in the current circumstances of schools. They presented various justifications for their stand on this issue. Some of them included lack of essential facilities and resources, not all teachers had knowledge and skills needed for inclusivity, time limitations, as well as affecting the self-esteem of these students.

Numerous studies on teachers' attitudes toward inclusion echo the need for training and resources for teachers (Hemmings & Woodcock (2011); Khan (2011); Naseer (2012); Rahamn & Dean (2012) & UNESCO (2011)). After an empirical study done on identifying teachers' perceptions towards inclusive education by Ali et al., (2006), they asserted that inclusive education programmes cannot be successfully implemented if teacher competency is not increased. Thus, they recommended to providing opportunities for teachers to attend courses or training that are related to inclusive education. In fact, such professional development activities

are vital for those who lack exposure and training in special education. In order to improve their attitude and skills in working with students with disabilities, teachers must have the opportunity to get themselves intensive training programs, as advocated by Anwer and Sulman (2012).

Knowledge and skills. Just like teacher attitude, knowledge and skills are important factors necessary for inclusive education. As teaching is a demanding job, knowledge, skills, and experiences are essential to achieve success in the profession. Teachers who work with SEN students are not an exceptional.

It is clear from past research that teachers' personal knowledge and skills are important as they play a crucial role in instructional delivery (Kuyini & Mangope, 2011). Fundamental knowledge and skills needed for a teacher of SEN students include, understanding needs and abilities of children with special needs and pedagogic skills such as instructional accommodation and activity differentiation (Nguyet & Ha, 2010). Moreover, teachers are required to have knowledge regarding the methods for development and implementation of IEPs and possess the skills for collaborating with other stakeholders (Sucuoğlu et al., 2013).

The overall findings of the study show that, 'knowledge and skills' has received disparate results than other factors of the school readiness indicators. For instance, most teachers did not agree that they have sufficient knowledge and skills required to teach in an inclusive setting. Likewise, nearly half of the participants of the survey disclosed that they did not have sufficient knowledge about various types of disabilities a child could have. They also showed lack of understanding regarding the use of IEP for students with special needs. Only 35% of teachers agreed that student IEP goals are addressed in academic and non-academic activities in their respective schools. This finding is consistent with Geldenhuys and Pieterse (2005)'s results on the study done in South Africa regarding inclusive education.

According to Mthembu (2009), successful implementation of inclusive education requires educators to have the necessary knowledge, skills and competencies to accommodate a wide range of diversity among learners in an inclusive classroom. If the level of the teachers' competency is increased, the inclusive education programme could be successfully implemented (Ali, 2006).

The findings show that majority of the teachers were not been adequately trained to teach children with disabilities. All the participants had general teaching qualifications from Certificate level to Masters, but only 30.5% of them had any training on special education. And among those who had the training, almost all of them have had only short term professional development training. Yet, Kapinga (2014) stresses the importance of training by stating that, “the success of inclusive education rests on quality teacher preparation gearing towards inclusive education. How teachers are prepared is intrinsically linked to the quality of education provided in the schools” (p.2).

Rice (2010) noted that experience gained over a period of time, enhances the knowledge, skills, and productivity of teachers. Majority of the teachers participated in the study have more than 6 years of experience working as a teacher. Their experience in the profession also might have worked as a contributing factor for the amount of knowledge and skills they manifest regarding teaching SEN students.

However, even though many teachers stated that they are not adequately trained to teach children with disabilities, teachers confirm that to some extent they had knowledge and skills needed to teach these students. This findings shows that despite the inadequate proper training on inclusive education, teachers’ self-efficacy regarding provision of inclusive education is high. More training is needed to upgrade their knowledge on SEN children and inclusive practices to enhance the learning experiences of special children.

As the results from the analysis show, even though the number is relatively comparatively lower, majority of teachers agreed with the statements given on the survey questionnaire on possessing knowledge and skills of inclusive education. Hence, overall, it could be said that to some extent teachers are ready for inclusive education in terms of these areas.

Challenges for inclusive education. Dealing with individual differences or diversity in the classroom can be full of challenges. Literature states that teachers all over the world experience difficulties at different levels when trying to implement inclusive education (Spies, 2013). According to Khan (2011), challenges faced by developing countries in implementing inclusive education include; a lack of relevant research information, inadequate support services,

lack of appropriate facilities and materials, inadequate training programs and ineffective policies and legislation.

The findings of the present study also revealed some of the challenges and complexities teachers face when attempting to implement inclusive practices in the schools selected for the study. Both quantitative and qualitative analysis of the data when combined, revealed five different types of major challenges, and these challenges are considered as barriers for successful inclusivity. Those five major challenges are:

- Teachers lacking knowledge and skills,
- Lack of facilities in schools,
- Lack of awareness among all stakeholders,
- Curriculum difficulties, and
- Time limitations.

As shown from the study, the most significant challenging barrier for the teachers is lack of knowledge and skills. As teachers reiterated, they lack knowledge about various disability types, ways of helping the students and parents, catering their needs and delivering effective lessons. Teachers also expressed that they lack necessary skills in various issues like, managing SEN students together with regular students, conducting effective differentiated lessons for them, managing time effectively, and giving exposure to a wide variety of challenging activities.

According to a report published by European Agency for Development in Special Needs Education (2003), “teachers need a repertoire of skills, expertise, knowledge, pedagogical approaches, adequate teaching methods and materials and time if they are to address diversity effectively within their classrooms” (p. 4). After conducting an empirical study to investigate the preparedness of educators for inclusive education, Naicker (2008) reported that teachers’ lack of knowledge, skills and experience of exceptional learners and mainstreaming has an impact on classroom teachers’ attitudes. Thus, the researcher recommended educators to provide in-depth knowledge of the philosophy of inclusion and the need for teachers to develop the commitment required to accommodate SEN students in mainstream classes through the means of pre-service and in-service training. Further, Avramidis, Bayliss, and Burden (2000) also emphasised the importance of improving knowledge and skills (competencies) through training programmes.

According to most of the teachers of this study, lack of resources or facilities is also among the significant challenges. Teachers voiced that schools do not have sufficient resources, starting from the classroom materials to overall school infrastructure which are necessary for students with special needs. As teachers confirmed, SEN students with physical disabilities cannot get accessibility to important places in almost all the schools. Likewise, teachers do not have adequate teaching aids or resources needed for differentiated teaching. In many previous findings, lacking adequate resources is a common barrier for inclusivity (Ainscow (2004); Anwer & Sulman (2012); Barco (2007); Fazal (2012); Kern (2006); Khan (2011); Hemmings (2011); Mthembu (2009); Spies (2013) & Walker (2012)). However, McGhie-Rihmond, Irvine, Loreman, Cizman, and Lupart (2013) found that, for teachers who have an optimistic perception about their skills and who are confident in implementing inclusive education, resources become less of an issue.

According to the findings of the study, lack of awareness among important stakeholders is also identified as a major challenge for inclusive practices. These important stakeholders include school management members, parents, and normal students of the mainstream classes. Participants delineated that parents' awareness is also an obstacle when it comes to implementing inclusivity. As mentioned by the teachers, it is difficult to convince parents of SEN students that those kids are worth special effort. Moreover, some parents of normal students do not agree to accommodate SEN students in the mainstream classes. In addition to these, awareness and general understanding of SEN students among normal students is also considered as a barrier for inclusivity. Teachers raised the issue that students with special needs are not being accepted by the regular students in the class, causing those SEN students feeling isolated with low self-efficacy.

Consistent with the above findings, Fazal (2012) found awareness of parents as a hindrance for inclusive education. She described that non-cooperative behaviour of the parents of disabled children especially parents with low levels of education is a challenge to teachers. "The attitude of the parents disturbs the children and makes them non-responsible" (Fazal, 2012, p. 829). Likewise, according to Broderick et al., (2012) teachers' attitudes and approaches towards inclusivity in the classroom can affect mainstream students' awareness to a great extent. As Broderick and colleagues state, to overcome the maltreatment of other students towards SEN

students by other students, teachers can incorporate teaching about diversity _ race, class, ethnicity, and ability. Teachers can make these topics an integral part of the curriculum so that a warm and supportive learning community can be established.

In addition to the above, as stated by Fisher et al., (2003), to implement successful inclusivity, the collaborative effort of all educators, including school leaders, and related services professionals is fundamental. The administrators or management members need to support teachers by modelling collaboration across all activities conducted in the school. In the same manner, SEN students must be given equal opportunities as regular students. Students with special needs have to be treated equally with equal opportunities in school activities, taking into consideration the ability and needs of their individuality (Barco, 2007).

Teachers in the study also expressed curricular difficulties they encounter when attempting to implement inclusive practices. As teachers reported, the compatibility and rigidity in following the curriculum, as well as in creating a uniform assessment criteria are major barriers for inclusivity. Likewise, planning and preparations to cater for a variety of needs were also remarked by many teachers. Jackson, Ryndak, and Wehmeyer (2009) asserted that for a single teacher, delivering a multi-content curriculum simultaneously for a variety of learners is not practical in terms of human resources and time. It has to be remarked that all students in a classroom will not obtain the same level of knowledge or understanding, for all learners learn differently and at different rates (Naicker, 2008). However, with necessary support and individualised modification, it can be possible (Avramidis et al., 2000)

Time limitations were identified as a barrier by many teachers who participated in this study. According to these teachers, to cater for the diverse needs of the students, they need to spend lots of time in planning and preparing for the lessons. According to the teachers, those students need exposure to a wide variety of challenging tasks, and teachers need to set activities that would keep the students attentive and engaged throughout the lessons. Moreover, within the short time period, often curricular goals set for the lessons cannot be implemented.

The above results on time constraints is consistent with other findings. For instance, Kern (2006), stated that though teachers supported the concept of inclusion, they did not believe that they had sufficient time to prepare and implement inclusive activities in mainstream classes.

Moreover, findings from Walker (2012)'s study also reveal that time constraints is a primary concern for teachers to adequately plan for SEN students in their mainstream classes.

Some major challenges reported by the participants of the study are presented above. It is evident that although teachers and schools show readiness in moving towards inclusive education, they have salient obstacles that would hinder inclusivity within their respective schools. Yet, when teachers and school leaders take on the challenge of making their classrooms and schools more inclusive, they become more skillful and better practitioners (UNESCO, 2001).

Limitations of the Study

The findings of this research should be interpreted with regard to several limitations. The following are some of these limitations.

- There is a high possibility that some questions of the investigation might not have been answered by the participants truthfully. Participants might have not revealed the truth about their views, and they might have felt intimidated for a possible identification, even though anonymity was assured.
- Although teachers who took part in the survey were asked to fill in the questionnaire confidently, there is a chance that teachers could have discussed the questions with others and arrived at a common response.
- It can also be presumed that some of the teachers who completed the survey questionnaires might have not understood the questions clearly. As the questionnaire was written in English language, teachers might have found some of the terms ambiguous, and hence they might have not comprehended the questionnaire explicitly.
- When filling the survey questions, there is a possibility that teachers gave the answers which they felt were correct rather than offering their personal beliefs and experiences.
- Because of the heavy workloads of teachers, they might have answered the survey questionnaire in haste, without much thought.

The above limitations might have affected the validity and reliability of the finding of the study to some extent. However, while recognizing these limitations, I believe this study would

help to provide clear and practical implications for future research and practice in the field of inclusive education in Maldives.

Recommendations for the Future Research

This study was conducted in the four government-run schools of Hithadhoo, Addu. The aim of this study was to understand what teachers believe, perceive, and feel about their schools' readiness for inclusive education. Similarly, the study also aims to identify the key challenges or barriers for providing inclusive educational practices in these four respective schools. Readiness of the schools and teachers were evaluated by focusing on the following six main factors: leadership, school climate, curriculum instruction and assessment, individual student support, teacher attitude, and knowledge and skills. There are also some other factors that might indicate the readiness of schools for inclusive education. Examples of such factors are scheduling and participation, programme planning and development, family-school relationship, programme implementation and assessment, and professional development (NJCIE, 2009). Further research can focus on these and other factors.

The study sample comprised only teachers to assess school readiness. However, to assess school readiness for inclusive education, other stakeholders like students, parents, and school administrators could also be included in future studies. A more extensive sample would help to obtain a better depiction of the situations of schools.

Further, the scope of the study is based on only one island of the Maldives. Hence, following the findings of this study, school readiness research can be conducted on a larger scale, so that a clearer understanding of schools' readiness could be obtained at a national level.

Recommendations for Practice

Not much research has been done in the field of inclusive education in the Maldives. Hence, the researcher presumes that the findings obtained from the insights of the study provide useful information about the readiness of schools for the implementation of the policy on 'Inclusive Education'. It is also assumed that the information is of value to people who are involved in various duties of the education sector. They include teachers, educational

administrators, teacher education institutions, and policy makers. The following are the five basic recommendations offered from this study.

Recommendation 1. School leaders need to acquire knowledge about the philosophy and other aspects related to inclusive education. The current study indicated that school leaders or principals have a key role to play when trying to provide inclusive practices. Thus, school leaders have to provide full support and backing to implement inclusive practices across all curricular and non-academic activities conducted in the school. Furthermore, as the technical and pedagogical support and assistance given to teachers is crucial, school leaders need to ensure that teachers are provided with adequate pedagogical awareness and assistance related to special education. This can be done in the professional development settings and other sessions conducted in the school. Likewise, the leaders have to ensure inclusivity, by guiding and supporting the effort for change, and drawing together the resources necessary to have successful inclusive practices.

Recommendation 2. The results of the study show that in terms of the physical aspects, schools do not have a safe environment to accommodate students with special needs. School must be provided with facilities that enhance accessibility and flexibility for SEN students. It is useful for MOE to have a SEN friendly school evaluation criteria for physical infrastructure. Similarly, schools must have materials needed to conduct differentiated teaching activities in the classrooms. Further, SEN students must be accepted and treated fairly by all members of the school community.

Recommendation 3. The study also highlights the importance of curriculum adaptation and integration needed to cater the needs of SEN students in mainstream classes. Hence, teachers need to set IEP goals for these students, and then carry out differentiated activities which are based on these IEPs. Teachers also need to incorporate more visual, tactile and kinaesthetic materials and activities to meet a variety of learners' needs. Furthermore, when teaching SEN students in inclusive settings, teachers need to modify their assessment strategies so that a diversity of needs are catered. For example, teachers can reduce the length or complexity of the test items and make assignments or test items more accessible to students with special needs.

Recommendation 4. When providing for inclusivity, teachers need to offer individual support to SEN students who are studying in mainstream classes. Providing individual student supports include, use of additional teaching and care supports to those students, additional teacher services (eg: assistant teachers), use of assistive materials, and school building or classroom adaptations. Teachers also need to collaborate with other stakeholders—students, parents, management members, community members—so that all students are truly integrated and supported.

Recommendation 5. The study reveals that teachers need to acquire more knowledge and skills necessary for the implementation of inclusive practices. According the findings, teachers do not have sufficient training on the field of special education. As a result, they require knowledge on disability types, understanding students’ needs and pedagogic skills needed to teach SEN students. They also lack skills on development and implementation of individualized education programs. Hence, teachers need to increase their competencies to accommodate a wide range of diversity among learners in an inclusive classroom. The school leaders have to ensure that in-service training opportunities are provided to all teachers who are working in mainstream classes. Similarly, pre- and in-service training have to be strengthened by incorporating content and skills related to inclusive education. If the level of the teachers’ competencies are increased through the means of such programmes, inclusive education programme could be successfully implemented in schools.

Conclusion

Implementation of policies on inclusive education are challenging as most of the educators do not have the readiness needed for inclusive practices (Pasha, 2012). When schools are expected to incorporate inclusive education, they are uncertain about their own readiness to embrace inclusivity. Though, classroom teachers are the real implementers of inclusive education, it is questionable whether they are ready to accept the principles of inclusivity in their classrooms. Thus, developing a better understanding of teacher and school readiness is crucial and it does not only benefit students, but may have a positive impact on the general school system.

The aim of this study is to understand what teachers believe, perceive, and feel about their schools' readiness for inclusive education, and identifying the common challenges that hinder provision of inclusivity in schools. The findings of the study show that in general, teachers believe that schools are ready to embrace the concept of inclusivity in the schools of Hithadhoo, Addu Atoll. Generally, teachers in these schools have the right attitude, and to some extent they are aware of the concept of special education. The areas they lack are pedagogical and technical support that could be improved through professional development programmes and other training sessions. The study also shows that schools need to improve their physical environment in order to provide accessibility to all types of students. However, despite these few areas of concern, in general a positive ambience for inclusive education is identified in all the schools.

For teachers and other educators, it is not easy to embrace inclusivity when they are not fully prepared and ready for the new paradigm. It is hoped that, this research could have an impact on the field of inclusive education in Maldives, and be a step forward towards enhancing research based education in the country.

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Appendices

Appendix A: Information letter to the Ministry of Education

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THE MALDIVES NATIONAL
UNIVERSITY



FACULTY OF EDUCATION

REQUESTING PERMISSION TO CONDUCT A STUDY IN 4 GOVERNMENT-RUN SCHOOLS OF HITHADHOO, ADDU CUTY

Dear sir/madam,

I am a student of The Maldivian National University, pursuing Master of Education. Currently I am undertaking a research leading to the production of a dissertation or other publications on the subject of “Teachers’ perceptions about institutional and their professional readiness for inclusive education in schools of Hithadhoo, Addu City”.

The study tries to understand the readiness of schools for inclusive education, by assessing and understanding teachers’ perceptions about the current status of various aspects of the school. According to the Disability Act (People’s Majlis, 2012) and Inclusive Educational Policy (MOE, 2013), all students should be given equal educational opportunities regardless of their physical, intellectual, social, emotional or other conditions. For the successful enactment of these policies, it is essential to understand and assess how ready the schools are for the implementation of the inclusive practices. Hence, it is expected that the study has a high significance and it is believed that the findings of this study will have an impact on educational reforms, particularly at school level, in relation to enhancing schools ability to become inclusive in educational practices.

I am writing to request your permission to conduct my research using teachers from the 4 government-run schools of Hithadhoo, Addu City. The research needs to administer a survey questionnaire, an interview and a focus group discussion for a selected group of total 273 teachers from these 4 schools.

Any information gained from the participants will be treated in the strictest confidence and none of the participants will be individually identifiable in the dissertation or any other publications.

Upon request a summary of my research will be made available to the participants and the school.

I would be grateful if you could grant me consent to undertake this study. If you have any further questions regarding my study, please contact me (telephone number: 7942098 , Email maree2098@gmail.com) or my supervisor Dr Mahamood Shougee (Phone number: 7778232, email address: mshougee@gmail.com)

Thank you for your attention and assistance.

Yours Sincerely

Mariyam Shareefa

Appendix B: Information letter to the principals



REQUESTING PERMISSION TO CONDUCT A STUDY IN YOUR SCHOOL

Dear Sir/Madam,

I am a student of The Maldivian National University, pursuing Master of Education. Currently I am undertaking a research leading to the production of a dissertation or other publications on the subject of “Teachers’ perceptions about institutional and their professional readiness for inclusive education in schools of Hithadhoo, Addu City”

The study tries to understand the readiness of schools for inclusive education, by assessing and understanding teachers’ perceptions about the current status of various aspects of the school. According to the Disability Act (People’s Majlis, 2012) and Inclusive Educational Policy (MOE, 2013), all students should be given equal educational opportunities regardless of their physical, intellectual, social, emotional or other conditions. For the successful enactment of these policies, it is essential to understand and assess how ready the schools are for the implementation of the inclusive practices. Hence, it is expected that the study has a high significance and it is believed that the findings of this study will have an impact on educational reforms, particularly at school level, in relation to enhancing schools ability to become inclusive in educational practices.

I am writing to request your permission to conduct my research using 24 teachers from your school. They can be from any grade or subject taught in the school. The selected teachers will be participating in a survey, and a focus group discussion with a group of 8 teachers randomly selected from the 4 government-run schools of Hithadhoo, Addu City.

After receiving your letter of consent I will proceed with getting consent from the teachers. I would be grateful if you can attach a list all teachers currently working in the schools, so that selection of participants will be done randomly. Once selection is done, I will arrange and inform you a time suitable for the teachers.

Any information gained from the participants will be treated in the strictest confidence and none of the participants will be individually identifiable in the dissertation or any other publications.

Upon request a summary of my research will be made available to the participants and the school.

I would be grateful if you could grant me consent to undertake this study. If you have any further questions regarding my study, please contact me (telephone number: 7942098 , Email maree2098@gmail.com) or my supervisor Dr Mahamood Shougee (Phone number: 7778232, email address: mshougee@gmail.com)

Thank you for your attention and assistance.

Yours Sincerely

Mariyam Shareefa

Appendix C: Information letter to the teachers



FACULTY OF EDUCATION

REQUESTING PERMISSION TO PARTICIPATE IN THE STUDY

Dear Sir/Madam,

I am a student of The Maldivian National University, pursuing Master of Education. Currently I am undertaking a research leading to the production of a dissertation or other publications on the subject of “Teachers’ perceptions about institutional and their professional readiness for inclusive education in schools of Hithadhoo, Addu City”.

The study tries to understand the readiness of schools for inclusive education, by assessing and understanding teachers’ perceptions about the current status of various aspects of the school. According to the Disability Act (People’s Majlis, 2012) and Inclusive Educational Policy (MOE, 2013), all students should be given equal educational opportunities regardless of their physical, intellectual, social, emotional or other conditions. For the successful enactment of these policies, it is essential to understand and assess how ready the schools are for the implementation of the inclusive practices. Hence, it is expected that the study has a high significance and it is believed that the findings of this study will have an impact on educational reforms, particularly at school level, in relation to enhancing schools ability to become inclusive in educational practices.

I would be most grateful if you would volunteer to assist in this project by participating in the study. Participants of the research will be from the 4 government-run schools of Hithadhoo, Addu City. The research needs to administer a survey questionnaire and a focus group discussion for a selected group of teachers from these 4 schools.

Any information gained from the participants will be treated in the strictest confidence and none of the participants will be individually identifiable in the dissertation or any other publications.

Upon request a summary of my research will be made available to the participants and the school.

I would be grateful if you could grant me consent to undertake this study. If you have any further questions regarding my study, please contact me (telephone number: 7942098 , Email maree2098@gmail.com) or my supervisor Dr Mahamood Shougee (Phone number: 7778232, email address: mshougee@gmail.com).

Thank you for your attention and assistance.

Yours sincerely

Mariyam Shareefa

Appendix D: Participants’ consent form



Name of Researcher(s): *Mariyam Shareefa*

Email address : maree2098@gmail.com

Phone no: 7942098

Title of study: Teachers’ perceptions about institutional and their professional readiness for inclusive education in schools of Hithadhoo, Addu City

Please read and complete this form carefully. If you do not understand anything and would like more information, please ask.

- The research is satisfactorily explained to me in verbal and / or written form by the researcher. YES / NO

- I understand that the research will involve: *a survey and a focus group discussion on the perception of teachers regarding their institutional and professional readiness for inclusive education in schools of Hithadhoo, Addu City.* YES / NO

- I understand that I may withdraw from this study at any time without having to give an explanation. YES / NO

- I understand that all information about me will be treated in strict confidence and that I will not be named in any written work arising from this study. YES / NO

- I understand that any information that I provide will be used solely for research purposes and will be destroyed on completion of your research. YES / NO

I freely give my consent to participate in this research study.

Signature:

Name:

Date:

Appendix E: Survey questionnaire



Teachers' perceptions about their institutional and professional readiness for inclusive education in schools of Hithadhoo, Addu City

Teachers' Survey Questionnaire

This questionnaire serves as a part of data collection of the above study, with the aim of understanding teachers' general perception about their professional and institutional readiness for inclusive educational practices.

All personal information and data collected will be kept confidential.

Please answer the following questions based on your own understanding and perception about the existing situation in your school.

PART- A

Personal Information

1. Type of school

- Primary
- Secondary
- Primary and Secondary

2. Gender

- Male
- Female

3.Age

- 20 – 29
- 30 – 39
- 40 – 49
- 50 and above

4.Qualifications

- Certificate or Diploma
- Degree
- Master or above

5. Experience as a teacher

- 5 years or below
- 6 – 10 years
- 11 – 20 years

6. Have you received any training about special education?

- Yes
- No

7. Qualifications in special education:

- Short-term Professional Development trainings about special education
- Undergraduate courses with major in special education
- Master of Education in Special Education
- None
- Others, please specify: _____

PART- B

School Readiness for Inclusive Education

Instructions: Please complete the following questions by circling the appropriate response corresponding to your belief. Use the following key to determine your answer.

- SD = Strongly Disagree
- D = Disagree
- A = Agree
- SA = Strongly Agree
- NAND = Neither Agree Nor Disagree

LEADERSHIP					
1. The school promotes education for all children through vision statement, mission statement and school goals.	SD	D	NAND	A	SA
2. School leader involves all stakeholders (parents, teachers, students) to make inclusion work.	SD	D	NAND	A	SA

3. School leader advocates acquiring resources through additional funding from government/parents/private sector, for resources to support effective inclusion	SD	D	NAND	A	SA
4. School leader ensures that IEPs (Individual Educational Programme) are set by teachers for students with special needs in their classrooms and encourage them to review and implement the IEPs regularly.	SD	D	NAND	A	SA
5. The school leader is proactive, committed and visible in efforts to support teachers in their inclusive efforts and ensure successful inclusion in the school.	SD	D	NAND	A	SA
6. School leader communicates that all staff are responsible for all of the children in their school so that students with special needs are not helped by only special education staff.	SD	D	NAND	A	SA
7. The school leader is knowledgeable about and involved in the design and implementation of current curriculum, instruction, and assessment practices.	SD	D	NAND	A	SA
8. Teachers are evaluated on whether they are using ongoing formative assessments to identify and cater for students with special needs.	SD	D	NAND	A	SA
SCHOOL CLIMATE					
1. The school environment is one that celebrates diversity and staff members work to create an atmosphere where students' differences are understood and appreciated.	SD	D	NAND	A	SA
2. There is a school-wide approach to building positive relationships among all students (including special needs students) across all activities (academic and nonacademic) and all settings.	SD	D	NAND	A	SA
3. There is a school-wide effort to promote awareness on active participation and responsibility regarding inclusion in the society.	SD	D	NAND	A	SA
4. School management and teachers have an understanding of disabilities and the special needs that having a disability can create.	SD	D	NAND	A	SA
CURRICULUM, INSTRUCTION AND ASSESSMENT					
1. Teachers incorporate visual, tactile and kinesthetic materials and activities to meet a variety of learners' needs	SD	D	NAND	A	SA
2. Teachers use class-wide routines and procedures to support classroom management and learning of all students.	SD	D	NAND	A	SA
3. When a student with disabilities requires a modified curriculum, teachers modify curricular goals and	SD	D	NAND	A	SA

classroom instruction to adapt curriculum and instruction to the needs special needs students.					
4. Teachers use multiple strategies to provide instruction such as individual, pairs, small groups and whole class.	SD	D	NAND	A	SA
5. Teachers involve students with disabilities by regularly using instructional strategies that support complex thinking rather than making the curriculum way too simple. (Example: While students without special needs are expected to analyze the characteristics of various nations, students with needs are merely asked to locate the nations on the map.)	SD	D	NAND	A	SA
6. Teachers regularly plan lessons involving materials to supplement the text (e.g., videos, DVDs, web resources, magazine articles, newspapers, etc.).	SD	D	NAND	A	SA
7. Teachers measure student understanding, and refine instruction using a variety of ongoing (formative) assessments.	SD	D	NAND	A	SA
INDIVIDUAL STUDENT SUPPORTS					
1. Where it is determined that a student’s goal cannot be effectively addressed within an existing class activity, the staff ensures that an alternative method is used (Eg: extra-classes / remedial classes).	SD	D	NAND	A	SA
2. School management members and teachers demonstrate knowledge of the general education classroom practices which support inclusion.	SD	D	NAND	A	SA
3. School management members and teachers have knowledge of writing IEPs for students with special needs.	SD	D	NAND	A	SA
4. School management members and teachers are knowledgeable about types of disabilities and theories about special education.	SD	D	NAND	A	SA
5. As needed, teachers use a variety of technology (eg: computer software programmes, games etc.) to ensure meaningful participation in instructional activities.	SD	D	NAND	A	SA
6. For students with special needs, specific goals are set with skills needed for post-school life (e.g., postsecondary education, work, community living etc.).	SD	D	NAND	A	SA
TEACHERS’S ATTITUDES TOWARDS INCLUSIVE EDUCATION					
1. My educational background has prepared me to effectively teach students with cognitive delays and deficits.	SD	D	NAND	A	SA
2. I feel comfortable in working with students with special needs in my classroom.	SD	D	NAND	A	SA

3. I am willing to help other teachers with issues which may arise when students with special needs are in their classrooms.	SD	D	NAND	A	SA
4. I believe that all efforts should be made to educate students who have special needs in regular classrooms.	SD	D	NAND	A	SA
5. I am willing to make the changes required in the classroom setting to help integrate students with disabilities.	SD	D	NAND	A	SA
6. I feel supported by school management when faced with challenges presented by students with various disabilities.	SD	D	NAND	A	SA
7. I believe that students with disabilities can show improved social skills if mainstreamed.	SD	D	NAND	A	SA
8. Although children differ intellectually, physically and psychologically, all children can learn in most environments.	SD	D	NAND	A	SA
9. Students with special needs have higher academic achievement when included in the regular education classroom.	SD	D	NAND	A	SA
10. I feel that self-esteem of children with special needs is increased when included in the regular education classroom.	SD	D	NAND	A	SA
KNOWLEDGE & SKILLS					
1. I have been adequately trained to meet the needs of children with disabilities.	SD	D	NAND	A	SA
2. I have sufficient knowledge about various types of disabilities a child can have.					
3. I am aware of what an IEP is.					
4. I have knowledge about instructional strategies that are effective in an inclusive classroom.					
5. I can demonstrate skills needed to teach a student with special needs.					
6. In my school, student IEP goals and objectives are addressed in academic and nonacademic activities and routines as appropriate.					
7. The school promotes awareness, knowledge and adoption of best practices needed for inclusive education by providing training and consultation for all school staff.					
8. I am aware of the Disability Act of Maldives and the Inclusive Education Policy of Ministry of Education.					

Do you believe special needs students should be taught in mainstream classes? If yes, provide your reasons. If no, explain why you believe it is not the best option for special needs students.

Would you include special education in your class? If yes, please try to explain at least 3 key or main challenges in including inclusive practices in the classroom

1. _____
2. _____
3. _____

Thank you

Appendix F: Focus group interview questionnaire



Teachers' perceptions about institutional and their professional readiness for inclusive education in schools of Hithadhoo, Addu City

Teachers' Interview & Focus Group Discussion Questions

PART- A

Personal Information

1. How many years have you been in the teaching profession?
2. Have you got any training on special education?
3. What is your current teaching grade / class?

4. Are there any SEN students in your class? / Have you ever taught SEN students together with normal students?

PART– B

Questions related to Teaching

1. How would you describe your philosophy of teaching and learning? What are the basic principles that guide your practice?

2. What are your classes like? What instructional approaches/strategies do you follow? (i.e., differentiated instruction, cooperative groups etc.)

3. Does your school leader guide you to promote inclusive education in the school? Does he/she show commitment and support for implementing successful inclusion in the school?

4. Describe the school climate. Is the school environment safe and secure for students with special needs? (both physically and socially)

5. Do you believe that in your school, there is good relationship between students and teachers? When students need help with issues, are teachers approachable for students?

6. Do you modify curricular goals and classroom instructions to adapt to the needs of students with special needs?

7. What about evaluating and monitoring students' progress? How do you assess and communicate students' achievement? Do you use IEPs?

8. Can you talk about the kind of individual support that you lend to students with special needs in your class/es?

9. What challenges do you encounter in working with students with special needs?

10. Is there anything that you would like to add or comment about teaching SEN students in inclusive settings?
