TEACHERS' ATTITUDES TOWARDS WORKING WITH STUDENTS WITH SPECIAL EDUCATIONAL NEEDS IN MAINSTREAM CLASSES IN EGYPT

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DECLARATION

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature: ……………………… Date: ………………………………..

27 February 2008

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Here's to the kids who are different,
The kids who don't always get A's,
The kids who have ears twice the size of their peers,
And noses that go on for days ...

Here's to the kids who are different,
The kids they call crazy or dumb,
The kids who don't fit, with the guts and the grit,
Who dance to a different drum ...

Here's to the kids who are different,
The kids with the mischievous streak,
For when they have grown, as history's shown,
It's their difference that makes them unique.
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ABSTRACT

Recent developments in education have focused on exploring different ways of responding to the diverse learning needs of students. The international trend has been to move towards an inclusive approach based on democratic principles in education, including students with special educational needs in mainstream schools and classrooms.

Egypt, an initial signatory to the Convention on the Rights of the Child, has not escaped the prominence of inclusive education on the international education agenda. No legislation on inclusion in schools has been promulgated in Egypt. Furthermore, information is lacking regarding teachers' attitudes towards working with students with special educational needs in mainstream classes, despite the fact that teacher attitudes are instrumental in determining the success or failure of inclusive education. The aim of the research, therefore, was to identify teachers' attitudes towards inclusive education.

For the purpose of this study, a non-experimental quantitative research design with specific reference to survey research was chosen. The population consisted of teachers in five schools in Alexandria and Cairo and a questionnaire was designed. Data was analysed using the statistical programme SPSS (14.0 for Windows).

Results indicate that teachers in Egypt have serious reservations about the feasibility of accommodating students with special educational needs in their classrooms. Curriculum development, educational support, funding opportunities, as well as the training of teachers, need to be addressed in order to facilitate the development of inclusive educational strategies.
ACRONYMS

ARCH  A Legal Resource Centre for Persons with Disabilities
CAPMAS  Central agency for public mobilisation and statistics
CEC  Council for Exceptional Children
CEF  Commonwealth Educational Fund
CSIE  Centre for Studies on Inclusive Education
DIAKONIA/NAD  Norwegian Association of Disabled
IDEA  Individuals with Disabilities Education Act
EADSNE  European Agency for Development in Special Needs Education
EENET  Enabling Education Network
ESRC  Economic & Social Research Council
FAPE  Families and Advocates Partnership for Education
JICA  Japan International Cooperation Agency
INEE  Inter-agency Network for Education in Emergencies
NCSNET/NCESS  National Commission on Special Needs and Training, National Committee for Special Educational Services
NGO  Non-Government Organisations
OECD  Organisation of Economic Co-operation and Development
OFSTED  Office for Standards in Education
UN  United Nations
UNDP  United Nations Development Programme
UNICEF  United Nations Children’s Fund
UNESCO  United Nations Educational, Scientific and Cultural Organisation
UNESCO/EFA  UNESCO/Education for All
UNESCO/UIS  UNESCO Institute for Statistics
UNCRC  United Nations Convention on the Rights of the Child
UNWRA  United Nations Relief and Works Agency for Palestine Refugees in the Near East
WHO  World Health Organisation
ILO  International Labour Organization (United Nations)
WENR  World Education News Review
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CHAPTER 1

CONTEXTUALISATION AND ORIENTATION TO THE STUDY

Inclusive education is gaining ground. Throughout the world, teachers and others involved in education are working to develop positive educational experiences that all children and young people can enjoy and benefit from, together. For disabled children and those experiencing difficulties in learning, this means inclusion in mainstream schools and classrooms alongside their non-disabled peers. For all children - and adults - it means a more enriching and rewarding educational experience - Sharon Rustemier (Centre for Studies in Inclusive Education, http://inclusion.uwe.ac.uk).

1.1 INTRODUCTION

Over the last two decades developments in special education have been part of the transformation occurring in education. Recent developments have involved education systems in exploring different ways of responding to the diverse learning needs of students, resulting in a gradual move away from segregation to the inclusion of all students in mainstream schools; a move from a focus on a defect model towards educational placement based on a social model of change (Mittler, 2000). The universal trend, therefore, has been to move from the clinical or individual perspective in separate special education settings, to a social and ecological perspective within mainstream schools. Social and ecological perspectives represent a school of thought that stands in direct opposition to the medical or clinical model and focuses on the integrated relationship between the person and his ecology (Kapp, 2002:13). The concept of separation has been contested (Ainscow, Farrell & Tweddle, 2000:221), since "at the heart of the idea of inclusive education lies serious issues concerning concepts such as human rights, equal opportunities and social justice" (Armstrong, Armstrong & Barton, 2000:1).

The inclusion movement in education originated to some extent in the "integration" movements of the 1970s in the education systems of countries of Western Europe and North America. This involved a limited attempt to accommodate and support
students with disabilities in mainstream schools (Dyson, 2003:1). Inclusion differs from the integration approach insofar as it indicates a commitment to the creation of mainstream schools, which are capable of accepting all students (Dyson & Forlin, 1999:25). For some countries, however, inclusion has come to have a somewhat different meaning. Both the Salamanca Statement and the Framework for Action (UNESCO, 1994a) point out that, in many parts of the world, inclusive education is seen as a forerunner to "Education for All" (UNESCO, 2000a; Dyson, 2003). This implies that there should now at least be some form of basic education for those children previously marginalised, either through not being able to attend school, or because of their disabilities (Dyson, 2003).

This right to education has generated an increasing interest in the equity of education systems in countries all over the world. The term "equity" is subject to a variety of interpretations, but the consensus generally is that an "equitable" system should provide high-quality education to all students. However, mainstream education was traditionally not designed for students with diverse learning needs. Consequently, the need to ensure that social justice and equity goals are met for all students is a challenge for mainstream schools and particularly for teachers. The consensus, internationally, is that for inclusive education to be meaningful, schools need to recognise and react to the diverse needs of their students while accommodating different styles. This is achieved through the adaptation of the learning environment, curriculum, and teaching strategies in mainstream classrooms (UNESCO, 2005a; 1994a). The training of teachers is crucial in the implementation of inclusive education. Teachers need to be equipped with the necessary skills in order to confront concerns of inclusive education, thereby accommodating diversity in education (Donald 1996:82; Department of Education 1998a:98-99; Department of Education, 2000:15, Department of Education, 1999a:15; Swart, Engelbrecht, Eloff & Pettipher, 2002).

While an adequate supply of teachers will provide the possibility of reaching international goals on education, it will ultimately depend on the efficacy of regular classroom teachers to guarantee that "Education for All" becomes a reality (UNESCO Institute for Statistics [UNESCO/UIS], 2006). Inclusive education is often seen as a challenge, which can only be met when society becomes committed to the principles of change regarding inclusivity in education. Changing legislation and
terminology can contribute to supporting this process, but meaningful change is dependent on the changing of attitudes of all major role-players. Since "peoples' attitudes determine their actions" (Williams & Finnegan, 2003:40), attitudes have both a cognitive and an emotional component, and they prompt observable behaviour (Swart et al., 2002:178; Opdal, Wormaes & Habayeb, 2001:144). Over the years, research has examined the attitudes of teachers towards inclusion. Results reveal that teachers tend to be indecisive or have disagreed with the possible advantages of inclusion (Hammond & Ingalls, 2003; Avramidis & Norwich, 2002), feeling that inclusion would ultimately bring little benefit to students with disabilities.

According to UNESCO/UIS, (2006), after Sub-Saharan Africa, the Arab States will face the greatest shortage of teachers in their endeavour to provide universal primary education (UPE) to all students by 2015. The United Emirates and the Palestinian Autonomous Territories will need to supplement their teaching force by about 3% annually. Egypt can expect the biggest increase in the number of school-age students, from 7.9 to 9 million, over the decade (UNESCO/UIS, 2006). The worldwide supply of teachers does not fluctuate in simple proportion to the number of students, but rather depends on the efficiency of the system and the organisation of teachers to meet education quality and equity goals. In essence, countries are hard-pressed to recognise that "no State should be satisfied with mere quantity, but should seek also to improve quality" (UNESCO/International Labour Organisation [UNESCO/ILO], 1999).

Egypt has not escaped the prominence of inclusion on the international education agenda and the resultant pressure to focus on educating all students in mainstream schools while improving efficiency and effectiveness. In Egyptian schools, systems are challenged to acknowledge responsibility for students' learning, by developing both their systems and methodologies (Khouzam, 2005:1). This is in accordance with the Salamanca Statement of 1994, and the consensus that inclusive education is not only "cost-efficient" but also "cost effective" (Peters, 2004:4-5). Egypt has the largest education system in the Middle East and the North African region, and one of the largest in the world. It is probable that the Egyptian population will reach 95 million in 2015 (United Nations International Children's Emergency Fund [UNICEF], 2006).
In Egypt, there are two kinds of schools, namely government and non-government schools. There are two types of government schools, namely Arabic Schools and Experimental Language Schools. The Arabic School offers the governmental national curriculum in Arabic. The Experimental Language Schools teach the government curriculum mainly in English. French is added as a second foreign language. Arabic, however, is still seen as a first language, alongside the foreign language. Egyptian nationals are required to study Arabic. The exception to this rule would be for students to attend international private schools (such as the British International School).

In the private sector, non-government schools are called Language Schools. These schools are supervised by the Ministry of Education and are required to teach state-approved curricula, but add either French or German as a second foreign language. These schools are usually better resourced. Many language schools offer additional educational programmes in conjunction with the national curriculum. These include the American High School Diploma, the British IGCSE, the French Baccalaureate, and the German Abitur. The majority of children attend government schools (World Education News Review [WENR], 1999.

At present, Egyptian legislation restricts the size of government school classrooms to 36 students. Merely 20% of schools actually comply with this law. At the time of this research, in 37% of the schools classes contained 45 or more students. In order to alleviate the problem of class sizes, about 30% of schools have introduced double shifts. On investigation it was found that 69% of the double-shift schools were bound to have 45 or more students per classroom and 24% of the single-shift schools had classes with 45 or more students (Population Council, 2001:1). The school system in Egypt works through a core curriculum, which is limited to basic academic subjects such as Arabic, mathematics, science and social studies. The Ministry directly controls this curriculum and all instruction is based on defined core content. While the fundamental curriculum method does not rule out the use of analytical thinking, problem solving and collaborative learning, it encourages teaching toward the "correct" answer (Khouzam, 2005:1).

Egypt was an initial signatory to the Convention on the Rights of the Child, and one of the six originators of the first World Summit for Children. Although there has been progress towards the achievement of child rights, questions have arisen regarding
the quality of the education. Efforts have been made by local, regional, and national
governments, as well as by international donors, in an attempt to modernise ageing
and colonial systems of curricula, assessment, and methodology throughout the
developing world. Unfortunately, while there has been movement towards "Education
for All", there has been little change in the quality of education in Egypt (Williams,
2005:1). Though major funding has been invested into training of teachers, little or
no change has filtered back into the schools. The reason cited is that once back in
schools, teachers are confronted by colleagues, supervisors, and even parents who
are unwilling to tolerate change. This results in teachers losing motivation and
lapsing back into previous ways of teaching. Wage disparity also significantly affects
the quality of education by diminishing the prestige of teaching as a profession. Low
wages will eventually attract less qualified teachers and dishearten those seeking a

Research on the implementation of inclusive education and the attitudes of teachers
towards inclusive education in Egypt is limited. An initial study on inclusive education
was conducted by Caritas, Egypt, in 1998, using its SETI Centre for Advice, Studies
and Training on Mental Retardation, in collaboration with the Upper Egypt
Association in Minya (UNESCO, 2002a:27). Two schools in three governorates were
included in the pilot study: Cairo, Minya and Alexandria. The purpose of this teacher
training programme was to assess the feasibility of including children with disabilities
into mainstream classes from kindergarten through to primary stages. The study was
a practical form of initiation to promulgating Egypt's ratification of the Convention on
the Rights of the Child (CRC) and the formulation of the National Plan of Action, to
address the problem of the education system in coping with the estimated 1.5 million
children with disabilities. It is estimated that of those 1.5 million children, only 25 000
were officially enrolled in school (UNESCO, 2002a; Save the Children [SCF/UK],
2001). In the conclusion to the report on the pilot study, certain problem areas were
cited. Due to the unwillingness or inability of the schools in releasing staff, the
proposed teacher training was not completed. The ability of the teachers to respond
to diversity in their classroom was extremely limited, though the desire to learn was
there. The important recommendation made was that if any of the modest gains
were to be maintained, follow-up and continuation were essential (UNESCO,
2002a:27).
1.2 STATEMENT OF THE PROBLEM

1.2.1 Background to the statement

Internationally, the concept of inclusive education is grounded in democratic principles, and the challenges facing many countries of the world centre on ensuring that the educational rights of all children are guaranteed. For schools to be truly democratic in acknowledging the educational rights of all children, teachers and schools will need to accept diversity and respond effectively in meeting the needs of all students within schools.

Teacher attitudes can be instrumental in determining the success or failure of any inclusion programme and it has been suggested that teachers' willingness to accommodate diversity in their classrooms may be influenced by interrelated factors, namely classroom procedures and the number of disabilities present in a particular class (Wilkins & Nietfeld, 2004:115; Avramidis & Norwich, 2002:140). Furthermore, in terms of willingness, teachers more often tend to be influenced by practical classroom difficulties than by concerns of working with students with special educational needs, including disabilities. If there were concerns about working with special needs students, it would depend largely on the severity of the disability and the amount of support available (Mastropieri & Scruggs, 1996:59-60).

1.2.2 Aim of the study

In view of the limited information available in Egypt regarding teachers' attitudes towards inclusive education, this study attempted to identify factors that influence Egyptian teachers' acceptance of the principle of inclusive education. Exploring teachers' attitudes towards inclusive education may serve as the initial step towards the meaningful implementation and acceptance of inclusive education in Egypt in future.

1.3 RESEARCH QUESTIONS

The following research questions guided the research in ascertaining teachers' attitudes towards inclusive education:

1. How did inclusive education develop internationally and what is the present situation in Egypt regarding inclusive education?
2. What are the critical elements of inclusive education and how does the development of inclusive schools influence teachers?

3. Identify teachers' attitudes towards working with students with special educational needs in mainstream classrooms according to the following sub-aims:

   - **Sub-aim #1**: To describe the biographic/demographic characteristics of respondents
   - **Sub-aim #2**: To ascertain teachers' perceptions of how accommodating their present classroom situation is towards students with different types of special educational needs
   - **Sub-aim #3**: To explore teachers' attitudes towards inclusive education as measured by four attitude constructs (an interrelated set of barriers, training, lesson planning and techniques and curriculum).
   - **Sub-aim #4**: To explore teachers' attitudes towards inclusive education as measured by additional questions not included in the PCA.

4. What implications do the attitudes of teachers have for the implementation of inclusive education in Egypt?

1.4 THEORETICAL FRAMEWORK

1.4.1 An ecosystemic framework

According to Engelbrecht (1999:4), "the values and understanding of students, teachers, schools, parents and communities shape and are shaped by the social contexts in which they find themselves". The ecosystemic perspective has proven useful in trying to identify with individuals in relation to their social contexts. This perspective notes that "people are seen as shaped by - and as active shapers of their social context" (Donald, Lazarus & Lolwana, 2002:42; Engelbrecht, 1999:42). The ecosystemic theory, as its name suggests, is a fusion of two theories, namely the ecological and system theories, and it indicates the study of the relationship between living organisms in their independent contexts and incorporates the contextual framework as formulated by Bronfenbrenner (Bronfenbrenner, 1992; Donald et al., 2002).
Bronfenbrenner's ecological model sees a child's development happening within five nested systems, namely the micro-, meso-, exo-, macro-, and chronosystems. These systems, which interact with one another, need to be considered when understanding a child's development (Donald et al., 2002:51; Paquette & Ryan, 2001). The main benefit of this ecological approach is that it emphasises the fact that situations and people's actions significantly influence a child's development, irrespective of whether the child has direct connections with the environment or not. The **microsystem** encompasses the relationships and everyday interactions the child has with his/her immediate surroundings (school, local community, family). Bi-directional influences affect relationships, while at the **mesosystem** level peer-group, school, and family systems interact with one another. The **exosystem** includes other larger social systems in which the child is not indirectly involved. For example, this could include the parents' workplace and parent-teacher associations. These systems affect the child in two ways - either by increasing risk or by increasing opportunity. Long working hours and poor remuneration for parents could lead to increased stress within the home, and could negatively influence a child's relationship with his or her parent(s) and increase risk (Alant & Harty, 2005:5).

The **macrosystem** involves dominant social structures as well as values and customs. It may influence and be influenced by all other levels of the system. The **chronosystem** relates to the dimension of time and the developments inside all of the previously mentioned levels (Donald et al., 2002:51-53; Paquette & Ryan, 2001). It is crucial to note that children are active participants in their own development and that the environment does not simply influence the child.

Systems theory applied in the context of education has developed our understanding of families, classrooms and schools, and the relationships between these and their social context. Donald describes it as "different levels and groupings of the social contexts as 'systems' where the functioning of the whole is dependent on the interaction between all parts" (Donald et al., 2002:47). Systems perpetuate themselves over time at all levels, and therefore they are seen as continuously developing and interacting with one another (Donald et al., 2002; Green, 2001:8).

For the purpose of this study, the researcher has adapted Donald's ecosystemic framework (see Fig. 1.1), specifically concentrating on teachers and their interaction with multiple contextual influences. The framework constructed according to the
rules of contextualisation, provides a better understanding of human experience and behavior. Based on contextual analysis and synthesis, it follows that an understanding of the context is the first step towards understanding the movement towards inclusive education (Engelbrecht, 1999:5).

FIGURE 1.1: AN ECOSYSTEMIC MODEL

The school system depicts the teachers' close interaction with colleagues, students and management within the school setting. A better understanding of teachers' school and community contexts can contribute to an understanding of specific factors such as teachers' personal experiences with students, personal development, level of support available to them, the class size and their workload, and contribute to the maintenance of a positive attitude.

The wider community system in the adaptation of Donald's ecosystemic model for the purpose of this study represents the community that is the geographical regions of Cairo and Alexandria.
The wider social system level includes the educational system in which teachers find themselves. Educational reform has been described as complex, arbitrary and at times highly political (Fullan & Miles 1992:2). Policies as formulated in accordance with international tendencies are imperative to the development of inclusive education in any country. The success, however, is determined by how these policies, such as those regarding funding, curriculum, structures, support, and resources reach the teachers and promote inclusive education.

Bronfenbrenner's (1992) and Donald's et al., (2002) frameworks thus allow an exploration of inclusive education as being about the development of education systems and the development of individuals (e.g. attitudes of teachers). By understanding the different factors operating within and between these systems a better understanding of inclusive education is facilitated (Singal, 2006:240).

1.4.2 Framework for inclusive schools within an ecosystemic perspective

Bronfenbrenner's theory is important with regard to inclusion, as the ecological systems theory clarifies the complexity of the interaction and interdependence of multiple systems that affect learners and their development and learning. It has been said that a "true ecological system thinker never debates whether the cause or the solution is situated in one single system, but considers the interdependence between all the systems" (Swart & Pettipher, 2005:13).

School reform in general is challenging with inclusion being one of the more complex components within educational reform (Fullan & Miles, 1992). Kavale and Forness (2000:287) emphasise the fact that "inclusion is not something that simply happens, but something that requires careful thought and preparation implemented with proper attitudes, accommodations, and adaptations in place". A definition of "the inclusive school" as defined by the Centre for Studies on Inclusive Education suggests the following:

It is community based; an inclusive school reflects the community as a whole. Membership of the school community is open, positive and diverse. It is not selective, exclusive or rejecting; it is barrier-free; an inclusive school is accessible to all who become members - physically in terms of the building and grounds, and educationally in terms of curricula, support systems and methods of communication; it promotes collaboration; an inclusive school works with, rather than competitively
against, other schools; it promotes equality; an inclusive school is a democracy (Wilson, 2000:298:).

Including students with special educational needs into mainstream classes has largely been mandated by legislation (Zirkel, 2002), and now teachers are being expected to support students with special needs in mainstream classes (Gersten & Woodward, 1990:5-6). This restructuring of the learning environment is important to both mainstream and special educators. Restructuring learning environments to sustain the inclusion of students with disabilities in a mainstream classroom is an important responsibility that teachers in mainstream and special education share. Simply placing a child with special needs into the school system does not lead to meaningful inclusion. It calls for a shift in thinking: moving from viewing inclusion as occurring mainly in special education, to viewing it in the context of school restructuring (Voltz, Brazil & Ford, 2001; Lipsey & Gartner, 1966).

The concept of inclusive school communities is described in terms of three fundamental characteristics: (1) an emphasis on belonging and meaningful participation, (2) the creation of alliances and affiliations among members, and (3) the provision of mutual support (Sands, Kozleski & French, 2000:116). Emphasis is no longer directed at individual students who are expected to “fit in,” but rather at the accountability of the system to change and accommodate the diversities of the student. For inclusion to be fully accepted in schools it would require the willingness and commitment of administrators, teachers and parents (Monahan, Marino, Miller & Cronic, 1997; Wagner, 2001).

The following framework describes an open system that justifies the external factors influencing inclusive education, for example policy, legislation, and cultural and socio-economic conditions. It also takes into account external factors that are integral components of inclusive education as a whole (Peters, 2004:14).
FIGURE 1.2: AN INPUT-PROCESS-OUTCOME-CONTEXT FRAMEWORK FOR INCLUSIVE EDUCATION

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PROCESS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School</strong>&lt;br&gt;• Curriculum content&lt;br&gt;• Textbook &amp; learning materials&lt;br&gt;• Teacher qualifications, training&lt;br&gt;• Morale &amp; commitment&lt;br&gt;• Accessible facilities&lt;br&gt;• Parent/community support&lt;br&gt;• Braille/Sgn Language support&lt;br&gt;• Action Plans &amp; Needs Assessments&lt;br&gt;• Evaluation Plan</td>
<td><strong>School Climate</strong>&lt;br&gt;• High expectations/respect&lt;br&gt;• Guiding Philosophy/Mission&lt;br&gt;• Participation/choice&lt;br&gt;• Positive teacher attitude&lt;br&gt;• Safe and supportive environment&lt;br&gt;• Flexible curriculum&lt;br&gt;• Incentives for participation&lt;br&gt;• Integrated whole-school system&lt;br&gt;• Collaborative support teams</td>
<td><strong>Achievement</strong>&lt;br&gt;• Literacy, Numeracy&lt;br&gt;• Good citizenship&lt;br&gt;• Personal development&lt;br&gt;• Positive attitude towards learning&lt;br&gt;• Self-determination/advocacy&lt;br&gt;• Self-esteem&lt;br&gt;• Social &amp; Independent Living Skills</td>
</tr>
<tr>
<td><strong>Student Characteristics</strong>&lt;br&gt;• Diverse Characteristics valued and supported&lt;br&gt;• Disability, gender, at-risk, refugee children, minorities, low-income</td>
<td><strong>Teaching/Learning</strong>&lt;br&gt;• Sufficient learning Time&lt;br&gt;• Active teaching methods&lt;br&gt;• Integrated systems for assessment &amp; feedback&lt;br&gt;• Appropriate class size&lt;br&gt;• Adapted curriculum to meet individual needs&lt;br&gt;• Active student participation&lt;br&gt;• Appropriate supports&lt;br&gt;• Clear roles &amp; responsibilities</td>
<td><strong>Attainment</strong>&lt;br&gt;• Formal completion&lt;br&gt;• Diplomas/qualification&lt;br&gt;• Preparation for Adult Life</td>
</tr>
<tr>
<td><strong>Family/Community Characteristics</strong>&lt;br&gt;• Parental Attitudes/Training&lt;br&gt;• Household income&lt;br&gt;• Economic conditions&lt;br&gt;• Cultural/religious factors&lt;br&gt;• Multi-sector coordination &amp; collaboration</td>
<td><strong>Contextual Factors</strong>&lt;br&gt;• Macro-economic and fiscal policies&lt;br&gt;• Political stability, decentralization, International coordination&lt;br&gt;• Data collection &amp; analysis</td>
<td><strong>Standards</strong>&lt;br&gt;• Official learning objectives [desired outcomes]&lt;br&gt;• School-level objectives&lt;br&gt;• Impact on family &amp; Comm&lt;br&gt;• Supportive Govt Policy</td>
</tr>
</tbody>
</table>

(Peters, 2004:14)
The value of incorporating such an approach of whole-school development encourages community action and participation, providing all-inclusive strategies for addressing barriers to learning and highlighting the importance of support services in addressing barriers to learning (Donald et al., 2002:140).

The process of restructuring and reculturing schools requires ongoing whole-school development. In general, whole-school development is seen as including such concepts as school effectiveness, school improvement, and school development (Fullan, 1992:17).

The Whole School Consortium (Peterson, 2004:1) has developed the following core principles relating to whole-school development:

- **Empowering citizens for democracy.** The promotion of democracy should become an integral part of any school culture.

- **Include all in learning together.** Schools should create the opportunity for children to learn together across culture, ethnicity, language, ability, gender, and age.

- **Provide authentic, multi-level instruction.** Instruction is designed for diverse students so that it will involve them in meaningful, real-world activities at multiple levels of ability, providing scaffolds and adaptations.

- **Build community and support learning.** Effective schools must work together towards building a community that provides mutual support within both the classroom and the school. Teachers strengthen the community; and provide guidance to engage students, parents and teachers in decision-making and direction of learning and school activities.

Integrating the above-mentioned frameworks in such a way as to lay the foundations for the development of an inclusive school is important. The precedence of any education system should be to address these barriers or factors that could lead to the breakdown of the system in accommodating diversity, which in turn leads to a breakdown in the leaning process. According to the system theory, barriers could occur within the learner, the school, the education system, and in a wider scope within the social, economic, and political context (National Commission on Special Needs in Education and Training/National [NCSNET/NCESS], 1997:69-73;
Engelbrecht, 1999:46). Synonymous with whole-school development is the concept of **health-promoting schools**, and its vital role in promoting the process of healthy learning environments within the systems mentioned in the ecosystemic framework (Donald et al., 2002:137). A health-promoting school is "a school that is constantly strengthening its capacity as a healthy setting for living, learning and working" (National Framework for Health Promoting Schools, 2000-2003:6). Health-promoting schools contribute to health and learning outcomes by means of the interrelationships of three areas: curriculum, teaching and learning practices; school organisation, ethos and environment; and partnership and services.

It is within this framework that the principle of inclusion, with its striving for development of non-discriminatory, welcoming and flexible environment and curriculum, occurs. The access to learning is facilitated through addressing the barriers to learning and development at system levels (Lazarus, Davidoff & Daniels, 2000:18). This systemic change reminds us that school systems are products of communities and families (Ferguson, Kozleski & Smith, 2001:13).

It is important to reiterate the movement away from focussing on the learner with a specific need, to addressing the barriers within the ecosystemic framework. Key elements have been identified which may either inhibit or promote the development of an inclusive school (Davidoff & Lazarus, 2002; Lazarus, Daniels & Engelbrecht, 1999:64-66). Leadership and management need to develop competencies in accommodating diversity and addressing barriers to learning and development. Strong leadership can only be effective if a strong governing body or management team supports it. In a school with a strong mission statement, their aims and objectives will directly reflect their working towards developing values and norms that are indicative of an inclusive learning environment. Flowing from the above-mentioned elements, a school development plan would facilitate the development of an inclusive teaching and learning environment, by developing strategic planning and procedures.

For a school to be truly inclusive, the resources and competencies of all major role-players (both inside and outside the school) need to be optimally utilised. This would include effective school-based support teams as well as networks from within the community.
1.5 RESEARCH DESIGN AND METHODOLOGY

1.5.1 Research design

Research design has been described as a "strategic framework for action that serves as a bridge between the research questions and the execution or implementation of the research" (Durrheim, 2002:29). Babbie and Mouton (2003:74) describe the research design as the "blueprint" of how the researcher plans to collect information from participants with the view of reaching a conclusion regarding the research problem.

For the purpose of this study, a non-experimental quantitative research design with specific reference to survey research, (which will be discussed in more detail in Chapter 4) was used. In quantitative research the researcher's aim is to determine the relationship between one entity (an independent variable) and another (a dependent or outcome variable) in a specific population. This study hopes to clarify the attitudes of teachers through correlations and comparisons, while taking into account variables such as gender. This quantitative approach does not in any way ignore personal experiences, but insists rather that these experiences are quantified on some scale, before they can be analysed (Mertens, 2005).

A non-experimental quantitative research design does not involve using experimentation to collect data, but rather careful observation and description of phenomena, often using surveys as was the case in this study. Therefore, it is quantitative in nature, as the results are organised and presented systematically, usually in the form of statistics. Non-experimental design was appropriate for this study as it dealt with the examination of relationships that occur between two or more variables without any planned intervention (Welman & Kruger, 2001:84).

1.5.2 Research methodology

Research methodology is "the reasoning that informs particular ways of doing research, or the principles that inform the organisation of research activity", and it "provides a rationale for the way a researcher proceeds" (Reid & Gough, 2000:3-4). A survey was chosen as the preferred instrument because of the nature of the information required to "identify attributes of a population from a small group of individuals" (Creswell, 2002:18). The attraction of using a questionnaire lies in its appeal to generalisability or universality, within a given parameter, its ability to make
statements that are supported by data, and its ability to establish the degree of confidence that can be attributed to a set of findings (Cohen, Manion & Morrison, 2000:171). The findings in this case would be attitudes of teachers towards inclusive education in Egypt.

1.5.2.1 Population and sample

Stratified purposeful sampling was undertaken, bearing in mind that the object of this study was to understand and discover teachers' attitudes. A stratified purposeful sampling is a combination of sampling strategies where sub-groups are chosen based on specified criteria and a sample of cases is then selected within those strata (Mertens, 2005:319). A combination of kindergarten, primary, preparatory and secondary schools was taken into account, as this covered all three phases found in the education system, namely Basic Education (Marhalet Al-Taaleem Al-Asassi), Secondary Education (Marhalet El-Taaleem Al-Thanawi) and Post-Secondary Education. As discussed previously, there are two types of schools found in Egypt and thus the study made provision for these as well.

The population consisted of five schools, stratified into two geographical regions, namely Alexandria and Cairo, which included all girls' schools, co-ed schools, language schools and traditional government schools. The schools from which the participants were drawn were selected from Language Schools in Cairo and in Alexandria from a list of government schools provided by the Ministry of Alexandria. In Cairo, the only stipulation given to principals was that the entire staff of the school was to participate. Random selection from the list provided in Alexandria was used, as this was likely to yield a truly representative sample of the population and avoid any bias on the part of the Ministry. The only stipulation was that principals and administrative staff were included in this study and that the list indicated which schools were experimental language schools. From this list, three schools were chosen for the study.

1.5.2.2 Data collection methods and data analysis

A comprehensive literature review is a crucial element of any research. It disseminates the existing train of thought, and helps demarcate the boundaries of the particular research, thus preventing it from becoming burdened with side issues.
Scrutinising relevant literature enables the researcher to ascertain where possible discrepancies in research design and statistics may occur (Mertens, 2005).

A questionnaire was designed and piloted in a Language School in Cairo. Eight teachers representing the various educational levels (kindergarten, primary, preparatory and secondary) responded to the questionnaire. In order to determine the validity of the instrument, respondents chosen were similar to those in the main survey. In its formatting, modifications allowed room for comments by the respondents.

The thorough pretesting of all aspects of the questionnaire is the best way to discover potential pitfalls in language translation. As the language of the researcher differs from that of the respondents, the construction of the instrument relied heavily on collaboration with native Arabic-speaking Egyptians. It was decided that the same person who did the initial translation would not do back translation. The back translation was extended by using *decentering*, which allowed modifications to the source document wording to accommodate concepts that were not directly translatable, thus ensuring that the language in both the source document and the translated document were subject to change until comparable questions were achieved for both documents (McKay, Breslow, Sangster, Gabbard, Reynolds Nakamoto & Tarnai, 1996:93-104; Mertens, 2005:183).

Analysis of the quantitative data was captured in Excel whereafter the data was transported to SPSS for statistical analysis. An experienced statistician supported the researcher in the analysis.

Permission for distribution was obtained from the Ministry in Alexandria and from principals in the Language Schools in Cairo. Questionnaires were personally delivered and collected on agreed dates in both Cairo and Alexandria. The Ministry in Alexandria provided assistance in terms of distributing the questionnaires via the Director of Educational Training, which alleviated problems of time and cost.
1.5.3 Ethical considerations

*Good quality research, which develops our theoretical and empirical knowledge of the world of education is important and if researchers are seen to conduct their activities unethically then this result is less likely to get done and will not be given the consideration it should receive* (Foster, 1999:25).

Throughout the construction and implementation of the study, it was important that the researcher kept the following in mind: Ethical research requires the balancing of the quest for obtaining knowledge against the importance of non-interference in the lives of others (Economic and Social Research Council [ESRC], 2005:1). Consent was obtained from principals in Cairo, and in Alexandria from the Deputy Minister of Education. Participants participated voluntarily and free from any form of coercion, and were fully informed about the purpose, methods, intended use of the research, what their participation in the research entailed, and what risks, if any, were involved. Of paramount importance to all the participants was the issue of anonymity. Risk to participants was reduced by primarily ensuring the rights of participants, and with the implementation of the following: maintaining privacy; guaranteeing anonymity; guaranteeing confidentiality and avoiding harm, deception and betrayal (Cohen et al., 2000:51). For the purpose of this study, names of subjects were discarded and replaced by a code number, thus protecting anonymity.

1.6 CONCEPT CLARIFICATION

Clarification of terminology is particularly pertinent when one engages in the inclusion/exclusion debate. It is, however, impossible to offer a final set of definitions as problems tend to occur when used across borders and languages in the international context.

1.6.1 North and South

The terms "North" and "South" are the preferred terms used internationally for "developed" and "developing" countries, and refer to the broad global differences in economics and political situations. These terms are more neutral than "developing" and "developing" which are at times misconstrued as derogatory, in that they ignore the levels of cultural richness and development in poorer countries. The "South"
refers to countries in Asia, Africa, the Middle East, Eastern Europe, Central and South America that are economically poorer. Countries of the "North" refer to economically richer countries (members of the G8 and Organisation of Economic Co-operation and Development [OECD] countries) (Stubbs, 2002:1).

1.6.2 Disabilities

Although there are many different definitions for disability, the World Health Organisation (WHO) defines disability as "any restriction or lack (resulting from impairment) of ability to perform an activity in the manner or within the range considered normal for human beings" (WHO, 1990 cited UNESCO, 2000a). The disability could be physical, sensory or intellectual. The terms "disability", "handicap" and "impairment" are frequently found in discussions centring on inclusion. These terms have sometimes been used interchangeably and have, depending on the specific context, acquired derogatory connotations.

The labelling of people with disability has been a contested issue because it centres on the negative features of the disability. Most understandings of disabilities relate to individual deficits and therefore a disability has always been regarded as a barrier to learning. These barriers include visual barriers, auditory barriers, oral barriers, cognitive barriers, physical barriers, medical barriers and psychological barriers.

1.6.3 Barriers to learning

Barriers to learning and development are those factors that lead to the incapacity of the system to accommodate diversity, that ultimately leads to learning breakdown or that prevents students from accessing educational provision. These factors can or may be located within the learner, the centre of learning, the education system or the broader social, economic and political context (Department of Education 2002:131).

1.6.4 Students who are experiencing barriers

Students who are presently enrolled in schools but for a variety of reasons do not progress adequately and who have physical, mental or multiple impairments and thus have more complex special needs that are not being met, are treated differently at special schools (UNESCO, 1994b:48-96). The limits of being different are often

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1 Children and youth at school are commonly referred to as learners in the South African context. Literature from other countries usually refers to students or pupils. The term "students" is used in this study except where the context of reviewed literature necessitates an alternative.
difficult to establish and this influences the validity of criteria used (Kapp, 2002:23-24).

Previously, students who experienced educational and other difficulties have been labelled as retarded, handicapped, or as having problems or special needs. In South Africa, as with many other countries (Egypt excluded), the current practice is to refer to them as Department of Education, 2005:5) or those with "different learning needs" (Department of Education, 2001:7). Accordingly, the South African White Paper on Special Needs Education (Department of Education, 2001) adopts the use of the terms "barriers to learning and development". For the purpose of this study I will retain the internationally acceptable terms "disability" and "impairments" when referring specifically to those learners whose barriers to learning and development are rooted in organic/medical causes. The terms "learners with barriers to learning" and "learners with special needs" are used interchangeably according to White Paper 6 (Department of Education, 2001:16).

Barriers to learning and different learning needs may reside in the learner, the school, the system of education, the wider society and economic and political circumstances (NCESS 1997; Speece, Molloy & Case, 2003). Donald et al. (2002:29) sees poverty as an external factor, which may lead to a series of barriers to productive learning. These barriers may be temporary or permanent. The categorization of students is considered by many as being unnecessary, even offensive and suggestive of the discredited and outdated medical model of disability (CSIE, 2000:13).

It is preferable to speak about who experience barriers to learning, rather than learners with barriers to learning to indicate a move from the medical paradigm that locates deficit with a learner. Perhaps the actual terminology may in some instances be less important than the paradigms with which people work when dealing with different learning needs.

1.6.5 Special educational needs

There are differences concerning the concept "special educational needs" in developing and developed countries. The term implies that there are two categories of learners: those with ordinary needs and those with special educational needs. The last category indicates those needs that have not been met, which has resulted in a
separate, inadequate system of education, exclusion from the mainstream system and/or learning breakdown, "thus the notion of learners with 'special educational needs' has become a catch-all phrase to categorise all those learners who somehow do 'not fit' into the mainstream education system" (Department of Education, 1997:11). For the purpose of the study the term "special educational needs" will be used as this is the term that is generally still used in Middle Eastern countries.

Traditionally, students with special educational needs were seen as individuals who deviated from the norm. With the focus being directed on the student, it was assumed that the cause of the difficulty lies within such students, whether it is biological or behavioural, preventing them from developing or functioning in the same way as their peers. Students who needed help at school due to learning difficulties or disabilities affecting their access to the curriculum, were described as having a "special educational need" (SEN). This is in keeping with the medical model approach, which uses as its point of departure the philosophy that the student and its impairment is the problem and cause for educational failure (Avramidis, Bayliss & Burden, 2000:277).

This view is regarded as problematic as it is based on the assumption that all students should have had the same learning opportunities before starting school. It has also failed to recognise that the social context and educational environment can make a substantial difference to a student's level of achievement, regardless of whether the student has any learning difficulties.

Therefore, while in many countries the focus continues to remain on problems which are seen to lodge within the student, special education provision is likely to remain post hoc rather than rooted in the education system through the principle of equality of opportunity (Keil, Miller & Cobb, 2006:168). For the purpose of this study the researcher will continue to use the term "special educational needs", as this is still the preferred term used in many Middle Eastern countries, fully aware that a new framework is needed which is intended to represent a more inclusive approach towards support for a student's learning and a move away from the current negative connotations of special educational needs.
1.6.6 Special education

"Special education is a form of education provided for those who are not achieving, or unlikely to achieve through regular education provision, the levels of educational, social and other attainments appropriate to their age, and which has the aim of furthering their progress towards these levels" (UNESCO, 1983:13). The development of special education has involved education systems in exploring different ways of responding to students with disabilities and learning difficulties. Children with special educational needs were placed in either special or adaptation classes at a mainstream school or in special schools. Unfortunately, these children were often the victims of labelling and stigmatisation.

With the passing of the Convention on the Rights of the Child (United Nations, 1989), it was indicated that every child has the right to receive an education. This challenged the suitability and effectiveness of separate education systems, based on a human rights perspective (UNESCO, 2005a:9). The Salamanca World Statement on Special Needs Education in 1994 called upon governments to adopt the principle of inclusive education and the policy of enrolling of all children in regular schools. Both these policies implied the progressive expansion of mainstream schools to provide for children displaying a wide range of needs. The movement of special education practices into the mainstream occurred through integration.

1.6.7 Mainstreaming and integration

The terms "mainstreaming" and "integration" are often used interchangeably in literature. Although they are closely related, there are distinctions in goals, processes and available services between the two. Interpretations are further complicated as these terms are also used differently in different parts of the world.

Mainstreaming can be referred to as a "political process of bringing an issue from the margins into the mainstreams" therefore making it acceptable to the majority (Stubbs, 2002:24). Mainstreaming in education in the 1970s and 1980s provided a means of integrating students with special educational needs back into mainstream classes, and was based primarily on the needs of students and the demands of the specific class (Engelbrecht, 1999:7). In this approach the learner is expected to adapt ("fit into") to the demands of the class (Department of Education, 2001:17).
Integration in education, which became popular in the 1970s (Mittler, 2000:10), involves preparing students for placement in ordinary mainstream schools, where the students must adapt to the school and there is no guarantee that the school will change to accommodate the diversity of students. However, the term "integration", as in the case of the term "mainstreaming", was increasingly seen as limited, as the accommodation and support of students with special needs remained essentially limited and unchanged (Dyson & Forlin, 1999).

1.6.8 Mainstream teachers

It is important to remember that countries differ in their concepts of classroom teachers. A definition was therefore sought that was internationally acceptable and comparable across countries. Classroom teachers are defined as "professional personnel involved in direct student instruction". This involves planning, organisation and conducting group activities whereby students' knowledge, skills and attitudes develop as stipulated by educational programmes (UNESCO/UIS, 2006). This classification incorporates classroom teachers, special education teachers (regardless of what setting they teach in) and other teachers who work with students as a whole in a classroom, in small groups in a resource room or one-on-one inside or outside a regular classroom. This definition excludes staff with some teaching duties, but whose role is primarily managerial or administrative, as well as student teachers, and teachers’ aides (UNESCO/UIS, 2006:23).

1.6.9 Inclusion and inclusive education

In recent years, the integration movement of the 1970s has transformed into the inclusion movement. Ballard provides a useful point of departure when he states that "[T]here is no such thing as an inclusive school; there is a process of inclusion that has no limits" (Ballard, 1995 in Sebba & Ainscow, 1996:3). Inclusive education is based on a value system that welcomes and celebrates diversity arising from gender, nationality, race and language of origin, social background, and level of educational achievement or disability (Mittler, 2000:10). It can be further defined as a process of addressing and responding to the diversity of needs of all students through increasing participation in learning, cultures, and communities and by reducing exclusion within and from education (UNESCO, 2003a).
Inclusion in education contains four key elements: Inclusion is a process in the continual search to find ways of responding to diversity. Inclusion is concerned with the identification and removal of barriers and involves collecting, collating, and evaluating information. Inclusion is about the presence, participation, and achievement of all students. Finally, it places emphasis on those students who may be at risk of marginalisation, exclusion or underachievement. "Presence" here, is concerned with where children are educated, and to what extent they are punctual. "Participation" relates to the quality of their experiences while at school, incorporating the views of the learner. "Achievement" is concerned with more than test results; it has more to do with the outcome of learning across the curriculum (Ainscow, 2005:15).

For the purpose of this study, inclusion in education is based on the definition by Mastropieri and Scruggs (1999: 8), namely that it is the accommodation of students with special needs in the general mainstream classroom under the instruction of the class teacher. This supports the concept of inclusion by suggesting that it involves support services to the student in mainstream classes, rather than excluding the student from the class and their peers.

### 1.6.10 Inclusive schools

The Office for Standards in Education (OFSTED) describes educational inclusion as meaning that "effective schools are inclusive schools". Therefore, according to the Centre for Studies on Inclusive Education (2002), "an inclusive school is community-based: It is not selective, exclusive or rejecting, but open, positive and diverse". This implies that all teachers are accountable for the education of all students, and the ability to attend a neighbourhood school is important for social reasons. It reflects a major paradigm shift from a deficit model of adjustment towards a system model of change (Ainscow, 1999; Dyson & Forlin, 1999).

### 1.6.11 Attitudes

Attitudes have been described as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (Eagly & Chaiken, 1993:1). This definition sees attitudes as tendencies that are learned or unlearned, lasting or changeable, and important or unimportant, and people's actions
as being determined by their perceptions (Williams & Finnegan, 2003:40). A person's perceptions and attitudes are often related to learning experiences provided by the environment and social beliefs (Schechtman & Or, 1996 in Swart et al., 2002:171). An attitude may include cognitive, affective, and behavioural components. The cognitive component indicates an individual's beliefs or knowledge regarding the object, while the affective component relates to the individual's feeling about the object. The behavioural component refers to the individual's predisposition in reacting towards the object in a particular way (Opdal, Wornaes & Habayeb, 2001:144).

1.7 ORGANISATION OF THE STUDY

In order to present my study, I propose to organise the chapters as follows:

Chapter 1: This chapter provides the background against which this study was developed.

Chapter 2: This chapter presents a literature review relating to international developments in order to provide an overall framework of previous research with specific reference to Middle East countries.

Chapter 3: This chapter traces the development of inclusive schools, starting from the perspective of whole-school development, emphasising critical elements in its development. The chapter looks closely at the major role-players who contribute to a school's development.

Chapter 4: In this chapter, the research design and methodology are discussed. The results of the empirical study are also presented and discussed in more detail, with particular attention to the various indicators and their implications for the development of inclusive education in Egypt.

Chapter 5: The chapter concludes with recommendations concerning the possible intervention in preparing teachers in recognising students' diversity within a mainstream class.
CHAPTER 2

THE MOVEMENT TOWARDS INCLUSIVE EDUCATION

2.1 INTRODUCTION

It has been estimated that worldwide 140 million children who are out of school are girls and children with disabilities. Of these children, 80% are in Africa (UNESCO, 2005a:1). Internationally, several forums have been convened to promote the inclusion of all in mainstream schools, and countries of the North and the South have implemented policies and strategies to develop inclusive schools. The aim of this chapter therefore will be to review literature related to the major developments in inclusive education worldwide, with a brief reference to countries of the North and a more in-depth review of countries of the South.

2.2 INCLUSIVE EDUCATION AS AN INTERNATIONAL POLICY

There have been significant developments internationally that influenced the education of students with disabilities. As discussed in Chapter 1, the integration movement of the 1970s developed into the inclusion movement in the 1980s. For countries of the North, such as the United States and the United Kingdom, the issue of inclusive education has essentially been the replacement of students and resources in a mainstream education system. For countries of the South, the issue of inclusive education is seen as that of extension and development in education (Dyson & Forlin, 1999:26).

The following timeframe indicates the major international policies relating to major human rights in the development of inclusion. This timeframe has been adapted from The Rights Framework for Inclusion (UNESCO, 2005a:14).

1948: Universal Declaration of Human Rights. Ensures the right to free and compulsory elementary education for all children.

1990: The World Declaration on Education for All.

1993: The UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities Rule 6. Not only affirms the equal rights of all children, youth, and adults with disabilities to education, but also states that education should be provided in "an integrated school settings" and in the "general school settings."

1994: Salamanca Statement and Framework for Action on Special Needs Education. "[S]chools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions." This should include disabled and gifted children, children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalized areas or groups" (par. 3).

2000: World Education Forum Framework for Action, Dakar, (EFA goals) and Millennium Development Goals. The aim is to ensure that all children have access to and complementary primary education by 2015. Focus is on the marginalised, especially girls.


At the heart of inclusive education is the human right to education, as pronounced in the 1948 Universal Declaration of Human Rights. Of equal importance is the rights of children not to be discriminated against, found in Article 2 of the Convention on the Rights of the Child (1989). Worldwide, 191 of 193 eligible countries, with the exception of the USA and Somalia (Rustemier, 2002b:7), have ratified this Convention.
At the World Conference on Education for All (Jomtien Thailand, 1990), 1500 participants, comprising delegates from over 155 governments, as well as policymakers, specialists in the field of education, health, social and economic development worldwide, met with the intention of discussing Education for All (UNESCO, 1990b). The goal of the Jomtien Conference was to stimulate an international commitment to a new and broader vision of basic education; to meet the learning needs of all, to equip people with the knowledge, skills, values and attitudes they need to live in dignity, to continue learning, to improve their own lives and also to contribute to the development of their communities and nations (UNESCO, 1990a:Article 1). The Standard Rules on the Equalisation for Persons with Disabilities (1993) later stated that general educational authorities are responsible for the education of persons with disabilities in an integrated setting. Education for persons with disabilities should be an integral part of national educational planning, curriculum development and school organisation (UNESCO, 1993:Rule 6).

In 1994, 92 governments and 25 international organisations met to discuss how to achieve the objectives of Education for All, by considering the policy shift towards promoting inclusive education. This shift in thinking culminated with the signing of the Salamanca Statement (UNESCO, 1994a), which embodied the following principle:

The guiding principle that informs this Framework is that schools should accommodate all children regardless of their physical, intellectual, emotional, linguistic, or other conditions. This should include impaired and gifted children (who may also have impairments), girls, and street children and working children who have lost their parents through AIDS or civil strife, children from linguistic, ethnic and or cultural minorities and children from other disadvantaged or marginalized groups … The development of inclusive schools as the most effective means for achieving education for all must be recognised (Salamanca Statement and Framework for Action-World Conference on Special Needs, 1994a:41).

This principle contains five main points:

- Every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning.
- Every child has unique characteristics, interests, abilities and learning needs.
• Education systems should be designed and educational programmes implemented to take into account the wide diversity of these characteristics and needs.

• Those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs.

• Regular schools with this inclusive orientation are the most effective measures of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all.

The Salamanca Statement is therefore an implicit statement on children's rights, education and to the level of learning. Stainback, Stainback, East and Sapon-Shevin (1994:489) state: "[T]he goal of inclusion is not to erase differences, but to enable all students to belong within an educational community that validates their individuality."

The principle of inclusion in education therefore seeks to achieve education for all by restructuring schools as institutions that include everyone, support learning and respond to individual needs (UNESCO, 1999b), and that provide much more than just the physical placement of students with difficulties in mainstream classrooms (Engelbrecht, 1999:10). Although researchers support the Salamanca Statement and its principles (Thomas & Glenny, 2002; Armstrong, Armstrong & Barton, 2000), a report on progress since the Salamanca Statement points out that many developments continue to separate provision for children and youth with special needs from other mainstream programmes (UNESCO, 2003b).

The World Education Forum held in Dakar, Senegal, in 2000 adopted the Dakar Framework for Action, Education for All: Meeting Our Collective Commitments, and declared 2015 as the year in which education for all would be realised. The Notes on the Dakar Framework for Action (UNESCO, 2000a) describe the broad vision of Education for All, which needs to be adopted in order to achieve the goals, with specific emphasis on those students who are most vulnerable to marginalisation and exclusion:

In order to attract and retain children from marginalized and excluded groups, education systems should respond flexibly" (par. 33). "Education systems must be inclusive, actively seeking out children
who are not enrolled, and responding flexibly to the circumstances and needs of all learners” (par. 19).

Thus, the Salamanca and Dakar Frameworks provide a baseline for UNESCO’s work in responding to the challenges of education for all by adopting inclusive education in order to address the question of marginalisation and exclusion. It is, however, important not to make the mistake of assuming that the structure of post-Salamanca 1990 is the same as post-Dakar 2000. The goals presented may have remained identical, but the approach employed in achieving them has changed. The world in the 21st century is certainly different from the one in which the Salamanca Conference took place and in which the ideals of its Declaration and Framework for action were formulated (World Bank, 2000).

According to the World Bank, new "drivers of change" need to be taken into account (World Bank, 2000:2). These have been identified as being the rapid spread of democracy, the prevalence of market economies, the globalisation of markets and knowledge, the technological revolution, and the changing role of government, individuals and the private sector (World Bank, 2000:2).

One of the greatest problems facing the world today is the growing number of persons who are excluded from meaningful participation in the economic, social, political and cultural life of their communities. Such a society is neither efficient nor safe (UNESCO, 2003b:3)

2.3 POLICY DEVELOPMENT REGARDING INCLUSIVE EDUCATION IN SPECIFIC COUNTRIES

2.3.1 Introduction

It has become widely acknowledged in many countries that on average, between 15 and 20% of students have special educational needs at some time in their school careers. The Warnock Report in the United Kingdom (Department of Education and Science [DES], 1978) indicated this quite clearly. One could therefore assume that in an average class of 30 pupils, between four and six will be in need of special help across the curriculum at some point during their schooling (Organisation for Economic Co-operation and Development [OECD], 1999). Research surveys conducted in various countries reveal these estimates, and show that the number of
students identified is increasing (OCED, 1995; 1998). Educating students with disabilities in mainstream schools remains an important goal for many countries, and this section will briefly examine the shift towards inclusive education in countries of the North and the South.

2.3.2 Specific countries of the North

2.3.2.1 England

In 1978 the Warnock Report (The Education of Handicapped Children and Young) provided the groundwork for a revolutionary change in thinking about education of children with special needs. Words like "handicapped" and "educationally subnormal" were removed and replaced with "special educational needs" (SEN). It did not however, put forward the notion that as many children as possible should be educated in mainstream classes.

The 1981 Education Act was intended as a tool for parents to exercise their right of choice, but was still based on the concept of a Special Education System, which labelled children as having learning difficulties:

\[\ldots\ \text{a disability which either prevents or hinders him from making use of educational facilities of a kind generally provided in schools, within the area of the local authority concerned, for children of their age} \ldots\] (Section 2(3)).

One of the main criticisms raised against this act was that it did not acknowledge the fact that children with disabilities had been segregated, in the first place due to the lack of facilities for them in mainstream classes (Integration Alliance, 1992). The Green Paper (Department for Education and Employment [DfEE], 1997) on Excellence for All Children clearly demonstrates the Government's commitment to inclusion, and the responsibility of schools to prepare all children to be productive members of society, by educating children with special educational needs, as far as possible, with their peers.

"[W]hilst recognising the paramount importance of meeting the needs of individual children (and the necessity of specialist provision for some) we shall promote the inclusion of children with SEN within mainstream schooling wherever possible (DfEE, 1997:5)."
"[W]here all children are included as equal partners in the school community, the benefits are felt by all"  
... "[W]e shall remove barriers which get in the way of meeting the needs of all children" (DfEE, 1997:4-5).

The Green Paper is seen as "the first step in a fundamental reappraisal of the way we meet special educational needs" (DfEE, 2003a:6). Following public consultation in the Green Paper Excellence for All Children – Meeting Special Educational Needs (DfEE, 1997), the Government published the White Paper, Meeting Special Educational Needs: A Programme of Action (DfEE, 1998). The 1996 Act was amended by Part 1 of the Special Educational Needs and Disability Act (SENDA) 2001, which provided a revised framework for inclusive education. It strengthened the right of children with special educational needs to attend a mainstream school unless this would be:

i) detrimental to the efficient education of other children, or

ii) against parental wishes (Ofsted, 2003).

The Government considers the role of segregated schooling for some students. According to official figures for 2001 (Statistics of Education: Special Educational Needs in England, January 2001, DfES), there were 258,200 school students with special educational needs. Of these, 36% were admitted to special schools or student referral units, in contrast to the 41% in 2001, 61% were accommodated in mainstream schools, compared with 56% in 1996 (Rustemier, 2002:3).

Between 1996 and 2001, the number of maintained special schools decreased by 7%, even though the size of special schools increased during that time. With the decrease of the number of teachers in special schools between 1996 and 2001, the number of education support staff, administrative and clerical staff enlarged by 7% and 11% respectively. From these statistics, it is clear that significant resources are continuing to be invested in segregated education (Rustemier, 2002:3a).

2.3.2.2 United States of America

Although education is not mentioned in the United States Constitution, it does however "undertake to provide" equitable educational opportunities. Under the Fourteenth Amendment, educational opportunity and vocational success are assured (Daugherty, 2001:1). Until the 1950s educational policy was the responsibility of
state and local governments, resulting in the access and quality of education varying from community to community (Sands, Kozleski & French, 2000).

During the 1960s and early 1970s, parents commenced to challenge State laws that required local education agencies (LEA) to provide special educational services to students with disabilities, and supply partial funding for services (Council for Exceptional Children [CEC], 2004). Parents became prime instigators in the struggle towards educational opportunities for their children (Pardini, 2002; CEC, 2004).

Legislation has been strongly affected by landmark court decisions, which directly influenced the introduction of the first public law to establish federal guidelines for special education services – for example, Mills v. Board of Education of the District of Columbia (1972), Brown v. Board Of Education (1975) and Pennsylvania Association of Retarded Citizens (PARC) v. Commonwealth of Pennsylvania (1971). In Brown v. Board of Education (347 U.S. 483, 1954) it was established that it was unfair to discriminate by segregating certain children and refusing them access to specific schools (Daugherty, 2001; Sands et al., 2004). The ruling in PARC v. Commonwealth of Pennsylvania and Mills v. Board of Education of the District of Columbia established the following:

*The responsibility of States and local school districts to educate individuals with disabilities is derived from the equal protection clause of the Fourteenth Amendment of the United States Constitution* (US Department of Education, 1995:1).

With the passing of the Elementary and Secondary Education Act (ESEA) of 1965 (Public Law 89-10) the first step in the recognition of federal government's involvement in addressing educational services in public schools was taken. This paved the way for more specific legislation in the 1970s.

In 1975, the U.S. Congress approved the landmark Public Law (PL 94-142), or the Education for All Handicapped Children Act (EHA), which mandated appropriate education for all students with disabilities (Sands et al., 2000). Initially, the Act referred to "handicapped children". In 1990, Congress made significant amendments to the wording of the law. The Education of the Handicapped Act Amendments of 1990 (P.L. 101-476) renamed the statute "The Individuals with Disabilities Education Act (IDEA)"; and throughout the text, references to "handicapped children" were
amended to read "children with disabilities". These changes reflected both the activism of individuals with disabilities and their supporters and an ever rising public awareness that "disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society" (U.S. Department of Education, 1995:5). The IDEA includes expansive directives for the provision of services to all children with disabilities. In spite of the challenges involved in helping such a heterogeneous group, the main beliefs of the IDEA have remained complete since 1975 (U.S. Department of Education, 1998).

In November 2004, Congress passed landmark legislation to reauthorise the Individuals with Disabilities Education Act (IDEA). The passage of this bill follows three years of development. Although many reservations exist pertaining to the amendments, it has been described in the following way:

Think of this new policy as a new equation: the principles of the law such as annual testing and reporting of subgroup data, plus student achievement and a narrowing of the achievement gap, plus overall sound state education policies, equals a new, common sense approach to implementation of No Child Left Behind — Secretary Margaret Spellings, April 7, 2005, in announcing new policies regarding implementation of NCLB (U.S. Department of Education, 2005).

Several critical changes affecting students with disabilities and their families as a result of the new legislation (effective as of July 1, 2005), focuses on the Individual Educational Plan procedure, due process and the discipline requirements. The impact on these changes will depend largely on how the U.S. Department of Education understands them through policies and regulations and how they are enforced at the state, district and school level (Council for Exceptional Children [CEC], 2004).

A recent rider in the Act permits the Secretary to issue only those regulations necessary to acquire agreement with the ruling. This provision limits the Secretary's authority to issue regulations that could be useful in illuminating ambiguities. A new section of the Act also suggests that states minimise the number of rules, regulations and policies to which the school districts are subject. Another issue mentioned concerning funding was the fact that the changes did not provide mandatory full funding, and in fact appropriated less funding than was initially allocated (Families and Advocates Partnership for Education [FAPE], 2004; CEC, 2004).
2.3.2.3 Australia

Geographically, the Australian continent makes up one of the largest nation-states in the world. Its small population of 19.5 million is largely concentrated in coastal regions, particularly in the south-east of the continent (UNESCO/Education for All [EFA], 2005). Education in Australia has followed changes that have been initiated in the international arena. While the principle of equity is well established, and the policy with respect to special education reflects the principle of placement in the least restrictive environment, one finds variations across states and territories. The responsibility for education is delegated to the states, while the territories only retain limited powers (Forlin & Forlin, 1998; Forlin 1997; OCED, 1999). In practice, this means that the six states and two territories administer and fund their own schooling, and determine policies and practices on matters such as curriculum, assessment, teacher employment and professional development (Australian Report on National Development, 1994-1996). For example, while equity charter of the State of New South Wales advocated inclusive education, its declared special education policy set the objective of maintaining a continuum of provision that included special classes and special schools (OCED, 1999). Education systems have begun shifting a certain degree of responsibility towards teachers, parents, and local communities (Forlin & Forlin, 1994). This movement towards greater self-management is allowing schools the freedom to react more effectively to the needs of their students (Forlin & Forlin, 2002).

Legislative action in the early 1990s changed the way children with special needs were to receive education. The rights of those at risk, of under-participation and under-achievement are protected by the Education Act of 1989; Disability Services protect people with disabilities against discrimination, including discrimination in education (McLuskie & Aniftos, 2003; Education Queensland, 2003). Therefore, education of such students occurs within the context of regular schools, and has become the responsibility of regular classroom teachers (Tait & Purdie, 2000; Forlin & Forlin, 2002).

While Australia does not have specific legislation that mandates educational integration, national education policies encourage social justice and equity for all students in Australian schools (McLuskie & Aniftos, 2002; Forlin, 2001). The decentralisation of power towards school-based decision-making groups has had a
major influence on the trend toward inclusive rather than segregated education (Forlin & Forlin, 1994). In reviewing Australian policy and practice with regard to the education of students with disabilities, Forlin (1997:21-26) found a general trend towards their enrolment in the first instance, in their local schools, with local schools increasingly taking responsibilities for the allocation of special education support services.

2.3.2.4 New Zealand

In size, the country has approximately the same land area as Britain and a population of approximately 3.815 million (UNESCO/EFA, 2005). Any reforms need to be viewed within the economic context of the time. Since 1987, the administration of education in New Zealand has undergone dramatic and rapid change, and New Zealand's education system has been shaped to some extent by its drive for economic stability (Fancy, 2004; Novlan, 1998; Perris, 1998). The right to education straddles civil and political rights, as well as economic, social, and cultural rights. As with many other countries throughout the world, New Zealand views education as one of the best financial investments, providing for a nation's wealth (Novlan, 1998).

This government clearly stated in Education for the 21st Century (Ministry of Education, 1996) that "the New Zealand school system must provide a broad and balanced education for all children ...". Education in New Zealand is seen as both a human right in itself and an indispensable means of realising other human rights encapsulated in several laws:

- The Education Act 1989 specifically gives children and young people with special educational needs an equal right with all others to enrol and receive education in state schools.

- The Bill of Rights Act of 1990 states that everyone has the right to be free from discrimination. It applies equality of educational opportunity with regard to disability.

- The Human Rights Act of 1993 makes it an offence to discriminate on the grounds of disability in the provision of education. The Act covers unlawful direct discrimination, and indirect indiscrimination in which actions seem to be neutral but have the effect of treating people with disabilities differently. For example, providing the same teaching material for all students without taking
into account the accommodations needed by a student with a disability is regarded as indirect discrimination (Human Rights Commission, 2001).

The broad standards for assessing the achievement of the right to education (the 4-A scheme) as laid down by the United Nations has been adapted in the New Zealand context in the form of a Right to Education Framework (Human Rights Commission, 2001). This framework is represented in Figure 2.1.

**FIGURE 2.1 THE RIGHT TO EDUCATION FRAMEWORK, HE WHARE TĀPAPA MĀTAURANGA (HUMAN RIGHTS COMMISSION, 201)**

As with general education, the development of special education in New Zealand has been influenced by ideas and practices imported from other countries, especially Britain and the United States (Chapman, 2001). The aim of the government's special education policy has been to develop the learning outcomes of all children and
young people with special educational needs at their local school, early childhood centre, or wherever they are educated. The special education policy framework called Special Education 2000 was first announced in the 1996 budget to enhance resourcing for children and young people with special needs (Ministry of Education, 2004).

The New Zealand education system is seen as encompassing, embodying, and fostering diversity within the system. This is clearly seen in the 2002 Briefing to the Incoming Minister of Education:

_The schooling system is working hard to respond to increasing diversity. The system has responded in different ways to a number of unique groups with their own experiences, context and needs … Alternative pathways are developed for students_ (Ministry of Education, 2002:24).

According to government policy in New Zealand, schools are required to implement an inclusive system. This point is stated in the New Zealand Disability Strategy Vision, which lends itself towards a fully inclusive society:

"... a society that highly values our lives and continually enhances our full participation" (New Zealand Ministry of Health, 2001).

### 2.3.3 Countries of the South

#### 2.3.3.1 South Africa

Since 1994, the South African Ministry of Education has made considerable attempts to address the disparity of the apartheid years and bring education in line with international standards (Department of Education, 2001; Engelbrecht, 2004b). The commitment of this Ministry has been the creation of a single, inclusive system of education (Engelbrecht, Swart, Eloff & Forlin, 2001). A strong emphasis on human rights is apparent in both educational policy and in legislation; all education policy documents that have subsequently emerged, encompass the principles contained in the South African Constitution. Section 9(3) of the Constitution reads: "The state may not unfairly discriminate directly or indirectly against anyone on one or more grounds including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour,
sexual orientation, age, disability, religion, conscience, belief, culture, language and birth" (Republic of South Africa, 1966a).

International guidelines have provided a framework for policy development in inclusive education in South Africa. These include the Universal Declaration of Human Rights (United Nations, 1948), the United Nations Convention on the Rights of the Child (United Nations, 1989), the Standard Rules on the Equalisation of Opportunities for Disabled Persons (United Nations, 1993) and the World Conference on "Education for All by the Year 2000" (UNESCO/EFA, 2000b). The transition process to a more a more inclusive system has been based on clear principles, which have been built into legislation and government documents. Key national policies and legislation include the White Paper on Education and Training in a Democratic South Africa (Department of Education, 1995b); The South African Schools Act (Republic of South Africa, 1996); White Paper on an Integrated National Disability Strategy and White Paper 6: Building an Inclusive Education and Training System (Department of Education, 2001).

At the beginning of 1997, the National Commission on Special Needs in Education and Training (NCSNET) and the National Committee for Education Support Services (NCESS) was chosen to examine and make recommendations on all facets of special needs and support services in South Africa (Department of Education, 1997:55). The aim of this commission was to contest the conceptualisation and limitations of special needs as found in South Africa. This report argued that the priority of an education system should be to address those factors that lead to the inability of the system to accommodate diversity, and conceptualised these factors as "barriers to learning and development" (Department of Education, 1997). The Commission viewed the terminology "students with special educational needs" as judgmental in that it implied that all students did not "fit into" the mainstream education system. Further, it concluded that this terminology provided no insight into the causes of the breakdown in learning, or the reasons for these students to be excluded from the system. They proposed replacing it with "barriers to learning and development" in keeping with where the transformation in the system needed to occur (Lomofsky & Lazarus, 2001:311).

White Paper 6: "Special Needs Education: Building an inclusive education and training system" acknowledges that special needs and support services tended to
focus on the delivery of highly specialised interventions which were limited to more advantaged sectors, specifically urban areas (Department of Education, 2001:9). The suggestion was put forward that the challenge would be to reduce, remove and prevent barriers to learning and development. Barriers may be located within the learner, within the centre of learning, within the education system, and within the broader social, economic, and political context (Department of Education, 2001:10). The aim of this policy is to focus on barriers to teaching and development as a non-racial and incorporated component of education. It places an emphasis on supporting students through full-service schools and it recognises the need to assist teachers in coping with a diversity of learning and teaching needs in order to guarantee that learning difficulties are ameliorated (Department of Education, 2001:10; Engelbrecht, 2004). White Paper 6: Building an Inclusive Education and Training System (Department of Education, 2001) builds on principles of the White Paper as well as all previous documents, and provides a road map for special education/educational services and training for the 21st century in South Africa.

2.3.3.2 Lesotho

Lesotho is a small, landlocked country, surrounded by the Republic of South Africa. It has a population of approximately 2.14 million. In economic terms, Lesotho is classified as one of the world's poorest countries, ranking 132nd out of 173 countries. It is estimated that 98% of primary schools and 92% of secondary schools are church-owned, indicating that the provision of formal education is the combined responsibility of the government, the churches, and the community (Lewin & Stuart, 2003; Moorosi & Sebatane, 1998). In 1992, there were more than 370 000 students in primary schools, which reflect approximately 75% enrolment (Mariga & Phachaka, 1993). The student: teacher ratio is estimated at 54:1, and about 85% of teachers are qualified. A study conducted in 1990 showed a high dropout rate; nearly 80 000 children are enrolled in Grade 1, with less than 30 000 remaining in Grade 7. Two-thirds of these are girls, since boys are generally required to herd animals (Enabling Education Network [EENET], 2002).

The inclusion of students with disabilities into the mainstream school system is a recent phenomenon. Before 1980, children with special needs were catered for by government bodies, private organisations and non-governmental organisations. In 1991, the Education Policy Guidelines expressed the need to provide basic
education to every child and to provide appropriate education to those students with special educational needs (Mariga & Phachaka, 1993). In 1987, Csapo undertook an extensive study entitled *Basic Practical Cost-effective Education for Children with Disabilities in Lesotho*. Subsequently, the World Conference on Education for All, as well as other important declarations, paved the way for the setting up of the Unit of Special Education. For the first time Special Education was included in the discussions of the Ministry's policies. In 1990, the Ministry in its Operations Plans for the first time promoted the integration of children with special educational needs into regular school systems at all level (Csapo, 1987; Mariga & Phachaka, 1993:12).

The present Constitution of Lesotho came into operation in August 1993. At that time, Lesotho had already endorsed the United Nations Convention on the Rights of the Child (UNCRC), and signed the Jomtien Declaration, both of which recognise education as a fundamental right. However, while the Lesotho Constitution "endeavours to make education available to all", aiming at providing compulsory primary education for all, this provision is seen as a "Principle of State Policy" rather than a "Fundamental Right". As a result, education is not a government responsibility that is enforceable in a court of law (Commonwealth Education Fund, 2003:1). Lesotho welcomed inclusive education as an educational route to reach as many children as possible, but also as a sustainable practice that reflects upon the inclusiveness of its culture (Mittler, 2000:27; Mittler & Platt, 1995).

### 2.3.3.3 Namibia

Namibia is a large, semi-arid and sparsely populated country (1.9 million inhabitants), located in the south-western part of Africa, bordering with Angola in the north, South Africa in the south, Zambia in the north-east, Botswana in the east, and with a western Atlantic coastline (Ministry of Basic Education, Sport and Culture, 2004:). The country has a relatively youthful population, with 43% of the total population under 15 years of age and only 4% over 65 years old (United Nations Development Programme [UNDP], 2003:252). Even though urbanisation is on the increase, Namibia is still mainly a rural society with 31% of the population living in urban areas.

In the 19th century, the German Imperial Government proclaimed Namibia a German protectorate, and this occupation lasted until South Africa occupied the Germany
colony during World War I and administered it under a mandate until after World War II, when it annexed the territory (Ministry of Basic Education, Sport and Culture, 2004; Amukugo, 1993). In 1966, the South-West African People's Organisation (SWAPO) entered into a liberation struggle which lasted almost 25 years, but ended in 1988 when South Africa consented to end its administration in accordance with a United Nations peace plan for the territory. Namibia became a democratic republic in 1990 following multi-party elections (Ministry of Basic Education, Sport and Culture, 2001a).

Formally, under South African rule, Namibia inherited a society segregated along ethnic and racial lines, leading to disparities in quality of educational services (Ministry of Basic Education, Sport and Culture, 2001b). Formal education in Namibia was pioneered by Western missionaries, of which the London and Wesleyan, Rhenish Missionary and Finnish Missionary Society were the most prominent. Their primary aim was evangelisation. Up to the 1960s, all native education was in the hands of missionaries (Nyambe & Griffiths, 2001). The education system during this time was seen as being unfair, and fragmented, and was used to further the interests of providing workforce for the labour market. Women's education was limited to domestic skills (Nyambe & Griffiths, 2001).

Following independence in 1990, the Ministry undertook major educational reform aiming at access, equity, quality, democracy, and lifelong learning (Ministry of Education and Culture, 1993:123). This was achieved by combining the 11 local education authorities into one Ministry of Education and Culture, Youth and Sport (MECYS). Currently (2006), the ministry is known as the Ministry of Basic Education, Sport and Culture (MBESC), with the "youth" portfolio being added to higher education (Ministry of Basic Education, Sport and Culture, 2004; Ministry of Basic Education, Sport and Culture, 2001). In ratifying the World Declaration on Education for All, Namibia took the stand that basic education should be for all, i.e. that basic education is inclusive education (Ministry of Education and Culture, 1999:3). The National Policy for Educationally Marginalized Children is a comprehensive document that is explicit in defining categories of educationally marginalised children, and providing reasons for marginalisation in education, inclusive of those with special educational needs (Ministry of Basic Education, Sport and Culture, 2004:11).
The Government holds the Department of Education accountable for ensuring that children and adults with disabilities are integrated into mainstream education. The National Policy on Disability states: "The Government shall ensure that children and youth with disabilities have the same right to education as children without disabilities" (Ministry of Basic Education, Sport and Culture, 2004:5). In order to realise this right for all students with disabilities and learning difficulties, the Ministry of Basic Education, Sport, and Culture is in the process of examining the Policy on Inclusive Education with the view of implementation. At present (2006), the educational needs of students with learning difficulties are met through special classes in mainstream schools or special schools.

2.3.4 Middle East countries

2.3.4.1 Introduction

The concept "Middle East" is usually associated with a largely Islam Arabic group of people. The area does, however, include many divergent cultures and ethnic groups; therefore it does not have precise borders. The most common and highly subjective definition includes Bahrain, Cyprus, Egypt, Iran (Persia), Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, the United Arab Emirates, Yemen, and Palestine. Iran is seen as being on the eastern border, while Afghanistan and Pakistan are included owing to their close relationship (ethnically and religiously), as well as historical connections to the Middle East According to the definition by the G8 (eight most industrialised nations in the world), the term "greater Middle East" (see Figure 2.2), has come to refer to the Arab and non-Arab Muslim countries stretching from Morocco in the West, to Pakistan in Southeast Asia (Sharp, 2005).
The historical and cultural experiences of countries in this region share many common themes. Islam, the main religion of the region, encourages the pursuit of education in its teachings. Since Arabic is the official language of all Arab countries, and the language of the Koran, it plays a major role in forming the region's cultural identity and intellectual tendencies (WENR, 1999). In Egypt, the majority of people are Sunni Muslims, while there are a small number of Shi’a Muslims. Approximately 8 to 10% of the population are Christians, the majority of whom belong to the Coptic Orthodox Church.

Although there are marked similarities among the traditional cultures of the Middle East, it is not possible to make generalisations across the region (Brown, 2001:255). The concept of inclusion as an ideology is still relatively new in the regions of the Middle East and it is still largely dominated by cultural values. In the past, students with disabilities have been educated in special schools or centres, and isolated from their peers. The strong cultural tradition has in many ways worked to both protect
and care for the disabled, at the same time preventing them from integrating into society (Brown, 2001:256).

When the concept of disability is seen from the perspective of culture, it takes on distinct dimensions. One finds in every culture a projected image of the ideal person, representing the realisation of customary cultural beliefs and norms. In many Arab countries, the acknowledgement of a disability is associated with an element of shame for the whole family. It is often difficult for Westerners to comprehend the implications of the shame response. Deeply embodied in Islam are the cultural values of compassion, justice, equality, kindness, and generosity of fate as God's will. Historically, traditional disabilities have been perceived as unquestionable. The acceptance of special education may be tantamount to admitting the inadequacy of one's child (Brown, 2001:271). In Arab culture, the mother is traditionally responsible for the education of her children; so much of the burden of protecting the family from the shame rests on her.

Education has been recognised as the cornerstone of sustainable social and economic development. Many countries in the region have embarked on reforms in their education systems and are revising their educational policies and strategies (UNDP, 2002a). Although Arab countries have made great strides in the quantitative expansion of education, it is noted that the general condition of education is still unfavourable compared to the achievements of other countries. The first Arab Human Development Report (AHDR) identified three deficits afflicting the Arab world, namely the issues of freedom, women's rights, and knowledge, and stressed the importance democracy as part of the solution. Events in the Occupied Territories and the invasion of Iraq have complicated matters (UNDP, 2002b).

Despite some positive achievements, the education systems in the region remains inadequately prepared to meet the challenges of the coming years (UNESCO, 2003a). The most serious problem facing Arab education is its deteriorating quality (UNDP, 2002b:47-51), which undercuts a basic goal of human development, namely to enhance the quality of life and enrich societies. Other contributing elements to the deteriorating quality are teachers and teachers' working conditions, and inadequate training, curricula and educational methodologies. As mentioned previously, inclusion is still a relatively new concept, and at present (2006) no consistent government standards provide the necessary standards to assess the
appropriateness of inclusive education. Only time will reveal whether the legislative rhetoric will be translated into commitment.

2.3.4.2 Status of teachers in the Middle East and North African regions

It is a known fact in the Middle East that not many people enter into the teaching profession. High achievers at school tend to focus upon other professions, such as medicine, engineering and law (UNESCO, 1996a). With 70 million children (the majority of whom are girls) in the Middle East and North Africa (MENA) still without access to schools (UNESCO/UIS, 2006), additional teachers will be required to meet this need. For socio-cultural and religious reasons, female teachers are preferred to male teachers in many countries. Female teachers are often seen as better role models for girls, and it has been suggested that the increase in the number of female teachers is expected to persuade parents to send to their daughters to school as it increases a sense of security (Ayyash-Abdo, 2000:192).

Relating to the demographics, it has been found that between 56 and 88% of female teachers are located in urban areas, and an estimated 60% were between 21 and 30 years of age, with the majority being married. In many countries, male teachers still outnumber female teachers, especially at the secondary level, where the number of female teachers comprise a third of the teaching force.

It is important to note that the average monthly income of both female and male teachers is comparatively low if compared to other professions, and this can act as a deterrent in attracting prospective teachers. Salaries in Language Schools and Government Schools tend to vary, and this applies to the keeping up with the inflation rate as well. It is not common for teachers to take on a second job in order to supplement salaries. These circumstances could lead to a decline in performance and diminished motivation (Ayyash-Abdo, 2000:192).

2.3.4.3 Palestine

Palestine is a country consisting of the Gaza Strip and the West Bank, which are areas of land divided by Israel. The population in Palestine in 2000 was approximately 3.2 million. Its demographic growth is among the highest in the world, with a population naturally doubling every 20 years (UNESCO/EFA, 2000c). Over 53% of the Palestinian population are under the age of 18, and most of these children are under the age of eight.
Around 800,000 Palestinian students are attending elementary schools, which constitutes more than 25% of the total population. Around 70% of the students attend government schools, 25% United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) schools, and 5% private schools, which are mostly run by charity or religious organisations (Diakonia/NAD, 2002). Up until the signing of the Declaration of Principles (Oslo1) between Israel and the Palestinian Liberation Organisation (PLO) in September 1993, education in Palestine had fallen under a succession of governing regimes – the Ottoman, British, Jordanian, Egyptian and Israeli. It was also governed by a specialised United Nations agency (UNRWA) set up in 1949 (Mazawi, 2000).

There are two distinct educational periods. During the first period, from 1967 to 1994, Palestine was under the control of the Occupation Authority (the military Rule in Gaza Strip, the West Bank and Jerusalem that became the Israeli Civil Administration in Gaza and the West Bank). The second period started after the Oslo Agreement in September 13, 1993, during which the Palestinian National Authority took charge of education (UNESCO/EFA 2000c; Brown, 2001). Since September 2000, when the Al-Aqsa Intifada began, education in the occupied territories has been in constant turmoil. Between September 2000 and 2001, there were nine uninterrupted months of severe or total closures (Save the Children, 2002). In spite of the extreme living conditions in the West Bank and Gaza there are some favourable conditions for inclusive education, namely the high educational level of the Palestinian population, and the relevant educational background of the majority of teachers, be it a Diploma or a B.A. in Education. The concepts of Human Rights and Education for All are widely known (Diakonia/NAD, 2002). The smallness of the country and the dense population contributed to the rapid dissemination of new concepts, among which is the concept of inclusive education (Diakonia/NAD, 2002).

The Palestinian Ministry of Education (MOE) adopted the global philosophy and launched inclusive education as a pilot project for three years, starting in 1997, with technical and financial support from Diakonia/NAD, Save the Children/Sweden and UNESCO (Diakonia/NAD, 2002; Save the Children, 2002). The general objectives were to enhance the capacity of the Ministry of Education to work on a policy toward inclusive education, and to strengthen the capacity of district Education Directorates to address the special educational needs (Diakonia/NAD, 2002). The UNESCO Pack
Special Needs in the Classroom was used as the basic training material. Awareness campaigns to change attitudes have been a core component of the project.

2.3.4.4 Egypt

The Egyptian education system is the largest in the MENA region and among the largest in the developing world, with an estimated 16 million students enrolled for the 1999-2000 school year. In 2004 the population of Egypt was 73,390 million, with an annual population growth rate of 1.8% (UNESCO, 2004a). The exponential growth of the education system following the revolution in 1952 is still not capable of keeping up with the demands of education, resulting in the serious overloading of classrooms. The situation was exacerbated by the collapse of oil prices in the early 1980s (WENR, 1999). There are two parallel education systems in Egypt: the religious Al-Azhar system and the secular system. Both the Al-Azhar Institutes and Al-Azhar University operate under the auspices of the Ministry of Al-Azhar Affairs. The Ministry of Education supervises the secular schools.

There are over 26,177 schools in Egypt, around 88% of which are devoted to basic education (primary and preparatory) (Egypt Human Development, Report 2000). Ninety-two percent of these are free Public/Government Schools, with only about 8% financed by the private sector. The poor financing of the formal school system has caused a shortage of school facilities, thus resulting in crowded classrooms with up to 46 pupils per class, a shorter school day, and a lack of well trained teachers and teaching aides. To accommodate the increasing numbers of pupils, most government schools operate twice a day from 07:00 to 14:00 and from 12:00 to 17:00 (Baker, 2003). These shifts place an extra burden on both teachers and pupils. Although a higher percentage of the GDP is spent on education in the Arabic-speaking world than in any other developing region, the quality of education in this region is deteriorating continuously. Educational reforms and the continual training and retraining of teachers have had little effect on the traditions of rote learning.

International donors (for example USAID) have provided support to the education and training sector in the form of technical assistance, training, and school construction. Their aim is the promotion of reform through educational decentralisation in specific governorates, and the improvement of teaching environments and teaching quality along with increased non-governmental
involvement in providing community-supported educational services. It is noted that even with initiatives led by government, and supported by regional and international organisations and donors, there has been a failure to overturn deteriorating quality in general, or to make any significant changes in what happens in the classroom (Williams, 2005:1).

In the late 1980s, the Egyptian Government embarked on an ambitious programme to reform education by improving the quality, availability and efficiency of basic education. After participating in the World Conference on Education for All that was held in Jomtien, Thailand in 1990, Egypt became one of the 10 countries targeted by UNICEF/UNESCO for special focus on combating illiteracy, and an action plan was developed to implement this project in 1992 (UNESCO, 2000).

Since the late 1990's, and in accordance with the inclusive educational principles of EFA, there has been a considerable increase in the number of schools and facilities seeking to develop skills to support children with disabilities and other diverse educational needs in mainstream classrooms (UNESCO, 2000e). In 1991, President Mubarak's keynote address on the status and direction of education in the Arab Republic of Egypt (ARE), included the following:

\textit{Education and its progress are our path and gate to the New World map. Education is the cornerstone of our national security in its broad context, covering economy, politics, our intellectual role which preceded other nations and which leads to stability, development and welfare. Education as such is our way to local and international competition} (Al-Gomhorira, 1993 cited in UNESCO/EFA 2000e Assessment: Country Reports).

At a conference in 2004 entitled "Education for all: a vision for the future", the need for more comprehensive in-service training programmes for teachers to address inclusive school development was voiced (UNESCO/EFA, 2004b, Arab Regional Conference "Education for All: Arab vision for the future").

According to the Central Agency for Public Mobilisation and Statistics (CAPMAS, 2005), there are nearly 337 000 teachers in the primary stage in both governmental and private education schools, and almost 206 000 in the preparatory stage. At present, new primary teachers are required to hold a degree from a university faculty of education. Those without the proper qualifications are required to enrol in
retraining programmes at education faculties. These courses (four years in length) take place in the evening and lead to a Bachelor of Education (BEd) degree. Candidates in possession of the General Certificate of Secondary Education are entitled to enter four-year secondary school teacher-training courses offered at university faculties of education. Graduates who hold a four-year university degree are also qualified to teach at the secondary level, provided they have completed one year of postgraduate training at a university faculty of education and have earned a General Diploma. However, university graduates who specialise in certain "shortage" subjects can begin teaching without teaching qualifications (WENR, 1999).

Available statistics indicate that Egyptian primary school teachers, as compared to teachers in the rest of the Middle East, appear to meet the minimum teaching qualifications (see Figure 2.3). According to the World Bank report, the challenge facing countries is not the recruitment of new teachers, but rather the improvement of the quality of teaching regarding qualifications, experience and competence (UNESCO, 2006:24).

**FIGURE 2.3: PROPORTION OF PRIMARY SCHOOL TEACHERS IN THE MIDDLE EAST WHO MEET THE MINIMUM TEACHING QUALIFICATIONS**

![Graph showing the proportion of primary school teachers who meet the minimum teaching qualifications across different countries in the Middle East.](image)

For these statistics, the International Standard Classification of Education (ISCED) is used. ISCED 5A are programmes at the tertiary level equivalent to university programmes.

With reference to disability, the Country Profile on Disability – Arab Republic of Egypt (Japan International Cooperation Agency [JICA], 2002), provides the following definition commonly used in Egypt: "A disabled person is a person who needs
rehabilitation services to meet the basic needs in society because impairments such as movement-related function, sensory function and mental function brings physical, social, economical and psychological disability." The Human Rights Report for Egypt (2004:23) indicates that there are approximately 5.7 million people with disabilities and 1.5 million are severely disabled.

Although, Egypt is considered as one of the countries in the Middle East with a rich statistical system, it is acknowledged that the data on disability is highly inaccurate (UNESCO, 2003a:32/3). This inaccuracy can be attributed to low awareness on the part of the households of the disabled persons and the calibre of the interviewer. The general feeling was that reporting on disabled persons is neither important nor particularly useful; while interviewers may not see the necessity for reporting accurate data on issues such as situation, characteristics and abilities of the disabled person (UNESCO, 2003a:32/4).

The Egyptian government places a high priority on support for persons with disabilities, with both governmental and non-governmental organisations collaborating in trying to solve issues of disabilities. However, current services are seen as only covering 10% of the total number of persons with disabilities (JICA, 2002:9). The Ministry of Education provides special education services for students with disabilities and has introduced services for the visually, hearing and intellectually impaired through special schools and schools with at least one or more special classrooms for students with disabilities. Government efforts in special education cover only 4%. Subsequently, inclusive education initiatives have been introduced through the United Nations Educational, Scientific and Cultural Organisation. The Country Profile on Disability-related Government Organisations is indicated in Table 2.1 (JICA, 2002:12):
TABLE 2.1: DISABILITY-RELATED GOVERNMENT ORGANISATIONS FOUND IN EGYPT

<table>
<thead>
<tr>
<th>NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Health and Population</td>
<td>• No specific section or department is responsible for planning and managing disability-related services.</td>
</tr>
<tr>
<td></td>
<td>• Responsible for eliminating the causes of disabilities.</td>
</tr>
<tr>
<td>Ministry of Education</td>
<td>• The ministerial resolution no. 154 decided that children with disabilities should join special education schools and classrooms. Children with disabilities include children with visual disabilities, visual weakness, hearing disabilities, and mental disabilities.</td>
</tr>
<tr>
<td></td>
<td>• The Ministry is responsible for special education schools and classrooms, and the promotion of special education.</td>
</tr>
<tr>
<td>Ministry of Social Affairs</td>
<td>• Prepares policies to care for persons with disabilities, and issues licences to non-government NGOs.</td>
</tr>
<tr>
<td></td>
<td>• Provides rehabilitation services, physical therapy, intellectual education, and other social services for persons with disabilities.</td>
</tr>
<tr>
<td>SETI Centre</td>
<td>• Established by the Ministry of Social Affairs and CARITAS-Egypt.</td>
</tr>
<tr>
<td></td>
<td>• Offers short intensive training courses on modular basis to beginners, special educators, social workers, physicians and trainers working in government organisations and NGOs.</td>
</tr>
</tbody>
</table>

Concerning specific disabilities, the graph in Figure 2.4 indicates types of disabilities for the year 1996. It is been noted that the statistics of disability in Egypt are affected by under reporting when compared with the proportion reported in other countries (Statistics of the Central Agency for Public Mobilization and Statistics [CAPMAS], 2005). The 1996 documents may in all purposes appear outdated, but one needs to note that this document was published in 2005. To date, no statistics has come out after 2005.
Regarding children with disabilities, the graph in Figure 2.5 indicates the number of disabilities per 100,000 children by age (5-14 years) for 1997. It is interesting to note that chronic conditions make up the largest percentage.

**FIGURE 2.5: NUMBER OF CHILDREN WITH DISABILITIES BY AGE IN 1997 (CITED IN UNESCO/UIS, 2006)**

Source: Social Research Center, American University in Cairo, *Child Well-being in Egypt: Results of EMICS, 1997.*

Note: Chronic conditions include heart, kidney, liver, leukemia, epilepsy and other diseases.
In research done by Sadek and Sadek (2000) in Egypt, the statistics for 1999-2000 (Table 2.2) provide an indication of the schools and classes for the various types of disabilities:

**TABLE 2.2: SUMMARY STATISTICS ON SPECIAL EDUCATION SERVICES IN EGYPT (1999 - 2000)**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SCHOOLS</th>
<th>CLASSES</th>
<th>STUDENTS</th>
<th>TEACHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>29</td>
<td>287</td>
<td>2490</td>
<td>837</td>
</tr>
<tr>
<td>Hearing</td>
<td>111</td>
<td>1185</td>
<td>12797</td>
<td>2646</td>
</tr>
<tr>
<td>Mental Retardation</td>
<td>96</td>
<td>1432</td>
<td>13736</td>
<td>2824</td>
</tr>
<tr>
<td>Total</td>
<td>236</td>
<td>2904</td>
<td>29023</td>
<td>6307</td>
</tr>
</tbody>
</table>

Concerning the training of teachers in special educational needs (Sadek & Sadek, 2000), all prospective teachers, regardless of their specialisations, are required to take Introduction to Special Education as a subject. In the Department of Curriculum and Methodology at universities, subject specialists are trained to teach mainstream students, but it has been noted that students with special needs are seldom taken into account, since modules on Special Needs Education are not incorporated into the pre-service training of teachers.

Training in special education is presently offered at various institutions:

1. Ain Shams University, College of Education.
2. Helwan University, College of Education.
3. At least six universities offer a one-year Diploma in Special Education: for College of Education graduates.
4. Early Childhood departments.
5. Kindergarten colleges.
2.4 CONCLUSION

As discussed in the introduction to this chapter, the inclusion of students with disabilities in mainstream schools can be seen as part of a world-wide human rights movement calling for the inclusion of all people with disabilities in all aspects of life. The framework of inclusion is incorporated in many international policy documents, originating in the Universal Declaration on Human Rights (UNESCO, 1949), and the Convention on the Rights of the Child (UNESCO, 1989), which outlines the rights of all children. The UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities (UNESCO, 1993), calls on countries to develop policies on inclusive education that are understood at both school and wider community levels.

In order for inclusive education to be realised, previously separate education system must be reorganised with the objective of guaranteeing that all students gain access to a full array of educational and social opportunities (Booth & Ainscow, 1998). Therefore, policies on national as well as provincial and school district levels should be planned to assist all students, regardless of impairment, ability, gender, language, ethnic or cultural origin or absenteeism, as well as students at risk of exclusion (Mittler, 2000; Swain & Cook, 2001). For inclusion to exist it cannot be selective, exclusive or rejecting, but must reflect openness and diversity. Furthermore, it must be negotiated in the decision-making process (Swain & Cook, 2001). This implies that if schools are to be inclusive, an inclusive culture, policy and practice need to be adopted (Mittler, 2000).

In countries of the north the advocacy awareness was more prominent, and parents of children with disabilities pushed for legislation to give their children right of education in mainstream schools; some through lawsuits and court decisions as in the USA. In the legislation process, words that were stigmatising, such as "handicapped" or "educationally subnormal", were replaced by words that bestowed dignity and effaced prejudice in an endeavour to deepen society’s acceptance of children with disabilities, and to acknowledge their rights to be educated alongside their typical peers in a mainstream setting.

In England and the USA, in spite of the substantial increase in numbers of education support staff and placement of children with disabilities in mainstream schools, since the issuance of legislation, the governments have still continued to maintain the
operation of, and invest resources in special schools, increasing their average size. In Australia, in spite of the lack of specific legislation mandating educational integration, the decentralised nature of education: delegating responsibilities to the State and Territories for education has effected greater involvement and responsibilities on the part of schools, teachers, parents, and the community in addressing special educational needs of students and providing resources for educational support services. Legislation and national policies of education supporting equity and placement in the least restrictive environment have paved the way for the development of a general trend towards enrolment of students with disabilities in their local schools in the first instance. New Zealand has made reforms in its education system in its endeavour for economic stability, and in viewing the provision of a broad and balanced education for all, both as a human right and as the best financial investment providing for its wealth. The New Zealand government has adopted the policy framework, Special Education 2000, a right to education framework whose underlying principles are availability, accessibility, adaptability and acceptability; all aiming to improve learning outcomes of all children with special educational needs, fostering diversity, eliminating barriers to learning, and providing equitable educational opportunities for all.

In Africa, South Africa's educational policy documents encompassed the principles of human rights contained in its constitution; an education reform movement to efface all prejudice practices of the apartheid era. Education authorities have adopted the challenging mission of minimising, removing, preventing and working with barriers to learning and development. In keeping with this mission, an international project was started to support inclusive education. In Lesotho, although formal education provision is the joint responsibility of community and government and inclusive education has been adopted as a state policy, the phenomenon has been in the system only since 1990.

Many Middle East countries have embarked on ambitious reforms in their education systems, policies and strategies, and have achieved significant quantitative expansion in education; however, its quality still needs to be enhanced through improving teachers' working conditions and providing good in-service training, curriculum development and sound educational methodologies. In Palestine, most teachers have teaching qualifications and the concept of inclusive education as part
of human rights has had rapid dissemination, through awareness campaigns, to change attitudes. Egypt has the largest education system in the MENA region and considers education as the foremost of its priorities; thus, focus has been on reforming and developing all stages of the education system as well as on increasing the number of schools and support facilities for children with diverse needs in mainstream settings. However, teacher training programmes still need much improvement.

It is recognised that policy development needs to be implemented at all levels and developments within communities need to be supported by local and national policies. There is an increasing recognition for the importance of collaboration among non-governmental organisations (NGOs), local government, and local community and religious organisations (World Education Forum, 2000).

With the inclusion of students with disabilities in mainstream schools as backdrop, Chapter 3 will provide an in-depth discussion of the development of inclusive schools.
CHAPTER 3

CRITICAL ELEMENTS IN THE DEVELOPMENT OF INCLUSIVE SCHOOLS

Perhaps the overriding aspect of schools as organisations that should be taken into account, but is often underemphasized or ignored in organisation development interventions, is the broader contextual element. This includes consideration of the factors linked to various aspects of the milieu, including social, political, economic, technological, legislative, ecological, physical, cultural, and institutional factors (Lazarus, Davidoff & Daniels, 2000:15).

3.1 INTRODUCTION

As discussed in the previous chapter, policy development needs to be implemented at all stages, and developments within local communities need to be assisted by both local and national governments. Although a good deal has been documented and discussed pertaining to inclusion and inclusive education, little agreement has been reached on how inclusive educational settings should be developed or what services should be provided. Research (Lipsky & Gartner, 1998; Sands et al., 2000) indicates that several critical or key factors are necessary in the development of inclusive schools. This chapter focuses on these critical elements in inclusive education within whole-school development.

The creation of learning communities, where everyone is actively engaged in challenging and meaningful activities, requires changes in the "core of educational practice" (Elmore, 1996:26). The teacher plays a pivotal role and for the acquisition of knowledge to be meaningful, it should extend to the way in which teachers and students view their roles, subject matter and interaction in the classroom. The onus therefore falls heavily on schools to work systemically in order to bring about meaningful change in classrooms. If they are to be successful, they need to "focus on the development and interrelationships of all the main components of the system simultaneously – curriculum, teacher development, community and student support" (Fullan & Miles, 1992:751).
3.2 WHOLE-SCHOOL DEVELOPMENT IN INCLUSIVE SCHOOLS

The theoretical framework of this study as discussed in Chapter 1 is important with regard to inclusion and whole-school development, as an ecosystemic approach enables a clearer understanding of the complexity of the interaction and independence of multiple systems that affect students and teachers, their development and learning. It has been said that a "true ecological system thinker never debates whether the cause or the solution is situated in one single system, but considers the interdependence between all the systems" (Swart & Pettipher, 2005:13). Inclusive education makes clear that system levels (macro, meso, micro) and their components of inputs, processes, outcomes, external factors (as specifically discussed in 1.4.1 and 1.4.2) are interrelated and context-dependent.

Educators and researchers have been interested and involved in improving schools, and school development has been described in numerous ways, with "educational reform" being one of the terms used. Over the years, education reform has attempted to bring about change in the practice of education. Many of the educators who were involved developed school reform models to examine their ideas about the types of organisational, curricular, and instructional modifications that help schools to offer a better education for students.

In recent years, there has been movement directed away from the traditional ways of thinking about school organisation and decision-making, staffing, teaching, curriculum, student services, and relationships with parents, business, and a systematic change across a community. Schools are open systems, continually interacting with other systems, both in the local and the broader community. This whole-school development approach, which encourages this reciprocal relationship, is often referred to as synergism, occurring between parents, learner, the community, and other organisations (Davidoff & Lazarus, 2002:2; Donald et al., 2002:145; Swart & Pettipher, 2005:5).

Davidoff and Lazarus (2000:2) provide a model for building an inclusive school aimed at developing an awareness of the school as a teaching and learning situation with specific emphasis on the psychosocial and physical environment, learning support in the school, and in-school community support (Engelbrecht, 1999:4). In this model, any school as an organisation has the following six features common to all
organisations: school culture, identity, strategy, structures and procedures, technical support and human resources.

The culture of a school is central to whole-school development, as it is closely linked to the identity of a school. School culture reflects the values and norms interacting in a school, and can be described as a set of understandings, or meanings, shared by a particular group. For inclusive education to succeed, a shift towards a reculturing of learning by both teachers and members of the community is necessary (Donald et al., 2002:147; Swart & Pettipher, 2001:34). Along with a school's identity, there is also the development of a school's organisational character, wherein its particular vision, mission and aims are reflected. Vision building involves incorporating all role-players' values, opinions, attitudes and contributions in developing a mission statement that is supportive of an inclusive learning environment. This requires a culture of collegiality and collaboration (Swart & Pettipher, 2001:35).

Strategy has two major elements, namely strategies to promote organisational development and strategies for curriculum development. Strategy refers to the way in which a school achieves its mission and goals, as well as the criteria for measuring and evaluating those achievements. This strategic planning is therefore an approach designed to achieve specific goals in the most effective way (Donald et al., 2002:147). This initial phase of strategic planning centres on micro-, macro- and exosystem needs and is usually formulated into the vision and mission statement of the school. These policies are usually shaped and directed by leadership, management and governance of the school.

The next element is that of structures and procedures. Structures deal with responsibility and authority occurring in departments amongst individuals. Procedures refer to the rules and regulations and how these structures relate to one another. Three aspects needing consideration in the school development process are decision-making structures and procedures, accountability processes, and the flow of information between the different structures (Engelbrecht, 1999:4).

Technical support is critical in any school's development. It includes resource accessing, teaching and learning support, finances and administration. All these forms of support aim at providing support to the school in an attempt to reach its goals and objectives (Donald et al., 2002:148).
The aspect of human resources pertains to all members of the school community, and the identification of human resources needs is imperative if effective learning is to take place. An understanding of the ecological factors, such as school and community climate, educators' practices, parental background and attitudes, can support the development of more effective partnerships.

### 3.3 CRITICAL ELEMENTS IN THE DEVELOPMENT OF INCLUSIVE SCHOOLS

#### 3.3.1 Funding

This section elaborates on some important aspects that constitute effective practices inclusive beyond the classroom context. One of the major considerations here is funding, which provides the financial assistance for staff professional development, curriculum materials, teaching resources, special equipment and facilities to successfully implement inclusive education. In most countries financial assistance is given by the national government to assist schools in successfully implementing an inclusive education programmes in schools (Frost, 2002).

According to the EFA 2000 Global Assessment, 63% of the cost of education was covered by governments, 35% by the private sector (including parents), and 2% by external cooperation (UNESCO EFA, 2000a). In many countries, the state is the major source of funding, with voluntary bodies being the alternative source (e.g. Lesotho). In most countries, the issue of resources seems not so much a question of levels of funding as it is a question of distribution and allocation of funds.

The Salamanca Statement (1994) emphasises that inclusive education is both cost-efficient and cost-effective, and that "equity is the way to excellence, thus assuring increased achievement and performances for all students" (Skrtic, 1991:148-206; Dyson, 2001; Dyson & Forlin, 1999:35). Adequate funding is seen as an essential element of inclusive education. Particularly, monetary policies and their incorporated incentives (or disincentives) for inclusive education "may be as important in affecting program provision as the amounts allocated" (Parrish, 2002:213-227). Countries advocating inclusive education need to adapt both legislative and fiscal policies in order to achieve their goal of inclusion (European Agency for Development in Special Needs Education [EADSNE], 2003).
Generally, two main parameters are used when it comes to the allocation of funding, namely destination locus and funding indicators. The first parameter relates to where the funding is being directed. In principle, funding can be allocated in many different ways: to the clients of the educational system – the students and/or the parents; to schools – special or mainstream (regular); to groups of schools or other regional institutions – such as resource centres (EADSNE, 2003; Fletcher-Campbell, 2002:20). The first three parameters fit the trans-Europe and UK situation, while the last parameter is more suited to the US, where governments allocate funding to states (Peters, 2004:48).

Funding indicators can be defined as input, throughput or output funding (Meijer, Pijl & Hegarty, 1999; Fletcher-Campbell, 2002:20; EADSNE, 2003). **Input funding** is established on the identification of need of each of the intended levels, for instance the number of pupils with special needs in a school, municipality or region. This possibly may be described in terms of referral rates, low achievement scores and number of disadvantaged students. The crucial issue to student-based funding is that the financial assistance is centred on the measured or expressed needs. Input funding is the most frequent type of funding used, but produces the most negative criticism from countries reporting its use. Less integration, more labelling and rising costs are amongst the most cited problems (EADSNE, 1999).

**Throughput funding** is based on functions or tasks that need to be developed. This resource-based model is founded on services supplied rather than on needs. Studies have indicated a move away from a student-based model to that of resource-based funding (Pijl & Dyson, 1998:261-279). Funding is equally allocated to municipalities or regions, based on total enrolment or numbers of students educated. Accompanying this model are fiscal policies mandating instruction or programmes, which focus on teacher resources and support to provide quality education to special needs students (European Agency for Development in Special Needs Education [EADSNE], 2003).

**Output funding** allocates resources based on productivity. In other words, the number of referred students (the lower the number, the more funds) or the achievement scores (the higher the achievement scores, the more funds). Although most countries have accepted the need for accountability and evaluation of programmes as part of cost-effectiveness, and do not use an output model, the US is
an exception with its "No Child Left Behind" legislation. The relevant act ties funding and school certification directly to student achievement scores, with economic penalties for "failure to achieve". Peters (2002:287-308) has noted that this type of funding penalises schools for conditions outside their control: for example, absentee rates of children, inadequate funding for textbooks and adapted curriculum materials.

Countries of the North have experienced widespread economic recession, inflation an increasing aging population, as expanding social and welfare services. Due to the increase in medical and social services and an increasing aging population, pressure has been mounting to control education budgets. This has resulted in the lack of funding being directed to educational services, leading to under-resourced and poor quality education systems, which in turn leads to the marginalisation of students with disabilities and special educational needs (Casely-Hayford & Lynch, 2003:4). Countries of the South have also experienced increased population growth, increasing poverty, war and HIV/Aids leading to the destabilisation of economies and limited financial resources (UNESCO, 2002b; EADSNE, 2003; Peters, 2004; Dyson & Forlin, 1999). These issues have put a strain on fiscal spending, necessitating the control of education budgets.

Countries are progressively realising the inadequacy of multiple systems of administration, organisational structures and services and the financially impractical options of special schools. Previously, financial studies often referred to financial resources as "What do the budgets purchase?" paying less attention to the way in which monies were allocated and distributed (Fletcher-Campbell, 2002). Attention is being paid increasingly to developing regulations facilitating inclusive education (Eurydice, 2003). In other words, greater interest is being shown in the connection between education budgets and educational outputs.

Confronted with serious financial restriction, countries of the North and South are initiating cost-effective programmes to promote inclusive education. While "school-as-a-whole" strategies are seen to be dominating economic reform in countries of the North, "community-as-a-whole" strategies are being implemented in the South (Engelbrecht, Howell & Bassett, 2002:59-72).

It has been estimated that the cost of providing special education as well as other services to students with special needs are 2.3 times greater than the cost of
providing for students without special needs (Chaikind, Danielson & Brauen, 1993:345). While pressure for accountability towards special needs and inclusive education is on the increase, few cost-effective studies or models for evaluation exist (Peters, 2004:51). A study undertaken by the European Agency for Development in Special Educational Needs (EADSNE), involving all its members (the European Union, Iceland and Norway), pointed out that if funds are not allocated in accordance with an implicit inclusion policy, inclusion is unlikely to happen in practice (UNESCO, 2003b:14).

3.3.2 Curriculum

The Expanded Commentary on the Dakar Framework for Action (par. 33) states:

*In order to attract and retain children from marginalized and excluded groups, education systems should respond flexibly … Education systems must be inclusive, actively seeking out children who are not enrolled, and responding flexibly to the circumstances and needs of all learners …* (UNESCO/EFA, 2000:16a. Meeting our Collective Commitments. Expanded Commentary on the Dakar Framework for Action).

It is accepted that numerous factors help to create a positive school environment for learning. There is a growing consensus regarding the importance of "a relevant curriculum" or "carefully prepared and co-ordinated syllabuses" and "dynamic and solid support from the competent educational authority" (UNESCO, 2001a). Therefore, the curriculum appears to be one of the most important resources available to schools which aim at ensuring "dynamic and solid support from the competent educational authority" (UNESCO, 2001b).

General curriculum can be regarded as "the overall plan for instruction adopted by a school or school system. Its purpose is to guide instructional activities and provide consistency of expectations, content, methods and outcomes" (Hitchcock, Meyer, Rose & Jackson, 2002:8; National Center on Accessing General Curriculum [NCAC], 2002). Curricula have been seen as including a range of content material for student application, teachers' guides' assessments, workbooks, and a variety of media. Curriculum can be viewed as subject courses such as English, Mathematics, and Science, or any other activity that takes place within the classroom setting. In line with the broader perspective of curriculum, it is therefore seen as encompassing all
of a student's school experiences, including those outside the classroom. Haas and Parkey (1993, cited in Kozleski et al., 2000:285) define curriculum as "all of those experiences that individual students have in a programme of education whose purpose is to achieve broad goals and related specific objects, which is planned in terms of a framework of theory and research past and present professional practice".

Curriculum should include key abilities: It should be suitable to learning needs, and encourage lifelong learning. Curriculum should cater for both the short- and long-term needs of students. Teaching should be designed to help students in appropriate stages through the development of simple to complex skills, low factual recall to higher level of intellectual skills, and through acquiring appropriate attitudes (UNESCO, 1994b). The curriculum should allow students to experience it in a number of ways. Their experiences, interests, abilities and individual needs can influence their curricular experience. This is true for students in a mainstream setting. For students with learning disabilities, these variances increase to meet their specialised needs.

Including students with special educational needs (SEN) into regular schools requires many changes both within and outside the school. It is not simply an issue of education, but should be seen as part of an encompassing development in society's way of thinking. However, this integration of students with disabilities into the regular classroom life of the school will not be achieved without modifications being made to the curriculum and to pedagogy (Shade & Stewart, 2001).

In many countries, the concept of the special curriculum arose out of specific mandates, for example, the mandate of PL (Public Law) 94-142, The Education of All Handicapped Children Act of 1975, in the United States. This mandate aimed at providing students with disabilities with free and public education, and was a step forward in the understanding of the particular needs of students (NCAC, 2002). With a change in legislation worldwide, for example the landmark Individuals with Disabilities Education Act Amendments of 1997 (IDEA), attention shifted to the significance of curriculum and standard-based reform for students with disabilities (Pugach & Warger, 2001:194). This amendment stipulated that students with disabilities were permitted to retrieve, participate, and advance within the general education curriculum (Yell & Shriner, 1997).
The development of special education curricula has been criticised over the years, as it was felt that special education did in fact neglect curricular issues (Pugach & Warger, 2001). It was felt, firstly, that by emphasising individualised education, special education curricula were ineffective in alleviating the existing barriers within the general curriculum because the students and teachers, who would have exemplified them, were marginalised. Secondly, it was believed that the lack of effective instructional strategies had little or no beneficial effect on the general curriculum: it remained inflexible and ineffective for many of its students (Pugach & Warger, 2001; Sands et al., 2000). What is evident is the disparity that developed between special education and regular education, resulting in students with disabilities being left further behind.

While regular teachers cannot be expected to resolve all the academic inadequacies of students with disabilities to adapt the whole curriculum for the sake of one student, many modifications can be made (Lipsky & Gartner, 1996). The goal of curriculum adaptation and modification is to "align the cognitive, affective, communicative, and physical/health demands of the curriculum to the capacities, strengths, and needs of the students" (Sands et al., 2000:316). Wehmeyer, Lattin and Argan (2001:334) speak about three levels of curriculum adaptation: "adaptation, augmentation, and alteration". It has been suggested that this adaptation can be applied transversely across educational planning, instruction, and curriculum design and that it can occur in different levels; depending on the students' support need (Sands et al., 2000). The following diagram (Figure 3.1) illustrates the multilevel focus for gaining access to the general curriculum.
3.3.3 Specific role-players in a school

3.3.3.1 School principals

In the great scheme of things, schools may be relatively small organisations, but their leadership challenges are far from small or simple (Center on Reinventing Public Education, 2003:5).

At the centre of the majority of definitions of leadership are two underlying functions, namely supplying direction, and influencing. Schools may vary in the applications of these functions, creating different models of leadership. Leadership is primarily seen as being –

"… the interpretation of events for followers, the choice of objectives for the group or organizations, the organisation of work activities to
accomplish objectives, the motivation of followers to achieve the objectives, the maintenance of cooperative relationships and teamwork, and the enlistment of support and cooperation from people outside the group or organizations" (Yukl, 1994:5).

Pressure is being exerted on schools to include students with disabilities. Teachers and principals are confronted with a daunting task to which there are no easy solutions. School leaders play a vital role in supporting and sustaining change in schools. The principal as an educational leader has been identified as the primary agent of change in either promoting or preventing its flow (Salisbury & McGregor, 2002; Fullan, 1996). Without their efforts, schools will not be able to change and become places where all students are welcome. Perhaps the most significant role is the fostering of an overall vision for the school (Ainscow & Hopkins, 1992:79). Vision is not seen as an outcome, but rather as a continuing process, shaped by one's experiences and understanding of others.

Staff willingness to create conditions favourable to learning for all students necessitates strategies, as well as good leadership and professional staff development (Florian, 1998). By acting as catalysts staff guide and support the course of change. Their attitudes towards inclusion were identified as having a significant impact on its outcome (Forlin, Hattie & Douglas, 1996; Forlin, 1997). The development of inclusive school communities requires major system changes (as discussed earlier) and purposeful leadership (Parker & Day, 1997).

Several characteristics associated with principals who head inclusive schools (Salisbury & McGregor, 2002:259) exist. These principals tend to risk takers, by being energetically acting as supporters of inclusive practices in their schools. They believe in investing in relationships, and work hard to build trust and promote changes by sharing information honestly with all staff members (Salisbury & McGregor, 2005:4). They ensure that they are accessible and are routinely involved at ground level with students, teachers, parents and members of the community, in addressing issues confronting their school. With principals who further this concept of collaboration and establishing collaborative teams, the leadership capacity of the school is extended to include a "community of leaders" that goes even beyond the principal. Principals are reflective in sharing information that has been gathered. This collaborative partnership is identified as being one of the most important means for
effectively responding to diversity and managing educational reform (Lipsey & Gartner, 1966:780). Principals open to inclusive schools have a strong awareness of direction and are deliberate in their actions. They inculcate their core beliefs, values and attitude into the greater school community, thus creating a culture of inclusion (National Institute for Urban School Improvements, 2005:6).

One of the most critical ways in which principals can sustain an inclusive environment is their commitment to providing emotional support to their students and staff (Littrell, Billingsley & Cross, 1994; Arik & Krug, 1993). According to Stainback and Stainback (1990:3), "an inclusive school is a place where everyone belongs, is accepted, supports, and is supported by his or her peers and other members of the school community. Inclusive schooling is the process of having his or her schools as a supportive community where the needs of all members are met and people support and accept responsibility for each other". Forlin (1995) suggests that principals have tended to embrace more positive attitudes towards inclusion than teachers, and generally had the opinion that special needs students should be included. However, in reality there is an existing gap between recommended practices and reality (Brotherson, Sheriff, Milburn & Schertz, 2001).

3.3.3.2 Teachers

Negative and harmful attitudes towards difference in our society remain a critical barrier to learning and development (NCSNESS/NCESS, 1997b:15).

It is generally accepted that teachers in mainstream classrooms are mostly directly responsible for implementing the majority of the day-to-day practices of inclusion (Smith & Smith, 2000:162). The successful development of inclusive education is therefore strongly based on the assumption that teachers would accept students with special educational needs and be responsible for meeting the diverse needs of all the children in their classrooms (Forlin, 1991:1790). However, as Fullan (1991) notes, teachers are renowned for resisting change (in this instance the change in traditional policies regarding the education of students with special educational needs). In this regard Shade and Stewart (2001:37) note that "teachers may feel challenged, hopeful and desirous of what can be accomplished, but many fear lack of support and inadequacies about their ability to teach children with different kinds
of problems". Research therefore indicates that it is necessary to analyse teachers' views towards inclusive education as there appears to be a strong connection between attitudes and views and their commitment to a practice (Forlin, 1995:179-180; Swart et al., 2002, Eloff et al., 2001; Frost, 2002). Engelbrecht et al (2003:1) state that "... policies of inclusive education rely on teachers' acceptance of them, belief in their worth, and ability to cope".

Research on teachers has yielded a substantial amount of data on teachers' views on the implementation of inclusive education (Engelbrecht et al., 2003:294; Forlin, 2001:236; Smith & Smith, 2000; Scruggs & Mastropieri, 1996). Factors influencing teachers' views include teachers' self-perceived competence, the nature of students' disabilities and administrative issues including support (Forlin, 2001:236; Avramidis & Norwich, 2002:134; Engelbrecht et al., 2003:305).

While many teachers support the right of all students to be educated in mainstream classrooms, some lack confidence in their ability to meet the diverse needs of all students, with the result that their views towards inclusion are frequently ambivalent (Smith & Smith, 2000) or negative and uncertain (Hammond & Ingallis, 2003; Swart et al., 2002). The required changes to planning, practice and assessment are experienced as overwhelming as teachers in mainstream schools have traditionally only been trained to teach students without special educational needs (Forlin, 2001; Forlin & Engelbrecht, 1998).

The research literature on teachers' views towards disability suggests that negative attitudes "lead to low expectations of a person with a disability" (Forlin et al., 1999:209) which in turn could lead to reduced learning opportunities, beginning a phase of weakened performance and further lowered expectations, both by the teacher and the student. Studies by Forlin (1995) and Soodak et al. (1998) found that teachers were most willing to include students with physical disabilities and least willing to include students' behavioural-emotional disorders. The European Agency for Development in Special Needs Education (2003) also established that behavioural, social and/or emotional problems were the most challenging for teachers within the context of inclusion. Other special needs that were also considered to create a significant challenge to teachers included specific learning disabilities, intellectual disabilities and multiple handicaps. In line with these findings, the study by Soodak et al. (1998) went so far as to report that teachers in fact
discriminate against students with different disabilities, expressing hostility towards students with learning disabilities and behaviour problems. Regarding the behaviour of the student with a disability, the most stressful feature cited was the short attention span of the student together with poor attention skills. Teachers felt that the students' attention seeking and disturbing of fellow students were also stressful behaviours exhibited by students that teachers experienced (Engelbrecht et al., 2000).

Avramidis and Norwich (2002) presume that these variations in teacher's views towards different categories of disabilities can be ascribed to the perceived instructional and managerial skills required to include these students in the classroom. The types of disabilities that are seen to bring the most challenges to the daily practice of teachers are in turn those that teachers hold the most negative views of and are least willing to teach and to provide for. Connelly's (2004) study in New Zealand concurred with the sentiment that students with severe disabilities, such as intellectual disabilities and autism, should not be included in the regular classroom. However, students with physical and academic disabilities should be accepted in regular classrooms. A study in Zimbabwe (Mushoriwa, 2001) revealed that 94% of the teachers were not happy to have children who are blind in their classrooms and that they were not prepared to teach them (Mushoriwa, 2001). Similar results were also indicated by studies in Uganda (Kristensen, Omagor-Loican & Onen, 2003).

Administrative and support issues include having to take full responsibilities for the student with specific educational needs as well as for the rest of the class. Further administrative issues included adapting the curriculum, adjusting lesson plans and obtaining funding for necessary support. (Avramidis & Norwich, 2002:134; Wormnaes & Hayayeb, 2001:145). Insufficient facilities and infrastructure to provide adequate support include inaccessible buildings, a lack of appropriate instructional material, as well as effective paraprofessional assistance. Finding the time for collaborative planning and collaboration is also identified as problematic. Finding of such time should reflect an organisational commitment to the recognition of factors influencing teachers' views and the facilitation of problems rather than relying on teachers to cope on their own (Smith & Smith, 2000; Bothma, Gravett & Swart, 2000; Hall, 2000).
Teachers' views play a significant role and "unless teachers are enjoying positive, health-enhancing and productive emotional states and high motivation and commitment, and unless they have the skills and the drive to implement change programmes, inclusive education approaches will not be implemented wholeheartedly or effectively" (Bailey, 1995:16).

3.3.4 Implementing inclusive practices through partnerships in school communities

So much is riding on our schools. As parents and communities, we have entrusted them with our greatest resource and tangible investment in the future: our children. The sheer magnitude of what we ask of these institutions – to promote learning, prepare a workforce and create a citizenry – puts them at the heart of our communities and endows them with special status (Melaville & Blank, 1998, cited in Carter, 2003:8).

3.3.4.1 Partnerships

Previously, the birth of a child with a disability was viewed as a tragedy, and the whole family was seen as being disabled and dysfunctional (Moore, Howard & McLaughlin, 2002:48). Early on, parents were often perceived as the source of their child's disability, and their voices frequently subdued by specialists, who were more concerned with conveying blame than paying attention to their uncertainties, dreams and hopes (Turnbull & Turnbull, 1997). Over recent years, parents have made a major shift from being predominantly passive recipients of information from professionals at schools, to becoming active, empowered parents of equal status (Johns, Crowley & Guetzloe, 2002, cited in Muscott, 2002:66).

At present, professionals generally show a willingness to take note of the voices of parents, and this change in attitude has led to a positive influence on the lives of students with disabilities and their parents. The significance of establishing a positive partnership between families and professionals has been recognised as being important. The term "partnership" is often used to include concepts such as collaboration, services, multidisciplinary team, and family or parent involvement (Summers, Hoffman, Marquis, Turnbull, Poston & Nelson, 2005:65).

With the mandate in legislation, parents are increasingly having more control over their children's education. The Individual with Disabilities Education Act (IDEA)
Amendments (U.S. Department of Education, 1995) confirms parents’ right to be engaged in their children's referral, testing, planning and evaluation. This expansion of educational rights to all students was mainly brought about through the efforts of parents (Turnbull & Turnbull, 1997). In many instances it took place in the courts, in a response to parent-initiated lawsuits and lobbying. According to Johns, Crowley and Guetzloe (2002) there has been a move from a dominant, inactive recipient of information from the school, to an empowered, enthusiastic, family role in decision-making concerning a child with a disability. This move towards a family-centred practice is based on the assumption that the whole family is affected when a child has a disability (Turnbull & Turnbull, 1997).

In the Inclusive Education Consultative Paper (Department of Education, 1998:37), schools are required to establish a partnership with parents in the development and execution of inclusive strategies. This authorisation for parental involvement which entitles parents to share with professionals in the decision-making of their child's education endeavours to balance out the lack of parental involvement and the balance of power between professionals and parents that have traditionally been prejudiced in favour of professionals (Kalyanpur, Harry & Skritic, 2000:121; Engelbrecht, Swart, Oswald & Eloff, 2005).

Even though legislation is in place and the desires of parents and professionals are being met, the development of collaborative partnerships are often unsuccessful. A partnership between families and professionals is often seen as the cause of stress for both parents and professionals. Throughout the literature parents are generally shown to be in favour of inclusion, although they expressed anxiety in several areas. Examples of such areas of concern are the attitudes of general education teachers, lack of appropriate support and resources and specialised instruction, coupled with concerns regarding social integration and progress (Leyser & Kirk, 2004, 272-273; Seery, Davis & Johnson, 2000). Parents were also concerned that inclusion would overburden both teachers and students, and that the students to be included would be behaviourally disruptive to the class (Palmer, Fuller, Arora & Nelson, 2001).

In the following diagram (Figure 3.2) emphasis is on the two dimensions of family-professional partnerships. This model of a family-centred practice is established on the premise that the whole family is influenced when a child has a disability, and therefore the focal point should be to meet family needs, rather than those of the
child. Children are likely to accomplish more when family requirements are catered for and family strong points are integrated into the educational programme (Muscott, 2002:66).

**FIGURE 3.2**: CONCEPTUAL FRAMEWORK OF THE COMPONENTS OF THE FAMILY-PROFESSIONAL PARTNERSHIP

![Diagram of the conceptual framework of the components of the family-professional partnership](image)


### 3.3.4.2 Partnerships with parents and siblings

*Parents have to be recognised as special educators, the true experts on their children; and professional people – teachers, paediatricians, psychologists, and others – have to learn to be consultants to parents* (Nicholas Hobbs, 1978: Founding Director of the John F. Kennedy Centre).

A contributing factor to the development of successful inclusion programmes is the involvement of parents of children with and without disabilities in the inclusion process (Bennett, Deluca & Bruns, 1997:15). Comprehending the perspective of parents of children with and without disabilities regarding the effectiveness of inclusion is important. The reasons are: (a) by legislation, parents are decision makers in placing their children with disabilities in integrated settings; (b) parents play a central role in their children's developmental and educational activities; (c) parents are the driving force behind many of the services provided to their children...
(Guralnick, 1994); (d) parents are potential initiators and advocates of reform (Gibb, Young, Allred, Dyches, Egan & Ingram, 1997:243-249); (e) parents' reactions are critical in ascertaining the social validity of inclusion (Dennis, Williams, Giangreco & Cloninger, 1993).

The parent-child relationship within any family is important, but sibling relationships are more significant, as brothers and sisters spend more time with each other than they do with their parents. This sibling bond has been described as "the most unique of all human relationships" (Seltzer & Krauss, 1993, cited in Moore, Howard & McLaughlin, 2002:49). Siblings will share many of the same concerns as their parents, but at the same time will have their own, unique issues (CEC, 2002; Dodd, 2004). These can involve feelings of loss and separation when their parents' time and attention are spent on a sibling's disability (ARCH, 1993:3). Siblings have a significant role in the dynamics of the family, but it is important that they are not obligated to take on roles beyond their age and abilities.

It has also been suggested that increased awareness of professionals in the needs of siblings can lead to their feeling of involvement in events and developments. More often than not, the child with the disability is usually the one on whom the attention is focused. There is growing confirmation that with no support, siblings are in jeopardy of developing a variety of mental and health problems. "The child with a disability will be cared for more effectively if the needs of individual family members are identified and met, including those of the siblings" (Miller, 1996:21).

3.3.4.3 Partnership with local communities

Educating children to live in our rapidly changing and complex society "requires contributions and commitments from everyone in the community" (Dodd & Konzal, 2002:288). The term "community" has been described as "... the smallest administrative area where people live" (World Health Organisation [WHO], 2003:4), which implies that there is a formal structure, with an elected or appointed body, that is responsible for the well-being of all those living in that designated area. This therefore includes people with disabilities (WHO, 2003). Community development can be seen "as the process of bringing people together for the achievement of a common goal, usually related to changing the quality of life" (Bender, 2004:201). In the literature, community development is regarded as "community education" and
"community organisation, or participation" (Bender, 2004:203). The term "community resources" can be used in a variety of contexts, though in many instances it is synonymous with financial aid. In the context of this research, community resources have come to include natural, human, financial and infrastructure resources (Bender, 2004).

Schools are located in communities and are strongly influenced by the communities' values and norms (Donald, Lazarus & Lolwana, 2002). An inclusive culture refers to a safe, understanding, collaborating, and stimulating community, where everyone is appreciated, which creates a basis for the highest achievement of all students (Dyson, 2001). Inclusive cultures are developed through building a sense of community, where everyone is made to feel welcome and is treated with respect (Hall & Engelbrecht, 1999). Therefore, establishing trust is seen as being of critical importance in fostering this relationship (Hall, 2002).

Schools are also faced with demanding circumstances, whether it is poor parent involvement, inadequate transport, insufficient funds or socio-economic factors (Engelbrecht & Snyman, 1999). This implies that economic, social and environmental factors do not function in isolation, but instead as mutually dependent factors of an all-encompassing developmental process, supported by vibrant community life and environs.

3.3.4.4 Community-based rehabilitation (CBR): providing a practical reality

During the 1970s, the World Health Organisation (WHO) formalised community actions for persons with disabilities into recognised programmes, known as Community-Based Rehabilitation (CBR). In 1994, the following definition of CBR stated:

*Community-based rehabilitation is a strategy within a community development for the rehabilitation, equalisation of opportunities and social integration of all people with disabilities. CBR is implemented through the combined efforts of disabled people themselves, their families and communities, and the appropriate health, education, vocational and social services (ILO, WHO, UNESCO, 1994).*

The logical question put forward is, "What does CBR have to do with teachers and education?" (Kisanji, 1999:3). If one is to accept that the development of a community entails catering for the basic needs of all its members, one could
therefore assume that education would and should play an important role in this process. Education has been described as the "process of knowledge, creation and transformation for the purpose of satisfying community needs" (Carmen, 1966 cited in Kisanji, 1993:3), and therefore, cannot be separated from development. Generally, CBR programmes aspire to incorporate students with disabilities into their local schools. CBR workers offer a link between the students and their families in the home situation as well as between students, their peers and their teachers in the school environment. The students' incorporation in their local schools is, therefore, linked to a wider movement to promote an inclusive society (Miles, 2000). In countries of the South, CBR has developed because of the failure of the existing services in the residential settings to meet the needs of most people with disabilities.

There are commonalities that exist in both CBR and inclusive education:

- CBR and inclusive education work together in some settings and should be seen as complementary.
- Both CBR and inclusive education share the same goals of equal access for people with disabilities.
- Both share the same values that there should be no discriminatory practice and that the value of all children should be recognized.
- Both need to change professional and community attitudes.
- Both need an optimistic view of what is possible.
- Both share a tension between technical expertise and broader approaches.
- Both enhance value by the Child-to-Child approach.
- Both value parents as participatory partners.
- Good practice needs to be identified and described in order to convince policy makers that CBR and inclusive education are not options, but components of the same service.

CBR is seen as a necessary strategy for advancing inclusive education, but it is doubtful whether it is able to support an inclusive system of education. It could, however, offer a sustainable alternative, where educational resources are in short supply, given that it does not require any specialist input or extra resources (Miles, 2000; Miles, 2000; Rogers 2003).

In work done by Save the Children (2001) it was noted that teachers felt a sense of
satisfaction and reward when a disabled child succeeded in learning or learnt more socially pleasing behaviour and became accountable for all children, when children experienced no trouble in making friends, and when they extended support to disabled children. Parents and teachers supported this sympathetic social responsibility. CBR workers were able to offer crucial encouragement to families in order to reinforce the benefits of integration. The successful incorporation of disabled children in their local schools emphasised the awareness campaigns, which were central to the objectives of CBR. Within this context, parents felt more encouraged to support their children's educational development (Miles, 2005:5).

3.3.4.5 The Role of NGOs in promoting inclusive education

NGOs supply a range of services to all who need them, irrespective of gender, religion, ethnicity, race, disability or socio-cultural background. There is effective coordination among them at the local level to pool their resources. NGOs are usually found to be flexible, and have great potential for starting inclusive education. It remains the case that in several developing countries the financial provision for the educational and other needs of individuals with disabilities is carried out largely by non-governmental organisations (NGOs). Evidence from UNESCO's (1995) review of the situation of special education in several member countries reveals that in 26 of these countries NGOs were considered the major source of funding while in several other developing countries NGOs provided up to 40% of the costs of special needs provision.

Government and NGOs at times have had different and conflicting perspectives of one another's legitimate rights, roles, capacity and motivation, which have often led to the impediment of a productive partnership. Tension and mistrust have often clouded these relations between government and NGOs; even though NGOs have played a vital role in education in Africa, providing services that the other could not do (USAID, 2002). In many countries, the influence of national NGOs has been largely underestimated, but more recently they are being recognised as being a contributing force in a country's progress towards Education for All. NGOs are therefore seen as an inseparable part of a democratic society, whose main mission is to provide services to the most vulnerable section of society, and to encourage empowerment and organisation.
3.3.4.6 **Education support services**

Historically, there has been a division between education support services and special needs education. Education Support Services have been considered as an "add-on" in the administration of education in South Africa, as well as in other countries of the world. These services concentrated on limited involvement and occurred mainly in the urban areas (NCSNET/NCESS, 1997).

According to the National Commission on Special Needs in Education and Training (Department of Education, 1997), "Educational Support Services (ESS) includes all human and other resources that help to develop and support the education system so that it is responsive to the different needs of all learners and the system."

From this definition, it is clear that in an integrated system, there should be a range of services to meet the needs of all students, working along with the education system. Support required by students or the system could include the following:

- teaching and learning support, including particular teaching and learning interventions (academic development programmes, enrichment programmes);
- the provision of assistive devices (Brailing facilities, specialised communication devices, appropriate information technology);
- general and career guidance and counselling; various forms of therapeutic support (medical, psychological, occupational, speech, physiotherapy);
- nutritional programmes; social interventions; parental support; teacher training and support; organisation development; and curriculum development (NCSNET & NCESS, 1997).

In keeping with the integration between the community and the school, support can and should be obtained from local NGOs and other members of the learning community, for example: Sign Language interpreters, welfare organisations, religious organisations and traditional healers (NCSNET/NCESS, 1997).

Article 40 of the Salamanca Framework for Action states that "[a]ppropriate preparation of all educational personnel stands out as a key factor in promoting progress towards inclusive schools" (UNESCO, 1999:13c:)
In an inclusive classroom, all students are seen as being important, but those who experience barriers to learning and development make special demands on teachers, who are expected to find ways of meeting their students' special educational needs. Teachers' perceptions of their own skills and level of support provided for them will largely affect their willingness to follow through with implementation. Support programmes therefore need to respond to the particular needs of the teachers, who will be directly involved in their implementation.

The term "collaboration" is used when describing ways of supporting schools, teachers, children and their parents. Engelbrecht (2004b:248) describes collaboration as a "catalytic, ongoing, dynamic, interactive process occurring among individuals working together towards a mutually accepted goal". It is further contended that this joint ownership and consensual decision making occurs within an atmosphere of respect and support. Capacity building in support of inclusion is one of the most important elements in the development of an inclusive system: focusing on teacher preparation (both pre- and in-service), and in-servicing of school heads, education officers and support staff. Strategies for developing support include focusing on collaborative support, for example the development of school-based support teams; and the establishment of district support teams and resource centres (Engelbrecht, Swart & Eloff, 2001). This collaboration enables co-equal parties, who share responsibility and accountability in reaching the desired outcomes, to work towards the formation of alliances (Sands, Kozleski & French, 2000). With rapidly changing knowledge and technology, teachers are now being expected to adapt accordingly.

Support may be given to teachers in any of the following ways:

- Provide teachers with a range of skills, expertise, knowledge, pedagogical approaches, adequate teaching methods and materials, and time to address diversity effectively.

- Provide support from inside and outside the school through leadership on the level of principals, school districts, communities and government and regional cooperation between agencies and parents.

- Provide teachers with support from colleagues in the school, as well as professionals from outside the school (NCSNETNC/ESS, 1997b).
Collaboration needs to be accepted by all, rather than being imposed. Engelbrecht (2004) quotes Pugach and Johnson (2002:16-18) in identifying certain qualities of effective collaborative professionals: "They are people who recognise the complexity of the goal, and its necessitating more than a combination of individual efforts. They value the establishment of trust amongst participants and their personal growth resulting from this participation." The barriers to collaboration, which indirectly affect the learners, are identified as the following:

**Conceptual barriers** are seen as probably being the most difficult to eradicate, as they form part of the culture of the school. "[A] common belief within a school culture is that students with disabilities do not belong in mainstream schools" (Wade, 2000:81). **Pragmatic barriers** are mainly concerned with systemic factors such as lack of time for implementing collaborative programmes. Schools have been described as "segmented egg-crate institutions" (Wade, 2000:82), where teachers tend to work in isolation, thus hindering any form of collaboration. **Professional barriers** see teachers in schools often being isolated by long-established behaviour and beliefs. This is particularly true of those teachers who have been teaching for a number of years. Disproportionate knowledge and expertise in training is another reason for the lack of collaboration amongst teachers (Wade, 2000:84).

### 3.4 CONCLUSION

It is evident that for inclusive representation in schools to be implemented, transformation in the organisation of schools is required. Whole-school development is synonymous with the concept of health-promoting schools and includes school effectiveness, school improvement and school development. Incorporating the approach of whole-school development encourages community participation, providing all-inclusive strategies for addressing barriers to learning, and highlighting the importance of support services.

Critical elements in the development of inclusive schools within a whole-school approach include funding, curriculum and major role-players (this includes principals), teachers, students with special educational needs and their families, peers and communities. A collaborative partnership between local government, schools and community will pave the way for the establishment of more inclusive learning communities, which will directly benefit all students. If the major role-players
understand the importance of the contexts in which they find themselves, transformation in the schools will be more readily accomplished. However, this will require that the role-players show perseverance, dedication and a high degree of sensitivity to the needs of all those involved.
4.1 INTRODUCTION

As discussed in Chapter 1, the aim of this study was to investigate the attitudes of teachers towards inclusive education. The aim of this chapter is to provide a complete explanation of the research methodology followed in this study. The methodology is discussed on the basis of the selection of participants, pilot study, data collection, procedures and data analysis.

4.2 RESEARCH DESIGN

4.2.1 Description of research design

As discussed in Chapter 1 (1.5.1), a research design is defined as "a set of guidelines and instructions to be followed in addressing the research problem" (Mouton, 1996:107). It provides a plan of action for the envisaged research. The researcher obtains research participants and collects information from them with a view to reaching conclusions about the research problem (Welman & Kruger, 2001:46). It also serves as a bridge between the research questions and the implementation or execution of the particular research (Terre Blanche & Durrheim, 1999:29). A variety of research designs is available to the social scientist, each with its own strengths and weaknesses (Babbie & Mouton, 2003:72). In order to clarify the attitudes of teachers through correlations and comparisons, while taking into account variables such as gender and training, amongst others, a non-experimental quantitative research design with specific reference to survey research was deemed appropriate for this study (Neuman, 2003:264).

4.2.2 Research format

Survey research is the best method available to the researcher who is interested in collecting original data from a population too large to observe, since it can be conducted for a wide variety of purposes. Surveys are frequently used in educational
research to describe attitudes, opinions, and beliefs. Survey research is often called correlational, as it makes use of variables to approximate the test for causality (Neuman, 2003:267). This type of research follows a deductive approach, as the researcher begins with a theoretical research problem and ends with an empirical measurement and data analysis. Once the researcher has decided on an appropriate method, certain basic steps are followed.

Mouton (2001:153), states that descriptive survey research is generally quantitative in nature and aims at providing a representative sample from a large population. As this study dealt with variables that were measurable and quantifiable, it allowed one to work with a sample that was representative of a population (Neuman, 2003).

4.3 LITERATURE STUDY

Part of any research process is the reviewing of relevant literature, which is based on the supposition that one learns from and builds on what others have done. It "offers ways of looking at the world, which are essential in defining the research problem" (Silverman, 1993:1). Merriam and Simpson (1995:15) state that "the process of problem identification involves refining and narrowing the topic of interest". The literature review provides a framework from which to develop the formulation of the research problem, the selection of a relevant design and methodology, the development of the questionnaire, and finally the interpretation of the results. The purpose as defined by Mertens (2005:32) "is to provide the researcher with an overall framework for where this piece of work fits into the 'big picture' of what is known about a topic from previous research".

In the initial stages, the review of relevant and recently published literature contributed to the comprehensive understanding of what had been written about inclusive education and, in particular, to teachers' attitudes. A criterion for an adequate literature review is that the literature provides sufficient information to support the theoretical framework and research questions (Mertens, 2005). In order to find relevant material, the researcher drew most of the literature from books, scholarly journals, government documents and policy reports. As very little literature on inclusive education in Egypt was available, use was made of online international publications, newspapers and articles.
4.4 IDENTIFYING PARTICIPANTS

4.4.1 Population and sample

Population is described as a "group of elements or cases, whether individuals, objects or events, that conform to specific criteria and to which we intend to generalise the results of the research" (McMillan & Schumacher, 2001:103). As mentioned in Chapter 1, schools in Egypt differ considerably. It is therefore important to take into consideration the differences amongst schools in relation to issues such as class sizes, salaries and resources.

Sampling is defined as "the process used to select cases for inclusion in a research study" (Van Vuuren & Maree, 2002:274). Sampling is one of the areas in which great divergence can be found when comparing the various research paradigms (Mertens, 2005). In spite of the contrasting views of sampling within the various paradigms, issues of common concern exist. All sampling decisions occur within the limitations of ethics and feasibility. Mertens (2005:176) identifies two basic sampling procedures in survey research, namely probability and non-probability sampling. The eventual purpose of sampling is to select a set of elements in the form of statistics from a population in such a way that they accurately portray the parameters of the total population. Probability sampling increases the chances of accomplishing this aim (Mertens, 2005:308; Mouton, 1996:175).

The main concern in sampling is representativeness. In this study, it was the researcher's aim to select a sample that would be representative of the population from which conclusions could be drawn. Unless the sample from which the generalisations come represents the population from which it was drawn, one cannot be certain that the population has the same properties as those of the sample (Mouton, 1996:136).

As discussed in Chapter 1, the population sample was selected from five schools, stratified into two geographical regions, namely Cairo and Alexandria. The schools ranged from kindergarten, primary, preparatory to secondary.

4.5 ETHICAL CONSIDERATIONS

"Ethical" is defined as "conforming to the standards of conduct of a given profession or group" (Babbie & Mouton, 2003:520). Strydom (2002:63) refers to ethical
measures within research as: "A set of moral principles which is suggested by an individual or group, is subsequently widely accepted, and which offers rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents, employers, sponsors, other researchers, assistants and students".

Heyes (2000:53) recognises the rights of the research participant as an autonomous, active individual who has the right to choose to participate in the study, and whose participation gives him/her the right to be fully informed about the study, the right to withdraw if so wished, and the right to make informed choices.

Every effort was made to ensure that the research did not pose any professional or personal threat or harm to the participants, as the researcher was fully aware that teachers are generally very hesitant to fill in questionnaires. Another important issue is that of maintaining confidentiality and anonymity (Cohen et al., 2000). In essence anonymity means that the researcher should in no way reveal participants' identities, and so numerical numbers instead of actual names were used during the collection, transcribing, analysis and reporting of the data. In this research, the participants' identities were treated confidentially throughout the entire study, and without any exception.

As a foreigner, the researcher had to work through specific protocol relating to the Egyptian context. For language schools in Cairo, principals and heads of governing bodies were approached directly and the rationale behind the study was explained. Regarding government schools in Alexandria, the Director of Educational Training at the Ministry was contacted telephonically to request his permission. The researcher met with the Director where the questionnaire and the procedure were discussed. An official letter in Arabic, outlining the aims and objectives, was written, but this was never signed by the Director of Educational Training and therefore became redundant, as good relations existed and permission had been granted at the meeting. The Ministry in Alexandria provided assistance in terms of distributing the questionnaires via the Director of Educational Training, saving time and costs.

Confidentiality was addressed by assigning a code number to each respondent as they completed the survey and using only that code to track survey responses. This code was entered on each survey, enabling the researcher to link the survey and the
respondent. This link allowed the survey results to remain confidential without being anonymous to the researcher. Aggregate data reported contained no individually identifiable information. Although participants were assured of confidentiality, it is possible that some answers were chosen in an effort to please the researcher.

4.6 DATA COLLECTION

4.6.1 Questionnaires

Inclusion is a multi-faceted concept and its implications in schools cover a wide range of factors. It would be impossible to cover every aspect of inclusion in one study. Questionnaires are therefore considered the best tool for the researcher who needs to obtain original data from a large population (Babbie & Mouton, 2002:231). With this objective in mind and also taking into account practical problems such as language, as well as including all teachers from different schools, it was decided to use questionnaires rather than formal interviews. It was hoped that the results obtained would lead to a comprehensive view of the attitudes of teachers, while at the same time contributing to an understanding of the aspects that would need to be addressed in the process of inclusion.

Like all research designs, surveys, and in particular questionnaires, have both strengths and weaknesses, but there are generally more advantages than disadvantages in using this type of research. The advantages of using a questionnaire are that a large amount of data can be collected quickly and inexpensively. This is especially the case with data that is geographically dispersed. Information can be administered comparatively easily and computer processing is simplified. It also allows for a broad, representative input and can build consensus for the results. The likelihood of bias is lessened because the researcher is not present, and the questions are impersonal. Questionnaires ensure anonymity and encourage candid responses. The use of structured questions obliges respondents to choose from a list of possible answers. Multiple-choice or rating types of questions yield quantitative data that is easily summarised, analysed, and reported. As the study dealt with attitudes, a questionnaire offered flexibility, both for assessing attitudes and collecting facts.

On the negative side, data collected is limited to a fixed set of questions, thus making it difficult to obtain in-depth information. The quality of the data also depends
on the specific experiences of the respondents, as well as their awareness, perceptions, honesty and memory. Unless participants are strongly motivated to complete the questionnaire, response rates may be low. Response rates vary widely from one questionnaire to another (10-90%). One disadvantage mentioned was the respondents' negative inclination towards questionnaires and the tendency not to complete or return them (Neuman, 2000:266). In order to preclude this tendency, principals were made responsible for the forms. In the case of Alexandria, the Deputy Director was the responsible person. This ensured that the majority of the questionnaires were returned. A further disadvantage is that questionnaires are often not fully understood. Language differences between the researcher and respondents can influence the validity and reliability of the research by barring both parties in ascribing mutual meaning. The pilot testing is a crucial step in attending to any technical aspects concerning the translation. Finally, it may be difficult to summarise and analyse the responses to open-ended questions.

4.6.2 Construction of questionnaire

The questionnaire was carefully constructed in such a way that it would yield sufficient data to answer the research questions as well as ensuring an acceptable response rate. To avoid that language would affect the outcomes of results, the questionnaire was written in Arabic. According to Babbie and Mouton (2003), the researcher needs to bear in mind that the following factors could indirectly influence the validity of the questionnaire:

- To what degree might the questions influence respondents to present themselves in a positive light?
- To what degree might specific questions influence respondents to predict what the researcher might want to hear?
- To what degree should a question elicit information about respondents' feelings and attitudes?

According to the literature, basic principles should be adhered to when the questions are formulated. Questions should have relevance for the respondents, and should be formulated clearly and unambiguously (Babbie & Mouton, 2003:233-239; Neuman, 2003:270-271).
The initial step in designing any questionnaire involves translating the research objects into information goals for the formulation of specific research questions. Creating an initial pool of questions is seen as an integral part of designing the questionnaire, as these questions could either prove to be relevant or could be discarded (Mouton, 2001:55-94). A number of questions were formulated and submitted to experts in the field of inclusive education for their comments. The questions were revised according to the comments received, so that the final questionnaire in the Arabic language was deemed comprehensive and all questions were relevant to the overall research question.

The researcher decided on a structured questionnaire in Arabic with 59 closed-questions, where respondents had to choose from a list of predetermined responses (McMillan & Schumacher, 2001:260-267). There was one open-ended question. From the researcher's perspective, the inclusion of an open-ended question would facilitate a more in-depth insight into participants' training, which might not have been covered in a multiple-choice question. Closed questions were primarily used, as they provided a structured, fixed response. Moreover, they are easily ranked and processed (Neuman, 2003:276). The disadvantage of this type of question is that the respondents' beliefs could be forced into fixed categories, as well as not always providing enough categories of possible answers (Neuman, 2003:279). The researcher chose closed-ended questions as they limit the number of possible responses. Results from closed-ended questions can be reported as average scores on each question (including standard deviations or range of scores to help reviewers to get a more complete picture).

Based on the extensive literature review, the questionnaire was structured in the following manner:

**Section A:** The first section (Questions 1-14) consisted of closed-ended questions aimed at eliciting information on background variables such as age, gender, region, qualifications, post held by educator, and teaching experience. This information provided a comparison between the different sub-groups. Question 15 consisted of an open-ended question, allowing respondents to qualify their response to training received in special education.
Section B: Questions 16-23 assessed teachers' difficulty in handling a broad range of special educational needs in their classes. The scale rated least difficult as 1 and most difficult as 4. (For the purpose of data analysis this was later recoded to range from 0 to 3.)

Section C: Questions 24-29 focused more specifically on teachers' ability to accommodate students with special educational needs within their present classroom situation, bearing in mind that "classroom teachers will be our primary resource for achieving our goal of an inclusive education system" (Department of Education, 2001:18).

Section D: Questions 30-60 dealt with barriers that might prevent a teacher from accommodating a student with special educational needs within a truly inclusive school. Issues such as funding, structural constraints, training, and support and teacher efficacy were discussed. A modified 4-point Likert scale was used as it was felt that it was not in our interest to assign the weight of 3 points to someone who is undecided. Respondents were asked to indicate to what extent they agreed with given statements. Each statement was scored from "strongly disagree" to "strongly agree".

In this section the researcher hoped to glean insight into the attitudes of regular classroom teachers, the consensus being that "the successful inclusion of the learner with special educational needs depends on the teacher's attitude towards such students and their resulting behaviour" (Lomofsky, Roberts & Mvambi, 1999:70).

4.6.3 Language constraints/ consideration

In conducting a survey in a language other than the researcher's mother tongue, a researcher may experience problems with inaccuracies stemming from translations. In this study it was imperative for the researcher to be sensitive to all cultural differences and to keep them in mind when interpreting the information obtained. To prevent language issues from affecting the outcome of the scale, the questionnaire was translated into Arabic. The researcher worked closely with a Ministry-accredited translator to ensure that teachers would have a complete understanding of the questions included in the questionnaire.
The questionnaire was formulated and submitted to both the education experts and non-educationalists for their comments. The pilot study also provided the opportunity for teachers to comment on the questions, whereafter these comments were submitted to the Arabic translator. The final Arabic questionnaire was deemed comprehensive, and all the questions were relevant to the overall research questions.

The questionnaire was subsequently translated back into English by a native speaker. McKay et al. (in Mertens, 2005:184) suggest that when texts are translated back into the source language, the instruments may become stilted, awkwardly worded or even incomprehensible. The authors suggest modifications to the wording in the source document to accommodate concepts that are not directly translatable, with the result that the language in both the source document and the translated documents is subject to change until comparable questions are formulated in both languages. As a result we then met with the translators to identify differences among the translations and to reach suitable compromises. For the purpose of this study questions were corrected to facilitate better reading of the English translation, but where the meaning would compromised the Arabic, the sentences were left. Such translations and adaptations seemed to assume that these translated instruments have a satisfactory validity and the same reliability as the original document. However, such an assumption could be dangerous, due to a variety of factors that could influence the validity of score, causing it to differ when the instrument is used in other cultural settings and languages.

4.6.4 Pilot study

Questionnaires do not emerge fully developed; but need to be created over time. Even if the researcher adapts questionnaires used by other researchers, it remains imperative that the questionnaire is piloted in order see that it is suited to the particular population and that it can deliver the data that is required. Piloting a study can be seen as an intellectual challenge in conceptualising and re-conceptualising the key aims and objectives of the study, and preparing the way for the actual survey and subsequent analysis (Mertens, 2005:182-183; Neuman, 2000:257). It should be recognised that pilot studies might also have a number of limitations. These include the possibility of making inaccurate predictions or assumptions based on pilot data, and problems arising from questions being left out. Completing a pilot study
successfully is not an assurance for the success of the actual survey (Neuman, 2003:258).

The researcher piloted the questionnaire in a language school in Cairo. Eight teachers representing the various educational levels (kindergarten, primary, preparatory and secondary) responded to the questionnaire. In order to determine the validity of the instrument, the respondents chosen were similar to those in the main survey. In its formatting, the modification allowed room for comments from the respondents. Besides testing the Arabic translation, the pilot provided an opportunity to test for ambiguities in any of the questions, and to minimise measurement error. After the completion of the pilot study, clarification of the following concepts took place.

1) **Clarity of terminology:** In the discussions that followed, teachers indicated that no major discrepancies had been found in the translation and that the concepts were easily understandable. It should be recognised that pilot studies might also have a number of limitations. These include the possibility of making inaccurate predictions or assumptions based on pilot data and problems arising from questions being left out. Finishing a pilot study successfully does not assure the success of the actual survey (Neuman, 2003:258).

Mention was made that teachers needed to be reminded to read the preceding explanation on the questionnaire carefully, as this would clarify any questions pertaining to "special educational needs".

2) **Clarity of instructions:** The teachers found that the instructions were clear, concise and self-explanatory. The only recommendation made was to remind teachers to read the instructions carefully.

3) **Content of questions:** The teachers mentioned that there were not enough choices given to Questions 8, 9 and 10. The additional choice of "Other: Please specify" was provided.

Question 14 was seen to be unclearly formulated as many teachers received training both in and outside the school. "Both" was added to this question, thus creating another option for the respondents.
4) **Format of the questionnaire:** Teachers experienced no problems with the layout and a positive point mentioned was the fact that the column headings were repeated on each page, thus avoiding the need to page back and forth to check options.

5) **Coding of questionnaire:** No coding problems were identified by the statistician.

6) **Testing procedures for analysis:** The statistician evaluated the envisaged strategies for processing the data and made minor changes to the spreadsheet.

### 4.7 DATA ANALYSIS

The completed questionnaires were captured in Excel, whereafter the data was exported to SPSS (14.0 for Windows) for statistical analysis.

Apart from generating frequency tables for the biographic/demographic variables, a series of cross-tabulations was run to investigate the relationship between the biographic/demographic variables and the key variables of the study. The key variables are fully explained in the introduction of the next chapter (see Section 5.1).

The biographic/demographic variables and the key study variables were all treated as categorical, resulting in Chi-square statistics being produced as tests of statistical significance. A 5% significance level (p<0.05) was used as guideline for determining significant relationships between variables.

The strength of the association between the variables, or effect size, was measured by means of a Cramér's V statistic. Cramér's V was selected because it can be used for both nominal-by-nominal cross-tabulations and nominal-by-ordinal cross-tabulations, with no restriction on the number of categories per variable. In theory, the value of Cramér's V ranges between 0 and 1, with 0 indicating no relationship at all and 1 indicating a perfect relationship between the two variables concerned. A rough rule of thumb often employed to interpret the strength of the relationship\(^2\) is the following:

\(^2\) See, for example, the statistical reference guide of the Department of Sociology, Anthropology and Criminal Justice at Rutgers, the State University of New Jersey (http://sociology.camden.rutgers.edu/curriculum/format.htm).
• Weak association: Cramér's $V = \text{less than 0.10}$
• Moderate association: Cramér's $V = \text{between 0.10 and 0.29}$
• Strong association: Cramér's $V = 0.30$ or higher

Lastly, although 315 completed questionnaires were received, only 270 of these were from teachers. Eight principals and 36 supervisors completed the remainder of the questionnaires and one respondent did not specify any position. It was decided to base all analyses only on the 270 teacher responses, because the focus of this study is on the attitudes of teachers towards inclusive education.

4.7.1 Reliability and validity of constructs

A principal component analysis (PCA) was performed on the 31 attitudinal items (Section D) in order to identify the underlying grouping (factors or components) of these items, based on their inter-correlations. First, however, the inter-correlations of the 31 items were examined to determine their appropriateness for inclusion in the PCA. Specific statistics, such as the measure of sampling adequacy (MSA), assisted in determining which items should be included in the PCA. On the basis of this preliminary examination, 5 items were deemed inappropriate for inclusion in the PCA because their MSAs were unsatisfactory. These 5 items were:

• Labelling students having special educational needs can lead them to feel underestimated and separated from the rest of the class (Item 39)
• These students will be better off at a special school (Item 47)
• At the moment I am satisfied with the support I receive from supervisors, psychologists and principals (Item 53)
• My school's present resources are aimed at supporting students at different levels and abilities (Item 58)
• My school will find it difficult to find the extra funding to accommodate these changes (Item 60)

Next, the PCA was performed with the 26 remaining items. Seven factors or components were extracted, by specifying the stopping criterion as 'eigenvalue > 1'

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3 The MSAs of these items were interpreted as 'miserable' for the PCA, according to the following interpretation scale by Hair et al. (1998:99-100): ‘>0.90 = marvellous’; ‘0.80-0.89 = meritorious’; ‘0.70-0.79 = middling’; ‘0.60-0.69 = mediocre’; ‘0.50-0.59 = miserable’; and ‘<0.50 = unacceptable’.
and by performing an orthogonal rotation (VARIMAX). Altogether 64% of the variance in the set of items can be accounted for by the seven components extracted. The components and their respective loadings per item are presented in Table 4.1.

The shaded cells in Table 4.1 represent factor loadings that are bigger than 0.50, which made these loading both practically and statistically significant, according to Hair et al. (1998:111-112). As a result, the two items with insignificant loadings (items were non-shaded cells) were excluded from further consideration in the process of creating constructs:

- *My present curriculum should be changed in order to support the educational learning needs of all my students* (Item 44)
- *Teachers should be flexible enough to adapt the curriculum to the needs of their students* (Item 45)
<table>
<thead>
<tr>
<th>Items</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C1</td>
</tr>
<tr>
<td>Inadequate in-service training prevents helping to meet the educational needs of my students (I33)</td>
<td>0.790</td>
</tr>
<tr>
<td>Providing a sustainable learning environment for these students, while still meeting the needs of my other students will be difficult (I35)</td>
<td>0.774</td>
</tr>
<tr>
<td>My present class set-up does not allow me to give the necessary attention to those students with special educational needs (I34)</td>
<td>0.765</td>
</tr>
<tr>
<td>I do not have the resources to teach these students (I36)</td>
<td>0.667</td>
</tr>
<tr>
<td>The increase of my workload from teaching will go unpaid (I32)</td>
<td>0.613</td>
</tr>
<tr>
<td>My school lacks extra staff (class assistants) to help with students with special educational needs (I31)</td>
<td>0.549</td>
</tr>
<tr>
<td>Training should be relevant and provide solutions on handling students with special educational needs (I51)</td>
<td>-0.026</td>
</tr>
<tr>
<td>Schools should have staff trained to assist teachers in working with students with special educational needs (I54)</td>
<td>-0.130</td>
</tr>
<tr>
<td>It is important for teachers to be trained to work with students with special educational needs (I49)</td>
<td>-0.052</td>
</tr>
<tr>
<td>On-going training in working with students with special educational needs would equip me for working with such students (I50)</td>
<td>0.178</td>
</tr>
<tr>
<td>It is important as a teacher that I am fully aware of the resources available to support my students' learning (I57)</td>
<td>0.193</td>
</tr>
<tr>
<td>My present curriculum should be changed in order to support the educational learning needs of all my students (I44)</td>
<td>0.376</td>
</tr>
<tr>
<td>Lesson plans should aim at supporting my student's special needs, and not only an attempt to supplement the curriculum (I42)</td>
<td>0.102</td>
</tr>
<tr>
<td>Item</td>
<td>Component</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td><strong>Teaching techniques and not only the curriculum are responsible for</strong></td>
<td></td>
</tr>
<tr>
<td><strong>the poor performance of students (I43)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C1</td>
</tr>
<tr>
<td></td>
<td>0.149</td>
</tr>
<tr>
<td><strong>Most students will experience obstacles (barriers) to learning</strong></td>
<td></td>
</tr>
<tr>
<td><strong>sometime during their school careers (I38)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.059</td>
</tr>
<tr>
<td><strong>My school's resource material is regularly updated in order to</strong></td>
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<tr>
<td><strong>meet the changing needs of my students (I59)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.114</td>
</tr>
<tr>
<td><strong>Acknowledging the educational needs of all students, the</strong></td>
<td></td>
</tr>
<tr>
<td><strong>curriculum content should be designed to reduce obstacles</strong></td>
<td></td>
</tr>
<tr>
<td><strong>(barriers) to learning (I40)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.115</td>
</tr>
<tr>
<td><strong>Curriculum content should allow students to develop on all levels</strong></td>
<td></td>
</tr>
<tr>
<td><strong>and should not be seen as only the acquisition of knowledge</strong></td>
<td></td>
</tr>
<tr>
<td><strong>(I41)</strong></td>
<td></td>
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<tr>
<td></td>
<td>0.030</td>
</tr>
<tr>
<td><strong>Teachers should be flexible enough to adapt the curriculum to</strong></td>
<td></td>
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<tr>
<td><strong>the needs of their students (I45)</strong></td>
<td></td>
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<tr>
<td></td>
<td>0.004</td>
</tr>
<tr>
<td><strong>As a teacher I feel encouraged to share these skills and knowledge</strong></td>
<td></td>
</tr>
<tr>
<td><strong>with other members of staff (I56)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.163</td>
</tr>
<tr>
<td><strong>Collaboration on planning strategies with colleagues would</strong></td>
<td></td>
</tr>
<tr>
<td><strong>improve my quality of teaching (I52)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.240</td>
</tr>
<tr>
<td><strong>Being aware of the skills and knowledge of other members of staff</strong></td>
<td></td>
</tr>
<tr>
<td><strong>is important (I55)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.122</td>
</tr>
<tr>
<td><strong>Teaching students with special educational needs is too difficult</strong></td>
<td></td>
</tr>
<tr>
<td><strong>for a regular class teacher (I48)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.247</td>
</tr>
<tr>
<td><strong>Accommodating students with special educational needs lowers</strong></td>
<td></td>
</tr>
<tr>
<td><strong>the standard of the rest of my class (I46)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.252</td>
</tr>
<tr>
<td><strong>The school does not have the necessary infrastructure (e.g.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>rails, ramps) to accommodate students with special physical needs</strong></td>
<td></td>
</tr>
<tr>
<td><strong>(I30)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.146</td>
</tr>
<tr>
<td><strong>As a teacher I can make a difference in removing obstacles</strong></td>
<td></td>
</tr>
<tr>
<td><strong>(barriers) to learning experienced by my students (I37)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.182</td>
</tr>
</tbody>
</table>
The next step was to perform a series of reliability analyses to determine the internal consistency (Cronbach’s Alpha) of the extracted components. The Cronbach’s Alpha coefficients for the seven components are reported in Table 4.2, together with suggestions as to how to increase these coefficients, where applicable.

### TABLE 4.2: CRONBACH’S ALPHA COEFFICIENTS FOR THE EXTRACTED COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Number of items</th>
<th>Cronbach’s Alpha Coefficient</th>
<th>Suggestion for increasing Cronbach’s Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>6</td>
<td>0.820</td>
<td>None</td>
</tr>
<tr>
<td>C2</td>
<td>5</td>
<td>0.778</td>
<td>None</td>
</tr>
<tr>
<td>C3</td>
<td>3</td>
<td>0.694</td>
<td>Coefficient will increase to 0.704 if Item 38 is deleted</td>
</tr>
<tr>
<td>C4</td>
<td>3</td>
<td>-0.249</td>
<td>Coefficient will increase to 0.732 if Item 59 is deleted</td>
</tr>
<tr>
<td>C5</td>
<td>3</td>
<td>0.679</td>
<td>None</td>
</tr>
<tr>
<td>C6</td>
<td>2</td>
<td>0.626</td>
<td>None</td>
</tr>
<tr>
<td>C7</td>
<td>2</td>
<td>-0.022</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:**

Even if Item 59 is to be reverse-scored, Cronbach’s Alpha for the three items for Component 4 still does not meet the criterion of 0.70 (namely 0.682).

If Items 38 and 59 were to be maintained, they would complicate the interpretation of the relevant components. In other words, there is also no theoretical justification for their inclusion.

Initially, the coefficients of only two components (C1 & C2 in Table 4.2) exceeded the recommended level of 0.70. However, if two additional items are to be deleted (Items 38 & 59), two more components (C3 & C4) would also meet this recommendation. The two items were therefore excluded from the process of creating constructs, resulting in four final components with acceptable reliability.4

The four components are presented in Table 4.3, together with the label assigned to each component, based on an inspection of the content of the individual items that comprise that component. For instance, component 1 was labelled as “An

---

4 When Cronbach’s Alpha values for a PCA structure are calculated on the same data on which the PCA was performed, the possibility remains that the alpha values could be inflated. Ideally, a data set should be randomly divided into two subsets of equal sizes, and the PCA structure derived from the one subset only. The alpha coefficients should then be calculated on the second subset, by using the PCA structure components from the first subset. However, it was not possible in this study to split the data, because there are 270 respondents and 31 variables identified for the PCA, and one needs 5-10 times as many respondents as there are variables for a PCA.
interrelated set of barriers", because the underlying items raise various issues concerning barriers that prevent teachers from attending to students with special educational needs (e.g. inadequately in-service training, the lack of teaching resources, an increased workload without additional support or financial remuneration, etc.)

TABLE 4.3: LABELS ASSIGNED TO FINAL COMPONENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>Items</th>
<th>Labels assigned</th>
</tr>
</thead>
</table>
| Component 1 (Alpha = 0.820) | Inadequate in-service training prevents helping to meet the educational needs of my students (I33)  
Providing a sustainable learning environment for these students, while still meeting the needs of my other students will be difficult (I35)  
My present class set-up does not allow me to give the necessary attention to those students with special educational needs (I34)  
I do not have the resources to teach these students (I36)  
The increase of my workload from teaching these students is unpaid(I32)  
My school lacks extra staff (class assistants) to help with special educational needs (I31) | An interrelated set of barriers |
| Component 2 (Alpha = 0.778) | Training should be relevant and provide solutions on handling students with special educational needs (I51)  
Schools should have staff trained to assist teachers in working with students special educational needs (I54)  
It is important for teachers to be trained to work with students with special educational needs (I49)  
On-going training in working with students with special educational needs would equip me for working with such students (I50)  
It is important as a teacher that I am fully aware of the resources available to support my students' learning (I57) | Importance of training as an enabling factor |
| Component 3 (Alpha = 0.704) | Lesson plans should aim at supporting my students' special educational needs, and not be seen as an attempt to complete the curriculum (I42)  
Teaching techniques and not only the curriculum are responsible for the poor performance of students (I43) | Importance of lesson planning and teaching techniques |
| Component 4 (Alpha = 0.732) | Acknowledging the educational needs of all students, the curriculum should be designed to reduce obstacles (barriers) to learning (I40)  
Curriculum content should allow students to develop on all levels and should not be seen as only the acquisition of knowledge (I41) | Importance of appropriate curriculum content |

The next step was to compute total scores for each of the components – in other words, to reduce each component to a single variable in the dataset. For example,
component 1 involves 6 items. The item responses were recoded in such a way as to range from 0 to 3 (0 = strongly disagree, 1 = disagree, 2 = agree, and 3 = strongly agree). Theoretically speaking, the total score for component 1 could then range from 0 (i.e. 6 x 0) to 18 (i.e. 6 x 3). A high total score for this component reflects a response that recognises an interrelated set of barriers to teach students with special educational needs.

Similarly, the total score for component 2 ranges from 0 (i.e. 5 x 0) to 15 (i.e. 5 x 3), where a high score means the recognition of the importance of training as an enabling factor in dealing with students with special educational needs. Scores for component 3 and 4 were calculated in a similar way – with high total scores respectively representing the recognition of the importance of lesson planning and teaching techniques and the importance of appropriate curriculum content in teaching students with special educational needs.

The four components' respective maximum theoretical values differ on the basis of the number of items that comprise the factor. Each component was thus standardised by changing it into a percentage (i.e. as a score out of 100).

The internal consistency of the components was examined by correlating the component's total score with each of the items that the component represents. These item-total correlations are summarised in Table 4.4, and appear in the shaded cells. As can be seen, the item-total correlations are all statistically significant and range between 0.587 and 0.909, suggesting large positive correlations between the items and the components on which they are supposed to be loading.
## Table 4.4: Item-Total Correlations

<table>
<thead>
<tr>
<th>Items</th>
<th>An interrelated set of barriers</th>
<th>Importance of training as an enabling factor</th>
<th>Importance of lesson planning and teaching techniques</th>
<th>Importance of appropriate curriculum content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate in-service training prevents helping to meet the educational needs of my students (I33)</td>
<td>0.782*</td>
<td>0.079</td>
<td>0.206*</td>
<td>0.173*</td>
</tr>
<tr>
<td>Providing a sustainable learning environment for these students, while still meeting the needs of my other students, will be difficult (I35)</td>
<td>0.745*</td>
<td></td>
<td>0.123*</td>
<td>0.111</td>
</tr>
<tr>
<td>My present class set-up does not allow me to give the necessary attention to those students with special educational needs (I34)</td>
<td>0.740*</td>
<td>-0.006</td>
<td>0.073</td>
<td>-0.021</td>
</tr>
<tr>
<td>I do not have the resources to teach these students (I36)</td>
<td>0.725*</td>
<td>0.113</td>
<td>0.081</td>
<td>0.176*</td>
</tr>
<tr>
<td>The increase of my workload from teaching these students is unpaid (I32)</td>
<td>0.681*</td>
<td></td>
<td>0.091</td>
<td>0.111</td>
</tr>
<tr>
<td>My school lacks extra staff (class assistants) to help with students with special educational needs (I31)</td>
<td>0.662*</td>
<td>0.154*</td>
<td>0.144*</td>
<td>0.239*</td>
</tr>
<tr>
<td>Training should be relevant and provide solutions on handling students with special educational needs (I51)</td>
<td>0.012</td>
<td>0.816*</td>
<td>0.336*</td>
<td>0.255*</td>
</tr>
<tr>
<td>Schools should have staff trained to assist teachers in working with students with special educational needs (I54)</td>
<td>-0.024</td>
<td>0.660*</td>
<td>0.152*</td>
<td>0.197*</td>
</tr>
<tr>
<td>It is important for teachers to be trained to work with students with special educational needs (I49)</td>
<td>0.021</td>
<td>0.787*</td>
<td>0.329*</td>
<td>0.253*</td>
</tr>
<tr>
<td>On-going training in working with students with special educational needs would equip me for working with such students (I50)</td>
<td>0.193*</td>
<td>0.778*</td>
<td>0.227*</td>
<td>0.343*</td>
</tr>
<tr>
<td>It is important as a teacher that I am fully aware of the resources available to support my students’ learning (I57)</td>
<td>0.202*</td>
<td>0.587*</td>
<td>0.095</td>
<td>0.105</td>
</tr>
<tr>
<td>Lesson plans should aim at supporting my students’ special educational needs, and not be seen as an attempt to supplement the curriculum (I42)</td>
<td>0.115</td>
<td>0.225*</td>
<td>0.868*</td>
<td>0.492*</td>
</tr>
<tr>
<td>Teaching techniques and not only the curriculum are responsible for the poor performance of students (I43)</td>
<td>0.154*</td>
<td>0.332*</td>
<td>0.877*</td>
<td>0.295*</td>
</tr>
</tbody>
</table>
Tables 4.4 also contain the correlations between the items and the components on which they are not supposed to be loading. (These appear in the non-shaded cells.) As can be seen, none of the items correlates more highly with a component different from the one which it was intended to measure. In fact, these correlations are either statistically insignificant (i.e. \( p>0.05 \)) or, where significant, only range between 0.121 and 0.504. This demonstrates the discriminant validity of the constructs.

Lastly, Table 4.5 explores the relationships between the four components. The highest correlation occurs between Component 3 ("lesson planning and teaching techniques") and Component 4 ("curriculum content"). The value of this correlation is 0.454, which can be interpreted as a moderate positive relationship.

**TABLE 4.5: INTER-CORRELATIONS OF FOUR COMPONENTS (\( N=265 \))**

<table>
<thead>
<tr>
<th>Components</th>
<th>An interrelated set of barriers</th>
<th>Importance of training as an enabling factor</th>
<th>Importance of lesson planning and teaching techniques</th>
<th>Importance of appropriate curriculum content</th>
</tr>
</thead>
<tbody>
<tr>
<td>An interrelated set of barriers</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Importance of training as an enabling factor</td>
<td>0.094</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Importance of lesson planning and teaching techniques</td>
<td>0.160*</td>
<td>0.322*</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Importance of appropriate curriculum content</td>
<td>0.180*</td>
<td>0.328*</td>
<td>0.454*</td>
<td>--</td>
</tr>
</tbody>
</table>

* \( p<0.05 \)
4.8 CONCLUSION

The research process can be seen as an interactive process between the researcher, the problem, the design and the interpretation of statistical computations. An integral part of any research process is the reviewing of relevant literature, as it provides the study with a framework from which the research process emanates. Questionnaires do not emerge fully developed; but need to be created, while piloting a study can be seen as preparing the way for the actual survey and subsequent analysis. Throughout the process, ethical concerns (as discussed in Chapter 1) play an important part in the planning and implementation of any research. The following chapter will interpret and discuss the statistical results in depth.
CHAPTER 5

EMPIRICAL FINDINGS

5.1 INTRODUCTION

The goals of this chapter are twofold: firstly, to use statistical tools, such as data organisation and analysis techniques, for providing information about the data collected from the questionnaire for each of the research objectives (as indicated in Chapter 1). Secondly, and more importantly, to interpret and assign meaning to the empirical findings, so that conclusions can be made with regard to the demands posed to teachers striving towards accommodating a student with special educational needs in a mainstream class.

The results will be presented according to the sub-aims and will include the source of the results, and the graphic representation in the form of figures, graphs or tables. A summary of these objectives are presented in Table 5.1, together with an indication of where in the chapter the findings for a particular objective had been reported.
TABLE 5.1: RESEARCH OBJECTIVES AND RELEVANT SECTIONS IN CHAPTER WHERE FINDINGS FOR OBJECTIVES ARE REPORTED

<table>
<thead>
<tr>
<th>Main research objectives</th>
<th>Secondary research objectives</th>
<th>Relevant section in chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>To describe the biographic/demographic characteristics of the respondents</td>
<td>--</td>
<td>Section 5.2</td>
</tr>
<tr>
<td>To ascertain teachers' perceptions of the difficulty of handling various types of special educational needs</td>
<td>To explore whether these perceptions differ significantly for groups with different biographic/demographic characteristics</td>
<td>Section 5.3</td>
</tr>
<tr>
<td>To ascertain teachers' perceptions of how accommodating their present classroom situation is towards students with different types of special educational needs</td>
<td>To explore whether these perceptions differ significantly for groups with different biographic/demographic characteristics</td>
<td>Section 5.4</td>
</tr>
<tr>
<td>To explore teachers' attitudes towards inclusive education as measured by the four questionnaire components (attitude constructs) generated by the PCA</td>
<td>To explore whether scores on these attitude constructs differ significantly for groups with different biographic/demographic characteristics</td>
<td>Sections 5.5.2 to 5.5.5</td>
</tr>
<tr>
<td>To explore teachers' attitudes towards inclusive education as measured by additional questionnaire items not used in the PCA</td>
<td>--</td>
<td>Section 5.5.6</td>
</tr>
</tbody>
</table>

Based on Table 5.1, there are three sets of key study variables:

- Items 16 to 22 in the questionnaire, which pertain to teachers' perceptions of the difficulty of handling various types of special educational needs.

- Items 25 to 29 in the questionnaire, which pertain to teachers' perceptions of how accommodating their present classroom situation is towards students with different types of special educational needs.

- The four attitude constructs on inclusive education, which were generated by means of a PCA, and comprise altogether 15 items (see Table 4.3 in Chapter 4 for a summary of these constructs and their underlying items).

Eight biographic/demographic variables were used in cross-tabulations with the key study variables. They are:
• Age of respondent (<30 years; 30-39 years; 40+ years)
• Gender (Female; Male)
• City where teaching (Alexandria; Cairo)
• Number of years' teaching (5 years or less; 6-10 years; 11-15 years; 16+ years)
• Degree in education (Yes; No)
• Phase in which working (Kindergarten; Preparatory; Lower Primary 1-3; Senior Primary 4-6; Secondary)
• Average class size (25 or less; 26-30; 31-35; 36-40; More than 40)
• Training received in teaching students with special educational needs (Yes; No)

Cairo has an urban population of approximately 15.2 million people (the largest in Africa). Alexandria, a coastal city, has a population of between 3.5 million and 5 million. It is the second largest city in Egypt. It is perceived that there will be differences between the biographic/demographic variables.

5.2 BIOGRAPHIC/DEMOGRAPHIC CHARACTERISTICS OF TEACHERS
An analysis of the demographic composition of the teaching force can provide important insights into the state of the teaching profession. Sections 5.2.1 to 5.2.9 report the results for the biographic/demographic characteristics of the teachers in the study.

5.2.1 Region
About 72% (N=194) of the 270 respondents were from Cairo and the rest from Alexandria.

5.2.2 Gender
All 270 respondents answered the question about gender; the majority of respondents were female (84%; N=226).

5.2.3 Age
In this study, respondents were asked to fill in their respective ages instead of marking specific categories. A total of 221 of the 270 respondents answered the question about age. The mean age was 35 years, with a standard deviation of 7.65.
The individual ages ranged from 22 to 59 years. Moreover, close to 50% of respondents fell in the 30-39 age categories (middle-age), as can be seen in Figure 5.1.

**FIGURE 5.1:** AGE DISTRIBUTION OF RESPONDENTS (N=221)

5.2.4 Types of school

For the purposes of this study, language schools and government schools (discussed in Chapter 1) were used. The government schools in Alexandria also included experimental schools. The teachers in this study were working mainly in Language schools (72%) – see Figure 5.2.

**FIGURE 5.2:** TYPE OF SCHOOL WHERE RESPONDENTS TEACH (N=270)
5.2.5 Teaching experience

As far as teaching experience is concerned, roughly equal percentages of respondents had between 6-10 and 11-15 years of teaching experience (24% and 26%). 21% of respondents had between 1-5 years of teaching experience (see Figure 5.3).

![Figure 5.3: YEARS OF TEACHING EXPERIENCE (N=270)](image)

5.2.6 Faculties and degrees

Although a wide range of faculties are represented as part of the teaching workforce, a total of 35% of the respondents indicated that they had graduated from the Faculties of Education. The second largest group (28%) of the respondents had graduated from the Faculty of Arts (see Figure 5.4).
The specifications provided by the 27 respondents (10.2%) who indicated 'other' in Figure 5.4 are as follows: 11 respondents said that they obtained a Teaching Diploma (7), Agricultural Diploma (1), or studied at a Technical College (2) or Industrial College (1). The remaining 16 specified a faculty other than Education: Medicine or Pharmacy (5), Social Work (3), Islamic or Arabic Studies (2), Physical Education (2), Languages (1), Psychology (1), Tourism (1) and Antiquities (1).

Lastly, a total of 267 respondents indicated whether or not they have a degree in Education. Of these, 35% (N=92) said that they were in possession of a degree in Education.

### 5.2.7 Phase in which the respondents worked

About 60% of respondents worked in the Primary Phase, with exactly half of these working in the Lower Primary and the other half in the Senior Primary Phase (see Figure 5.5). The next largest category of respondents (18%) worked in the Preparatory Phase.
5.2.8 Average class sizes of respondents

The most frequently mentioned class size was 36-40 learners, which was reported by 56% of the respondents. A small percentage of respondents (7%) said that, on average, their classes consisted of 25 or fewer learners. Similarly, a small percentage (12%) reported an average class size of 46 or more learners.

Moreover, 9% (N=23) of 269 respondents said that they had a classroom assistant.
5.2.9 Special education training

Altogether 14% (N=37) of 268 respondents said that they had received training in teaching students with special educational needs. Moreover, 32 of the 37 respondents indicated where the training had taken place (see Figure 5.7).

The majority (40%) indicated that their training had been received outside the school, while 22 % indicated inside the school and 38% had received training both inside and outside the school.

FIGURE 5.7: WHERE TRAINING WAS RECEIVED (N=32)

Table 5.2 shows the type of training received based on the responses of the 37 teachers who had in fact received training.

TABLE 5.2: TYPE OF TRAINING RECEIVED IN WORKING WITH STUDENTS WITH SPECIAL EDUCATIONAL NEEDS

<table>
<thead>
<tr>
<th>CENTRE</th>
<th>TRAINING</th>
<th>FREQUENCY</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No training specified</td>
<td>9</td>
<td>24.3</td>
</tr>
<tr>
<td>South Africa</td>
<td>International Course – working with diversity; special needs training</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>Alexandria</td>
<td>SETI – Class management, special needs</td>
<td>12</td>
<td>3.2</td>
</tr>
<tr>
<td>Alexandria</td>
<td>Class management, special needs</td>
<td>6</td>
<td>16.2</td>
</tr>
<tr>
<td>Cairo</td>
<td>Educational tools, literacy training for parents, IQ testing</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>Alexandria</td>
<td>Learning styles, integrating special needs</td>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>Alexandria</td>
<td>Working with disabled students</td>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>37</td>
<td>100.0</td>
</tr>
</tbody>
</table>
5.3 TEACHERS’ PERCEPTIONS OF THE DIFFICULTY OF HANDLING VARIOUS TYPES OF SPECIAL EDUCATIONAL NEEDS

The perceptions of teachers towards the handling of students with specific educational needs are important teacher attributes with regard to the success of inclusive education. Figure 5.8 shows seven types of special educational needs investigated in this study, and the percentages of respondents who rated each of these needs respectively as 'most difficult', 'difficult' 'less difficult' and 'least difficult' to handle in their class.

FIGURE 5.8: TEACHERS’ PERCEPTIONS OF THE DIFFICULTY OF HANDLING SEVEN TYPES OF SPECIAL EDUCATIONAL NEEDS

[Graph showing teacher perceptions of difficulty for various needs]
With a high premium being placed on academic achievement, it appears from the results that the respondents were most concerned about the handling of students with intellectual difficulties – 28% responded that it would be 'most difficult'. Together with 41% who responded that it would be 'difficult', it means that a total of 69% of respondents perceived the handling of students with intellectual difficulties in their class as problematic.

On the opposite side of the spectrum, 44% of respondents indicated that handling gifted students in their class would be 'least difficult'. If one includes the 23% who indicated that it would be 'less difficult', a total of 67% of respondents perceived the handling of this category of learners as relatively unproblematic.

A concern for many teachers would be those students who were not mastering the required material and displayed some form of learning difficulty – 63% of respondents indicated that handling such students would be 'most difficult' or 'difficult'. Marginally more respondents saw the handling of students with visual difficulties as problematic (59%) compared to the handling of students with behavioural difficulties (54%). The responses to the handling of students with emotional difficulties were relatively evenly distributed, with 51% respondents perceiving it to be 'most difficult' or 'difficult' and 49% perceiving it to be 'less difficult' or 'least difficult'.

Next we investigate the relationships, expressed as cross-tabulations, between the seven types of special educational needs and the eight biographic/demographic variables. Tables 5.3 to 5.8 report only those biographic/demographic characteristics of teachers that are statistically-significantly related to the teachers' perceptions of the difficulty of handling the special educational needs.

As explained in Section 4.5, Chi-square was the test of statistical significance. The 'most difficult' and 'difficult' categories of the special educational needs rating have been collapsed, as well as the 'less difficult' and 'least difficult' categories. This was done to ensure that no more than 20% of the expected frequencies in any cross-tabulation are less than five; otherwise the resulting Chi-square statistics would have been invalid.

Cramér's V is the measure of effect size, indicating the strength of the association between the two variables concerned. The values of Cramér's V reported in Tables
5.3 to 5.8 can be used to compare the relative strength of the associations in the different cross-tabulations. Moreover, to interpret Cramer's V, the rough guideline in Section 4.5 can be used.

**TABLE 5.3: BIOGRAPHIC/DEMOGRAPHIC VARIABLES THAT ARE STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF THE DIFFICULTY OF HANDLING INTELLECTUAL DIFFICULTIES**

<table>
<thead>
<tr>
<th>Biographic/demographic variables</th>
<th>Intellectual difficulties</th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Least/less difficult</td>
<td>Difficult/most difficult</td>
<td>Total</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>27.0%</td>
<td>73.0%</td>
<td>211</td>
</tr>
<tr>
<td>Male</td>
<td>48.7%</td>
<td>51.3%</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>30.4%</td>
<td>69.6%</td>
<td>250</td>
</tr>
<tr>
<td>City</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alexandria</td>
<td>55.6%</td>
<td>44.4%</td>
<td>63</td>
</tr>
<tr>
<td>Cairo</td>
<td>21.9%</td>
<td>78.1%</td>
<td>187</td>
</tr>
<tr>
<td>Total</td>
<td>30.4%</td>
<td>69.6%</td>
<td>250</td>
</tr>
<tr>
<td>Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kindergarten</td>
<td>13.8%</td>
<td>86.2%</td>
<td>29</td>
</tr>
<tr>
<td>Preparatory</td>
<td>16.7%</td>
<td>83.3%</td>
<td>48</td>
</tr>
<tr>
<td>Lower Primary 1-3</td>
<td>50.0%</td>
<td>50.0%</td>
<td>76</td>
</tr>
<tr>
<td>Senior Primary 4-6</td>
<td>29.9%</td>
<td>70.1%</td>
<td>67</td>
</tr>
<tr>
<td>Secondary</td>
<td>14.3%</td>
<td>85.7%</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>29.8%</td>
<td>70.2%</td>
<td>248</td>
</tr>
<tr>
<td>Training received</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>65.7%</td>
<td>34.3%</td>
<td>35</td>
</tr>
<tr>
<td>No</td>
<td>23.9%</td>
<td>76.1%</td>
<td>213</td>
</tr>
<tr>
<td>Total</td>
<td>29.8%</td>
<td>70.2%</td>
<td>248</td>
</tr>
</tbody>
</table>

Observations based on Table 5.3 are as follows:

- Strong associations (Cramér's V = 0.30 or higher) are recorded between the perception of the difficulty of handling learners with intellectual difficulties and three biographic/demographic variables: the city where the teacher's school is located, the phase in which the teacher is working, and whether or not the teacher received training with regard to learners with special educational needs. The association in the case of teacher gender is only moderate.

- Significantly more female teachers than male teachers (73% versus 51%) perceived the handling of students with intellectual difficulties as 'difficult'/'most difficult'.
• Respondents from Cairo were more likely than respondents from Alexandria to perceive the handling of students with intellectual difficulties as 'difficult'/'most difficult' (78% versus 44%).

• In all phases, except Lower Primary, the majority of respondents (at least 70%) regarded the handling of students with intellectual difficulties as 'difficult'/'most difficult'. The highest percentages of 'difficult'/'most difficult' responses are associated with teachers in the Kindergarten and Secondary phases (86% each). In Lower Primary the teachers were evenly divided in their perception, with 50% saying 'difficult'/'most difficult' and 50% saying 'least difficult'/'less difficult'.

• Of those who received training in teaching students with special educational needs, 66% said that handling students with intellectual difficulties would be 'least difficult'/'less difficult'. On the other hand, of those who did not receive such training, 76% said that handling students with intellectual difficulties would be 'difficult'/'most difficult'. This demonstrates the positive influence of training at least as far as handling students with intellectual difficulties is concerned.

Table 5.4 summarises the relationships, expressed as cross-tabulations, between the perception of the difficulty of handling learners with hearing difficulties and the five biographic/demographic variables to which it is statistically-significantly related.
<table>
<thead>
<tr>
<th>Biographic/demographic variables</th>
<th>Hearing difficulties</th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Least/ less difficult</td>
<td>Difficult/ most difficult</td>
<td>Total</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>5.459</td>
</tr>
<tr>
<td>Female</td>
<td>44.1%</td>
<td>55.9%</td>
<td>211</td>
</tr>
<tr>
<td>Male</td>
<td>64.9%</td>
<td>35.1%</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>47.2%</td>
<td>52.8%</td>
<td>248</td>
</tr>
<tr>
<td>City</td>
<td></td>
<td></td>
<td>28.967</td>
</tr>
<tr>
<td>Alexandria</td>
<td>77.0%</td>
<td>23.0%</td>
<td>61</td>
</tr>
<tr>
<td>Cairo</td>
<td>37.4%</td>
<td>62.6%</td>
<td>187</td>
</tr>
<tr>
<td>Total</td>
<td>47.2%</td>
<td>52.8%</td>
<td>248</td>
</tr>
<tr>
<td>Phase</td>
<td></td>
<td></td>
<td>15.676</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>31.0%</td>
<td>69.0%</td>
<td>29</td>
</tr>
<tr>
<td>Preparatory</td>
<td>33.3%</td>
<td>66.7%</td>
<td>48</td>
</tr>
<tr>
<td>Lower Primary 1-3</td>
<td>62.5%</td>
<td>37.5%</td>
<td>72</td>
</tr>
<tr>
<td>Senior Primary 4-6</td>
<td>52.2%</td>
<td>47.8%</td>
<td>69</td>
</tr>
<tr>
<td>Secondary</td>
<td>35.7%</td>
<td>64.3%</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>47.2%</td>
<td>52.8%</td>
<td>246</td>
</tr>
<tr>
<td>Class size</td>
<td></td>
<td></td>
<td>15.851</td>
</tr>
<tr>
<td>25 or less</td>
<td>78.9%</td>
<td>21.1%</td>
<td>19</td>
</tr>
<tr>
<td>26-30</td>
<td>47.8%</td>
<td>52.2%</td>
<td>23</td>
</tr>
<tr>
<td>31-35</td>
<td>48.0%</td>
<td>52.0%</td>
<td>25</td>
</tr>
<tr>
<td>36-40</td>
<td>38.4%</td>
<td>61.6%</td>
<td>146</td>
</tr>
<tr>
<td>More than 40</td>
<td>63.6%</td>
<td>36.4%</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>46.7%</td>
<td>53.3%</td>
<td>246</td>
</tr>
<tr>
<td>Training received</td>
<td></td>
<td></td>
<td>11.367</td>
</tr>
<tr>
<td>Yes</td>
<td>73.5%</td>
<td>26.5%</td>
<td>34</td>
</tr>
<tr>
<td>No</td>
<td>42.5%</td>
<td>57.5%</td>
<td>212</td>
</tr>
<tr>
<td>Total</td>
<td>46.7%</td>
<td>53.3%</td>
<td>246</td>
</tr>
</tbody>
</table>

Observations based on Table 5.4 are as follows:

- Strong associations (Cramér's V = 0.30 or higher) are recorded between the perception of handling hearing difficulties and the four biographic/demographic variables: city, phase, class size and training received.
- The study revealed that an overwhelming majority of male respondents agreed that the handling of hearing difficulties as 'least'/'less difficult' (65% versus 44%). More than half of the female respondents expressed the belief that handling hearing difficulties would be 'difficult'/‘most difficult'.
- Notably, more teachers in Alexandria than in Cairo (77% versus 37%) believed the handling of hearing difficulties to be 'least'/‘less difficult'. Respondents from
Cairo were more likely than those from Alexandria to perceive the handling of hearing difficulties as 'difficult'/'most difficult' (63% versus 23%).

- In all the phases, except Lower Primary and Senior Primary, the majority of respondents (at least 70%) viewed the handling of students with hearing difficulties as 'difficult'/'most difficult'. The highest percentages of 'difficult'/'most difficult' are associated with teachers in the Kindergarten, Preparatory and Secondary phases (at least 67%).

- That data also revealed that the largest majority of respondents (62%) indicated that class sizes of between 36-40 students presented as 'difficult'/'most' difficult. Class sizes between 26-35 students were evenly distributed in their perception with 52% saying 'difficult'/'most difficult'.

- With regards to those teachers who received training in special educational needs, 74% indicated that handling students with hearing difficulties would be 'least'/'less' difficult, whereas 57% who did not receive specific experienced handling these students as 'difficult'/'most difficult'. From these results it can be assumed that training does provide teachers with the necessary skills in handling hearing difficulties.

Table 5.5 introduces the single biographic variable of teaching experience that is significantly related to the perception of handling emotional difficulties.
TABLE 5.5: BIOGRAPHIC/DEMOGRAPHIC VARIABLES THAT ARE STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF THE DIFFICULTY OF HANDLING EMOTIONAL DIFFICULTIES

<table>
<thead>
<tr>
<th>Biographic/demographic variable</th>
<th>Emotional difficulties</th>
<th></th>
<th></th>
<th></th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Least/ less difficult</td>
<td>Difficult/ most difficult</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of teaching</td>
<td></td>
<td></td>
<td></td>
<td>10.183 (p&lt;0.05)</td>
<td>0.200</td>
<td></td>
</tr>
<tr>
<td>5 years or less</td>
<td>62.1%</td>
<td>37.9%</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10 years</td>
<td>36.1%</td>
<td>63.9%</td>
<td>61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15 years</td>
<td>55.2%</td>
<td>44.8%</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16+ years</td>
<td>42.6%</td>
<td>57.4%</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48.8%</td>
<td>51.2%</td>
<td>254</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Observations based on Table 5.5 are as follows:

- A moderate association (Cramér's V = 0.10 and 0.29) was recorded between the number of years teaching experience and the perception of handling emotional difficulties.
- When teaching experience was analysed, it appeared that 64% of respondents with 6-10 years' teaching experience had indicated that it would be 'difficult'/most difficult' to handle such students, as opposed to the 62% of teachers with 5 years' or less teaching experience who viewed it as 'least'/less difficult'.

Table 5.6 introduces the single biographic variable relating to the specific regions that are significantly related to the perception of learning difficulties.

TABLE 5.6: BIOGRAPHIC/DEMOGRAPHIC VARIABLE THAT IS STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF THE DIFFICULTY OF HANDLING LEARNING DIFFICULTIES

<table>
<thead>
<tr>
<th>Biographic/demographic variable</th>
<th>Learning difficulties</th>
<th></th>
<th></th>
<th></th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Least/ less difficult</td>
<td>Difficult/ most difficult</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City</td>
<td></td>
<td></td>
<td></td>
<td>7.057 (p&lt;0.05)</td>
<td>0.169</td>
<td></td>
</tr>
<tr>
<td>Alexandria</td>
<td>50.8%</td>
<td>49.2%</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cairo</td>
<td>32.2%</td>
<td>67.8%</td>
<td>183</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37.1%</td>
<td>62.9%</td>
<td>248</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Observations based on Table 5.6 are as follows:
- A moderate association (Cramér’s V= between 0.10 and 0.29) was recorded between the perception of handling students with learning difficulties and the demographic regions.

- The data also communicates the message that significantly more (68%) of the respondents from Cairo indicated that working with students with learning difficulties would be 'difficult'/'most difficult'. In Alexandria teachers were more evenly divided in their perceptions - 51% saying 'least'/'less difficult' and 49 % saying 'difficult'/'most difficult'.

Table 5.7 summarises the relationships, expressed as cross-tabulations, between the perception of the difficulty of handling learners with visual difficulties and the three biographic/demographic variables to which it is statistically-significantly related.

**TABLE 5.7: BIOGRAPHIC/DEMOGRAPHIC VARIABLES THAT ARE STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF THE DIFFICULTY OF HANDLING VISUAL DIFFICULTIES**

<table>
<thead>
<tr>
<th>Biographic/demographic variables</th>
<th>Visual difficulties</th>
<th>Chi-square</th>
<th>Cramér’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Least/ less difficult</td>
<td>Difficult/ most difficult</td>
<td>Total</td>
</tr>
<tr>
<td>City</td>
<td>Alexandria</td>
<td>68.8%</td>
<td>31.3%</td>
</tr>
<tr>
<td></td>
<td>Cairo</td>
<td>31.6%</td>
<td>68.4%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>41.0%</td>
<td>59.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase</td>
<td>Kindergarten</td>
<td>17.2%</td>
<td>82.8%</td>
</tr>
<tr>
<td></td>
<td>Lower Primary 1-3</td>
<td>57.3%</td>
<td>42.7%</td>
</tr>
<tr>
<td></td>
<td>Senior Primary 4-6</td>
<td>46.4%</td>
<td>53.6%</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>32.1%</td>
<td>67.9%</td>
</tr>
<tr>
<td></td>
<td>Preparatory</td>
<td>25.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40.6%</td>
<td>59.4%</td>
</tr>
<tr>
<td>Training received</td>
<td>Yes</td>
<td>65.7%</td>
<td>34.3%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>36.4%</td>
<td>63.6%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40.6%</td>
<td>59.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Observations for Table 5.7 as follows:

- The Cramér's V values all indicate a moderate to strong association between the biographic/demographic variables and teachers' perceptions of the difficulty of handling learners with visual difficulties. The strongest association is reported for the city where the teacher is located.
The results indicate a contrasting point of view regarding the handling of visual difficulties with 69% of respondents in Alexandria indicating that it would be 'least'/less difficult', as opposed to 68% in Cairo saying it would be 'difficult'/most difficult'.

In all the phases, except Lower Primary, the majority of respondents (at least 70%) indicated that it would be 'difficult'/most difficult' to accommodate students with visual difficulties. In Lower Primary 57% of respondents indicated that they would find it 'least'/less difficult'.

Of those who received training in teaching students with special educational needs, 66% indicated that handling students with visual difficulties would be 'least'/less difficult'. On the other hand, of those who did not receive such training, 67% said that handling students with visual difficulties would be 'difficult'/most difficult'. This demonstrates the positive influence of training at least as far as handling students with visual difficulty is concerned.

Table 5.8 summarises the relationships, expressed as cross-tabulations, between the perception of the difficulty of handling giftedness and the four biographic/demographic variables to which it is statistically-significantly related.

**TABLE 5.8: BIOGRAPHIC/DEMOGRAPHIC VARIABLES THAT ARE STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF THE DIFFICULTY OF HANDLING 'GIFTEDNESS'**

<table>
<thead>
<tr>
<th>Biographic/demographic variables</th>
<th>Giftedness</th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Least/ less difficult</td>
<td>Difficult/most difficult</td>
<td>Total</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;30 years</td>
<td>60.9%</td>
<td>39.1%</td>
<td>46</td>
</tr>
<tr>
<td>30-39 years</td>
<td>76.2%</td>
<td>23.8%</td>
<td>101</td>
</tr>
<tr>
<td>40+ years</td>
<td>58.9%</td>
<td>41.1%</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>68.0%</td>
<td>32.0%</td>
<td>203</td>
</tr>
<tr>
<td><strong>City</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alexandria</td>
<td>54.0%</td>
<td>46.0%</td>
<td>63</td>
</tr>
<tr>
<td>Cairo</td>
<td>71.1%</td>
<td>28.9%</td>
<td>187</td>
</tr>
<tr>
<td>Total</td>
<td>66.8%</td>
<td>33.2%</td>
<td>250</td>
</tr>
<tr>
<td><strong>Phase</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kindergarten</td>
<td>75.9%</td>
<td>24.1%</td>
<td>29</td>
</tr>
<tr>
<td>Lower Primary 1-3</td>
<td>74.7%</td>
<td>25.3%</td>
<td>75</td>
</tr>
<tr>
<td>Senior Primary 4-6</td>
<td>48.5%</td>
<td>51.5%</td>
<td>68</td>
</tr>
<tr>
<td>Preparatory</td>
<td>62.5%</td>
<td>37.5%</td>
<td>48</td>
</tr>
<tr>
<td>Secondary</td>
<td>89.3%</td>
<td>10.7%</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>66.9%</td>
<td>33.1%</td>
<td>248</td>
</tr>
</tbody>
</table>
Giftedness

Biographic/demographic variables

<table>
<thead>
<tr>
<th>Class size</th>
<th>Least/ less difficult</th>
<th>Difficult/ most difficult</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 or less</td>
<td>78.9%</td>
<td>21.1%</td>
<td>19</td>
</tr>
<tr>
<td>26-30</td>
<td>73.9%</td>
<td>26.1%</td>
<td>23</td>
</tr>
<tr>
<td>31-35</td>
<td>64.0%</td>
<td>36.0%</td>
<td>25</td>
</tr>
<tr>
<td>36-40</td>
<td>70.1%</td>
<td>29.9%</td>
<td>147</td>
</tr>
<tr>
<td>More than 40</td>
<td>41.2%</td>
<td>58.8%</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>66.5%</td>
<td>33.5%</td>
<td>248</td>
</tr>
</tbody>
</table>

Chi-square | Cramér's V

12.592 (p<0.05) | 0.225

Observations for Table 5.8 are as follows:

- Moderate associations (Cramér's V = between 0.10 and 0.29) are recorded between the perception of handling students who are gifted and four biographic/demographic variables: age, city, phases and class size.
- In all age groups, the majority of respondents (at least 65%) noted the handling of gifted students as 'least'/less difficult'.
- Respondents in Cairo were more positive in their response, with 71% indicating that they regarded working with gifted students as 'least'/less difficult'.
- With the exception of Senior Primary, all other phases recorded high percentages (above 75%) of 'least'/less difficult' in handling gifted students.
- It was noted that in larger classes (<40) 58% of respondents found working with gifted students as 'difficult'/most difficult'.

5.4 TEACHERS' PERCEPTIONS OF HOW ACCOMMODATING THE PRESENT CLASSROOM SITUATION IS TOWARDS STUDENTS WITH SPECIAL EDUCATIONAL NEEDS

Figure 5.9 reports the percentage of respondents who indicated, for each of six types of students with special educational needs, the extent to which the present classroom situation could accommodate that particular group of students.
FIGURE 5.9: TEACHERS’ PERCEPTIONS OF WHETHER THEY COULD ACCOMMODATE SIX TYPES OF STUDENTS WITH SPECIAL EDUCATIONAL NEEDS INTO THEIR PRESENT CLASSROOM SITUATION

From the results it is apparent that 69% of all respondents indicated that it was not at all possible to accommodate students with intellectual impairments, as well as those who were not up to the present class standard. The responses to accommodating students with both hearing and speech problems were evenly distributed, with 53% indicating 'yes, but with some difficulty'. Similarly, 54% of the respondents were willing to accommodate students who were hyperactive, while recognising some 'challenges/difficulty' may exist. 45% of the respondents indicated that it was not at all possible to accommodate students in wheelchairs, while 32% acknowledged that it was possible, but with some challenges.
Tables 5.9 to 5.13 investigates the relationship between the biographic/demographic characteristics of teachers and their perception of how accommodating the present classroom situation is towards students with different kinds of special educational needs. Only statistically significant relationships are reported.

In Table 5.9, we report the biographic/demographic variables that are statistically-significantly related to the perception of accommodating students in wheelchairs. There were two such biographic/demographic variables.

**TABLE 5.9: BIOGRAPHIC/DEMOGRAPHIC VARIABLES THAT ARE STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF ACCOMMODATING STUDENTS IN WHEELCHAIRS**

<table>
<thead>
<tr>
<th>Biographic/demographic variables</th>
<th>Students in wheelchairs</th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes, but with some challenge/difficulty</td>
<td>Not at all possible</td>
</tr>
<tr>
<td>Years of teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years or less</td>
<td>16.9%</td>
<td>47.5%</td>
<td>35.6%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>18.5%</td>
<td>38.5%</td>
<td>43.1%</td>
</tr>
<tr>
<td>11-15 years</td>
<td>29.2%</td>
<td>21.5%</td>
<td>49.2%</td>
</tr>
<tr>
<td>16+ years</td>
<td>26.1%</td>
<td>23.2%</td>
<td>50.7%</td>
</tr>
<tr>
<td>Total</td>
<td>22.9%</td>
<td>32.2%</td>
<td>45.0%</td>
</tr>
<tr>
<td></td>
<td>13.995</td>
<td></td>
<td>0.165</td>
</tr>
<tr>
<td></td>
<td>(p&lt;0.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kindergarten</td>
<td>6.9%</td>
<td>27.6%</td>
<td>65.5%</td>
</tr>
<tr>
<td>Lower Primary 1-3</td>
<td>21.1%</td>
<td>28.9%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Senior Primary 4-6</td>
<td>20.0%</td>
<td>36.0%</td>
<td>44.0%</td>
</tr>
<tr>
<td>Preparatory</td>
<td>22.9%</td>
<td>35.4%</td>
<td>41.7%</td>
</tr>
<tr>
<td>Secondary</td>
<td>46.4%</td>
<td>32.1%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Total</td>
<td>22.3%</td>
<td>32.4%</td>
<td>45.3%</td>
</tr>
<tr>
<td></td>
<td>18.248</td>
<td></td>
<td>0.189</td>
</tr>
<tr>
<td></td>
<td>(p&lt;0.05)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Observations for Table 5.9 are as follows:

- The associations are not particularly strong but only moderate, as Cramer's V is never bigger than 0.30.
- The results indicate that 47% of the teachers with 5 years' experience or less acknowledged that there might be challenges in accommodating students in wheelchairs in their classes. Similarly, those with 11-15 years' and 16+ years' experience were the least accepting, indicating that it was 'not at all possible'.
- Sixty-five percent of Kindergarten respondents believed that it was not at all possible to accommodate students in wheelchairs in their classes. Secondary respondents, on the other hand, were more positive, with 46% of the
respondents indicating that it was possible to accommodate students in wheelchairs.

Table 5.10 summarises the relationships, expressed as cross-tabulations, between the perceptions of accommodating hyperactive students and the five biographic/demographic variables to which it is statistically-significantly related.

**TABLE 5.10: BIOGRAPHIC/DEMOGRAPHIC VARIABLES THAT ARE STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF ACCOMMODATING HYPERACTIVE STUDENTS**

<table>
<thead>
<tr>
<th>Biographic/demographic variables</th>
<th>Hyperactive students who cannot follow instructions</th>
<th>Chi-square</th>
<th>Cramer's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes, but with some challenge/difficulty</td>
<td>Not at all possible</td>
</tr>
<tr>
<td>City</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alexandria</td>
<td>28.6%</td>
<td>40.0%</td>
<td>31.4%</td>
</tr>
<tr>
<td>Cairo</td>
<td>16.4%</td>
<td>60.3%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Total</td>
<td>19.7%</td>
<td>54.8%</td>
<td>25.5%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;30 years</td>
<td>24.5%</td>
<td>32.7%</td>
<td>42.9%</td>
</tr>
<tr>
<td>30-39 years</td>
<td>16.2%</td>
<td>59.0%</td>
<td>24.8%</td>
</tr>
<tr>
<td>40+ years</td>
<td>24.1%</td>
<td>55.2%</td>
<td>20.7%</td>
</tr>
<tr>
<td>Total</td>
<td>20.3%</td>
<td>51.9%</td>
<td>27.8%</td>
</tr>
<tr>
<td>Years of teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years or less</td>
<td>16.9%</td>
<td>49.2%</td>
<td>33.9%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>14.1%</td>
<td>57.8%</td>
<td>28.1%</td>
</tr>
<tr>
<td>11-15 years</td>
<td>31.3%</td>
<td>44.8%</td>
<td>23.9%</td>
</tr>
<tr>
<td>16+ years</td>
<td>15.9%</td>
<td>66.7%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Total</td>
<td>19.7%</td>
<td>54.8%</td>
<td>25.5%</td>
</tr>
<tr>
<td>Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kindergarten</td>
<td>24.1%</td>
<td>55.2%</td>
<td>20.7%</td>
</tr>
<tr>
<td>Lower Primary 1-3</td>
<td>28.0%</td>
<td>38.7%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Senior Primary 4-6</td>
<td>21.3%</td>
<td>50.7%</td>
<td>28.0%</td>
</tr>
<tr>
<td>Preparatory</td>
<td>10.4%</td>
<td>64.6%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Secondary</td>
<td>6.7%</td>
<td>86.7%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Total</td>
<td>19.8%</td>
<td>54.5%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Training received</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>32.4%</td>
<td>37.8%</td>
<td>29.7%</td>
</tr>
<tr>
<td>No</td>
<td>17.3%</td>
<td>57.7%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Total</td>
<td>19.5%</td>
<td>54.9%</td>
<td>25.7%</td>
</tr>
</tbody>
</table>

Observations based on Table 5.10 are as follows:

- Moderate associations (Cramér's V = never bigger than 30) are recorded between the perceptions of accommodating hyperactive students and the five biographic/demographic variables: city, age, years teaching and training received.
- Regional data showed that significantly more respondents in Cairo than in Alexandria (60% versus 40%) were of the opinion that accommodating hyperactive students was possible, but with some 'challenges/difficulties'.

- When age was analysed, it appeared that 43% of the respondents under the age of 30 reacted more negatively, and noted the accommodation of hyperactive students as 'not at all possible'.

- With respect to phases, significantly more Secondary respondents indicated 'yes, but with some challenges/difficulties' to working with hyperactive students.

- With regard to those teachers who had received training, 38% indicated that handling hyperactive students would be possible, but with some challenges and difficulties, whereas 58% who had not received training experienced similar sentiments. From these results one wonders how effective the training was, or how reliable these results are.

In Table 5.11 we report on the single biographic/demographic variable that is statistically-significantly related to the perception of accommodating students with visual impairments.

**TABLE 5.11: BIOGRAPHIC/DEMOGRAPHIC VARIABLE THAT IS STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF ACCOMMODATING STUDENTS WITH VISUAL IMPAIRMENTS**

<table>
<thead>
<tr>
<th>Biographic/demographic variable</th>
<th>Students with visual impairments</th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes, but with some challenge/difficulty</td>
<td>Not at all possible</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>13.8%</td>
<td>51.7%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Lower Primary 1-3</td>
<td>13.2%</td>
<td>50.0%</td>
<td>36.8%</td>
</tr>
<tr>
<td>Senior Primary 4-6</td>
<td>24.0%</td>
<td>40.0%</td>
<td>36.0%</td>
</tr>
<tr>
<td>Preparatory</td>
<td>8.3%</td>
<td>52.1%</td>
<td>39.6%</td>
</tr>
<tr>
<td>Secondary</td>
<td>39.3%</td>
<td>39.3%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Total</td>
<td>18.4%</td>
<td>46.5%</td>
<td>35.2%</td>
</tr>
</tbody>
</table>

Observations based on Table 5.11 are as follows

- Moderate associations (Cramér’s V = being less than 0.30) were recorded between the perception of accommodating students with visual impairment and the phase in which respondents taught.
• In all the phases, except Secondary and Senior Primary, the majority of respondents (at least 50%) responded with 'yes, but with some challenges/difficulty'.

Table 5.12 summarises the relationships, expressed as cross-tabulations, between the perceptions of accommodating students with speech problems and the two biographic/demographic variables to which it is statistically-significantly related.

TABLE 5.12: BIOGRAPHIC/DEMOGRAPHIC VARIABLES THAT ARE STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF ACCOMMODATING STUDENTS WITH SPEECH PROBLEMS

<table>
<thead>
<tr>
<th>Biographic/demographic variables</th>
<th>Students with speech problems</th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes, but</td>
<td>Not at all possible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with some</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>challenge/</td>
<td></td>
</tr>
<tr>
<td>Years of teaching</td>
<td>5 years or less</td>
<td>19.0%</td>
<td>27.6%</td>
</tr>
<tr>
<td></td>
<td>6-10 years</td>
<td>4.7%</td>
<td>59.4%</td>
</tr>
<tr>
<td></td>
<td>11-15 years</td>
<td>15.2%</td>
<td>63.6%</td>
</tr>
<tr>
<td></td>
<td>16+ years</td>
<td>5.8%</td>
<td>59.4%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>10.9%</td>
<td>53.3%</td>
</tr>
<tr>
<td>Phase</td>
<td>Kindergarten</td>
<td>17.9%</td>
<td>57.1%</td>
</tr>
<tr>
<td></td>
<td>Lower Primary 1-3</td>
<td>11.8%</td>
<td>43.4%</td>
</tr>
<tr>
<td></td>
<td>Senior Primary 4-6</td>
<td>14.7%</td>
<td>41.3%</td>
</tr>
<tr>
<td></td>
<td>Preparatory</td>
<td>2.1%</td>
<td>72.3%</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>6.9%</td>
<td>72.4%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>11.0%</td>
<td>52.9%</td>
</tr>
</tbody>
</table>

Observations based on Table 5.12 are as follows:

• Moderate associations (Cramér's V = being less than 0.30) are recorded between the perception of accommodating students with speech problems and two biographic/demographic variables: years of teaching and phase.

• 53% of respondents with 5 years’ or less teaching experience indicated that it was 'not at all possible' to accommodate students with speech problems in their classes. The remaining results revealed that 61% of the respondents could accommodate these students, but would find it challenging and difficult.

• Preparatory and Secondary Phase results were evenly distributed in their perception, with 72% saying 'yes, but with some challenge/difficulty'. 57% of the Kindergarten respondents indicated that it would be possible, but not without
challenges and difficulties. Lower Primary and Senior Primary teachers acknowledged that they could work with students with speech problems, but it would be challenging and difficult.

Table 5.13 summarises the relationships, expressed as cross-tabulations, between the perceptions of accommodating students with intellectual impairments and the two biographic/demographic variables to which it is statistically-significantly related.

**TABLE 5.13: BIOGRAPHIC/DEMOGRAPHIC VARIABLES THAT ARE STATISTICALLY-SIGNIFICANTLY RELATED TO THE PERCEPTION OF ACCOMMODATING STUDENTS WITH INTELLECTUAL IMPAIRMENTS**

<table>
<thead>
<tr>
<th>Biographic/demographic variable</th>
<th>Students with intellectual impairments who are not up to present class standard</th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes, but with some challenge/difficulty</td>
<td>Not at all possible</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>5.0%</td>
<td>22.5%</td>
<td>72.5%</td>
</tr>
<tr>
<td>Male</td>
<td>5.0%</td>
<td>42.5%</td>
<td>52.5%</td>
</tr>
<tr>
<td>Total</td>
<td>5.0%</td>
<td>25.6%</td>
<td>69.4%</td>
</tr>
<tr>
<td>City</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alexandria</td>
<td>11.3%</td>
<td>26.8%</td>
<td>62.0%</td>
</tr>
<tr>
<td>Cairo</td>
<td>2.7%</td>
<td>25.1%</td>
<td>72.2%</td>
</tr>
<tr>
<td>Total</td>
<td>5.0%</td>
<td>25.6%</td>
<td>69.4%</td>
</tr>
<tr>
<td>Training received</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>20.0%</td>
<td>31.4%</td>
<td>48.6%</td>
</tr>
<tr>
<td>No</td>
<td>2.7%</td>
<td>24.4%</td>
<td>72.9%</td>
</tr>
<tr>
<td>Total</td>
<td>5.1%</td>
<td>25.4%</td>
<td>69.5%</td>
</tr>
</tbody>
</table>

Observations based on Table 5.13 are as follows:

- Moderate association (Cramér's V = 0.10 and 0.29) were recorded between the perceptions of accommodating students with intellectual impairments and the three biographic/demographic variables: gender, city and training received.
- Significantly, more female respondents than male respondents (72% versus 52%) perceived the handling of students with intellectual difficulties as 'not at all possible'. More males than female teachers (42% versus 22%) responded to 'yes, but with some challenges/difficulty'.
- The results revealed that 72% of the respondents from Cairo, as opposed to 62% from Alexandria, regarded working with students with intellectual impairment as 'not at all possible'.


• Of those who had received training in teaching students with intellectual impairment, 49% said that handling students would be not be possible at all. On the other hand, of those who had not received such training, 73% indicated that handling students with intellectual impairments would not be possible. From these results it is evident that the training provided had not met the needs of the teachers in providing suitable strategies.

5.5 TEACHERS’ ATTITUDES TOWARDS INCLUSIVE EDUCATION

5.5.1 Introduction

Table 5.14 reports the descriptive statistics for the four attitude components. As explained in Section 4.3.2, the scores for each component were transformed to range, in theory, between 0 and 100. However, only in the case of the first component (‘An interrelated set of barriers’) did at least one respondent obtain a score of zero (the minimum value reported in Table 5.14). This means that at least one of the 265 respondents selected a ‘strongly disagree’ response for all six attitude statements comprising that component. For none of the other three components did any of the respondents select a 'strongly disagree' response for all of the attitude statements comprising those components. However, for all four components there was at least one respondent who selected a 'strongly agree' response to the entire component items, because the maximum value for every component is 100.
TABLE 5.14: DESCRIPTIVE STATISTICS FOR THE FOUR ATTITUDE COMPONENTS

<table>
<thead>
<tr>
<th>Descriptive statistics</th>
<th>Component 1: An interrelated set of barriers</th>
<th>Component 2: Importance of training as an enabling factor</th>
<th>Component 3: Importance of lesson planning and teaching techniques</th>
<th>Component 4: Importance of appropriate curriculum content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>63.4</td>
<td>73.4</td>
<td>68.0</td>
<td>74.0</td>
</tr>
<tr>
<td>Mode</td>
<td>66.7</td>
<td>66.7</td>
<td>66.7</td>
<td>66.7</td>
</tr>
<tr>
<td>Median (50th percentile)</td>
<td>66.7</td>
<td>73.3</td>
<td>66.7</td>
<td>66.7</td>
</tr>
<tr>
<td>25th percentile</td>
<td>50.0</td>
<td>66.7</td>
<td>50.0</td>
<td>66.7</td>
</tr>
<tr>
<td>33rd percentile</td>
<td>61.1</td>
<td>66.7</td>
<td>66.7</td>
<td>66.7</td>
</tr>
<tr>
<td>67th percentile</td>
<td>72.2</td>
<td>80.0</td>
<td>66.7</td>
<td>83.3</td>
</tr>
<tr>
<td>75th percentile</td>
<td>75.0</td>
<td>86.7</td>
<td>83.3</td>
<td>83.3</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>19.8</td>
<td>17.2</td>
<td>21.9</td>
<td>18.9</td>
</tr>
<tr>
<td>Variance</td>
<td>390.5</td>
<td>296.5</td>
<td>481.2</td>
<td>357.1</td>
</tr>
<tr>
<td>Minimum value</td>
<td>0</td>
<td>26.7</td>
<td>16.7</td>
<td>33.3</td>
</tr>
<tr>
<td>Maximum value</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total responses</td>
<td>265</td>
<td>265</td>
<td>265</td>
<td>265</td>
</tr>
<tr>
<td>Number of items</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

To cross-tabulate these attitude components or constructs with the biographic/demographic variables selected, the component scores were dichotomised by using the median as cut-off. Thus, in the case of Components 1, 3 and 4, scores of 66.7 and higher were classified as 'median and above' and scores of less than 66.7 classified as 'below median'. In the case of Component 2, a score of 73.3 served as cut-off.

Figure 5.10 shows the distribution of component scores in terms of the median as cut-off. In the case of Components 3 and 4 ('Importance of lesson planning and teaching techniques' and 'Importance of appropriate curriculum content') the overwhelming majority of responses (74.7% and 84.5%) are classified as falling into the category 'median and above'. This means that large percentages of respondents scored high on these two components – i.e. large percentages of respondents recognised the importance of both lesson planning and teaching techniques, and appropriate curriculum content.\(^5\)

\(^5\) A more elaborated technical note is warranted here. Normally the median is defined as a value below and above which 50% of cases would fall (50th percentile). However, Figure 5.8 shows results contrary to this.
Next, in Sections 5.5.2 to 5.5.5, a breakdown of responses is first given for each of the individual statements that comprises a particular component, followed by a series of tables that summarises the statistically significant relationships between the biographic/demographic variables and the dichotomised component scores.

**5.5.2 Component 1: An interrelated set of barriers**

Part of implementing inclusive education is the recognition of potential barriers that hinder the development of a suitable learning environment. Figure 5.11 reports the definition of the median, specifically for Components 3 and 4. The reason for this apparent contradiction has to do with the distribution of scores. As can be seen in Table 5.14, the value of the median for Component 3 is exactly the same as the value of both the 33rd and 67th percentiles, namely 66.7 out of 100. Similarly, the median for Component 4 (also 66.7) corresponds to both the 25th and 33rd percentiles. Expressed in terms of the actual scores in the data set, it means that respectively 43% and 42% of respondents obtained a score of a 66.7 for Components 3 and 4. Thus, a single score (66.7) dominates in both Components 3 and 4. Also, Components 3 and 4 include only two items each and are therefore not truly continuous because of a highly restricted range of possible scores between 0 and 100. This could be interpreted by some statisticians as violating some of the assumptions required for parametric one-way ANOVAs and t-tests. It was therefore decided to apply non-parametric tests to explore whether scores on the four components differ significantly for groups with different biographic/demographic characteristics. Two non-parametric options were available here: (1) to perform a series of Mann-Whitney and Kruskal-Wallis tests, or (2) to categorise the component scores by specifying a cut-off (in this case the median) and to perform a series of Chi-square tests. The latter option was followed. Also, by choosing the latter option consistency in the presentation and reporting of results was ensured.
percentage of respondents who indicated, for each of six individual statements, Component 1 ('An interrelated set of barriers').

**FIGURE 5.11: TEACHERS’ RESPONSES TO THE SIX INDIVIDUAL STATEMENTS COMPRISING COMPONENT 1 ('AN INTERRELATED SET OF BARRIERS')**

From these results it is clear that the majority of respondents 'agreed' with each statement. A combined 69% agreed/strongly agreed that their present class set-up did not allow them to give the necessary attention to those students with special educational needs. 55% of respondents agreed that the present system did not provide extra staff to help with students with special educational needs, and 75% were categorical in feeling that having to teach these students would increase their workload. 74% respondents who agreed/strongly agreed with the statement that inadequate in-service training prevented them meeting the needs of their students.
Table 5.15 summarises the relationship between the dichotomised variable for Component 1 (‘An interrelated set of barriers’) and the three biographic/demographic variables to which it is statically-significantly related.

**TABLE 5.15: BIOGRAPHIC/DEMOGRAPHIC VARIABLES THAT ARE STATISTICALLY-SIGNIFICANTLY RELATED TO COMPONENT 1 (‘AN INTERRELATED SET OF BARRIERS’)***

<table>
<thead>
<tr>
<th>Biographic/demographic variables</th>
<th>An interrelated set of barriers</th>
<th>Chi-square</th>
<th>Cramér’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below median</td>
<td>Median and above</td>
<td>Total</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>45.3%</td>
<td>54.7%</td>
<td>223</td>
</tr>
<tr>
<td>Male</td>
<td>26.2%</td>
<td>73.8%</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>42.3%</td>
<td>57.7%</td>
<td>265</td>
</tr>
<tr>
<td>Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kindergarten</td>
<td>41.4%</td>
<td>58.6%</td>
<td>29</td>
</tr>
<tr>
<td>Lower Primary 1-3</td>
<td>32.9%</td>
<td>67.1%</td>
<td>79</td>
</tr>
<tr>
<td>Senior Primary 4-6</td>
<td>51.9%</td>
<td>48.1%</td>
<td>77</td>
</tr>
<tr>
<td>Preparatory</td>
<td>31.3%</td>
<td>68.8%</td>
<td>48</td>
</tr>
<tr>
<td>Secondary</td>
<td>60.0%</td>
<td>40.0%</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>42.2%</td>
<td>57.8%</td>
<td>263</td>
</tr>
<tr>
<td>Class size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 or less</td>
<td>31.6%</td>
<td>68.4%</td>
<td>19</td>
</tr>
<tr>
<td>26-30</td>
<td>34.8%</td>
<td>65.2%</td>
<td>23</td>
</tr>
<tr>
<td>31-35</td>
<td>57.1%</td>
<td>42.9%</td>
<td>28</td>
</tr>
<tr>
<td>36-40</td>
<td>47.3%</td>
<td>52.7%</td>
<td>150</td>
</tr>
<tr>
<td>More than 40</td>
<td>23.3%</td>
<td>76.7%</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>42.2%</td>
<td>57.8%</td>
<td>263</td>
</tr>
</tbody>
</table>

Observations based on Table 5.15 are as follows:

- The associations between the three biographic/demographic variables and the dichotomised component variable are not particularly strong, but only moderate (Cramér's V never exceeds 0.30).
- Men were more likely than women to have obtained high component scores, i.e. scores in the ‘median and above’ category (74% versus 55%). This means that men were significantly more likely than women to recognise an interrelated set of barriers in teaching students with special educational needs.
- As far as phase is concerned, teachers in the Lower Primary and Preparatory phases tend to have the higher component scores (67% and 69% scored in the ‘median and above’ category). This means that teachers in these phases have a keener recognition of an interrelated set of barriers in teaching students with special educational needs. The lowest recognition of barriers is associated with
Secondary phase teachers (60% scored in the 'below median' component score category).

- Teachers of relatively large classes (more than 40 learners) as well as teachers of relatively small classes (25 or less learners) show the largest recognition of an interrelated set of barriers in teaching students with special educational needs (77% and 68% of responses in the 'median and above' category).

5.5.3 Component 2: Importance of training as an enabling factor

Figure 5.12 reports on teachers' responses to the five individual statements concerning the importance of training as an enabling factor.
On initial investigation, 73% of respondents acknowledged the importance of being fully aware of the resources available to support students' learning. 34% of respondents disagreed with this statement. From the combined response, 88% of the respondents who 'agreed/strongly agreed' to the statement that serious consideration should be given to the relevancy of training, aimed at providing solutions on handling students with special educational needs. The importance of continuous training in providing the necessary skills was accentuated in the 84% responses. 19% of respondents came out against continuous ongoing training.
None of the biographic/demographic variables revealed any statistically significant relationship with the dichotomised scores (‘median and above; ‘below median’) of Component 2.

5.5.4 Component 3: Importance of lesson planning and teaching techniques

Figure 5.13 reports on teachers’ responses to the importance of lesson planning and teaching techniques

**FIGURE 5.13: TEACHERS’ RESPONSES TO THE TWO INDIVIDUAL STATEMENTS COMPRISING COMPONENT 3 (‘IMPORTANCE OF LESSON PLANNING AND TEACHING TECHNIQUES’)**

The results indicate that 75% of respondents acknowledged that teaching techniques, and not only the curriculum, are to blame for the poor performance of students. This is in keeping with the notion that teachers consider their own teaching strategies as creating barriers to learning. 85% of respondents believed that lesson plans should be aimed at supporting students with special educational needs, instead of merely seeing it as an attempt to complete the curriculum.

Table 5.16 reports on the Biographic/demographic variables that are statistically-significantly related to the importance of lesson planning and teaching techniques.
The following emerged from an inspection of the values in Table 5.16:

- The associations are not particularly strong, but only moderate, as Cramer's V is never bigger than 0.30.

- The moderate associations are also reflected in the distribution of percentages. In the case of all three biographic/demographic variables, the larger share of respondents in any sub-group obtained component scores in the 'median and above' category. For instance, 66% of respondents in the 'younger than 30 years' category obtained component scores that were on par with the median or higher, compared to 82% and 83% of respondents in the 30-39 years and 40 years and older categories. The component scores of all sub-groups fall predominantly in the 'median and above' category.

- Still, a stronger recognition of the importance of lesson planning and teaching techniques is associated with the following groups of respondents: teachers older than 30 (82% & 83%), teachers working in Alexandria (84%), and teachers without a degree in Education (79%).

### 5.5.5 Component 4: Importance of appropriate curriculum content

Figure 5.14 reports on two individual statements relating to the importance of appropriate curriculum content.
FIGURE 5.14: TEACHERS’ RESPONSES TO THE TWO INDIVIDUAL STATEMENTS COMPRISING COMPONENT 4 (‘IMPORTANCE OF APPROPRIATE CURRICULUM CONTENT’)

The curriculum and its outcomes should encourage the participation of all students by adjusting to the needs of the students, and not vice versa. Students with special educational needs should receive a continuum of support within the framework of the regular curriculum. A combined 93% agreed that the curriculum content should help reduce obstacles (barriers) to learning by acknowledging the needs of all students. 5.7% responded by strongly disagreeing.

Table 5.17 reports on the biographic/demographic variable that is statistically-significantly related to the importance of appropriate curriculum content.

TABLE 5.17: BIOGRAPHIC/DEMOGRAPHIC VARIABLE THAT IS STATISTICALLY-SIGNIFICANTLY RELATED TO COMPONENT 4 (‘IMPORTANCE OF APPROPRIATE CURRICULUM CONTENT’)

<table>
<thead>
<tr>
<th>Biographic/demographic variable</th>
<th>Importance of appropriate curriculum content</th>
<th>Chi-square</th>
<th>Cramér's V</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below median</td>
<td>Median and above</td>
<td>Total</td>
</tr>
<tr>
<td>Class size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 or less</td>
<td>42.9%</td>
<td>57.1%</td>
<td>70</td>
</tr>
<tr>
<td>36-40</td>
<td>47.3%</td>
<td>52.7%</td>
<td>150</td>
</tr>
<tr>
<td>More than 40</td>
<td>23.3%</td>
<td>76.7%</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>42.2%</td>
<td>57.8%</td>
<td>263</td>
</tr>
</tbody>
</table>

Observations based on Table 5.17 are as follows:

- Significantly more teachers in the larger classes (40+) than in the ‘smaller’ classes have high component scores, i.e. scores in the ‘median and above’
category (77% versus 53% and 57%). High component scores point towards a larger recognition of the importance of appropriate curriculum content.

- The association between class size and the dichotomised component variable is, however, not strong, but moderate.

5.5.6 Other items that were not used in constructing the attitude components

For the purposes of discussion the remaining 16 items that were not included in the attitude component have been grouped under general headings as indicated in Table 5.18.

**TABLE 5.18 OTHER ITEMS THAT WERE NOT USED IN CONSTRUCTING THE ATTITUDE COMPONENTS**

<table>
<thead>
<tr>
<th>Items</th>
<th>Response</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>ATTITUDES</td>
<td></td>
<td>4.9%</td>
<td>18.1%</td>
<td>47.2%</td>
<td>29.8%</td>
</tr>
<tr>
<td>Accommodating students with special educational needs lowers the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>standard of the rest of my class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching students with special educational needs is too difficult for</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a regular class teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>These students will be better off at a special school</td>
<td></td>
<td>3.4%</td>
<td>18.1%</td>
<td>41.1%</td>
<td>37.4%</td>
</tr>
<tr>
<td>As a teacher I can make a difference by removing obstacles (barriers)</td>
<td></td>
<td>2.6%</td>
<td>20.0%</td>
<td>60.4%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Teaching students with special educational needs can cause them to</td>
<td></td>
<td>6.8%</td>
<td>11.7%</td>
<td>53.6%</td>
<td>27.9%</td>
</tr>
<tr>
<td>feel underestimated and separated from the rest of the class</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most students will experience obstacles (barriers) to learning</td>
<td></td>
<td>1.1%</td>
<td>22.3%</td>
<td>56.2%</td>
<td>20.4%</td>
</tr>
<tr>
<td>experienced by my students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CURRICULUM</td>
<td></td>
<td>3.8%</td>
<td>7.2%</td>
<td>54.3%</td>
<td>34.7%</td>
</tr>
<tr>
<td>Teachers should be flexible enough to adapt the curriculum to the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>needs of their students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My present curriculum should be changed in order to support the</td>
<td></td>
<td>1.1%</td>
<td>10.2%</td>
<td>55.5%</td>
<td>33.2%</td>
</tr>
<tr>
<td>educational learning needs of all my students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUPPORT</td>
<td></td>
<td>16.1%</td>
<td>23.8%</td>
<td>37.5%</td>
<td>22.6%</td>
</tr>
<tr>
<td>The school does not have the necessary infrastructure (e.g. rails,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ramps) to accommodate students with special physical needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At the moment I am satisfied with the support I receive from</td>
<td></td>
<td>7.2%</td>
<td>37.7%</td>
<td>44.9%</td>
<td>10.2%</td>
</tr>
<tr>
<td>supervisors, psychologists and principals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My school's present resources are aimed at supporting students at</td>
<td></td>
<td>4.5%</td>
<td>35.8%</td>
<td>47.2%</td>
<td>12.5%</td>
</tr>
<tr>
<td>different levels and abilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My school's resource material is regularly updated in order to meet</td>
<td></td>
<td>5.7%</td>
<td>38.9%</td>
<td>46.8%</td>
<td>8.7%</td>
</tr>
<tr>
<td>the changing needs of my students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Regarding attitudes, the results revealed mixed responses from the respondents. On the one hand 81% supported the sentiments of inclusive education in acknowledging that labelling students as having special educational needs, can cause students to feel underestimated and separated from the rest of the class.

Respondents agreed with the statements that most students would experience obstacles to learning during their school careers, and that teachers could make the difference by removing these obstacles. However, 80% of the respondents felt that teaching students with special educational needs would be too difficult for a regular class teacher, and that they should be accommodated in special schools.

Educators were concerned about the fact that these students would need individual and special attention, which might not be possible in a regular class. With large classes educators would not be able to give these students the individual attention they required, which could result in the lowering of standards.

The data revealed that the majority (80%) of respondents were of the opinion that the educational curriculum needed to be changed to give all students a chance to succeed. Teachers were adamant that they be allowed more flexibility for adapting the curriculum to the needs of the students. The results revealed that in principle educators were in agreement with the positive benefits of collaboration, but in reality the present system does not provide the time for such activities.
• Regarding the present infrastructure in schools, it was clear that they did not have the necessary ramps, rails, etc. to accommodate students with physical needs. This was reflected in the 60% response rate. The results concerning schools' resources being aimed at supporting students at different ability levels and being regularly updated, drew a fair amount of uncertainty, with only 55% in agreement.

• Although this study did not address the issues of funding, it was found that 56% of respondents felt that it would be difficult for schools to find extra funding to accommodate students with special educational needs.

5.6 CONCLUSION

This chapter provided a quantitative assessment of teachers' attitudes, which was conducted to determine teachers' views towards inclusive education. In the following chapter these findings will be discussed in greater depth, followed by conclusions and recommendations.
6.1 INTRODUCTION

As discussed in detail in Chapters 1 and 2, educational transformation within an inclusive approach to education influences the roles and responsibilities of teachers and school principals, as well as pupils and their parents (Swart & Pettipher, 2001:30). Unfortunately, too often change in education has failed, because insufficient attention had been paid to the needs of those who are expected to put change into effect (Weamouth et al., 2000 in Hay et al., 200:214).

The objective of this chapter is to discuss the results of the empirical investigation (Chapter 5) and then formulate a conclusion to the research as a whole and make recommendations.

6.2 DISCUSSION OF THE RESULTS

The following discussion attempts to address the identification of teachers' attitudes towards working with students with special educational needs according to the following sub-aims of this study:

- **Sub-aim #1:** Teachers' perceptions of handling various types of special educational needs.
- **Sub-aim #2:** Teachers' perceptions of how accommodating their present classroom situation is towards students with different types of special educational needs.
- **Sub-aim #3:** Teachers' attitudes towards inclusive education as measured by four attitudes construct (an interrelated set of barriers, training, lesson planning and techniques, and curriculum).
As discussed in Chapter 3 (3.3.3.2) there appears to be a strong connection between teachers' attitudes towards inclusive education and their commitment to the practice of inclusive education. Salend (2001) states that teachers' attitudes are a prerequisite for the successful integration of students with disabilities, and according to Avramidis, Bayliss and Burden (2000), the cooperation and commitment of those directly involved in implementing policies are essential. Teachers who have positive attitudes about inclusive education accept children with special needs into their classrooms and involve them in all academic learning and social interaction with other children (Frost, 2002).

Respondents were in completely in agreement with the statement that negative attitudes towards students with special educational needs manifest itself in the labelling of students and could lead to students feeling underestimated and separated from the rest of the class. Hegarty (1994) supports this view and suggests that negative attitudes are not manifestly due to dislike or discrimination, but rather due to the labels attached to students with barriers to learning. Even if they accept them in their classes, teachers may underestimate their abilities.

6.2.1 Teachers' perception of handling various types of special educational needs in their present classroom situation (Sub-aim: 1)

As discussed in Chapter 3 (3.3.3.2), variations in teachers' attitudes towards different categories of disabilities are linked to the perceived instructional or managerial skills required to include these students (Avramidis & Norwich, 2002). Results indicate, for example, that respondents are apprehensive about having students with emotional and/or behavioural disorders in the classroom. It could be inferred that this stems from the fear of standards being lowered, as well as from teachers' having lack of confidence in their own management skills. Furthermore, this finding is in compliance with the research done by Beveridge (1995), who noted that students with learning and emotional or behavioural difficulties presented challenges to teachers, but that the extent of their needs are relative to the quality of the educational experiences with which they are provided.

Most respondents feel that students with intellectual impairments are at a heightened risk for behavioural problems. Seventy-two percent of female respondents came out very strongly, saying that it was not possible to accommodate students with
intellectual impairments who were not up to standard in their classes. Of all the special needs, the most problematic aspect for teachers is accommodating students who are hyperactive.

From the demographic information, it appears that regardless of gender, age, experience and training, all respondents found hyperactive behaviour challenging. It appears that the traditional classroom practice in Egyptian schools is proving to be an ordeal for many of these students. As has been shown, problems with hyperactivity, attention, and impulsivity increase when the curriculum is perceived as routine-bound and dull; consequently, certain students are placed at risk for failure.

To be intrinsically motivating to any student, curricula need to be interesting and challenging, providing opportunities for initiative and creative input. Training seems to be ineffective and together with continuous in-service training and behavioural management, curriculum adaptations with supplemented support from educational psychologists would possibly be more beneficial.

Respondents were generally more willing to integrate students with physical disabilities than to accommodate those with intellectual impairments. Hastings and Oakford (2003) support this finding (see Chapter 3), which notes that respondents are becoming less accepting towards severe intellectual impairments and multiple impairments. This anomaly may be influenced by inaccurate knowledge about disorders, as well as a cynical outlook regarding developmental outcomes that is likely to prevail where students have intellectual impairments. Training can be seen as one way of combating this stereotyping of students. As students tend to take their cues from teachers, so teachers’ attitudes towards disability will influence students’ views of the same. Through their entrance examinations, language schools in Cairo ensure academic excellence. These schools therefore do not automatically accommodate students who are not on par with the rest of the students in their grade.

The environment of the student with a hearing loss is very important. With the present situation in Egyptian schools of having large numbers of students in a classroom, the outside traffic noise, together with the typical classroom instructional distances, contribute towards a negative listening environment for the student with a
hearing loss. Studies undertaken for road traffic noise levels in Greater Cairo indicated that levels in the city were higher than those set by Egyptian standards for residential areas. The development of language, speech, reading skills, as well as complex cognitive functions, is dependent on the ability to listen (Crandell & Smaldino, 2000). With the teaching of language being an integral part of curriculum both in language schools and government schools, it was noteworthy that the kindergarten phase results revealed that more than half of the respondents envisaged problems working with a student with speech problems. Problems with the language system are fundamental to a student's ability to access the curriculum and interact with their peers (Dockrell & Lindsay, 2000). It is during early and middle adolescence that peer interaction seems to hit a peak of importance. Adolescents with speech difficulties may appear less competent because of their inability to express themselves meaningfully. It is therefore not surprising that more than 70% of respondents from the preparatory and secondary phase indicated that working with students presenting with speech problems would be problematical. It was evident that experience played a major role, as seen in 53% of respondents with 5 years' experience or less indicating that they would not be able to accommodate students with speech problems. Rectifying the present situation is going to be a daunting task, as according to literature, there is no cost-effective way to improve the listening environment in the regular classroom without construction and/or class size reduction (Marshall, Ralph & Palmer 2002).

With the present overwhelming mass of visual material to which students are continually exposed (viz. textbooks, handouts, class schedules and blackboard writing), accommodating a visually impaired or blind student in overcoming their limitation will be extremely difficult. Educational facilities for the blind generally fall short of fulfilling their demands. To rectify the situation, teachers need to be equipped with training based on a student's particular visual impairment and his/her skill of communication (e.g., Braille, speed-listening, etc.). Presently adaptive technologies are expensive in Egypt, while there is a lack of training to dispel the misconception that blind and visually impaired students can learn together.

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6 September and October 2001. Weighted sound pressure level ($L_{Aeq}$) = 80 dB and higher was recorded while the maximum permissible level is 65 dB (Abas & Tamura, 2002:358-364).

7 According to most conservative estimates, there are at least 60,000 blind children in Egypt, only 2,200 of whom are enrolled in schools, because facilities are inaccessible for most of the blind population. Study conducted by Association for Health and Environmental Development (AHED), Al-Ahram Weekly Online 21 – 27, June 2001, Issue No. 539 - http://weekly.ahram.org.eg/2001/539/lt1.htm.
At the other end of the mental ability scale lies the intellectually gifted group of students. Giftedness, although not usually seen as a special educational need, was also included in this study. The rationale behind the inclusion of giftedness is that many schools are unable to make the necessary adjustments to accommodate gifted students, with the result that many of these students develop behavioural problems. This finding is supported by Harnett et al. (2004:74), who noted that often students with ADHD and gifted students present with similar symptoms that could result in a wrong diagnosis.

An overwhelming majority of respondents indicated that most teachers did not experience any difficulty in handling gifted students. With the present situation in Egyptian schools being one of overcrowding, the restricted curriculum results in students not being challenged to perform to their fully capacity, because they seem to be performing adequately. Unfortunately, and in reality, "the plight of the gifted learner is seldom mentioned" (Kokot, 1999:270).

Equally important is the view that no matter how many of the above-mentioned special needs are included, the problem will remain if there is no change in the beliefs of the school, its staff and its curriculum. Students can be fully and actively integrated in the process of inclusion only when a barrier-free environment has been created where learning takes place.

### 6.2.2 Teachers' perceptions of how accommodating their present classroom situation is towards students with different types of special educational needs (sub-aim 2)

The results revealed that many respondents were of the opinion that their present class set-up is not conducive to working with students with special educational needs. In any school the number of students in a class has a definite impact on a teacher's teaching capabilities. This is even more pertinent when having to accommodate students with special educational needs (see Chapter 1). As class size might have an influence on the attitudes of teachers, this question was included in the survey.

Class sizes tended to be larger in Alexandria (46+) than in Cairo. In some of the government schools with high/pupil ratios, these are associated with double shifts of pupils during the day on the same school premises. While allowing reductions in
both the costs of school facilities and equipment and the costs of training teachers, this policy has increased the burden on teachers and raises questions about the quality of education dispensed in such situations. Inspection of the results suggested that large classes were a cause for concern, and increased the negative attitudes of particularly the Cairo-group of teachers towards including students with special educational needs. This issue is universal, but particularly significant in less developed countries such as in Uganda (Kristensen et al., 2003) and Zimbabwe (Mushoriwa, 2001).

This issue of class size is one of the main reasons why parents choose (if financially possible) a language school (relating to Cairo only in this study). Parents believe that a higher quality of instruction is more likely to occur in relatively smaller classes. In any discussions centering on change in Egypt, class size will always be part of the equation. Possibly the effect of class size should not be deliberated in isolation, but in relation to changes in teaching methods and classroom organization.

Teachers were correct in their assumption that accommodating students in wheelchairs will not be possible. For students with physical disabilities the issue of access is compounded by the accessibility to their physical environment, whether in terms of transportation, street access or general accessibility. Public buses are not accessible to disabled persons. The stairs leading onto buses are difficult for mobility-impaired persons to negotiate. If the school is far away, especially in the rural areas, there will not be accessible transportation, and a disabled student may not be able to walk to school. If the child is able to travel to school, stairs may bar a mobility-impaired child. Such inaccessibility often renders these schools unsafe for the blind and deaf students as well.
6.2.3 Teachers' attitudes towards inclusive education as measured by interrelated sets of barriers, training, lesson planning and techniques and curriculum as well as availability of resources (Sub-aim 3)

As mentioned in Chapter 1, this study has an ecosystemic framework as point of departure, concentrating specifically on teachers and their interaction with manifold contextual influences. Barriers to learning could therefore arise from interrelated intrinsic and extrinsic factors such as the lack of training and competency on the part of the teacher for accommodating students with special educational needs.

The majority of respondents (77%) were of the opinion that teaching students with special educational needs would be too difficult for a regular classroom teacher. This finding is supported by Forlin and Engelbrecht (1998) who noted that many teachers did not feel that they were sufficiently equipped to deal with students with special educational needs. From this statement it could be inferred that teachers lacked the necessary skills and experience on how to work with such students, thus placing undue pressure on them as teachers. The data also revealed that more female than male respondents felt competent in working with special educational needs. These results are in keeping with the study done by Alghazo and Naggar Gaad (2004).

When examining any education system, it is imperative that the qualifications of teachers are taken into consideration. With a wide range of faculties being represented, the data revealed that only 35% of the respondents were graduates from the Faculty of Education. These results could imply that level of pedagogical training of teachers varied considerably, and could range from nil to a full programme. The concept of issuing teaching licences is not common practice in Egypt and the professionalisation of teaching still remains a subject of rhetorical discourse.

In order for schools to become more inclusive, teachers need to critically examine ways of increasing participation for the diversity of students that they serve within a local community (Frederickson & Cline, 2002). Insufficient training and teacher development in itself can be a barrier to the implementation process.

As discussed in previous chapters, teachers may well be the most important persons in determining the extent to which student's potential is achieved, and these results will influence the subsequent development of training programmes with regard to
identifying and dealing with students with educational needs (UNESCO, 2006:49). The placement of students with special needs in the mainstream lessons will make new teaching demands on the teachers in ordinary schools (Hegarty, 1994:80). In many instances change has failed because of insufficient attention being paid to those who are expected to put the change into effect (Wearmouth et al., in Hay, Smit & Paulsen, 2001:214).

Training indicates the minimum organised teacher training (pre-service or in-service). Current pre-service requirements cannot serve as a proxy for the qualifications held by the existing teaching force. The results indicated that for the majority of Egyptian teachers, 6-15 years had passed since they received their initial training. Only 14% indicated that they had received training in teaching students with special educational needs. Most of the special needs training had been given to teachers in Alexandria. A possible reason for this is that NGOs such as SETI seems to have more success in government schools in Alexandria than in Cairo. NGOs and other academic institutions have found Alexandria to be more articulate about problems and more willing to represent their students. The message that could be communicated here is that since teachers are not trained in special education, they might feel ill-prepared to work effectively with students with special educational needs.

One of the most common factors acknowledged in the literature as being crucial to teacher acceptance of inclusion-based practices, is that of both pre-service and in-service training. As mentioned in Chapter 2, only new teachers coming into the profession receive an introductory course in special education. Very little training in teaching students with special needs is offered as part of the pre-service training. The data from the combined centres of Cairo/Alexandria substantiated this fact: only 20% of the respondents in these centres had less than five years' experience.

As is generally the case, the level of in-service training is left to the discretion of individual schools, and usually does not cover the areas of learning disabilities, gifted or attention deficit hyperactive students. A possible reason is the fact that in-service training has a significant impact on a school's budget and is therefore not high on the list of priorities. It is therefore of paramount importance that school leadership show a level of preparedness in supporting the ongoing development of their teachers,
through a sound system of educational incentives that will motivate teachers to invest in their own development.

In-service training in Egypt faces several problems. These include the fact that teacher education is generally planned in the absence of teachers. A higher priority is given to the number of teachers receiving training than to the quality of training. There is little or no formal evaluation of training programmes and the focus ever falls on teacher performance. Moreover, teachers seldom receive meaningful feedback.

Uncovering negative stereotypes and advocating acceptance of inclusion will be essential in the establishment of an inclusive training system. The negative attitude towards students with special educational needs manifests itself in the labelling of students. Respondents were in total agreement that labels could lead to students feeling underestimated and separated from the rest of the class. This finding was furthermore supported by McLeskey and Waldron (2002) who found that students in the classroom without disabilities noticed the differences between them and their peers, and rejected them by labelling and/or calling them names.

What is apparent is teaching a student with special needs clearly requires a certain degree of commitment. It unavoidably means there is more planning and preparation to meet the needs of a range of abilities. Forlin (1998) stated that having students with special needs in a regular classroom means additional work, which is appended onto teachers existing workloads. The majority of Egyptian respondents agreed with this statement. A further deduction could be that teachers lacked the necessary skills and experience on how to work with students with special educational needs. This is consistent with findings reported earlier. However, Prochnow, Kearney and Caroll-Lind (2000), stated that not all students with special needs required additional work from the teachers, and it depends on the type of disability. He further elaborated that different disability levels gave different levels of exhaustion for teachers trying to meet student's needs. This means to prepare work for students with mild disabilities would be less draining than for students with moderate and severe learning difficulties.

Research indicates that there is limited academic value for students with special educational needs in the regular classroom unless the instructions are adapted to meet the student's needs and without this modification there is no guarantee that
students with special needs are participating meaningfully in academic learning (Conway, 2005). The current study revealed that the majority of respondents expressed the belief that teaching techniques and not only the curriculum are responsible for the poor performance of students. This is in keeping with the notion that teachers consider their own teaching strategies as creating barriers to learning (UNESCO, 2001a:15). This has implications in the future training of teachers. The results of this study revealed that more than 80% of respondents believed that lesson plans should aim at supporting students’ special needs, and that they should not merely be an attempt to complete the curriculum. These findings could indicate the willingness of Egyptian teachers teaching in regular schools to make changes in order to be able to include students with special educational needs.

Teaching resources should be adequately provided to support learning, and lessons must be student-centred and accommodate the needs of every student. It is important for class teachers to develop effective teaching outcomes and good lesson structures, which would motivate students to become actively involved with challenges appropriate to them.

The curriculum is the focal point of all inclusionary practices (Sands et al., 2000:293), and as discussed in Chapter 3, the growing consensus is that true inclusion implies providing a learning environment and curriculum that reach the diverse needs of all students. The overwhelming majority of respondents agreed that there was a problem with the present curriculum in Egyptian schools. The deduction could be made that Egyptian teachers are of the opinion that drastic changes need to be made to the curriculum before students with special educational needs can be included in schools. At present (2006), constraints arise within the interconnecting parts of the curriculum, such as content, language and medium of learning and teaching, management and organisation of classrooms, teaching style and pace, and the time frame for the completion of curriculum and materials. In many ways, teachers still teach by using rote learning, and methodically following textbooks and copying notes. This rigidity and inflexibility of the curriculum does not allow for individual differences, which can ultimately lead to a breakdown in the learning process (Department of Education, 2002:137).

A large percentage of respondents believed that curriculum content should allow students to develop at all levels, and that their learning should not be the acquisition
of knowledge only. This finding is consistent with studies done by Scruggs and Mastropieri (1996) and Conway (2005). Both government and language schools reiterated the feeling that the curriculum needed to allow students to experience successful learning, and that it should be adjusted to meet students’ individual needs. The overwhelming majority of respondents conceded that the curriculum content should help in reducing barriers to learning by acknowledging the educational needs of all students.

The most important question pertaining to support and resources is whether instruction and resources required by students with special educational needs can be provided within a regular classroom. A solution in providing sustainable learning opportunities for all students lies in the strengthening of support services offered in schools. The negative attitudes of teachers developed seem also associated with inadequate teaching and learning resources and lack of adequate classroom facilities. This concern is widespread and found in studies in Australia (Hay & Winn, 2005) and Uganda (Kristensen et al., 2003).

Although the data indicated that respondents were generally satisfied with the support received from supervisors, psychologists and principals, there was a definite need for support in the form of trained staff that can assist in working with students with special educational needs. As mentioned earlier schools in Egypt are generally understaffed. If these services are inaccessible, barriers to learning and development will not be sufficiently addressed, which in turn affects the quality of education available to students. The promotion of open, positive and diverse schools will also be conceded as the education system will not be in a position to respond to the diverse needs of its students. Support could be related to any of the levels within the student and may involve collaboration and consultation with other professionals.

Traditionally, teachers in Egypt work individually rather than in groups. The results of this study revealed that the majority of respondents agreed in the principle of sharing knowledge with colleagues. Unfortunately, due to the general demands, most schools and teachers have found little additional time for such collaborative work.

While the international viewpoint regarding school support facilitating inclusion is that it should take the form of smaller class sizes and the reduction of the educator: learner relationship (UNESCO, 1999b), it is in reality an unrealistic expectation in
most Egyptian schools. Perhaps a more realistic expectation could be that teachers should be supported by providing information on disabilities, instructional strategies, awareness and acceptance, and team-building skills. The results from the study indicated that respondents generally felt that they did not have sufficient resources available to cater for the needs of students with special educational needs.

Although this study did not address the issue of funding extensively, it was found that teachers felt that schools would find it difficult to find extra funding to accommodate the necessary changes to support students with special educational needs. The funding of staff training programme for teachers to gain more knowledge in different areas of disabilities is vital. This assists teachers to broaden their knowledge and skills so that they can effectively teach children with diverse learning needs (Lyons, 2005). According to Stainback and Stainback (1990), governments should provide financial assistance for schools to purchase teaching and learning resources and the special learning equipment for students with special needs.

6.3 CONCLUSION

Educating students with disabilities in mainstream schools remains an important goal for many countries. The tendency has been for countries of the North to provide the guidelines on educating students with special educational needs. In the USA the advocacy awareness was more prominent and parents of children with disabilities were behind the drive for legislation to give children right of education in mainstream schools. Although the emphasis has been towards educating students with special educational needs in mainstream schools, both the USA and UK have continued to maintain and invest in special schools. In countries of the South, the major restraint has been the shortage of facilities lack and/or shortage of qualified teachers. In South Africa, it has not been possible to separate the movement towards inclusion from the attempt to build democracy.

Although the Egyptian government places a high priority on the principles of inclusive education, government efforts in special education only covers 4% of meeting the actual needs (UNESCO, 2006). It is apparent that the present education system in Egypt does not make any provision for accommodating students with special education needs in mainstream classes. Regardless of the obvious benefits of inclusion from a human rights point of view, teachers in Egypt have serious
reservations about the feasibility of accommodating students with special educational needs in mainstream classes. The results of this study indicate that the overall consensus amongst Egyptian teachers is that students with special educational needs would be better off in special schools and that the teaching of students with special educational needs should remain a separate specialised field. If inclusive education and in particular the ecosystemic perspective is forced upon reluctant teachers, it could have dire consequences. With no legislation on inclusion policies, little is being done to break down misconceptions surrounding inclusion. Consequently, negative attitudes can not be addressed proactively on government level.

**Regarding the implications for the implementation of inclusive education in Egypt it is important to take note of the following:**

Legislation needs to encourage the development of schools to create inclusive cultures, which should lead to inclusive policies and ultimately produce inclusive practices in Egyptian schools. To realise this aim and break down misconceptions surrounding inclusion, will involve more than just policy changes. Teachers should be involved throughout the process of policy formation, as teachers’ perceptions of inclusive education will not only influence their acceptance but also affect commitment.

Although Egyptian teachers in principle agree with inclusion, there is still a lack of knowledge regarding the feasibility of working with students with special needs. The findings clearly indicated that the majority of teachers in Egypt are not trained in working with students with diverse learning needs. In a country where material resources for the majority of schools are scarce, the training of staff could be seen as powerful force waiting to be utilised. Time, effort and funds need to be made available for in-service training.

It also became evident in the study that the present class sizes, lack of support staff and resources in many Egyptian schools would affect the achievement of inclusion. The cost of providing education is a critical matter for many schools, especially when linked to the issue of employing more teachers. The challenge facing Egyptian schools will be to find inclusive methods without supplementary resources/assets.
With any educational reform in schools, funds will need to be generated to provide for the expansion of inclusive education. Insufficient funding in itself creates a barrier to learning. Making the best use of limited funds leads to the belief of inclusion as a cost-effective form of provision of education in a highly resource-intensive endeavour (Forlin, 2001:330). In a country where the issue of teachers’ salaries remain a contentious issue, the inclusion of students with special education needs could be seen as an extra burden leading to negative attitudes towards inclusion. Government support is needed to effectively implement the inclusive education policy. This includes training of specialists to support teachers, funds for teaching and learning resources and facilities in schools.

The study indicates that inclusion is centrally a curriculum issue, creating the most significant barrier to learning and exclusion for many students. The data indicated that teachers were apprehensive about teaching students with special needs because of inadequate knowledge and skills in developing inclusive classrooms, the management and organisational skills required and in adapting the curriculum to meet the needs of students with special educational needs.

It is essential, that teachers be trained in the areas of teaching and learning skills, curriculum development and modification, and classroom organisation in order to provide effective inclusive programmes in schools. The shift would be away from a content-based, role recall curriculum, as presently found, to that of skills-based learning. By developing their existing skills, teachers will ultimately feel more confident in working with students with special educational needs.

The results showed that the majority of schools lack the necessary infrastructure to bring about effective inclusive school in Egypt. Schools will have to be modified in order to accommodate students with special educational needs.

6.4 LIMITATIONS AND DELIMITATIONS OF THE STUDY

According to Cresswell (1994:106-107), limitations and delimitations are described as parameters that assist the researcher in establishing boundaries, exceptions, reservations and qualifications that are inherent to a particular study.

The limitations of this study are provided below.
The fact that the researcher was a foreigner working in a Middle East country placed limitations on cultural frameworks. When a researcher and teachers share similar cultural and linguistic backgrounds, these associations are easier. Even with the researcher's well-intended efforts to familiarise herself with the culture there remained the possibility of western bias.

Merriam (2002) contends that in studies of this nature teachers' responses could be morally or politically ingrained. This could lead to teachers being predisposed to giving socially acceptable answers, thus making it difficult to ascertain whether the results are a true reflection of Egyptian teachers' understanding. Although endeavours were made to validate the findings, the researcher cannot be sure that the view initially envisaged has been measured.

A further delimitation is that the study investigated teachers' understanding and not their actual behaviour in classroom settings. As there is no official policy regarding inclusive education in Egypt, this variable could not be controlled in the study.

Another main criticism against this study is that it lacks strong evidence-based data, by limiting itself to questionnaires and not combining research methods (questionnaires with interviews). As this study had limited funds for translation, the scope of the study was restricted to questionnaires.

6.5 RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made:

- If inclusive education is to become a reality in Egypt, clearly articulated policies for education need to be established to remove the disparity between needs and definite local practice that arise from a lack of training, organisation, attitudes and teachers' skills. For this to be truly realised, schools need to equip their teachers not only with the necessary skills, but also with positive attitudes towards inclusion.

- All role-players' values, opinions, attitudes and contributions in developing a mission statement that is supportive of an inclusive learning environment need to be taken into account. School principals should acknowledge the principles
behind inclusion and set the tone for their school by acting as catalysts for key stakeholders to promote a supportive, caring community.

- The restructuring and reculturing of schools, as part of whole-school development, should be an ongoing process. Community action and participation should be encouraged. All-inclusive strategies ought to be employed to address barriers to learning and to highlight the importance of support in dealing with these barriers.

- It is clear from the study that training is one of the successful ways of changing attitudes. To enhance teacher training in this context, an in-service training programme should be established that relies on professional development. It should be designed to (a) improve skills and attitudes and school-wide capacity to teach students with diverse learning abilities and learning styles effectively (b) build professional learning communities, where staff is encouraged to actively participate in the formation of programmes, ultimately leading to the empowerment of teachers, parents and students. Besides the main in-service training, smaller teacher discussion groups should be scheduled regularly to give feedback and discuss ongoing issues.

- Moving away from the concept of "one size fits all" teachers need to be encouraged to design, adapt and develop a curriculum that absorbs students in active learning in significant and real-world activities at various levels of ability, providing alternative methods of teaching.

The development of an inclusive education system will require more than the idea of all students being educated within the regular classroom. The complexity of change can only be achieved through an ongoing process that engages teachers, administrators, parents, community and students. It is this synthesis of working together that will create a truly inclusive classroom. As stated by the International Commission on Education for the Twenty-first Century (UNESCO, 1996b):

"Education cannot, on its own, solve the problems ... It can, however, be expected to help to foster the desire to live together ..."

Finally, in the words of Barth (1990:514): "[D]ifferences hold great opportunities for learning. Differences offer a free, abundant, and renewable resource." Perhaps this
study has highlighted the need for all role-players to contribute towards eradicating differences and focusing on empowering Egyptian teachers to make use of these differences in order to bring about inclusive schools.
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APPENDIX A
TEACHERS’ ATTITUDES TOWARDS WORKING WITH STUDENTS WITH SPECIAL EDUCATIONAL NEEDS IN MAINSTREAM CLASSES

This questionnaire is designed to work towards understanding your context as a teacher (find out a few things yourself) and your teaching situation. It will also at look at your views towards working with different types of students.

“Special educational needs can be seen as arising from either intellectual, emotional, physical and learning difficulties, which prevent the student from achieving his/her potential”.

To ensure confidentiality your name will not appear on this form. The answering of this form is totally voluntary, but we would appreciate your participation, as it will assist in the development of future training programmes. Please answer the questions truthfully. There is no right or wrong answers.

General Information: Mark the appropriate block with an X.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1</td>
<td>What is your age?</td>
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<tr>
<td>2</td>
<td>Gender?</td>
<td>Male</td>
</tr>
<tr>
<td>3</td>
<td>Where do you teach?</td>
<td>Cairo</td>
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<tr>
<td>4</td>
<td>What type of school do you teach in?</td>
<td>Government</td>
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<td>5</td>
<td>What position do you hold in your school?</td>
<td>Principal</td>
</tr>
<tr>
<td>6</td>
<td>How many years have you been teaching?</td>
<td>Less than 1 year</td>
</tr>
<tr>
<td>7</td>
<td>Do you have a degree in education?</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>From which faculty did you graduate?</td>
<td>Engineering</td>
</tr>
<tr>
<td>9</td>
<td>In which phase do you work?</td>
<td>Kindergarten</td>
</tr>
</tbody>
</table>
### General Information: Mark the appropriate block with an X.

10. Which subjects do you teach?
- [ ] IT
- [ ] Art/Music
- [ ] Arabic
- [ ] English
- [ ] Other: Please specify: _______________________

11. On average what size is your class?
- [ ] Less 20
- [ ] 20-25
- [ ] 26-30
- [ ] 31-35
- [ ] 36-40
- [ ] 41-45
- [ ] 46+

12. Do you have a classroom assistant?
- [ ] Yes
- [ ] No

13. Have you ever received training in teaching students with special educational needs?
- [ ] Yes
- [ ] No

14. If answered “Yes” please indicate with an X where you received training.
- [ ] Training inside the school
- [ ] Both
- [ ] Training outside the school

15. Please briefly state what type of training you received in working with students with special educational needs:

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

### Please rate the difficulty in handling the types of special educational needs (presented below) in your class. Please mark the appropriate block with an X

<table>
<thead>
<tr>
<th></th>
<th>Most difficult 4</th>
<th>Difficult 3</th>
<th>Less difficult 2</th>
<th>Least difficult 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Behavioural difficulties</td>
<td></td>
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<tr>
<td>17. Emotional difficulties</td>
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<tr>
<td>18. Giftedness</td>
<td></td>
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<tr>
<td>19. Hearing difficulties</td>
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<tr>
<td>20. Intellectual difficulties</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>21. Learning difficulties</td>
<td></td>
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<tr>
<td>(e.g. reading, spelling etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Visual difficulties</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>23. Combination of any of the above difficulties</td>
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</tbody>
</table>
Please indicate whether you could accommodate the following students into your present classroom situation? Mark the appropriate block with an X

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Yes, but with some challenges/difficulty</th>
<th>Not at all possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 Students in wheelchairs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 Students with hearing problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 Students with speech problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 Hyperactive students who cannot follow instructions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 Students with visual impairment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 Students with intellectual impairments who are not up to your present class standard</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please indicate to what extent you agree with the following statements. Mark the appropriate block with an X

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 The school does not have the necessary infrastructure (e.g. rails, ramps) to accommodate students with special motor needs</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>31 My school lacks extra staff (teacher assistants) to help with students with special educational needs.</td>
<td></td>
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<td></td>
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<tr>
<td>32 The increase of my workload from teaching these students is unpaid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 Inadequate in-service training prevents helping to meet the educational needs of my students</td>
<td></td>
<td></td>
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<tr>
<td>34 My present class set-up does not allow me to give the necessary attention to those students with special educational needs</td>
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<tr>
<td>35 Providing a sustainable learning environment for these students, while still meeting the needs of my other students will be difficult</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>36 I do not have the resources to teach these students</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37 As a teacher I can make a difference in removing obstacles (barriers) to learning experienced by my students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38 Most students will experience obstacles (barriers) to learning sometime during their school careers</td>
<td></td>
<td></td>
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</tbody>
</table>
Please indicate to what extent you agree with the following statements. Mark the appropriate block with an X

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>Labelling students as having special educational needs can cause them to feel underestimated and separated from the class</td>
<td></td>
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<tr>
<td>40</td>
<td>Acknowledging the educational needs of all students, the curriculum content should be designed to reduce obstacles (barriers) to learning</td>
<td></td>
<td></td>
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<tr>
<td>41</td>
<td>Curriculum content should allow students to develop on all levels and should not be seen as only the acquisition of knowledge</td>
<td></td>
<td></td>
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<tr>
<td>42</td>
<td>Lesson plans should aim at supporting my students’ special needs, and not only an attempt to supplement the curriculum</td>
<td></td>
<td></td>
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<tr>
<td>43</td>
<td>Teaching techniques and not only the curriculum are responsible for the poor performance of students</td>
<td></td>
<td></td>
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<tr>
<td>44</td>
<td>My present curriculum should be changed in order to support the educational learning needs of all my students</td>
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<tr>
<td>45</td>
<td>Teachers should be flexible enough to adapt the curriculum to the needs of their students</td>
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<tr>
<td>46</td>
<td>Accommodating students with special educational needs lowers the standard of the rest of my class</td>
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<tr>
<td>47</td>
<td>Students with special educational needs will be better off in a special school</td>
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<tr>
<td>48</td>
<td>Teaching students with special educational needs is too difficult for a regular class teacher</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>49</td>
<td>It is important for teachers to be trained to work with students with special educational needs</td>
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<tr>
<td>50</td>
<td>On-going training in working with students with special educational needs would equip me for working with such students</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>51</td>
<td>Training should be relevant and provide solutions on handling students with special educational needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Collaboration on planning strategies with colleagues would improve my quality of teaching</td>
<td></td>
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<tr>
<td>53</td>
<td>At the moment I am satisfied with the support I receive from supervisors, psychologists and principals</td>
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<td></td>
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</tbody>
</table>
Please indicate to what extent you agree with the following statements. Mark the appropriate block with an X.

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>Schools should have staff trained to assist teachers in working with students special educational needs</td>
<td></td>
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<tr>
<td>55</td>
<td>Being aware of the skills and knowledge of other members of staff is important</td>
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<tr>
<td>56</td>
<td>As a teacher I feel encouraged to share these skills and knowledge with other members of staff</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>57</td>
<td>It is important as a teacher that I am fully aware of the resources available to support my students’ learning</td>
<td></td>
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</tr>
<tr>
<td>58</td>
<td>My school’s present resources are aimed at supporting students at different levels and abilities</td>
<td></td>
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<tr>
<td>59</td>
<td>My school’s resource material is regularly updated in order to meet the changing needs of my students</td>
<td></td>
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</tr>
<tr>
<td>60</td>
<td>My school will find it difficult to find the extra funding to support students with special educational needs.</td>
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</tbody>
</table>
APPENDIX B
استبيان

مقامات وتوجهات المدرسين بشأن العمل مع الطلاب ذو الاعتقادات التعليمية الخاصة في
الإطار السائد بالصفوف

يتضح هذا الاستبيان لتبرير على مفهوم كمدرس (اكتشف تلك الأشياء القليلة التي لديك) ووضعك التدريسي. كما
أنه سيعطي فكرة عن أرائك بشأن العمل مع مختلف نواعات الطلاب.

"يمكن اعتبار الاعتقادات التعليمية الخاصة على أنها ناشئة صعوبات ذهنية أو اتفاقية أو جسمانية أو علمية، والتي من
 شأنها أن تمنع الطلاب/طالبة من تحقيق كفاءيتهم/إمكانياتهم.

تضمن السريان فإن السؤال لن يذكر بهذا النموذج. إن الإجابة عليه هذا النموذج هو أمر طبيعي تماماً، إلا أننا نقدر
لسيانتكم مشاركتكم، حيث سيساعدنا ذلك على تطوير البرامج التدريبية في المستقبل. نرجو الإجابة على الأسئلة بكل
المصداقية، لا توجد إجابات بصح أوخطأ.

**معلومات عامة:** ضع العلامة (×) في الخانة الصحيحة.

<table>
<thead>
<tr>
<th>رقم</th>
<th>كم تبلغ من العمر؟</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>النمو 6</td>
</tr>
<tr>
<td>3</td>
<td>أين تقوم بالتدريس؟</td>
</tr>
<tr>
<td>4</td>
<td>ما هو نوع المدرسة التي تقوم بالتدريس فيها؟</td>
</tr>
<tr>
<td>5</td>
<td>ما هي الوظيفة التي تشغلون بها في مدرستكم؟</td>
</tr>
<tr>
<td>6</td>
<td>كم سنة أمضيت في التدريس؟</td>
</tr>
<tr>
<td>7</td>
<td>هل لديك درجة علمية في التربية؟</td>
</tr>
<tr>
<td>8</td>
<td>ما هي الكلية التي تخرجتم منها؟</td>
</tr>
<tr>
<td>9</td>
<td>ما هي المرحلة التي تتعلمون فيها؟</td>
</tr>
</tbody>
</table>

**الجواب**

- الهندسة
- التربية
- العلوم
- الثقافة

كلية أخرى: نرجو ذكرها:

- حضانة
- إعداد
- ثانوي
- ابتدائي
- مراحل أخرى: نرجو تحديدها:
#### معلومات عامة: ضع العلامة (×) في الخانة الصحيحة

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>10</th>
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<tbody>
<tr>
<td>تكنولوجيا المعلومات دين - فنون/موسيقى تعليمية - اللغة العربية - لغات انجليزية - الرياضيات</td>
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<tr>
<td>ما هي المواد التي تقومون بتدريسها؟</td>
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<table>
<thead>
<tr>
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<td>أقل من 30</td>
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<td>31-40</td>
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<tr>
<td>41-50</td>
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<tr>
<td>51-60</td>
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<tr>
<td>61-70</td>
<td></td>
</tr>
<tr>
<td>ما هو متوسط عدد الطلبة بفصلكم؟</td>
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<table>
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<td>هل لديكم مساعد في الفصل؟</td>
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<table>
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<td>نعم</td>
<td></td>
</tr>
<tr>
<td>لا</td>
<td></td>
</tr>
<tr>
<td>هل تلقح تدريبا في تدريس الطلاب ذوي الاحتياجات التعليمية الخاصة؟</td>
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<table>
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<tr>
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<tbody>
<tr>
<td>إذا كانت الإجابة &quot;نعم&quot; نرجع وضع علامة × على تدريب داخل المدرسة - تدريب خارج المدرسة</td>
<td></td>
</tr>
<tr>
<td>المكان الذي تلقح فيه التدريب</td>
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<table>
<thead>
<tr>
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<th>15</th>
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<tbody>
<tr>
<td>نرجع إلى أن تبينوا إبجاه نوع التدريب الذي تلقحتموه للعمل مع الأطفال ذوي الاحتياجات التعليمية الخاصة</td>
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<table>
<thead>
<tr>
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<td>صعوبات سلوكية</td>
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<tr>
<td>17</td>
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<tr>
<td>صعوبات اجتماعية</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>ما يتعلق بالأهداف</td>
<td></td>
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<tr>
<td>19</td>
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<tr>
<td>صعوبات سمعية</td>
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<tr>
<td>صعوبات ذهنية</td>
<td></td>
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<tr>
<td>21</td>
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<tr>
<td>صعوبات في التعلم (مثل القراءة واللهجة وما إلى ذلك)</td>
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<tr>
<td>22</td>
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<td>صعوبات بصرية</td>
<td></td>
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<tr>
<td>23</td>
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<tr>
<td>مجموعة من أي من الصعوبات البارزة عاليا</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>نرجو تقييم مدى الصعوبة للنوع الذي تتعاملتم معه من ذوي الاحتياجات التعليمية الخاصة (كم هو وارد أدناه)</td>
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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>في فصولكم</td>
<td>نرجع وضع علامة (×) في الخانة المناسبة</td>
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<table>
<thead>
<tr>
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<tr>
<td>أقل صعوبة</td>
<td></td>
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<td>28</td>
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</tr>
<tr>
<td>الأكثر صعوبة</td>
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<td>صعوبات سلوكية</td>
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<td>30</td>
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<td>صعوبات اجتماعية</td>
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</tr>
<tr>
<td>31</td>
<td></td>
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<tr>
<td>ما يتعلق بالأهداف</td>
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<td>32</td>
<td></td>
</tr>
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<td>صعوبات سمعية</td>
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<td>33</td>
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<tr>
<td>صعوبات ذهنية</td>
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<td>34</td>
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<td>صعوبات في التعلم (مثل القراءة واللهجة وما إلى ذلك)</td>
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<td>35</td>
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<td>صعوبات بصرية</td>
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<td>36</td>
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<td>مجموعة من أي من الصعوبات البارزة عاليا</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>نرجو تقييم مدى الصعوبة للنوع الذي تتعاملتم معه من ذوي الاحتياجات التعليمية الخاصة (كم هو وارد أدناه)</td>
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<table>
<thead>
<tr>
<th>ITEMS</th>
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<tbody>
<tr>
<td>في فصولكم</td>
<td>نرجع وضع علامة (×) في الخانة المناسبة</td>
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<table>
<thead>
<tr>
<th>ITEMS</th>
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<tbody>
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<tr>
<td>أقل صعوبة</td>
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<tr>
<td>41</td>
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</tr>
<tr>
<td>الأكثر صعوبة</td>
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<tr>
<td>42</td>
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</tr>
<tr>
<td>صعوبات سلوكية</td>
<td></td>
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<td>43</td>
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<td>صعوبات اجتماعية</td>
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<td></td>
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<tr>
<td>ما يتعلق بالأهداف</td>
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<td>45</td>
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<td>صعوبات سمعية</td>
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<tr>
<td>صعوبات ذهنية</td>
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<td>47</td>
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</tr>
<tr>
<td>صعوبات في التعلم (مثل القراءة واللهجة وما إلى ذلك)</td>
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<td>48</td>
<td></td>
</tr>
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<td>صعوبات بصرية</td>
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<td>49</td>
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</tr>
<tr>
<td>مجموعة من أي من الصعوبات البارزة عاليا</td>
<td></td>
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</tbody>
</table>
نرجو توضيح إذا كان بمقوركم استعمال الطلاب الثانيين بالوضع الحالي الذي عليه فصلكم الدراسي؟ نرجو وضع علامة × في الخانة المناسبة.

<table>
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<tr>
<th>عدم مع بعض التحديات / المصاعب</th>
<th>نعم</th>
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<tr>
<td>أطفال بكراسي متحرك</td>
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<tr>
<td>أطفال لديهم مشكلات سمعية</td>
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<tr>
<td>أطفال لديهم مشكلات في التخطيط</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>أطفال ذوي نشاط زائد عن الحد لا يستطيعون إتباع التعليمات</td>
<td>27</td>
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<tr>
<td>أطفال ضعاف البصر</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>أطفال ذوي إعاقة ذهنية في غير مستوى فصلهم الحالي</td>
<td>29</td>
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نرجو توضيح إلى أي مدى تواقرون على المقولات التالية. ضع علامة × بالخانة المناسبة.

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<tr>
<th>لا أوافق بشدة</th>
<th>أوافق بشدة</th>
<th>لا أوافق بشدة</th>
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<tr>
<td>ليس لدى مدرستكم البنية التحتية اللازمة (مثل القصبان الحديثة وأماكن الوقف) لاستيعاب الطلاب ذوى الاحتياجات الخاصة</td>
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<td>هناك نقص في عدد هيئة التدريس لمساعد الفصول</td>
<td>31</td>
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<tr>
<td>تدرس في لغة الطلاب من شأنه أن يزيد من حمل المعلم على والديه لا أتفق على عمه مثيل</td>
<td>32</td>
<td></td>
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<tr>
<td>عدم كفاية التدريب على الطبيعة للمساعدة على الوقاية والاحتياجات التعليمية للطلاب</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>إن تتضمن الصف الحالي الذي أدرس فيه لا يسمح لي بتقديم العناية اللازمة للطلاب ذوي الاحتياجات الخاصة</td>
<td>34</td>
<td></td>
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<tr>
<td>إن توفير بيئة تعليم مستقلة لبطار الطفل، سيجعل الأمر صعبا بالنسبة لي للفاولة باتصالات الطلاب الآخرين أن ليس لدي الموارد لتدريس هؤلاء الطلاب</td>
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<tr>
<td>إنني كمدير أستطيع أن أتمزق معلومات (حوار) التعليم التي بواكها طلابي</td>
<td>36</td>
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 찾아 وظيفة: 3
نرجو توضيح إلى أي مدى توافقك على المواقف التالية، ضع علامة × بالخانة المناسبة

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<tbody>
<tr>
<td>38</td>
<td>مواجهة الطلاب معوقات (حواجز) في بعض الأحيان خلال مسيرتهم الدراسية.</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>وضع بطاقات للطلاب الذين لهم احتياجات تعليمية خاصة يعلهم يشعرون بالدونية ويتعرف عليهم بباقي الصف.</td>
<td></td>
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<td>40</td>
<td>يتعين أن تساعد محاويات المناهج على تقليل المعوقات (الحواجز) في التعلم عن طريق الإقرار بالاحتياجات التعليمية الخاصة لكل طالب.</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>يتعين أن تحض المراجعات المناهج للطلاب تنبية كافة المستويات ولا يتعين اعتبارها مجرد حصول على المعلومات.</td>
<td></td>
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<tr>
<td>42</td>
<td>يجب أن تستهدف خطط الدروس دعم طالب من ذوي احتياجات التعليمية الخاصة ولا يتعين اعتبارها مجرد محاولة لاستيفاء المناهج.</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>أن تقنيات التدريس وليس فقط المناهج هي المسؤولة عن الأداء المتدني للطلاب.</td>
<td></td>
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<tr>
<td>44</td>
<td>أن المناهج الحالية التي لدى تعديل تغييره ليصبح دائماً احتياجات التعلم الزراعي لكل طالب.</td>
<td></td>
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<tr>
<td>45</td>
<td>يتعين أن يتساهم المدرسين بالمهارة الكافية لمهام المناهج مع احتياجات طلابهم.</td>
<td></td>
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<tr>
<td>46</td>
<td>أن استعداد الطلاب ذوى الاحتياجات التعليمية الخاصة من شأنه أن يقلل من مستوى بقية الطلاب الصف لدى الأفضل أهداء الطلاب لمدارس خاصة بهم.</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>أن تدريس طالب ذوية الاحتياجات التعليمية الخاصة يجعل الأمر في غاية الصعوبة للتدريس الذي يقوم بالتدريس العادي للصف.</td>
<td></td>
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<tr>
<td>48</td>
<td>من المهم تدريب المدرسين على العمل مع الطلاب ذوء الاحتياجات التعليمية الخاصة.</td>
<td></td>
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<tr>
<td>49</td>
<td>أن التدريس المستمر على العمل مع الطلاب ذوء الاحتياجات التعليمية الخاصة من شأنه أن يغلي للعلم مع أولئك الطلاب.</td>
<td></td>
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<tr>
<td>50</td>
<td>يتعين أن يكون التدريب متخصصاً وأن يقدم حلاً للتواصل مع الطلاب من ذوء الاحتياجات التعليمية الخاصة</td>
<td></td>
</tr>
</tbody>
</table>
نرجو توضيح إلى أي مدى توافقون على المقولات التالية، ضع علامة × بالخانة المناسبة

<table>
<thead>
<tr>
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<th>توافق</th>
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<tbody>
<tr>
<td>التعاون في استراتيجيات التخطيط مع الزملاء من شأنه أن يحسن من جودة التدريس</td>
<td>52</td>
<td></td>
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</tr>
<tr>
<td>في الوقت الحالي لنا رضا عن الدعم الذي يتلقاه من المشرفين، والأخصائيين النفسيين، والمديرين</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>تعني أن يكون لدى المدارس موظفون مسؤولين لمساعدة المتدربين في العمل مع الطلاب ذو الحاجات التعليمية الخاصة</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>تعد التنمية المهارات والمعرفة الأعضاء الآخرين بيئة العاملين أمرًا مهمًا</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>إن كمندرس أشعر بالتشجيع للمشاركة في هذه المهارات والمعرفة مع أعضاء هيئة العاملين الآخرين</td>
<td>56</td>
<td></td>
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<tr>
<td>من المهم أن كمندرس أن يكون على دراية تامة بالموارد المتاحة لدعم عملية التعلم للطلاب</td>
<td>57</td>
<td></td>
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<tr>
<td>إن الموارد المتاحة يمرستي تهدف إلى دعم الطلاب بخلف مستوى حياتهم وفرصهم</td>
<td>58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>إن موارد المدرسة يمرستي يتم تحديدها بصفة منتظمة لمواجهة الاحتياجات المتغيرة لطلابي</td>
<td>59</td>
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<tr>
<td>إن مدرستي تواجه صعوبة في إيجاد تمويل إضافي لاستيعاب هذه المتغيرات</td>
<td>60</td>
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