



Final Report

Situational Analysis on the Policies, Practices and Barriers to Inclusive Education in Primary Education Sector in Cameroon.

Presented

by

Professor Emeritus T.M.S. Tchombe, UNESCO Chair SEN/IE

University of Buea

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Research Team

Professor Therese Mungah Shalo Tchombe: Principal investigator

Name	Assigned Duties	Region	Town
Dr. Patrick Fonyuy Shey	Researcher	Center and Littoral	Yaounde, Mbalmayo and Douala
Dr. Lo-oh Joseph Lah	Researcher	Far North	Maroua
Dr. Nsagha Sarah	Researcher	South West	Buea and Kumba
Dr. Vandelin Mbgwa	Research Assistant	Center	Yaounde and Mbalmayo
Mr. Marceline Leuna	Research Assistant	Center	Yaounde and Mbalmayo
Mr. Bongwong Bruno	Research Assistant	Littoral	Douala
Mr. Lambert Leinyuy	Research Assistant	Littoral	Douala
Mr. Shouibou Abdoulai	Research Assistant	South West	Buea and Kumba
Mr. Ndzetar Emmanuel	Research Assistant	South West	Buea and Kumba
Mr. Tani Emmanuel	Research Assistant	North West	Kumbo
Mr. Melem Linda	Research Assistant	North West	Bafut
Mr. Ajongako Raymond	Research Assistant	Far North	Maroua
Mr. Nana Célestin	Statistician		

Contents

Research Team	i
Contents	ii
List of tables	vi
List of figures	viii
Acronyms.....	ix
Acknowledgements.....	x
Executive Summary.....	1
Background.....	4
The problem	5
Rationale	6
Objectives of the Study	6
Significance of the Study	7
Scope/Delimitation	7
The Concept of Inclusive Education	8
International Perspectives on Inclusive Education	10
Disability as a Social Construct	12
Conceptualizing “Special Schools” and “Mainstream Schools”	13
Disablement in the form of International Classification of Functioning, Disability and Health ...	14
The making of a policy and its implementation.....	15
Cameroon inclusive education policy	16
Implementation of inclusive education policy in Cameroon	18

Policy gaps and orientation for best practices in Cameroon.....	20
Some basic statistics	20
Method	21
Research design	21
Study area	21
Population.....	22
Sample and sampling procedure	22
Discussions with researchers and training of research Assistants.....	23
Instrumentation and data collection	23
Validation of Measuring Instruments.....	24
Administration of Instruments	24
Method of Data Analyses	25
Data processing and analysis	25
Ethical.....	26
Findings	28
Objective1. Existing policies, systems, procedures and processes on inclusive education in Cameroon.....	31
Awareness of existing policies on inclusive education	31
Knowledge of existing policies on inclusive education	33
Objective 2: Implementation of existing policies, systems, procedures and processes at the managerial level.....	35
Objective 3: Implementation of the existing policies, systems, procedures and processes at the level of selected special needs institutions and regular schools in selected regions	36
The effectiveness of policy implementation as perceived by Educators at the decentralized Service	36

Evaluation of school infrastructure as a way of effective implementation of inclusive policy	37
Evaluation of availability of special materials equipment as a way of effective implementation of inclusive policy.....	39
Evaluation of existing human resources as a way of effective implementation of inclusive policy.....	40
Evaluation of the design of education programmes as a way of effective implementation of inclusive policy.....	42
Extent to which pupils with special needs benefit from policies on inclusive education	43
Perceived benefits in the implementation of inclusive education policies.....	44
Objective 4: Gaps and barriers to the systematic mainstreaming of inclusive education in regular schools.....	49
Objective 5: identify strategies to improve on existing policies and practices for the management and implementation of inclusive practices in basic education.....	53
Critical indicators of inclusive education in Cameroon	55
Objective 6: Identify best practices for inclusive education practice in Cameroon schools.....	59
Modeling inclusive education in Cameroon	64
Discussion.....	67
References.....	75
Appendices	78
Appendix 1: Content analysis conceptual report.....	78
Appendix 2: Description of the sample.....	89
Appendix 3: Distribution of characteristics of impairment types in classroom by school types..	93
Appendix 4: Classroom diversity and impending barriers to learning.....	94
Appendix 5: Evaluation of system, process and effectiveness of inclusive education: opinion survey.....	95
Appendix 6: Perception/attitudes of stake holders towards inclusive education.....	97



List of tables

Table 1: Sample flow table	24
Table 2: Awareness of existing policies on inclusive education by setting and respondent types ..	32
Table 3: Knowledge of existing policy on inclusive education: comparison by setting type and categories of educators	34
Table 4: Educational administrators' perceived implementation of inclusive policies	35
Table 5: Level of implementation of educational programme.....	36
Table 6: Assessment strategies.....	36
Table 7 Distribution of respondents' perception of school infrastructure by school types	38
Table 8: Distribution of respondents' perceptions on school infrastructure based on the settings	38
Table 9: Distribution of respondents' evaluation of the availability of special needs materials/equipment based on school types	39
Table 10: Distribution of respondents' evaluation of the availability of special needs materials /equipment based on the settings.....	40
Table 11: Distribution of respondents' assessment of the availability of existing human resources based on the different types of schools.....	41
Table 12: Distribution of respondents' assessment of existing special needs specialist based on the settings	41
Table 13: Distribution of respondents' perception on the sensible nature of the school curricular (disability sensitive or not) by School type.....	42
Table 14 Distribution of respondents' perception on the sensible nature of the school curricular (disability sensitive or not) by School Location (Urban and Rural)	43
Table 15: Summary tables for critical indicators of inclusive education in Cameroon: system, processes and efficiency as derived from observations.....	46
Table 16: Perceived school-related barriers to inclusive education: distribution by school type....	49
Table 17: Community-based barriers to inclusive education.....	50

Table 18: Perceived barriers by educational administrators in relation to the implementation of inclusive education policies and response measures	51
Table 19: Perceived solution to barriers to inclusive education: school perspectives	53
Table 20: Perceived Strategies as solutions to address barriers to inclusive education from the perspective of educational administrators.....	54
Table 21: Perceived solutions to barriers to inclusive education: community perspectives	55
Table 22: Emerging best practice in school rules and regulations by school types in Cameroon....	59
Table 23: Emerging best practice in the use of inclusive pedagogies by school types in Cameroon	60
Table 24: Emerging best practice in assessment strategies by school type in Cameroon.....	61
Table 25: Regression Model comparing predictive power among components of inclusive education in Cameroon and the Integrated Value Mapping (IVM)	64

List of figures

Figure 1: Characteristics of pupils as determinants of inclusive education in Cameroon Basic Education classrooms.....	28
Figure 2: Schematic presentation of inclusive education in Cameroon	30
Figure 3: Existing policies on inclusive education as identified by the respondents.....	31
Figure 4: Awareness of existing policies on inclusive education: comparison by school type.....	33
Figure 5: Showing knowledge of existing policies according to school type.....	34
Figure 6: Showing the effectiveness with which policies are implemented as perceived by the educators at decentralized level.....	37
Figure 7: Showing the extent to which pupils with special needs benefit from policies on inclusive education.....	43
Figure 8: Perceived benefits received by pupils with special needs following the implementation of policies on inclusive education	44
Figure 9: Perceived benefits received by pupils with special needs from policies addressing pupils with special needs.....	45
Figure 10: Critical indicators of inclusive education in Cameroon: system, processes and efficiency as perceived by the respondents	56
Figure 11: Critical indicators of inclusive education in Cameroon: system, processes and efficiency as derived from observations	57
Figure 12: Emerging best practices of inclusive education	62
Figure 13: Logistic Regression Model comparing predictive power among components of inclusive education in Cameroon	65
Figure 14: Diagram explaining critical factors of inclusive education in Cameroon.....	66
Figure 15: Social model of inclusive education in Cameroon.....	70

Acronyms

CE:	Centre
CRC:	Convention on the Rights of the Child
ESEDA:	Ecole Spécialisée pour Enfants Déficiant Auditif
FN:	Far North
ICF:	International classifications of functioning
ICIDH:	International Classification of Disability, Impairment and Handicap
LIT:	Littoral
PWD:	Persons with Disabilities
SPSS:	Statistical Package for Social Sciences
SW:	South West
UN:	United Nations
UNESCO:	United Nations Educational, Scientific and Cultural Organisation
WHO:	World Health Organisation

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Executive Summary

Since the 20th century growing bodies of literature on policy statements and research including international debates have been concerned with the issue of inclusion in contradistinction to segregation. This has provoked reactions on whether Special Education should be continued as a model of education. Emerging views resonated the significance of inclusion, which values all, respects their differences, and enables the full participation of all learners in educational activities and address a sense of belonging for all. This report echoed the various international mechanisms reinforcing that education is the right of all children. The psychosocial concerns in the rights hypothesis is to fight against all emerging reductionist factors such as prejudice, discrimination and marginalization that persons in disadvantaged conditions suffer. This study focused on rights and needs rather than categories of disabilities adopted the social model of inclusion that is based on democratic values. Accordingly, inclusive education has emerged as a global movement that seeks to challenge exclusionary practices, embodying beliefs and principles that every learner has a fundamental right to learn with psychosocial support to meet different needs. Special education is instruction that is specifically designed to meet the unique needs of children with disabilities so they may learn the information and skills that other children are learning.

Policy and its implementation strategies are crucial to achieve such goal. The Cameroon government has undertaken measures through several policy statements since 1983 to 2010 to ensure the educational rights of all children and in particular those with disabilities. However, these pieces of legislation have major flaws that impede the implementation of inclusive education practices. Some of the flaws could be attributed to the policy models (e.g., top-bottom rather than bottom-top) that impact implementation process because of the absence of a systematic situational analysis. The most recent law of 13th April 2010, stipulates the provision of special education, psychosocial support, socio-economic integration, medical prevention and access to employment, infrastructure, housing and transport for persons with disabilities, among other issues but missed out the concept of inclusive education and its practices. The absence of a text of application usually impedes on effective implementation. This is one of the problems with the current policies on Special Education posing challenges to inclusive education practices in regular schools.

Thus the general objective of the study is to conduct a situational analysis on the policies, practices and barriers to inclusive education in primary education sector in Cameroon. Six specific objectives directed the study.

The survey research design was used in this study with a triangulation of qualitative and quantitative procedures to determine the situation of special education needs and inclusive education in Cameroon. The study adopted a descriptive survey because it of it focus on a general assessment of the implementation of policy on inclusive education practices in Cameroon. Method triangulation used questionnaire, observation and interview for data collection. The questionnaire was used to sample the opinions of a cross section of teachers, observation was used to identify the nature, and quality of infrastructure and material resources in order to assess existing infrastructure and pedagogical support materials.

Five out of the ten regions of Cameroon constituted the study area. These were North West, South West, Littoral, Centre, and Far North regions of Cameroon. The towns where data was collected were Maroua, Yaounde, Mbalmayo, Bafut, Bansa, Kumba and Buea, and Douala. The total sample of the study was made up of 204 Administrators and other stakeholders in central and decentralized services including teachers of both public and private institution in rural and urban areas. The institutional sample was 24, characterised by/regular/special schools dichotomy.

Data was analysed using quantitative and qualitative statistics and the findings clearly showed that there were more visually impaired, hard of hearing, writing and reading difficulties in most school contexts. In terms of policy awareness the findings demonstrated a gross absence of awareness. The implementation of the policies was generally more effective in the special schools though this difference was not statistically significant. From the analyses of policy gaps and barriers, the findings showed that the implementation of inclusive education policies was largely flawed by many gaps in the policies. Interestingly, educational administrators presented majority of the gaps and barriers to implementation, whereby they saw barriers than opportunities in inclusive education policies in Cameroon.

The outcomes of the study led a model based on comparing the predictive power among components of inclusive education in Cameroon. These were: Perception/attitude of stakeholders towards inclusive education, teachers' level of training in special needs

education, school programmes and parental involvement, indigenous beliefs about children with disabilities, cultural practices that impact inclusive practices, school rules and regulations and assessment strategies. Furthermore, it identified five emerging critical factors for inclusive education policy in Cameroon. The analysis permitted not only the identification of strengths and weaknesses but provided orientations for the amelioration of existing practices, proposed suggestions for reforms and perspectives for sustainability. From the study it was possible to also propose a social model for inclusive education in Cameroon. Some recommendations are policy reform, teacher training, capacity building for administrators at both central and decentralized levels and in- service training for practicing teachers, strong psychosocial services, including orientation for implementation and put in place a monitoring and evaluation mechanisms.

Background

The World Health Organisation (WHO) estimates that at least 15% of the world's population lives with a disability (WHO, 2011). WHO also estimates that 90% of persons with disabilities live in developing countries. Education as a right for all children has been enshrined in international conventions since the 1948 Universal Declaration of Human Rights. The World Programme of Action concerning Persons with Disabilities introduced the concept of equal opportunities and equal access to society, when it was adopted in 1982. The global decade (1983-1992) for disabled persons, however, did not bring about any improvement to the quality of life for people with disability in Africa. Yet, the United Nations Standard Rules on the Equalization of Opportunities for persons with Disabilities, adopted in 1993, strongly reaffirmed the principles of inclusive policies, plans and activities by stating that, the needs and concerns of persons with disabilities should be incorporated into general development plans and not be treated separately (UN, 1993). Consequently, the world conference on special needs education in Salamanca in 1994 reiterated the Jomtien Declaration in 1990 on Education for all. The Salamanca Conference's conclusion highlights that "Special Needs Education" is an issue of equal concern to countries of the north and the south "cannot advance in isolation". The second goal of the Millennium Development Goals aims at achieving universal primary education by 2015; children everywhere, boys and girls alike, will be able to complete a full course of primary school. In this light, efforts have been and continue to be made towards having a complete and wholesome education that includes all classes and categories of children.

Clearly, countries in the South African region are more advanced in their efforts to provide appropriate support for persons with disabilities. They took great advantage of the "African Decade of Disabled Persons" declared in 2000-2009. The psychosocial concerns in all of this, is the emergence of reductionist factors such as prejudice, discrimination and marginalization that this group of persons suffer, which is deep-rooted in the unconscious of many in society, particularly as disability is perceived as a curse in traditional settings.

The limited opportunities for access that exist in Cameroon is in contradiction with the assertions of the World Education Forum in Dakar (2000, par.6), namely, that "education is a fundamental human right. It is the key for sustainable development, peace and stability within and among countries, and thus an indispensable means for effective participation in societies and economies of the twenty-first century, which are affected by rapid globalization." See appendix 1 illustrating the long road to inclusion.

The problem

Available statistics in developing countries in general and Cameroon in particular reveal large gaps in peoples knowledge on special needs and inclusive education. Absence of such knowledge has negatively impact existing laws on inclusive education in Cameroon because attention is paid more on integration of persons with disabilities than inclusive education practices. Typical among these laws are the 1983 Law on persons living with disability, the 1990 text of application of the 1983 Law and the most recent and widely cited 2010 Law on persons living with disability. Nothing is mentioned in policy documents regarding diversity in the classroom and the welfare of children in disadvantage situation with also special educational needs. The focus is more on specificity rather than on inclusivity with no legislation addressing also psychosocial needs and supports. As such, educators perceptions of inclusive education is only limited to disability issues making it difficult to account for the progress of equity in education for all citizens. With such limited data, the less represented groups are not named or planned for. More so, there is even no useful instrument to monitor and evaluate their progress. Even if these exist, the absence of clear understanding of inclusive education and its practices pose a major problem for practitioners of education institutions. Until, policy defines what inclusion means in practical terms and legislates on the characteristics of an inclusive classroom, then can there be a way forward for inclusive education practices in Cameroonian classrooms. The absence of a statistical data bank on categories of pupils and students with special education needs is an obstacle on knowledge about the diversity of needs be it disability of other needs that are barriers to access and learning. Without the above information, there will be difficulties with planning quality inclusive practices, in relation to lecturers/teachers, special education teachers to assist classroom teachers, social workers, psychologists and appropriate instructional material, assistive technologies and administrative support. Limitations in legislations derived from a policy that does clarify what inclusive practices entail or who are being managed restricts the degree of access to necessary services and support networks. Except for the special schools, one will hardly find resources such as Braille materials; use of sign language interpreters and readers in mainstream classrooms. Very little special consideration is made for students in course offerings and during examinations in regular schools. Dysfunctional obstacles abound as can be seen in bad practices and poor perceptions of the actors involved.

Rationale

To understand the implementation process of policy, there is need to analyse and assess the extent to which practionners in the education enterprise at central/decentralized services and the community are aware of the policy on inclusive education and its implications for practice. There is the need therefore to know how institutions are organized and how available resources are managed including differential pedagogical practices. As inclusive education is now perceived as an enhancing strategy towards achieving education for all, this study should offer new dimensions for reforms in re-thinking policy towards effective inclusive practices.

Objectives of the Study

General objective

The general objective of the study is to conduct a situational analysis on the policies, practices and barriers to inclusive education in primary education sector in Cameroon.

Specific Objectives

- To analyze the existing policies, systems, procedures and processes on inclusive education in Cameroon.
- To assess the level of implementation of the existing policies, systems, procedures and processes at the managerial level (central ministries and decentralized structures ó delegations at regional, divisional and sub-divisional levels).
- To assess the level of implementation of the existing policies, systems, procedures and processes at the level of selected special need institutions and selected primary schools in selected regions.
- To identify the gaps and barriers to the systematic mainstreaming of inclusive education in government primary schools.
- To identify strategies to improve on existing policies and practices for the management and implementation of inclusive practices in basic education
- To identify best practices.

General Research question

The general research question is, to what extent are policies and practices of inclusive education being implemented at the primary education sector in Cameroon and what are the barriers to achieving the set goals?

Specific Research questions

- To what extent do the existing policies, systems, procedures and processes address inclusive education in Cameroon?
- How is the implementation of the existing policies, systems, procedures and processes achieved at the managerial level (central ministries and decentralized structures ó delegations at regional, divisional and sub-divisional levels)?
- To what extent is the level of implementation of the existing policies, systems, procedures and processes achieved at the level of selected special needs institutions and selected primary schools in selected regions?
- What are the gaps and barriers to the systematic mainstreaming of inclusive education in government primary schools?
- Are there strategies to improve on existing policies and practices for the management and implementation of inclusive practices in basic education?
- Are there best practices?

Significance of the Study

The significance of this study is the creation of awareness on both central and decentralized services in Basic Education of knowledge of the policies and legislations on inclusive education in Cameroon for effective implementation in all aspects of education practices. Discussion on policy gaps should provoke reaction for the review of existing policies to make them more functional and inform strategies for inclusive education to be implemented by Sightsavers and partners.

Scope/Delimitation

This study is limited to Basic Education in Cameroon at the level of the centralized service of the ministry, decentralized services at the regional, divisional and sub- divisional levels

and the schools where inclusive processes are expected to be experienced. The institutions both special and regular, in rural and urban areas were focal on this account for firsthand experiences of how policy implementation is understood and addressed. The major concern was on policy, practices, curricula, human resource, infrastructure and barriers because these would affect quality process. The study was limited to five regions. The content area was inclusive practices. The main actors were the inspectors and teachers.

The Concept of Inclusive Education

A succinct definition of inclusive education is provided by Lipsky & Gartner (1996, 1999), who described it as students with disabilities having full membership in age-appropriate classes in their neighbourhood schools, with appropriate supplementary aids and support services. To Antia et al. (2002), inclusion denotes a student with a disability unconditionally belonging to and having full membership of a regular classroom in a regular school and its community. They contrasted this with 'integration' or 'mainstreaming' both of which imply that the student with a disability has the status of a visitor, with only conditional access to a regular classroom, but primary membership of a special class or resource room.

In their review of 28 European countries, Meijer et al. (2003) described three different approaches to including pupils with special educational needs: one-track (including almost all pupils in the mainstream), multi-track (a variety of services between mainstream and special needs education), and two-track (two distinct educational systems). In this study, the main focus is upon the first of these – the one-track approach.

In recent years and in the context of this study, the concept of inclusive education has been broadened to encompass not only pupils with disabilities, but also all learners who may be disadvantaged or marginalized in relation to gender, poverty, language, ethnicity, and geographic isolation. Earlier, Skrtic et al. (1996) had argued that inclusive education goes far beyond physical placement of students with disabilities in general classrooms, but should involve schools meeting the needs of all their students within common, but fluid, environments and activities. This broadened conceptualisation of inclusive education was recently articulated in the meeting at the forty-eighth session of the UNESCO International Conference on Education, held in Geneva in November 2008, where it was acknowledged that 'inclusive education is an ongoing process aimed at offering quality education for all

while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination (UNESCO, 2009, p.126).

Advocacy for inclusive education revolves around three main arguments. Firstly, several writers claim that inclusive education is a basic human right. For example, Christensen (1996) argued that exclusion or segregation of students with special needs is a violation of their human rights and represents an unfair distribution of educational resources. Similarly, Lipsky & Gartner (1996, 1999) asserted that inclusive education is a fundamental right, derived from the principle of equity, which, if recognised, would contribute significantly to a democratic society. This is also emphasised in UNESCO's *Salamanca Statement* (1994) and by Slee (2001), the latter considering that inclusive education is about the cultural politics of protecting the rights of citizenship for all students. Writing from a British perspective, and as a person with a disability, Oliver (1996) argued that the education system has failed students with disabilities by not equipping them to exercise their rights and responsibilities as citizens, while the special education system has functioned to exclude them from both the education process and wider social life. He thus saw inclusion as a political as well as an educational process.

Secondly, as Lipsky & Gartner (1996, 1999) pointed out, in designing educational programmes for students with disabilities, the focus must shift from the individual's impairments to the social context, a key feature of which should be a unitary education system dedicated to providing quality education for all students (Meijer et al. (2003). A similar point is advanced by Skidmore (2002), who found that teachers have two contrasting pedagogical discourses – the discourse of deviance and the discourse of inclusion. These differ along a number of dimensions, such as teachers' views on the educability of students, their explanations of student failure, and their curriculum models. He argued that the discourse of inclusion provides an alternative vision of the relationship between education and society that runs counter to the processes of segregation and differentiation that have dominated the development of mass schooling. The latter point was also expressed by Slee (2001), who claimed that the more schools have been called upon to include the masses, the more they have developed the technologies of stratification and exclusion. Slee saw a danger, too, in inclusive education deteriorating into assimilation or absorption.

A third argument asserts that since there is no clear demarcation between the characteristics of students with and without disabilities, and there is no support for the contention that specific categories of students learn differently, separate provisions for such students cannot be justified (Lipsky & Gartner, 1996, 1999).

International Perspectives on Inclusive Education

In a recent book outlining international perspectives on inclusive education, Mitchell (2005) and his authors explored the notion that the characterisation, purpose and form of inclusive education reflect the relationships among the social, political, economic, cultural and historical contexts that are present at any one time in a particular country and/or local authority. Among the 16 propositions to emerge from this overview, six are particularly pertinent to this study:

- Inclusive education extends beyond special needs arising from disabilities and includes consideration of other sources of disadvantage and marginalisation, such as gender, poverty, language, ethnicity, and geographic isolation. The complex inter-relationships that exist among these factors and their interactions with disability must also be a focus of attention.
- While many countries seem committed to inclusive education in their rhetoric, and even in their legislation and policies, practices often fall short. Reasons for the policy-practice gap in inclusive education are manifold and include barriers arising from societal values and beliefs; economic factors; a lack of measures to ensure compliance with policies; the dispersion of responsibility for education; conservative traditions among teachers, teacher educators and educational researchers; parental resistance; lack of skills among teachers; rigid curricula and examination systems; fragile democratic institutions; inadequate educational infrastructures, particularly in rural and remote areas; large class sizes; resistance from the special education sector (especially special schools); and a top-down introduction of inclusive education without adequate preparation of schools and communities.
- Inclusive education exists in historical contexts in which vestiges of older beliefs co-exist with newer beliefs.
- Inclusive education is embedded in a series of contexts, extending from the broad society, through the local community, the family, the school and to the classroom.

- Because cultural values and beliefs, levels of economic wealth, and histories mediate the concept of inclusive education, it takes on different meanings in different countries, and even within countries. The form taken by inclusive education in any particular country is influenced by the nature of the settlements reached at any one time between (a) traditional values such as social cohesion and group identity, collectivism, images of wholeness, fatalism, hierarchical ordering of society, and (b) modernisation values such as universal welfare, equity and equality, democracy, human rights, social justice, individualism, and parent choice.
- Economic considerations play a significant role in determining approaches to inclusive education. These include (a) a recognition that it would not be financially realistic to provide special schools throughout a country, (b) the adoption of a human capital policy of developing all individuals primarily as a means of enhancing the economy, and (c) an attitude that persons with disabilities are economic liabilities and are therefore of low priority.

The United Nations and its agency, UNESCO, have played a significant role in promoting inclusive education. The most significant event took place in June 1994 when representatives of 92 governments including Cameroon and 25 international organisations met in Salamanca, Spain (UNESCO, 1994). The resulting agreement, known as the *Salamanca Statement*, demonstrated an international commitment to inclusive education.

The *Statement* called upon all governments to adopt as a matter of law or policy the principle of inclusive education, enrolling all children in regular schools, unless there are compelling reasons for doing otherwise.

More recently, in December 2006, the 61st session of the United Nations General Assembly confirmed a *Convention on the Rights of Disabled Persons*, which included a significant commitment to inclusive education.

It should be noted, however, that neither the *Salamanca Statement* nor the *Convention* explicitly states that all children with special educational needs should be educated in fully inclusive settings at all levels of the education system. Nor do they explicitly exclude such an interpretation. In other words, there is a degree of ambiguity regarding the intentions of both documents with regard to the meaning of inclusion.

Disability as a Social Construct

The term disability is used in this study as any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being. This definition reflects the idea that to a large extent, disability is a social construct. Most people believe they know what is and is not a disability. If you imagine "the disabled" at one end of a spectrum and people who are extremely physically and mentally capable at the other, the distinction appears to be clear. However, there is a tremendous amount of middle ground in this construct, and it's in the middle that the scheme falls apart. What distinguishes a socially "invisible" impairment - such as the need for corrective eyeglasses - from a less acceptable one - such as the need for a corrective hearing aid, or the need for a walker? Functionally, there may be little difference. Socially, some impairments create great disadvantage or social stigma for the individual, while others do not. Some are considered disabilities and some are not.

In their attempt to make sense of the activities, policies and institutions which, through the organization of learning, help to transform the capacities of people to live a fuller and more distinctively human life (Pring, 2004, p.17), researchers in inclusive practices have examined different assumptions, beliefs and attitudes about disability and difference, about equity, and about effective inclusion of students with special needs and/or learning difficulties. They have identified and explored the major approaches to education for children with special needs, which have developed from these beliefs and assumptions.

This study laid more emphasis on the social model which proposes that people can be disabled by a lack of resources to meet their needs. It addresses issues such as the under-estimation of the potential of people to contribute to society and add economic value to society, if given equal rights and equally suitable facilities and opportunities as others. A fundamental aspect of the social model concerns equality. The struggle for equality is often compared to the struggles of other socially marginalized groups. Equal rights are said to give empowerment and the 'ability' to make decisions and the opportunity to live life to the fullest. The social model of disability often focuses on changes required in society. The social adapted model therefore points to the fact that although a person's disability poses some limitations in an able-bodied society, oftentimes the surrounding society and environment are more limiting than the disability itself.

The following examples further illustrate the difficulty of defining disability without consideration of social factors:

- A person who has a cochlear implant;
- A person who has a digestive disorder that requires following a very restrictive diet and following a strict regime of taking medications, and could result in serious illness if such regime is not adhered to;
- A person with serious carpal tunnel syndrome;
- A person who is very short.

It is likely that different people could have different responses to the question of whether any of the above-listed characteristics would result in "disability", and some might say, "It depends". This illustrates the differences in the terms "disability" and "handicap", as used by the UN. Any of the above traits could become a "handicap" if the individual were considered disabled and also received disparate treatment as a result.

Another example of the social construction of disability is when society discriminates against an individual who may have impairment (in the sense of the UN. definition) without a corresponding functional limitation. "The power of culture alone to construct a disability is revealed when we consider bodily differences - deviations from a society's conception of a "normal" or acceptable body - that, although they cause little or no functional or physical difficulty for the person who has them, constitute major social disabilities. An important example is facial scarring, which is a disability of appearance only, a disability constructed totally by stigma and cultural meanings. Stigma, stereotypes, and cultural meanings are also the primary components of other disabilities, such as mild epilepsy and not having a 'normal' or acceptable body size.

Conceptualizing “Special Schools” and “Mainstream Schools”

A special school is designed specifically for children with special educational needs, for examples schools run by the Ministry of Social Affairs. They have smaller classes usually and specialist interventions. They take several forms; it may be a school that takes children of a broad range of special needs or they may be very specialized. Some examples are children with autistic spectrum disorders and even within that those who are high functioning or those with very severe autistic difficulties. Meanwhile a mainstream school

is a school that caters for all children, including those with special educational needs for example schools run by Ministry of Basic Education in Cameroon.

Again, where special education services are available, they are offered at special day schools, residential special schools, special classes in regular schools, integrated schools, habilitation and rehabilitation centres or other inclusive settings (Mpofu et al., 2000; Tchombe, 2008; Tchombe & Kasia, 2006; Teferra, 2005). The schools and the classrooms are typically overcrowded, ill equipped and understaffed (Mutepfa, 2005, Teferra, 2005). Teachers are not often aware or even trained in special education needs as teacher education programmes seems not to address special education needs or inclusive practices.

As observed, Cameroon is still lagging behind in having appropriate statistics and in the identification of disability in terms of testing. Testing is crucial and complex because of its potentials for referral, intervention and rehabilitation when necessary, since pupils/students in need of special education due to a particular disability may still have different levels of ability in different areas (Tchombe, 2009). There is need for well trained teachers, laboratories and resource rooms with trained technicians for clinical and specific training. Primary research is needed to highlight existing links and create a data bank of aggregated statistics on categories of disabilities. There are limited prevention and rehabilitation services.

Disablement in the form of International Classification of Functioning, Disability and Health

The advent of the new International Classification of Functioning, Disability and Health (ICF) (2001), replacing the WHO (1980) Classification of Impairment, Disability and Handicap (ICIDH), has provided a framework that has great potential for the collection of more meaningful disability data. The framework offers the opportunity to look at all aspects of functioning and disability, regardless of the nature of the impairment, or health problem information. The additional information it can provide, is about the person's capacity to participate and how this is affected by the environmental/contextual factors.

In the 1980s, it became increasingly clear that a different paradigm was needed to accomplish the goals set forth for special education. The special education practices of the past were founded on an old paradigm where skills were seen as a prerequisite to inclusion or integration. An alternate paradigm reverses this order, and requires educators to temporarily abandon their emphasis on skills and place the child in the regular classroom

with appropriate support. The rationale is that a student's desire to belong, to be "one of the kids," provides the motivation to learn new skills, a motivation noticeably absent in segregated classrooms.

This paradigm, with its recognition of the importance of belonging, is not a new concept introduced with the inclusive education movement. Abraham Maslow (1970), in his discussion of a hierarchy of human needs, pointed out that *belongingness* was an essential and prerequisite human need that had to be met before one could ever achieve a sense of self-worth. Belongingness, which is having a social context, is a requisite for the development of self-esteem and self-confidence. That is why Maslow situated self-esteem above belongingness in his hierarchy. Without a social context in which to validate a person's perceived worth, self-worth is not internalized.

Being placed in segregated classrooms or programmes means being denied the opportunity to learn socially appropriate behaviours and develop friendships with peers. Inclusive education represents a very concrete and manageable step that can be taken in our school systems to ensure that *all* learners begin to learn that belonging is a right, not a privileged status that is earned. If we are to create schools in which learners feel welcomed as part of a community, then we must begin by creating schools that welcome the diversity of all children. The fundamental principle of inclusive education is the valuing of diversity within the human community. Every person has a contribution to offer to the world. The ways in which people with disabilities can contribute to the world may be less apparent. When inclusive education is fully embraced, we abandon the idea that children have to become "normal" in order to contribute to the world.

The making of a policy and its implementation

Policy implementation is a complex process that cannot be fully understood without an analysis of the complexities, tensions, conflicts, perceptions and dilemmas related to those engaged in the implementation (Stofile, 2008). A review of the different implementation perspectives, together with a review of policy implementation studies, forms the critical basis for understanding these complexities. The policy making process can be conceptualised in terms of two broad perspectives, namely, rationalist and political frameworks (Fataar, 1999).

The rationalist framework is firmly grounded in functionalism and the sociology of regulation; and assumes that policy making is a rational process involving decision making which can operate linearly through different stages (Fataar, 1999; Kruss, 1997).

The political perspective of policy development in contrast acknowledges the contested nature of policy and the need to understand the political nature of the policy process (Stofile, 2008). It is critical of the notion that implementation is a matter of automatically following a fixed policy text and putting legislation into practice (Bowe & Ball, 1992: 12). These two frameworks form the basis of what has developed into two approaches to implementation analysis, namely, top-down and bottom-up. The top-down model assumes that policy implementation is a linear process that is characterised by a hierarchically ordered set of events, which can be centrally controlled (Cerych & Sabatier, 1986; Pressman & Widavsky, 1973; Sabatier, 1986). In contrast to the top-down approach, is the bottom-up approach. One of the key proponents of this approach is Elmore (1980). He argues for a backward mapping approach as an alternative to forward mapping. Elmore challenges the assumptions of the top-down approach on the grounds that they are an inappropriate way of describing real life policy implementation.

Cameroon inclusive education policy

The Cameroon government has undertaken measures to ensure the educational rights of children and particularly those with disabilities before 1983 when the first law officially permitted children with disabilities to attend regular schools. Yuh and Shey (2007), assert that with the introduction of Christian education by the western missionaries who were the first to introduce western education in Cameroon, consideration was given to the well being of persons with disabilities. A small number of such children were accepted in mission schools and were taught alongside other children.

During the post-colonial period, formal education for children and adults with disabilities were mostly provided for in specialized centres with a few attending regular primary schools. The first centers came into existence in 1972. There was *École Spécialisée pour Enfants Déficients Auditif (ESEDA)* which was a special school for children with hearing impairments in Yaounde. Also, there was *Externat Medico Pédagogique à La Colombe* (Special School for the Mentally Retarded) in Yaounde. These centers were run and managed by religious groups and parents of children with disabilities.

On the 15th of August 1975 another centre called Promhandican was created in Yaounde by Italian missionaries. The aim of the center was to provide vocational training to children with various forms of disability for their eventual socio-economic integration in the society. With the creation of the Ministry of Social Affairs in 1975, a department of national solidarity was established to oversee the well-being of persons with disabilities and the very old. This department in collaboration with the Ministries of Education, has contributed to improve the education of persons with disabilities by authorizing the creation of many privately owned special schools in all regions of the country with some receiving yearly subventions from the state. Some of these institutions or special schools serve persons with specific disabilities like mental retardation, visual and hearing impairments, behavioural disorders and more. Presently, Cameroon has several officially recognized institutions serving persons with disabilities (PWDs).

Recently, in response to international declarations laws and legislations have been put in place to permit children with disabilities to attend regular schools. However, these pieces of legislation have major flaws that impede the implementation of inclusive education in Cameroon. Some of the flaws could be attributed to policy models (eg, top-bottom and bottom-top) that impact implementation process. Law No 83/12 and its revised version Law No 2010/002 of April 2010 relating to the protection and welfare of persons with disabilities make provision only for persons with disabilities. The 13th April 2010, Law stipulates the provision of special education, psychosocial support, socio-economic integration, medical prevention and access to employment, infrastructure, housing and transport for persons with disabilities, among other issues. Poor treatment by way of discrimination and deprivation of persons with disability by school teachers will be punished under section 242 of the penal code. However, while Law No 83/12 of 1983 includes children born of needy parents with disability, law No.2010/002 of 13th April 2010 identifies and limits itself to four kinds of disability namely: physical, sensory, mental and multitude disabilities. Provisions for the education of children with other special needs like orphans, gender, street children, the sick, children from broken homes and others are not mentioned. These categories do not benefit from privileges like material, financial, pedagogic support and others. The problems of street children are enormous yet strategies for supporting them is still limited (Tchombe, et al. 2001). These laws are apparently not inclusive.

Furthermore, the laws are not proactive. Law No. 83/12 allows children with disabilities to be admitted in schools before the material and human resources are provided to meet their needs if necessary. Such a model of education is integration because inclusive education requires a total transformation of the school system to meet the needs of all learners. Also, some of the legislations are difficult to implement. Circular letter, No. 86/L/1656/MINEDUC/CTZ of January 1986 instructs school administrators to facilitate the admission of children with disabilities. This may be difficult with severe cases of disability if the school is not equipped in human, material and physical resources to cater for these needs.

Highlights from decree No 90/1516 of 26 November 1990 addressed the modalities for applying the law as stipulated in article I that "the education of handicapped children and adolescents is assured in the regular schools and in centers for special education." Article 2 of the same decree says precisely that "children with hard of hearing, visual impairment and mental disabilities will benefit from special education that will permit them to register in regular school. This approach addresses the integration model. The decree also laid down the conditions for implementing the 1983 decree that grants certain privileges to children with disabilities amongst which are an age waiver, the right to repeat, financial support and others. Children with special needs (poverty, orphans, street children etc) with exception of those with disabilities do not benefit from this decree directly, even though these categories of children are equally vulnerable to exclusion from education.

In spite of these good intentions for the education of persons with special needs, Law No. 98/004 of 14th April 1998 laid down guidelines for education in Cameroon, grants equal opportunities without discrimination of gender, political, philosophical and religious opinion, socio-cultural, linguistic or geographical origin...." The short coming in this law is that no mention is made of persons with disabilities. Furthermore, at no point in time has any of the decrees and laws mentioned the training of teachers nor address curriculum reform to respond to the needs of inclusion.

Implementation of inclusive education policy in Cameroon

The implementation of government's policies though not yet fully achieved is increasingly creating awareness in the fight against social exclusion and ensures national solidarity. A circular letter of 11 October 2005 by the Minister of Secondary Education made specific reference to the organization of public and class examinations as concerns the visually

impaired and hard of hearing. Braille and other necessary materials needed by the students should be made available.

On 2nd August 2006 both the Ministers of Secondary Education and Social Affairs issued a joint circular relating to facilitate the admission of handicapped children and children of handicapped parents in secondary schools. These children are exempted from paying parent/students dues. Also a joint circular letter No. 283/07/LC/MINSEC/MINAS of 14th August 2007 relates to the identification of children with disabilities and those born of parents with disabilities enrolled in government colleges and their participation in official exams. According to this circular letter only the above category of children are identified. This means the same category of children who attend private and lay private schools are not identified or given special considerations in official examinations. In addition to that, the circular limits consideration only to the physically impaired, the visually impaired and the hearing impaired.

Another joint Circular letter issued by the Ministers of Higher Education and Social Affairs on 8th July 2008 reinforced the amelioration of the conditions and support offered to disabled students in State Universities as it posited that:

- Organizers of academic evaluation examinations should take cognizance of students with disabilities
- The universities should provide structures for guidance and counselling
- Universities should give priority to disabled students for any job and award as prizes of excellence to deserving students
- Universities should improve on the infrastructure and sport equipments.

Policies and circular letters need to address specifically all disabilities such as autism, dyslexia, intellectual disabilities and so on as well as other special needs that are vulnerable to exclusion from education. Policy directs implementation process. When there are lapses in policy, implementation is not effective. An understanding of the meaning of special education needs and inclusive education is necessary for an effective implementation of inclusive practices. The University of Buea has been conscious about responding to needs of students with disabilities given that there is a UNESCO Chair for Special Education Needs that is increasing the awareness of inclusive practices.

Policy gaps and orientation for best practices in Cameroon

All children have the right to learn, as set forth in the United Nations Convention on the Rights of the Child (CRC) to which virtually all governments in the world including Cameroon have ratified. Moreover, all children can learn, without regard to their physical, intellectual, social, emotional, linguistic, or other conditions. This includes children with disabilities and the gifted and talented; street and working children; children of remote or nomadic populations; children from linguistic, ethnic, or cultural minorities; children affected by HIV/AIDS; and children from other disadvantaged or marginalized areas or groups. Furthermore, while all children can learn, they may not all learn the same things at the same time, and with the same results, but this is completely normal and acceptable.

In order to take care of this challenge, it is generally agreed that schools need strong inclusive policies and philosophies that support the right of all children to participate in an inclusive way (Special Education Review Committee, 2000; Lupart, 2002; Bunch, 1999). According to Raymond (1995) the tenets of a positive inclusive philosophy include the fact that every learner has the right to participate in all aspects of school life. In addition, a Saskatchewan report (1986) states that inclusion exceeds the meager idea of physical placement and assimilates the basic values of participation, friendship and interaction. In line with these, we find that African governments in response to global initiatives, have undertaken measures to ensure the educational rights of children irrespective of disabilities.

Some basic statistics

Conflict and poverty continue to cause high rates of disability in the less developed world (Schneider et al.2007). But every country calculates the number of disabled people in their country differently which may be on cultural differences, different disability definitions and different methods of data collection.

The World Bank report (2008) estimates that there are approximately 650 million disabled persons in the world of whom 80 million are in Africa. Based on WHO (2011)estimate Cameroon records approximately 1,600,000, which is about 8% (WHO, 2011) of its population. From the statistics, it seems that, among all the other disabilities, there are more visually impaired persons (6000) in Cameroon. A review of some statistics collected by the Ministry of Social Affairs in 2008 and published in 2010 on disabilities in 47 institutions offering special education in the ten regions of Cameroon registered 3,992 institutional based persons with disabilities: 1,552 physically handicapped; 883 hard of

hearing; 281 visually impaired; 106 mentally disabled; 1,070 mixed of visually impaired, autistics, hard of hearing, etc.).

Method

Research design

The survey research design was triangulation of qualitative and quantitative. We adopted a descriptive survey because the study presents a situational analysis of inclusive education by making a general assessment of inclusive education in Cameroon. The study was equally stratified because perceptions and views of the various categories of educators namely teachers, school administrators and educational administrators were appraised comparatively. For data collection the study also employed methodological triangulation approach which involves the use of a questionnaire, observation and interview (Amin, 2005). The questionnaire was used to sample the opinions of a cross section of teachers; observation was used to observe the infrastructure and material resources of different institutions in order to assess existing infrastructure and pedagogical support materials. Interview was used for Administrators and other stakeholders in central and decentralized services.

Study area

The study sites are carved out from the four geopolitical and cultural regions/zones of Cameroon. These regions include the Western highlands, the Coastal plains, the Forest region and the Sahelian region of northern Cameroon. These regions represent the geographical, cultural, political, social and economic diversity of Cameroon, with each of them representing a unique character which builds up Cameroon's national character. The regions are further split into ten administrative regions, headed by a Governor and Regional delegates of state ministries, including those of basic education and social affairs to which this study is interested. From the four geopolitical and cultural regions, five administrative regions were purposively selected for the study. These were the North West (NW) selected from the Western highlands because of its specific activities on inclusive education to share experiences, the South West (SW) & Littoral (LT) selected from the coastal plains, the Centre (CE) selected from the forest region, and the Far North (FN) selected from the Sahelian region of northern Cameroon. From each administrative region selected, four to six schools made up of regular and specialized schools, urban and rural locations and public and private-owned institutions were selected.

The FN region is the second most populated region in the Cameroon, with a population of 3,480,414 inhabitants; the NW is fourth thickly populated with a population of 1,804,695 inhabitants; the SW is seventh most populated with a population of 1,384,286 inhabitants and the Centre is the third thickly populated in the country with a population of 1,904,142 inhabitants (National Institute of Statistics, 2010). Their chief towns are Maroua, Bamenda, Buea, Douala, Yaounde respectively, and many other urban and semi-urban towns across the selected regions.

The populations of the NW, SW, LIT., CE and FN regions are a conglomerate of many ethnic groups, comprising the native population and a significant proportion of immigrants from other regions and from foreign countries, particularly Nigeria, Chad, and Gabon. The native populations comprise a variety of ethno-linguistic and cultural groups. However, the notable ethnic groups in the NW are: Chomba, Tikari, Widikum, and Fulani; in the SW are: Bakweri, Bayangi, Bakossi, and Bangwa; Coastal people of the littoral are the Douala,s and Mbo, in the CE are: Bulu and Beti; and in the FN are: Toupouri and Fulani. The main languages spoken in the NW region are: Lamnso, Itanghikom, Ngemba, Aghem, and others; and in the SW region: Bakweri, Bangwa, Bayangi and Bakossi. The foresters largely speak Bulu and in the FN, Ffulde is largely spoken.

Population

The population of the study included basic education teachers, school administrators, educational administrators Directors of specialised centres offering varied services to persons with disabilities in the North West, South West, Littoral, Centre, and Far North regions of Cameroon and top officials in the Ministries of Basic Education and Social Affairs.

Sample and sampling procedure

The main sampling strategies were purposive and convenience. The institutional sample was made up of 24 schools, including 07 special centres and 18 mainstream schools. There was a sample of 147 teachers with approximately 06, selected from each participating school/institution; as well as about 05 regional delegates and about 16 divisional delegates of basic education one Inspector General in the Ministry of Basic Education and one Sub-Director in the Ministry of Social Affairs. Specialised schools were purposively selected from Maroua, Yaounde, Mbalmayo, Douala, Buea, Kumba, Bafut and Kumbo, as well as urban and rural regular schools. While in the regular schools, classrooms were purposively

selected for observation of inclusive practices. The convenience sampling technique was used to select teachers. List of schools are presented in tables 1, 2 and 3. List of subjects and participants are presented in tables 4 through to 7. Appendices???

Discussions with researchers and training of research Assistants

The data collection teams were oriented and trained in the different sites respectively to enhance the collection of quality data. It was important to emphasis on the SightSaverø values and the reason for the research. The objectives of the research were well discussed. The three instruments were examined and procedure for data collection discussed particularly the interviews and observation guides. Approach to documentary review of Decrees and legislations were also highlighted.

Instrumentation and data collection

The comprehensive documentary review of inclusive education policies, programmes and practices in Cameroon offered insight into policy issues. In this wise, state policies and legislation were reviewed in order to establish any perspectives or indicators for effective inclusive practices in Cameroon schools. This desk study analyses facilitated the development of instruments for collecting field data (questionnaire, interviews and checklists for observations). Three instruments were used for data collection. The questionnaire was a combination of both qualitative (open questions) and quantitative questions where the two point scale response of öyesö, önoö was followed by a öwhyö question to probe for additional qualitative information on the issues raised. Questionnaire for school administrators had three sections: (1) identification of persons with Special Needs at School Level, (2)awareness, analysis and implementation of existing Policy, School Rules and Regulations, Assessment Strategies, Diagnosis, Intervention and Referral Services, School Programmes and Parental Involvement; (3) Perceptions/attitudes of stake holders towards inclusive education, Attitudes of School Administrators, Indigenous Beliefs about Children with Disabilities and other Marginalised and disadvantaged groups and Cultural Practices that impact Inclusive Education with a the section for Constraints on Inclusive Education for teacherø questionnaire. With regards to value judgment on the level of implementation, the opinions of the respondents were sorted. The huge qualitative data illustrated differences in opinions based on perception. A four point scale (averagely effective, effective, very effective and not effective) was used to check how effective was policy implementation on practice. If implementation is perceived as very effective it means the respondents have good knowledge of the policy and are employing this in achieving all dimensions of inclusive practices. For the Educational Administrators,

issues on the interviews focused on training, practices, infrastructure, assessment and others. Telephone interviews with officials of centralized services were based on policy implementation in the education system. All instruments were translated into French.

Validation of Measuring Instruments

The instruments used, were validated in two phases; that is face validity and content validity in order to ensure reliability of the instruments. The instruments were pilot tested in non-participating schools.

Administration of Instruments

Questionnaires were given to teachers, school administrators (Head masters and mistresses) and the regional and divisional delegates and sub-divisional delegates were interviewed, while the physical school environments and classroom practices were observed with the help of checklists. Overall, the data was collected on policy, infrastructure; human and financial resource, equipment and assistive technological devices availability in the specialised schools and in inclusive regular schools. Data was collected over a period of one week (10 days) and the instruments administered by the researchers, assistant researchers and local assistants using the self delivery technique. The researchers took the disposition to ensure that respondents understood the questions to ensure the collection of relevant and appropriate data Table 7 presents a sample flow table of distribution and return rate of questionnaires and numbers interviewed.

Table 1: Sample flow table

SN	Questionnaire denomination	Number of questionnaires administered	Returned for regular school	Returned for special school	Total returned	Percent returned
1	Questionnaire for teachers	50 x 4 = 200	123	24	147	73.5%
2	Questionnaire for educational administrators	10 x 4 = 30	23		23	76.7%
3	Questionnaire for school administrators	15 x 4 = 45	25	9	34	75.6%
6	Checklist for observations	25	19	5	24	96%
7	Number of institutions	25	19	5	24	96%

Method of Data Analyses

A triangulation of quantitative and qualitative techniques of analysis was used to analyse the data. In this respect, a descriptive statistics was used to analyse quantitative data while content analysis was used to analyse qualitative data. Also a documentary review of existing legislation and policies was done.

Data processing and analysis

Since the questionnaire was a combination of both qualitative (open questions) and quantitative data, to be in line with the standardized approaches of data processing and analysis, the data management and analysis processes went through a number of systematic steps all complementary to each other. These steps were as followed:

Review and labeling of questionnaires: during this stage, questionnaires that were not properly filled were sorted out. That is, questionnaires that were not completely filled because the respondent refused to continue or those where the respondents answered only questions they have answers to. Questionnaires were then attributed serial numbers that could help match them to the data base.

Conception of the analytical guide: The analytical guide was developed based on the indicators of the study to answer the research questions and objectives.

Content analysis and pre-coding: Because of the huge number of open ended questions, the data analysis included a well demarcated phase labeled content analysis and pre-coding (Nana, 2012). This phase involved essentially the project researchers and the statistician. By the end of the pre-coding exercise, a code list was derived that summarized the major concepts of the study (Appendix 1). A code in this context is an umbrella term that summarizes a concept; for instance, the concepts 'Some parents believe they are witches they bring evil to family', 'Some cultures say that they are witches and even kill them' and 'La religion, les rites' can be summarized under cultural beliefs as code or umbrella term.. Codes are accompanied by their descriptions (code description) to enlighten the users on the main or key ideas that it summarizes. These codes were defined as variables for data entry in Epi Info 6.04d (CDC, 2001); for instance, the code ignorance could be defined as a variable as enable the entry of all the instances where concepts related to it emerge from the data in order to facilitate counting and integration in other analytical processes. This exercise continued during data entry. Concepts that were not attributed code during the conceptual analysis stage went through the process of content analysis during data entry and new codes were generated in SPSS to identify them. The descriptions of the codes were now used as variable labels in the Statistical Package for Social Sciences (SPSS) Standard version, Release 17.0 (SPSS Inc. 2008).

Data cleanup (content cleanup and exploratory statistics): Exploratory statistics is an integrated part of data cleanup. Variables are explored to identify questionable entries, inconsistency in responses and outliers and discuss their validity and make the necessary corrections; for examples, in giving the number of visually impaired in its classroom, the respondent can by mistake write 20 for a regular classroom; this figure might emerged

distinctively from the data set therefore drawing attention and need for verification (Nana, 2012). During this stage, the fate of missing data is defined. Some may be set as missing and some recoded depending on the statistical requirements. Frequency analysis was used for categorical variables as to identify invalid entries and missing values. The sorting command was used to group similar records of interest as to facilitate their exploration, correction or elimination. At the end of this exercise, data was validated for analysis.

Data was later analyzed using the following approaches (Nana, 2012): For categorical variables such as sex, setting type or school type, descriptive statistics presented the distribution of subjects between and within subsets using frequencies and proportions, and more specifically Multiple Response Analysis for multiple-responses question (with possibility for more than one response to a single question). Measures of association between variables were carried out using Chi-Square test of independence or of equality of proportions for nominal vs nominal and nominal vs ordinal variables. As for continuous variables such as number of pupils with disabilities, Case Summary Statistics was used to present the measurements of central tendencies and dispersions.

Binary Logistic Regression Model was used to model the system of inclusive education in Cameroon; more specifically the model was aimed at appraising the predictive power of the various component predictors or critical indicators of inclusive education on the benefit to pupils with disabilities.

Results were presented using statistical tables and charts. All statistics are discussed at the 0.05 significant level ($\alpha=0.05$). In the other sense, whenever the P-value is less than Alpha, there is a significant difference, a significant relationship, a significant dependence or association or a significant variability explained.

Ethical

In conducting this study, the following ethical considerations were considered to protect the interest of the subjects.

- The consent of the respondents who participated in the study was sought by visiting the central ministries, decentralized structures and schools concerned. A detailed explanation of the purpose of the study and all the procedures that were to take place was revealed to them. It should be noted that informed consent letters were not sent to the participants due to cultural considerations. Visiting someone and explaining to him your intentions is more likely to yield fruits than sending a letter to the person concerned. In the Cameroonian culture, talking to someone directly is a show of respect to his personality. It should be noted that some people may not be willing to reply to letters because of the fear that the letters may incriminate them.
- No force was used on the participants to take part in the study and they were allowed the chance to withdraw whenever they wished.

- The issue of confidentiality was raised and discussed with officials of centralized and decentralized services, head teachers and teachers. This was in order to build a bridge of trust between the authorities, teachers and the research team. To strengthen the issue of confidentiality the names of all the participants in the study were not considered and have not been mentioned anywhere in the study.
- Deception was avoided on the part of the research team by not telling the participants lies or promising them material or financial benefits.

Findings

The findings of the study are presented based on each research questions or objectives. Both qualitative and descriptive information are presented to explain and justify the findings of the study. Before we delve into the findings, it is important to present a case analysis of the situation of needs in Cameroon schools in order to ascertain the need for inclusive education practice. The situation is shown in figure 1 below.

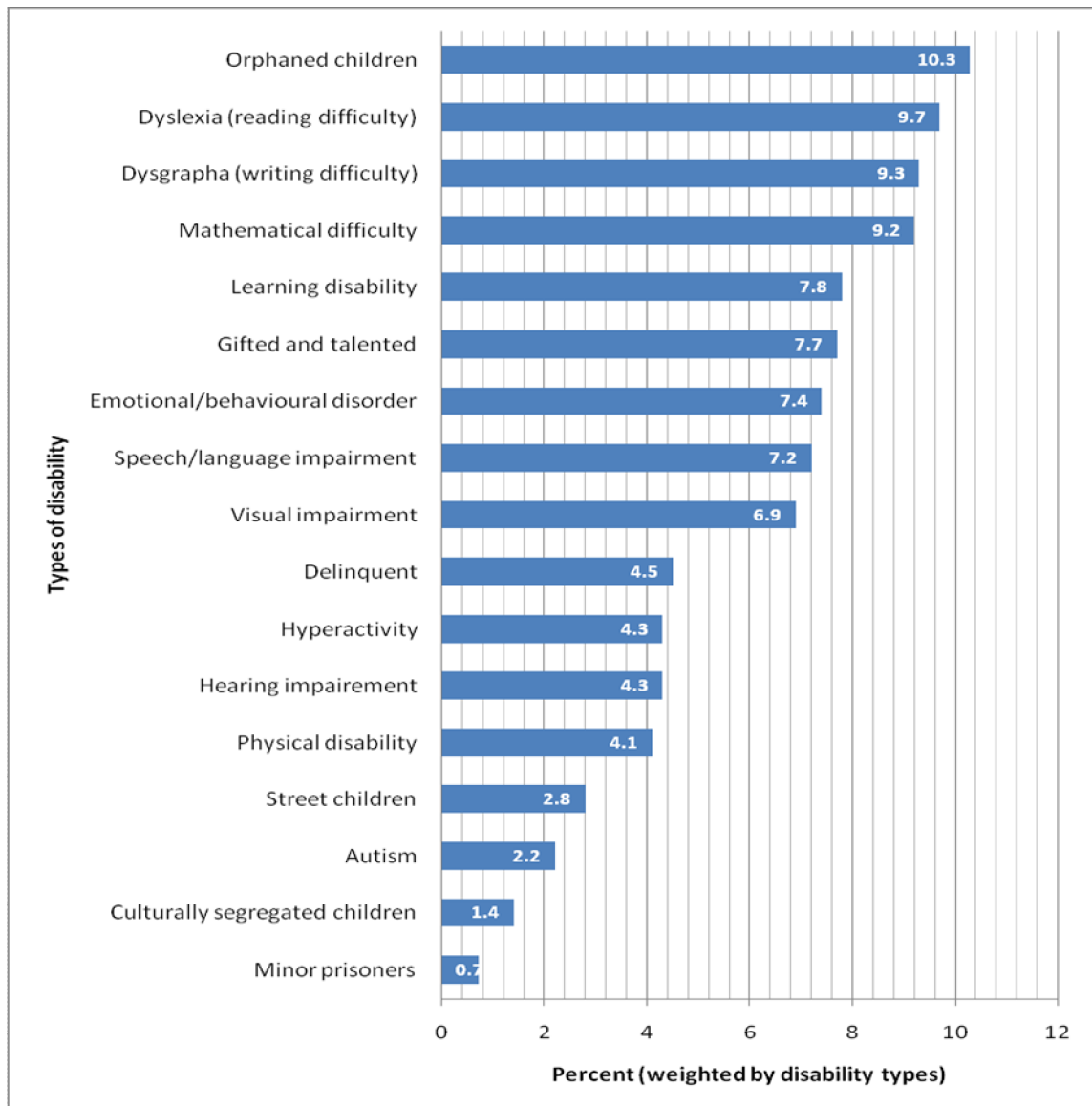


Figure 1: Characteristics of pupils as determinants of inclusive education in Cameroon Basic Education classrooms

Figure 1 reveals that inclusive education in Cameroon shall consider both pupils with disabilities on the one hand and the disadvantaged and other marginalized pupils on the other hand. As for pupils with disabilities, the following types were identified: Visual impairment, hearing impairment, autism, emotional/behavioural disorder, speech/language impairment, physical disability, learning disability; as for the disadvantaged and other marginalized pupils, the following categories were also identified: reading difficulty, writing difficulty, mathematical difficulty, gifted and talented, street pupils, culturally segregated pupils, delinquent, minor prisoners, orphaned pupils, delinquent pupils.

The finding on this figure, also presented on tables 12 and 13 as appendices 2 and 3 show that according to school type (special & regular) and setting (urban & rural), disability-related characteristics are more likely found in regular schools than in special schools. There are more children with reading, writing, mathematical difficulties and behavioural problems found in regular schools than in special schools. This is also true for the rural / urban settings where more children with impairments and disabilities are found more in urban than in rural settings. In conclusion, from the findings it was clear that the visually impaired, hard of hearing, writing and reading difficulties were found to be many as evident in the significance of the results. This study makes a schematic presentation to illustrate a clear understanding of inclusive practices that Cameroon policy in addressing inclusive education should consider; see Figure 2 below.

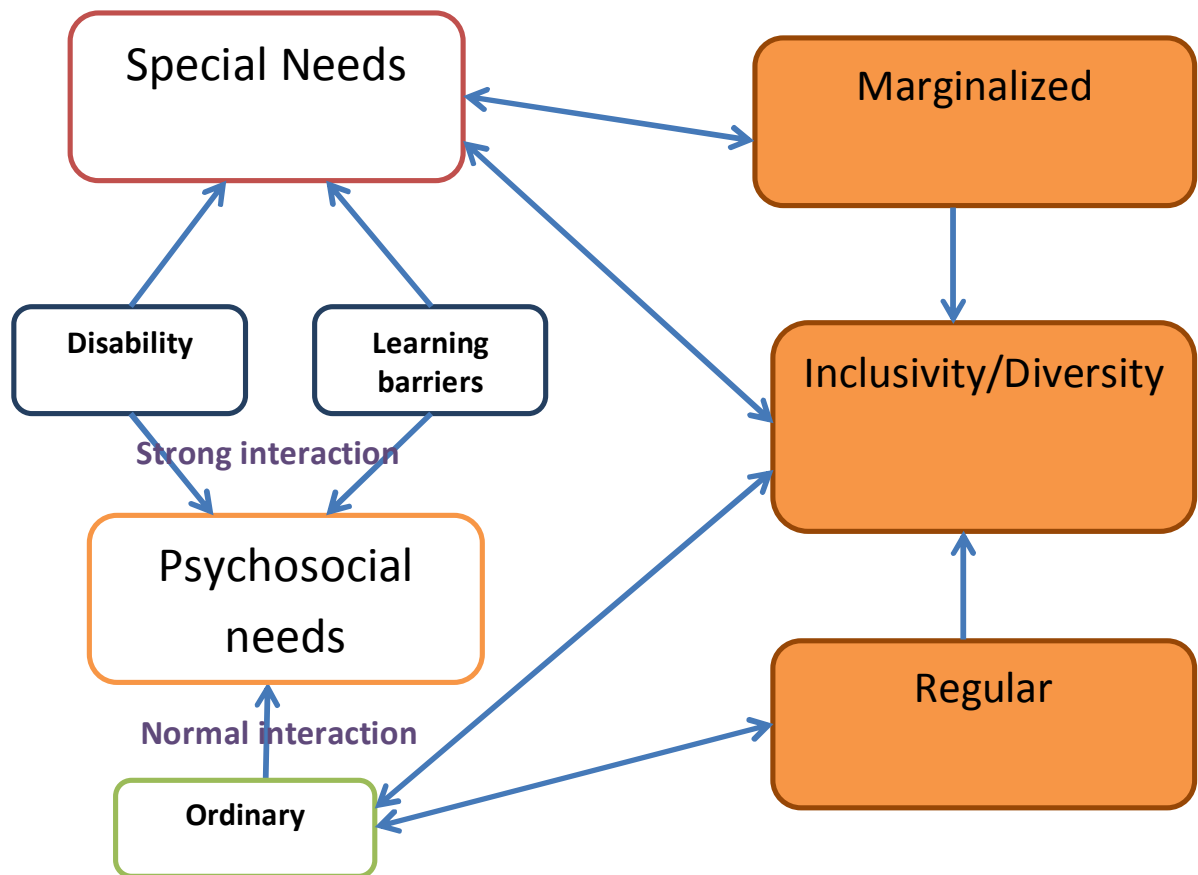


Figure 2: Schematic presentation of inclusive education in Cameroon

The figure above presents two groups of pupils that can be found in any classroom that addresses inclusion. At the very top, there is the group with special needs which are in two categories as evident in figure I; pupils with disabilities and those with learning barriers caused by various dimensions of disadvantages experienced from their environment. The other major group is the ordinary pupils who may be free of the type of experiences shared by the groups mentioned above. What links all the groups is the fact that at varying degrees they all have psychosocial needs, whereby the psychosocial needs for those with special needs may be more than for the ordinary. The illustrations lead to two groups of pupils; those with special needs depicting the marginalized as the arrow directs and the ordinary depicting the regular as pointed by the arrow. These groups seen independently indicates special education school especially for the those with disabilities with the underlying philosophy of segregation, while the regular is the mainstream schools, where one can also find children with other forms of disadvantages other than disability. One of the concerns

of this study is how policy has addressed the middle concept of inclusivity/diversity whereby all the groups of children mentioned above are found in one classroom and where such classrooms are equipped with adequate human and material resources to embrace and facilitate inclusive education practices, in doing this acknowledging diversity and thus differences in needs. Thus, objective one of the study analyses existing policy on inclusive education.

Objective1. Existing policies, systems, procedures and processes on inclusive education in Cameroon

Awareness of existing policies on inclusive education

The findings above orient perceptions of subsequent findings but more especially enable understanding of the basis of existing policies. Accordingly, the review and analyses of existing policies, systems, procedures and processes on inclusive education in Cameroon, showed that there exist several policies on inclusive education in Cameroon. These present themselves in the form of Laws, Presidential decrees, Ministerial orders and circular letters. The findings clearly demonstrated the gross absence of awareness of issues emerging from such policies. The analysis of the findings is presented in Figure 3.

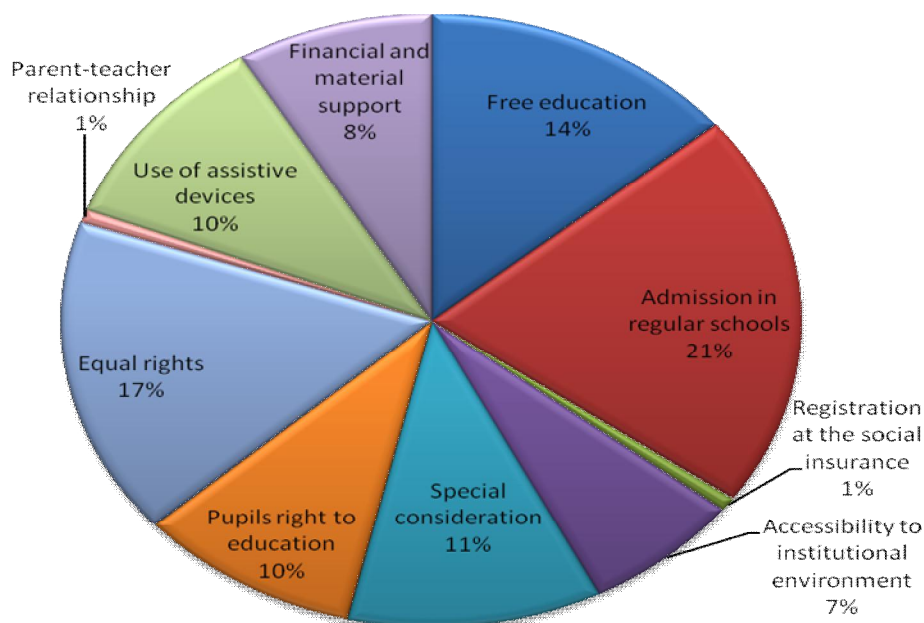


Figure 3: Existing policies on inclusive education as identified by the respondents

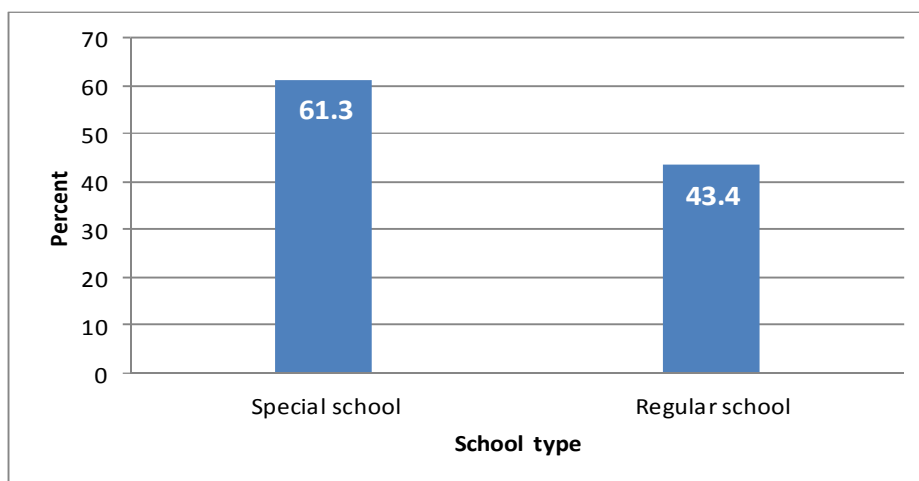
Out of a total of 205 respondents, only 63 (30.7%) could specify a policy on inclusive education. This also implies that even among those who said they were aware, though they knew about the existence of such policies, they could not specify the policies. Admission in regular schools was the most highlighted policy statement, followed by Free education and then Equal right. What the findings are highlighting therefore is that the existing policies are addressing more the issues of access not process. The analysis searches for awareness based on urban /rural dichotomy. The results are presented in table 2.

Based on qualitative interview generated data, respondents, including regular school teachers and administrators also pointed to awareness of some existing policies on inclusive education in Cameroon. For example, on pupils' right to education, one regular school administrator said: "Politique de l'éducation obligatoire" and the other said: "La nouvelle politique de l'éducation, suivi individuel". And on equal rights, a regular school teacher pointed to "Law N° 2010/002 of 13 April 2010 relating to the protection and welfare of persons with disabilities", UN convention on the rights of the child (1989), UNESCO Salamanca statement (1994), the UN Convention on the rights of persons with disabilities, and another teacher pointed to "La politique de la protection de l'enfant". Meanwhile regular school administrators mentioned: "Disability Act, Dakar conference" and another talked of "Ecole de promotion collective" and "Club de theatre, club de santé, club de journalism pour tous". The majority 13 (52.0%) of respondents believed that these policies are only averagely implemented and a weak majority 56 (52.3%) believed that pupils with special needs benefit from those policies because of some articles of the policies from 1983 through to 2010 addressed resources and opportunities only to Special Education needs that have disability status.

Table 2: Awareness of existing policies on inclusive education by setting and respondent types

Categories		Are you aware of any existing policy on inclusive education?		N	χ^2 -test
		Yes	No		
Setting type	Urban	64 (49.2)	66 (50.8)	130	$\chi^2=0.943$ D.f. = 1; P=0.331
	Rural	25 (41.7)	35 (58.3)	60	
Respondent type	Teacher	61 (44.5%)	76 (55.5%)	137	$\chi^2=5.611$ D.f. = 2; P=0.060
	Educational administrator	10 (50.0)	10 (50.0%)	20	
	School administrator	16 (48.5)	17 (51.5)	33	
Total		87 (45.8)	103 (54.2)	190	

It was realized that educators from urban areas 64 (49.2%) were slightly more aware of the existence of policies for inclusive education than those from rural areas 25 (41.7%), though the difference was not statistically significant. Table 2 also indicates that educational administrators were fairly more aware than school administrators and teachers were the least aware. Generally, the level of awareness was poor (not above 50%). This is clear, because the concept Inclusive Education in contradistinction to Special education is nowhere found in all policy statements. It was also important to highlight that the level of awareness of existing policies on inclusive education was relatively higher in special schools as presented on figure 4 below even though inclusive practices per se are not carried out.



χ^2 -test: $\chi^2=3.293$; $df=1$; $P=0.070$.

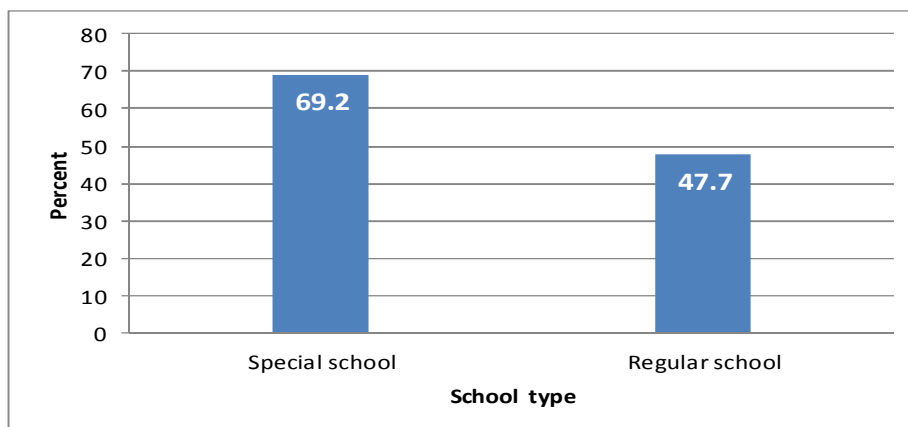
Figure 4: Awareness of existing policies on inclusive education: comparison by school type.

Knowledge of existing policies on inclusive education

The level of knowledge on existing policies on inclusive education did not differ significantly in rural and urban areas and among the three categories of educators which on the whole was relatively low. In more specific terms, knowledge of existing policies was more visible in urban (53.4%) than rural (44.4%) areas and among school administrators (70%) than educational administrators (50.0%) and teachers (45.8%) as presented on table 3. It was also observed that educators from special schools were more knowledgeable than those from regular school as illustrated on figure 4.

Table 3: Knowledge of existing policy on inclusive education: comparison by setting type and categories of educators

Categories		Knowledge of existing policy on inclusive education		N	χ^2 -test
		Average and above	Below average		
Setting type	Urban	62 (53.4)	54 (46.6)	116	$\chi^2=1.195$ D.f. = 1; P=0.274
	Rural	24 (44.4)	30 (55.6)	54	
Respondent type	Teacher	55 (45.8%)	65 (54.2%)	120	$\chi^2=5.611$ D.f. = 2; P=0.060
	Educational administrator	10 (50.0)	10 (50.0%)	20	
	School administrator	21 (70.0)	9 (30.0)	30	
Total		86 (50.6)	84 (49.4)	170	



2-test: $\chi^2=4.026$; D.f. = 1; P=0.054.

Figure 5: Showing knowledge of existing policies according to school type

Objective 2: Implementation of existing policies, systems, procedures and processes at the managerial level

In the second objective, the study was intended to assess the level of implementation of the existing policies, systems, procedures and processes at managerial level. Findings showed that at the decentralised services, there was very scanty awareness of the existing policies. Most of the expected qualitative data were not provided; out of the 23 educational administrators effectively sampled, only 11 gave their opinion on this question. Fifty percent of the sampled educational administrators graded their level of knowledge on inclusive education below average.

Table 4: Educational administrators' perceived implementation of inclusive policies

Educational administrator	How effective are policies on inclusive education implemented in your institution?				Total
	Averagely	Effectively	Very effectively	Not effective	
N	3	2	4	2	11
%	27.3%	18.2%	36.4%	18.2%	100.0%

Discussions on the implementation of Inclusive Education at the level of central administration of the Ministry of Basic Education would be inappropriate. It is only recently that the department for inclusive education was created in the Ministry of Basic Education and has not yet gone functional. So if the centralised service could not give any concrete information, it is because the implementing structure was not in place. The contradictions emerging from the Ministry of Basic Education are that being the ministry with pedagogic knowledge, the ministry informed on their pedagogic support to the inclusive programme being offered by the Ministry Social Affairs. But the Social Affairs school is for specific cases of disability carried out not in a normal classroom where both special needs in the widest sense and normal pupils share the same classroom space. Officials in the Ministry of Social Affairs are quite aware of policies on the welfare of persons with special needs in Cameroon. The major problem emerging from the Laws is that there is no policy on inclusive education for all policies are on special education. But the Ministry is putting in place structures to promote the education of persons with disabilities, disadvantaged and marginalised groups in mainstream schools.

However, the following tables 5 and 6 indicate the degree of implementation with regards to assessment services such as, diagnosis, interventions, referral and perceived assessment strategies for inclusive education in Cameroon.

Table 5: Level of implementation of educational programme

Educational administrator	Do educational programmes have assessment services for inclusive education?		Total
	Yes	No	
N	7	14	21
%	33.3%	66.7%	100.0%

Table 6: Assessment strategies

Educational administrator	Do educational programmes have assessment strategies for special needs educations?		Total
	Yes	No	
N	7	14	21
%	33.3%	66.7%	100.0%

The findings from educational administrators in decentralised services indicated a very low response showing only 33.3% who asserted the existence of such services.

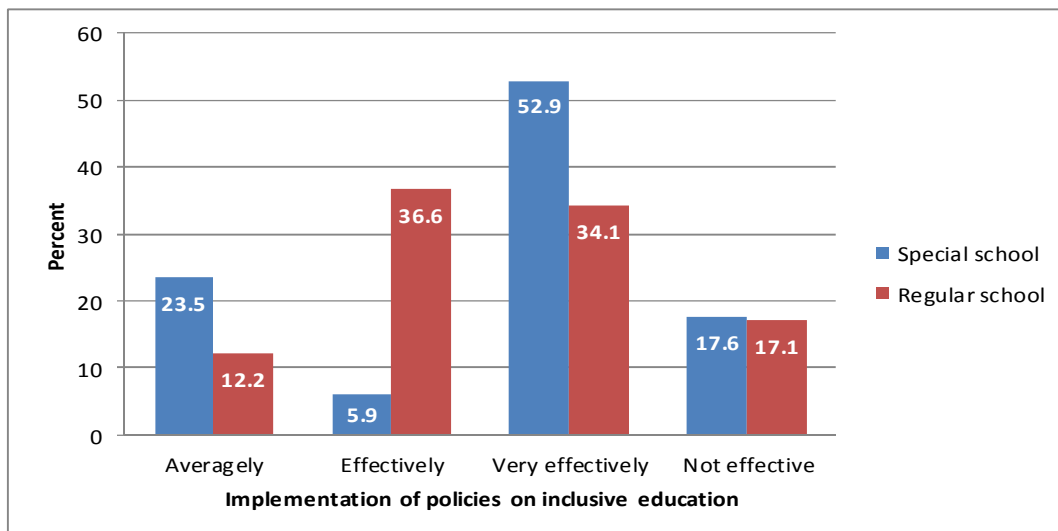
Objective 3: Implementation of the existing policies, systems, procedures and processes at the level of selected special needs institutions and regular schools in selected regions

The third objective assess the level of implementation of the existing policies, systems, procedures and processes at the level of selected special needs institutions and regular schools in selected regions. The findings are presented on figure 5 and table 19 that follow.

The effectiveness of policy implementation as perceived by Educators at the decentralized Service

This policy was very effectively implemented in rural schools (76.5%) than in urban schools (24.5%) which was significantly lower ($\chi^2=17.100$; d.f. = 3; $P=0.001$). The implementation of the policies was generally more effective in the special school though this difference was not statistically significant (Figure 6). This was the case because the

policies respond more to the needs of special schools. Children in special schools have more access to quality resources and financial benefits all specialized to meet their individual needs as clearly stated in the policies. The appreciation of the three categories of educational actors in relation to the implementation of the policies did not differ significantly ($\chi^2=4.874$; $df=6$; $P=0.560$).



$\chi^2=6.174$; d.f. = 3; $P=0.103$

Figure 6: Showing the effectiveness with which policies are implemented as perceived by the educators at decentralized level

The data for this analysis was from an open ended question, where the responses were coded and characterized on the 4 point scale.as seen below.

N.B. 0%= Not implemented; 0.1-25%=very ineffective; 25.1-49.9%= not effective; 50-55%; averagely effective; 55.1-75%: effective; and 75.1% and above very effective. This categorization derived from an open-ended question.

Evaluation of school infrastructure as a way of effective implementation of inclusive policy

Table 7 shows that three major difficulties in the implementation process faced by special schools are school infrastructure, location and access to school (roads). This of course, was quite the opposite for regular schools, which were more satisfied with their locations and roads. The major concerns for regular schools were the lack of resource room, inadequacy of paths and classroom environment. Globally, infrastructures were less adapted to inclusive education in regular schools than in special schools. It can then deduce that

special schools are more concerned with accessibility to school environment whilst regular schools are more handicapped by the lack of equipment and other resources.

Table 7 Distribution of respondents' perception of school infrastructure by school types

School infrastructure disability friendly or unfriendly	School of investigation (n and % of those who termed indicators as friendly)		N
	Special schools	Regular schools	
Classroom	5(100.0%)	11(57.9%)	16(66.7%)
School location	3(60.0%)	14(73.7%)	17(70.8%)
Roads	3(60.0%)	13(72.2%)	16(69.6%)
Toilets	5(100.0%)	11(64.7%)	16(72.7%)
Offices	5(100.0%)	12(66.7%)	17(73.9%)
Playing grounds	4(80.0%)	12(63.2%)	16(66.7%)
Paths	4(80.0%)	8(44.4%)	12(52.2%)
Resource room	4(80.0%)	7(43.8%)	11(52.4%)
Aggregated score (MRS)	33(82.5%)	88(61.1%)	121(65.8%)

$\chi^2=6.36$; d.f.=1; $P=0.012$

Following from the above table 8 informs on rural urban perceptions about the availability of school infrastructure.

Table 8: Distribution of respondents' perceptions on school infrastructure based on the settings

School infrastructure	Settings of investigation (n and % of those who termed indicators as friendly)		N
	Urban	Rural	
Classroom	9(64.3%)	7(70.0%)	16(66.7%)
School location	8(57.1%)	9(90.0%)	17(70.8%)
Roads	10(71.4%)	6(66.7%)	16(69.6%)
Toilets	9(64.3%)	7(87.5%)	16(72.7%)
Offices	11(78.6%)	6(66.7%)	17(73.9%)
Playing ground	11(78.6%)	5(50.0%)	16(66.7%)
Paths	7(50.0%)	5(55.6%)	12(52.2%)
Resource rooms	8(61.5%)	3(37.5%)	11(52.4%)
Aggregated score (MRS)	73(65.8%)	48(65.8%)	121(65.8%)

$\chi^2=0.04$; d.f.=1; $P=0.847$

The findings demonstrate that the problem of school location, roads; toilets, playing ground and resource room were not available in rural areas. There was a general complain about school locations.

Evaluation of availability of special materials equipment as a way of effective implementation of inclusive policy

Special needs materials were globally perceived as not really available in regular schools (table 9). In special schools, the situation generally was perceived as critical as well, though equipment such as Word processor with spelling and grammar checker, Instructional software, Voice recognition capabilities, Picture board and Taped instructions were fairly available. Table 10 presents information about the availability of special needs materials and equipment.

Table 9: Distribution of respondents' evaluation of the availability of special needs materials/ equipment based on school types

Special needs materials/ equipment	School of investigation (n and % of those who termed indicators as available)		N
	Special schools	Regular schools	
Optical character recognition	1(25.0%)	3(16.7%)	4(18.2%)
Word processor with spelling and grammar checker	3(60.0%)	3(16.7%)	6(26.1%)
Alternative keyboard	2(40.0%)	3(16.7%)	5(21.7%)
Instructional software	3(60.0%)	4(23.5%)	7(31.8%)
Talking clock	2(40.0%)	5(27.8%)	7(30.4%)
Voice recognition capabilities	3(60.0%)	3(60.0%)	6(26.1%)
Speech synthesizers	3(60.0%)	2(11.1%)	5(21.7%)
Augmentative communication	2(40.0%)	1(5.6%)	3(13.0%)
Cassette tape recorder	2(40.0%)	2(11.1%)	4(17.4%)
Copy machine	1(20.0%)	4(25.0%)	5(23.5%)
NCR paper	1(20.0%)	4(22.2%)	5(21.7%)
Feet pointers	1(20.0%)	3(16.7%)	4(17.4%)
Picture board	3(60.0%)	7(38.9%)	10(43.5%)
Taped instructions	3(60.0%)	4(23.5%)	7(31.8%)
Aggregated score (MRS)	30(43.5%)	48(19.5%)	78(24.8%)

$\chi^2=16.61$; d.f.=1; P 0.001

Table 10: Distribution of respondents' evaluation of the availability of special needs materials /equipment based on the settings

Special needs materials / equipment	Settings of investigation (n and % of those who termed indicators as available)		N
	Urban	Rural	
Optical character recognition	4(33.3%)	0(0%)	4(18.2%)
Word processors with spelling and grammar check	4(30.8%)	2(20.0%)	6(26.1%)
Alternative keyboard	5(38.5%)	0(0%)	5(21.7%)
Instructional software	5(38.5%)	2(22.2%)	7(31.8%)
Talking clock	5(38.5%)	2(20.0%)	7(30.4%)
Voice recognition capabilities	6(46.2%)	0(0%)	6(26.1%)
Speech synthesizers	5(38.5%)	0(0%)	5(21.7%)
Augmentative communication devices	3(23.1%)	0(0%)	3(13.0%)
Cassette tape recorder	3(23.1%)	1(10.0%)	4(17.4%)
Copy machine	4(36.4%)	1(10.0%)	5(23.8%)
NCR papers	4(30.0%)	1(10.0%)	5(21.7%)
Feet pointer	2(15.4%)	2(20.0%)	4(17.4%)
Picture board	6(46.2%)	4(40.0%)	10(43.5%)
Taped instructions	5(41.7%)	2(20.0%)	7(31.8%)
Aggregated score (MRS)	61(34.7%)	17(12.2%)	78(24.8%)

2=20.97; d.f.=1; P<0.001

The general picture from the findings illustrated that the equipment were globally more available in urban than in rural areas. Previous tables have presented views about the level of the implementation of policy with regards to infrastructures, material and assistive technological devices. Table 11 presents findings on the availability of human resources.

Evaluation of existing human resources as a way of effective implementation of inclusive policy

From tables 11 & 12, the lack of special needs specialists was highly pronounced in both urban and rural areas though much more pronounced in rural settings. All the types of specialist were very absent in regular schools with brailist and counselors being the most represented but at a very weak rates of 22.2% and 27.8% respectively. As for special schools, apart from language interpreters and special educators, all the other types of specialists were insignificantly represented below average. Their availability was higher in special needs schools than in regular schools. Educational psychologists were completely absent in special schools unlike regular schools which had an availability rate of 16.7%. As

for sign language interpreters, they were fairly present in special schools but completely absent in regular schools.

Table 11: Distribution of respondents' assessment of the availability of existing human resources based on the different types of schools

School infrastructure culture present or not present	School of investigation (n and % of those who termed indicators as present)		N
	Special schools	Regular schools	
Brailist	2(40.0%)	4 (22.2%)	6(26.1%)
Sign language interpreters	3(60.0%)	0(0%)	3(13.6%)
Physiotherapist	2(40.0%)	1(5.9%)	3(13.6%0
Speech pathologist	1(20.0%)	0(0%)	1(4.5%)
Counselor	1(25.0%)	5(27.8%)	6(27.3%0
Social welfare worker	2(40.0%)	4(21.1%)	6(25.0%)
Nurses	2(40.0%)	2(11.8%)	4(18.2%0
Educational psychologist	0(0%)	3(16.7%)	3(13.0%)
Special educator	4 (80.0%)	2(11.1%)	6(26.1%)
Technician to repair equipment / materials	2(40.0%)	1(5.6%)	3(13.0%)
Aggregated score (MRS)	19(38.8%%)	22(12.6%)	41(18.3%)

$\chi^2=17.58$; d.f. =1; $P<0.001$

Table 12: Distribution of respondents' assessment of existing special needs specialist based on the settings

Special needs specialists	Settings of investigation (n and % of those who termed indicators as present)		N
	Urban	Rural	
Brailist	4(30.0%)	2(20.0%)	6(26.1%)
Sign language interpreters	2(16.7%)	1(10.0%)	3(13.6%0
Physiotherapy	2(16.7%)	1(10.0%)	3(13.6%)
Speech pathologist	1(8.3%)	0(0%)	1(4.5%)
Counselor	4(30.0%)	2(22.2%)	6(27.3%)
Social welfare workers	6(42.9%)	0(0%)	6(25.0%)
Nurses	2(16.7%)	2(20.0%)	4(18.2%)
Educational psychologist	2(14.3%)	1(11.1%)	3(13.0%)
Special educators	4(30.0%)	2(20.0%)	6(26.1%)
Technicians to repair equipment / materials	2(15.4%)	1(10.0%)	3(13.0%)
Aggregated score (MRS)	29(23.0%)	12(12.2%)	41(18.3%)

$\chi^2=4.28$; d.f.=1; $P=0.039$

Evaluation of the design of education programmes as a way of effective implementation of inclusive policy

a) School curricular and disability sensitivity

From tables 13 and 14 that examine the appropriateness of the syllabi, on the whole, they were more disability sensitive in special school than in regular schools where the situation was perceived as very poor for indicators such as ‘The subject syllabi are disability sensitive’, ‘Text books are disability sensitive’, ‘Children with disabilities have equal opportunities to participate in co-curricular activities like sports, cultural dances etc.’ and ‘Aspects of inclusive education are included in teacher training programs’. The most critical problems in special school were text books were not disability sensitive and aspects of inclusive education not included in teacher training programs. Globally, the situation was not different between rural and urban areas. The next sets of results illustrate the extent to which pupils with special needs are benefiting from the policy on inclusion or special needs.

Table 13: Distribution of respondents’ perception on the sensible nature of the school curricular (disability sensitive or not) by School type

Subject syllabi	School of investigation (n and % of those who termed indicators as agree)		N
	Special	Regular	
The subject syllabi are disability sensitive	4(80.0%)	7(38.9%)	11(47.8%)
Children with special needs are readily admitted in to our institution	4(80.0%)	9(50.0%)	13(56.5%)
Persons with disability can study natural science	5(100.0%)	11(61.1%)	16(69.6%)
Text books are disability sensitive	2(50.0%)	4(22.2%)	6(27.3%)
Children with disabilities have equal opportunities to participate in co curricular activities like sports, cultural dances etc.	4(80.0%)	7(38.9%)	11(47.8%)
Aspects of inclusive education are included in teacher training programs	2(50.0%)	6(33.3%)	8(36.4%)
Aggregated score (MRS)	21(70.0%)	44(40.7%)	65(47.8%)

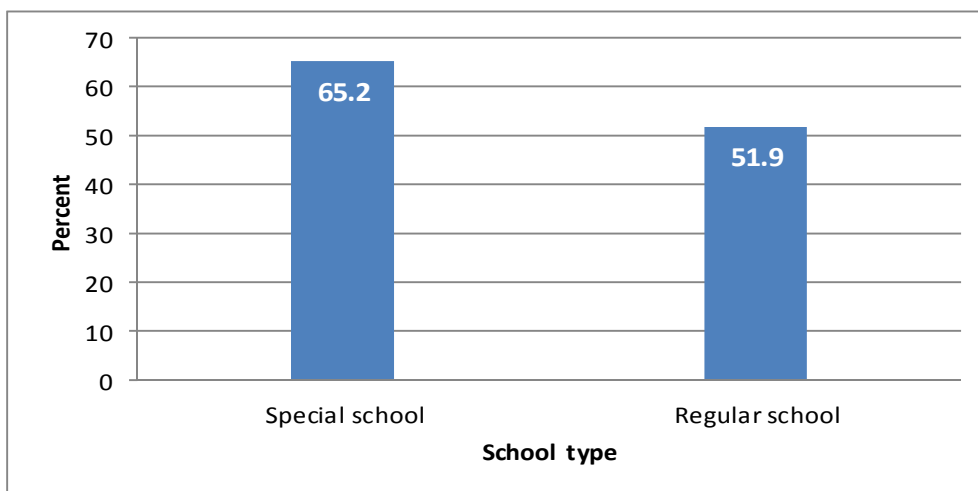
2=8.01; d.f.=1; P=0.005

Table 14 Distribution of respondents' perception on the sensible nature of the school curricular (disability sensitive or not) by School Location (Urban and Rural)

Subject syllabi are disability sensitive (agree or disagree)	Setting type of investigation (n and % of those who termed indicators as agree)		N
	Urban	Rural	
The subject syllabi are disability sensitive	6(46.2%)	5(50.0%)	11(47.8%)
Children with special needs are readily admitted in to our institution	8(61.5%)	5(50.0%)	13(56.5%)
Persons with disability can study natural science	8(61.5%)	8 (80.0%)	16(69.6%)
Text books are disability sensitive	3(23.1%0	3(33.3%)	6(27.3%)
Children with disabilities have equal opportunities to participate in co curricular activities like sports, cultural dances etc	5(38.5%)	6(60.0%)	11(47.8%)
Aspects of inclusive education are included in teacher training programs	5(41.7%)	3(30.0%)	8(36.4%)
Aggregated score (MRS)	35(45.5%)	30(50.8%)	65(47.8%)

$\chi^2=0.53$; d.f.=1; P=0.466

Extent to which pupils with special needs benefit from policies on inclusive education



$\chi^2=1.353$; d.f. = 1; P=0.245

Figure 7: Showing the extent to which pupils with special needs benefit from policies on inclusive education

The study showed that pupils from special schools benefit more from policies on inclusive education (access to free education, protected by policy, access to other resources

prescribed by the policy and appropriate infrastructure) more than their counterpart from regular school who do not share most of the advantages. However the difference was not statistically significant. Pupils from rural areas seems to benefit from policies on inclusive education (62.5%) more than those from urban area (49.5%) but this difference was not statistically significant ($\chi^2=1.958$; d.f. = 1; $P=0.162$). The appreciation of the three categories of respondents did not differ significantly ($\chi^2=1.175$; = 2; $P=0.556$).

Perceived benefits in the implementation of inclusive education policies

The various perceived benefits are listed below with the dominant one being social integration as shown on figure 7. The highest benefit perceived by respondent in relation to inclusive education was the social integration of pupils with special needs.

As for benefits related to the implementation of policies, there were for the major ones free education, donation/assistance and improve performance though their statistical rate were all below 50% (Figure 8).

Special schools benefitted more from free education and donation/assistance than regular schools. This was the same between rural and urban areas with rural areas benefitting more from these two advantages.

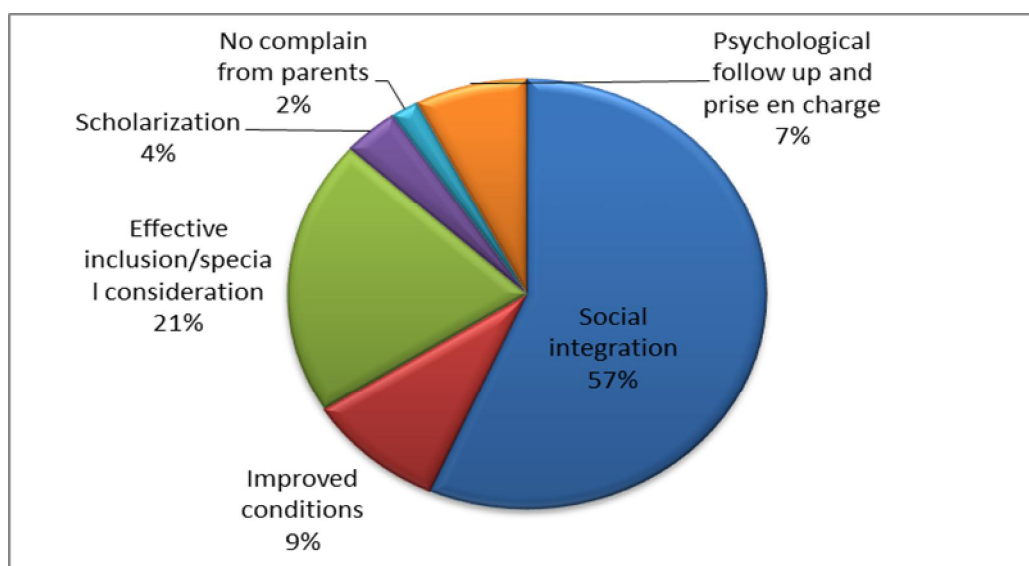


Figure 8: Perceived benefits received by pupils with special needs following the implementation of policies on inclusive education

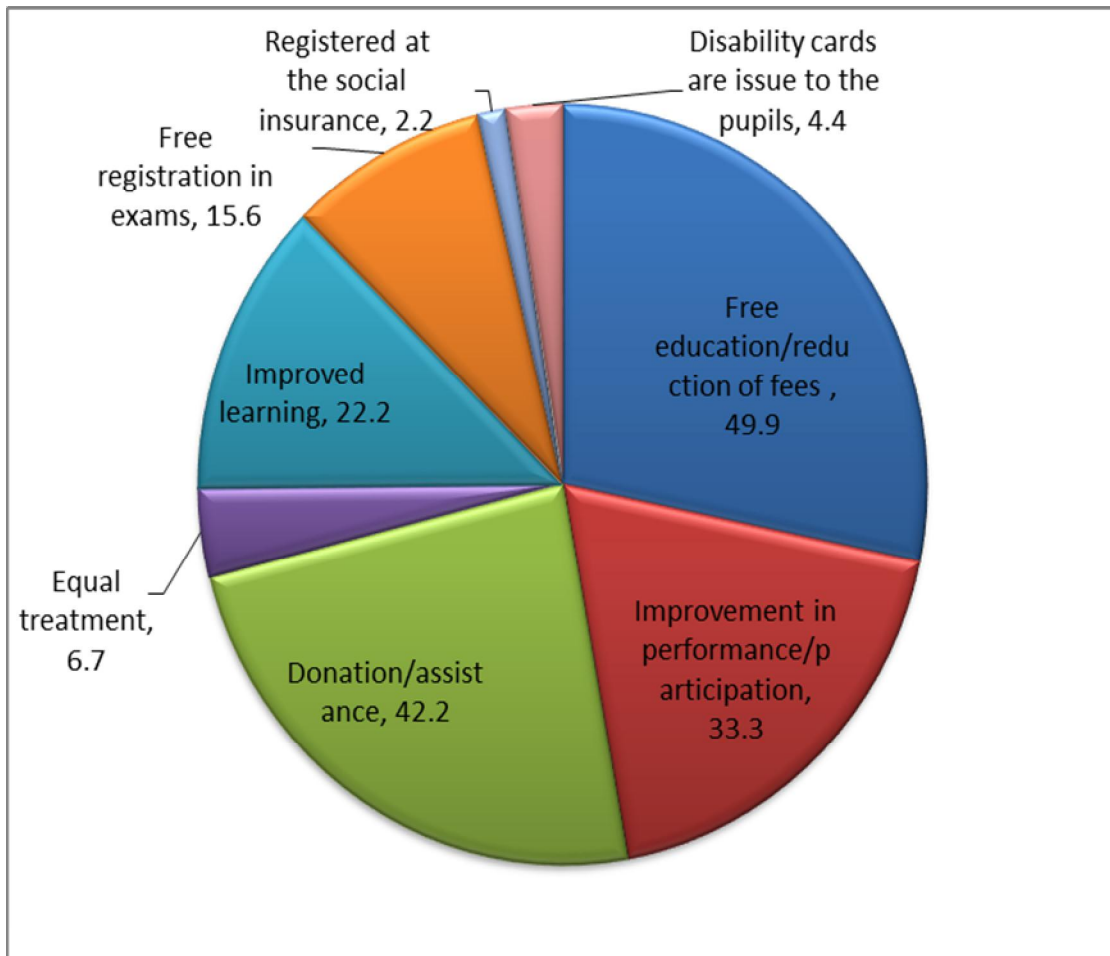


Figure 9: Perceived benefits received by pupils with special needs from policies addressing pupils with special needs

Schools were observed and the data derived from the observation is presented in table 15, illustrating critical indicators of inclusive education in Cameroon: processes and efficiency in each of the five regions studied.

Table 15: Summary tables for critical indicators of inclusive education in Cameroon: system, processes and efficiency as derived from observations

Independent indicators		Evaluation of school infrastructure: disability friendly (n and %)			Evaluation of school infrastructure: culture friendly (n and %)			Evaluation of special need materials/equipment: available (n and %)			Assessment of Existing Human Resources: present (n and %)		
		n (%) MRS	N	2-test	n (%) MRS	n	2-test	n (%) MRS	N	2-test	n (%) MRS	N	2-test
School type	Special	33(82.5%)	40	2=6.36 d.f.=1 P=0.012	33(89.2%)	37	2=4.92 d.f.=1 P=0.027	30(43.5%)	69	2=16.61 d.f.=1 P<0.001	19(38.8%)	49	2=17.58 d.f.=1 P<0.001
	Regular	88(61.1%)	144		103(71.5%)	144		48(19.5%)	246		22(12.6%)	175	
Setting type	Urban	73(65.8%)	111	2=0.04 d.f.=1 P=0.847	81(75.0%)	108	2=0.00 d.f.=1 P=0.958	61(34.7%)	176	2=20 d.f.=1 P<0.001	35(45.5%)	77	2=4.28 d.f.=1 P=0.039
	Rural	48(65.8%)	73		55(75.3%)	73		17(12.2%)	139		30(50.8%)	59	
Region	North West	30(62.5%)	48	2=15.99 d.f.=4 P=0.003	35(74.5%)	47	2=17.11 d.f.=4 P=0.002	29(34.9%)	83	2=18.41 d.f.=4 P<0.001	21(36.2%)	58	2=22.60 d.f.=4 P<0.001
	Littoral	10(41.7%)	24		14(63.6%)	22		7(17.1%)	41		8(26.7%)	30	
	Center	22(57.9%)	38		22(57.9%)	38		22(32.4%)	68		5(10.4%)	48	
	South West	38(86.4%)	44		41(95.3%)	43		17(24.3%)	70		3(5.7%)	33	
	Far North	21(70.0%)	30		24(77.4%)	31		3(5.7%)	53		4(11.4%)	35	
Total		121(65.8%)	184		136(75.1%)	181		78(24.8%)	315		41(18.3%)	224	

Independent indicators		Evaluation of educational programmes: disability sensitive(n and % of agree)			School curricular: culture sensitivity (n and % of agree)			Interaction in school (n and % of agree)			Inclusive pedagogic practice (n and %)		
		n (%) MRS	N	χ^2 -test	n (%) MRS	N	χ^2 -test	n (%) MRS	N	χ^2 -test	n (%) MRS	N	χ^2 -test
School type	Special	21(75.0%)	28	$\chi^2=8.01$ d.f.=1 P=0.005	16(80.0%)	20	$\chi^2=1.57$ d.f.=1 P=0.230	23(100.0%)	23	$\chi^2=0.84$ d.f.=1 P=0.360	28(96.6%)	29	$\chi^2=1.29$ d.f.=1 P=0.256
	Regular	44(40.7%)	108		47(65.3%)	72		81(92.0%)	88		93(86.9%)	107	
Setting type	Urban	35(45.5%)	77	$\chi^2=0.53$ d.f.=1 P=0.466	34(65.4%)	52	$\chi^2=0.53$ d.f.=1 P=0.466	61(95.3%)	64	$\chi^2=0.18$ d.f.=1 P=0.672	69(90.8%)	76	$\chi^2=0.58$ d.f.=1 P=0.446
	Rural	30(50.8%)	59		29(72.5%)	40		43(91.5%)	47		52(86.7%)	60	
Region	North West	18(50.0%)	36	$\chi^2=15.65$ d.f.=4 P=0.004	16(66.7%)	24	$\chi^2=17.24$ d.f.=4 P=0.002	28(93.3%)	30	$\chi^2=2.79$ d.f.=4 P=0.594	30(85.7%)	35	$\chi^2=3.81$ d.f.=4 P=0.433
	Littoral	4(22.2%)	18		4(33.3%)	12		14(93.3%)	15		17(94.4%)	18	
	Center	10(33.3%)	30		14(70.0%)	20		20(83.3%)	24		25(83.3%)	30	
	South West	21(75.0%)	28		20(100.0%)	20		23(100.0%)	23		29(96.7%)	30	
	Far North	12(50.0%)	24		9(56.3%)	16		19(100.0%)	19		20(87.0%)	23	
Total		65(47.8%)	136		63(68.5%)	92		104(93.7%)	111		121(89.0%)	136	

Table 15 presents among other results the findings on how inclusive education is faring in the different regions under study. From the eight measures it was evident there were differences in different aspects. As concerns the availability of disability friendly infrastructure, it was observed that the Far North (70%), North West (62.5%) and Center (57.9%) were respectively sensitive to infrastructural development. With regards to the friendly nature of disability school infrastructure, the average score is well above average with the South West Region illustrating this consciousness more (95.3%). In terms of special needs materials there is gross absence of such materials in all the regions. The basic indications of the merger availability from special schools found the center (32.4%) and North West (34.9%) where most of the special schools can be found. The nature of human resources illustrated gross absence, thus this could be seen as a major block for inclusive education to be implemented. Furthermore the study also examined whether programmes are disability sensitive, gain three of the five regions were found to be sensitive scoring and average of (50%); South West (75%), North West (50%) and North West (50%). In the aspect of whether school curricular is culture sensitive it was observed that all the regions had curricular that were culture sensitive with an average score (68.5%) with South West (100%), Center (70%) and Littoral only 33.3%. These particular findings illustrate the concern for relevance of schooling activities. Also the nature of school interaction was examined, the average score for all the regions stood at 93.7%. It demonstrated that much interaction goes on giving children the opportunity for participation. Inclusive pedagogical practices were examined. Interestingly enough in all the regions some form of inclusive pedagogic practices go on (89%). These analyses gave an overview of inclusive practices and information on how and what direction restructuring or reformation can be carried out.

Objective 4: Gaps and barriers to the systematic mainstreaming of inclusive education in regular schools

In the fourth objective the focus was on policy gaps and barriers to the systematic mainstreaming of inclusive education in regular schools. Findings showed that the implementation of inclusive education policies was largely flawed by many gaps in the policies themselves and barriers or challenges of implementation. The findings are found in tables 16, 17 and 18 support with excerpts from qualitative expressions.

Table 16: Perceived school-related barriers to inclusive education: distribution by school type

Disability related barrier	Statistics	School type		Total
		Special	Regular	
Inadequate environment/infrastructure	N	8	34	42
	%	32.0%	37.8%	36.5%
Distance to school	N	3	21	24
	%	12.0%	23.3%	20.9%
Assistive devices and other resources	N	14	53	67
	%	56.0%	58.9%	58.3%
Financial problems	N	10	24	34
	%	40.0%	26.7%	29.6%
Expensive education	N	6	4	10
	%	24.0%	4.4%	8.7%
Lack of personnel	N	10	41	51
	%	40.0%	45.6%	44.3%
Difficult to follow time table	N	6	11	17
	%	24.0%	12.2%	14.8%
More teaching effort/comprehension problems	N	3	4	7
	%	12.0%	4.4%	6.1%
Difficult to manage disability	N	4	13	17
	%	16.0%	14.4%	14.8%
Inadequate trained personnel	N	4	27	31
	%	16.0%	30.0%	27.0%
Discrimination from parents	N	1	0	1
	%	4.0%	.0%	.9%
Not implemented	N	0	3	3
	%	.0%	3.3%	2.6%
Inadequate parental collaboration	N	0	1	1
	%	.0%	1.1%	.9%
Total	N	25	90	115
	%	21.7%	78.3%	100.0%

Findings from table 16 show that school related barriers to the implementation of inclusive education policy in Cameroon are more related to inadequate school environment and infrastructure, inadequate or absence of assistive devices and other resources, lack of personnel and those on ground are inadequately trained including other barriers and challenges not mentioned but do impact the process.

Table 17: Community-based barriers to inclusive education

Community based problem	Responses	Percent of Cases
Exclusion of people with disability	30	28.6%
Financial constraints/poverty, shortage of resources	100	95.2%
Poor road network	33	31.4%
Inaccessible school environment	15	14.3%
Identification process	19	18.1%
Lack of education and sensitization	36	34.3%
Lack of assistive devices at community level	19	18.1%
Lack of exposure	37	35.2%
Communicative obstacles	15	14.3%
Refuse to collaborate	2	1.9%
Lack of coordination	1	1.0%
Lack of statistics	1	1.0%
Lack of field experts	3	2.9%

N=105

From the table 17 above, community-based barriers to inclusive education mainly pointed to the exclusion of people with disability, financial constraints/poverty, shortage of resources, lack of education and sensitization, lack of exposure and poor road network. However there are other community based barriers. It is important to indicate that a regional pedagogic inspector believed that community-based organizations could serve as platform for collaboration to help curb these problems at community level. Table 18 presents the perceptions of administrators on the barriers and challenges towards the implementation process..

Table 18: Perceived barriers by educational administrators in relation to the implementation of inclusive education policies and response measures

Question	Quotations
Disability related barriers	'Lack of special teachers, specialist' [Regional delegate], 'The training of teachers don't have the knowledge' [sub-divisional delegate] 'Manque de personnel spécialisés' [Regional pedagogic inspector]
Culture related barriers	'Stigmatisation, ignorance, pauvreté' [Regional pedagogic inspector]
Problems faced by community in helping pupils with special needs	'Shortage of resources, ignorance on the part of the community' [Regional delegate] 'No barrier' [Sub-divisional inspector]
Ways that schools can help overcome these barriers	'In service program, talk to parents, train teachers who are specialists in that field' [Regional delegate] 'La sensibilisation des parents d'élève' [Regional pedagogic inspector]
Way that community can help overcome these barriers	'La création des associations de lutte contre l'ignorance, la création des petites entreprises' [Regional pedagogic inspector] 'Provision of human resources, specialist in handling various categories' [Sub-divisional inspector] 'To overcome ignorance of parent and be exposed through meetings on how to handle their disabled children' [Regional delegate]
Ways that government can help to overcome these barriers	'Specialist should be trained, sensitization of the educational community, measures for the community to change their ignorant mentality' [Regional delegate] 'The ministry should create teachers training schools aimed at training teachers to handle special children' [Sub-divisional inspector] 'Formation du personnel, affectation équilibrée du personnel formé dans les structures scolaires, éducation des masses sur l'importance et la nécessité de l'éducation inclusive' [Regional pedagogic inspector]

Educational administrators underscored the issues concerned with disability and culture related barriers and problems faced by the community. They emphasized on the need to train quality teachers and specialists, sensitize the community and educate parents. But what came out clearly was that educational administrators presented majority of the gaps and barriers to implementation. In most cases they saw barriers than opportunities for inclusive education policies in Cameroon which could have presented the base for influencing policy reforms.

Data obtained from interviews further highlighted culture related barriers to the effective implementation of inclusive education policy. It pointed to negative attitudes and behaviours such as labeling/stigmatization/discrimination, negative cultural beliefs, ignorance, cultural diversity and tribalism. Excerpts from the voices of the respondents are

hereby stated; a regional pedagogic inspector reported that there was the phenomenon of "Giving names to pupils with disabilities".

Negative Cultural beliefs

And a regular school teacher reported that some cultural beliefs hold that "they are witches, they bring evil to the family" and should be killed. Reporting on cultural diversity as a barrier to implementation, another regular school teacher said: "l'écôle à plusieurs élèves de toutes les ethnies -Non-maîtrise des ethnies environnantes". Meanwhile, a regular school administrator pointed to ignorance and argued that: "Beaucoup de parents pensent que l'enfant qui a des déficiences ne doit pas aller à l'écôle, ils les gardent à la maison".

General absence of knowledge

Barriers created by the absence of knowledge have been well demonstrated by this study. For example, some regular school teachers pointed to "Ignorance on the part of the community", "Incompréhension et manque de communication des parents", "Most of the teachers are not trained in special education so they find it difficult to teach pupils with visual problems", "There is no person to educate the community about pupils with special needs", "lack of knowledge and education, the pupils have no use for them", "Ignorance des premiers soins avant l'arrivée des specialists", etc. Other disability related barriers were highlighted: "Lack of special teachers, specialist [Regional delegate]", "The training of teachers don't have the knowledge [sub-divisional delegate] or "Manque de personnel spécialisés [Regional pedagogic inspector].

Objective 5: identify strategies to improve on existing policies and practices for the management and implementation of inclusive practices in basic education

The findings informed on the strategies that can be used to eradicate barriers and ensure smooth implementation of inclusive education practices. Table 19 presents the findings.

Table 19: Perceived solution to barriers to inclusive education: school perspectives

Strategies used by schools to overcome the barriers	Responses	Percent of Cases
Educating the community	57	45.2%
Home-school relationship	29	23.0%
Enhancing inclusive education	27	21.4%
Good teacher-pupil relationship	20	15.9%
Assessing the Educational environment	7	5.6%
Parent participation	14	11.1%
Improve social interaction	25	19.8%
Facilitate accessibility to the school environment/special consideration	34	27.0%
Equal treatment	23	18.3%
Continuous training and in-service teaching program	68	54.0%
Re-education of the people with disabilities	35	27.8%
Employment of qualified personnel and adequately working environment	1	.8%
Sent them to special centers	1	.8%
Census	4	3.2%
Counseling service	1	.8%
Partnership	1	.8%

N=126

The most prominent perceived strategies to eradicate barriers and improve on the implementation of inclusive education policy in Cameroon were based on the need for continuous training of teachers and in-service teaching programme (54%); educating the community (45.2%); and facilities to facilitate accessibility to the school

environment/special consideration (27%) and re-education of persons with disabilities. Other strategies were identified and the findings are in table 20.

Table 20 shows that educational administrators saw the training of specialists (58.5%) as the most important strategy to improve on the implementation of inclusive education policies. They also recommended among others, the presence of general support/aid (49.6%); the provision of assistive devices (42.3%); and the employment of specially trained teachers (38.2%).

Strategies for addressing community challenges were examined and the findings are found in table 21.

Table 20: Perceived Strategies as solutions to address barriers to inclusive education from the perspective of educational administrators

Strategies the government can use to overcome barriers	Responses	Percent of Cases
Free education	41	33.3%
Assistive devices	52	42.3%
General support/Aids	61	49.6%
Adequate learning environment	21	17.1%
Promoting inclusive education/promoting the right of the disabled	8	6.5%
Employing specially trained teachers	47	38.2%
Training specialist	72	58.5%
Special centers	24	19.5%
Employing persons with disabilities	8	6.5%
Motivate teachers	10	8.1%
Improvement of training scheme	9	7.3%
Continuous training	19	15.4%
Construction of resource centers	26	21.1%
Infrastructural development	34	27.6%
Special consideration during exams	5	4.1%
Good financial management	3	2.4%
Education of parents and the population	7	5.7%
Creating special centers	10	8.1%
Creating special schools	3	2.4%
Census	1	.8%
Promoting national languages	1	.8%

N=123

Table 21: Perceived solutions to barriers to inclusive education: community perspectives

Community strategies to overcome the barriers	Responses	Percent of Cases
Participatory Infrastructural adaptation	25	24.0%
Participatory policy development/acceptance	11	10.6%
Assistance to people with special needs	59	56.7%
Promotion of education and sensitization of the communities	28	26.9%
Evaluation and enabling the communities	31	29.8%
Visitation	5	4.8%
Leadership position for the persons with disabilities	2	1.9%
Set laws	3	2.9%
Change of mentalities	15	14.4%
Improve accessibility	6	5.8%
Curbing communication barriers between peoples and the impaired	18	17.3%
Solidarity	1	1.0%
Curb exclusion	7	6.7%
Creation of association and small enterprises	1	1.0%
Providing equipment	2	1.9%
Census	1	1.0%

N=104

Table 21 shows that from the community perspective, perceived solutions were seen in the light of providing assistance to persons with special needs, evaluating and enabling the communities, promoting the education and sensitization of communities to participate in infrastructural adaptation. Interview data also pointed to the need for relevant set of laws, changed mentalities, improved accessibility and curbing communication barriers. For example, a regular school teacher recommended: "Set laws to protect these pupils" and another said "Change of mentality, and assume their duty as part of the teaching learning process". Another maintained "Arrêt de mise à mort de certains handicapés, albinos au Nord", and "L'abandon de certaines croyance vis-à-vis des enfants souffrant et de certains handicaps".

Critical indicators of inclusive education in Cameroon

Critical indicators for inclusive education were identified, in Appendices 5 and 6 but summarized on figures 10 and 11 as presented below.

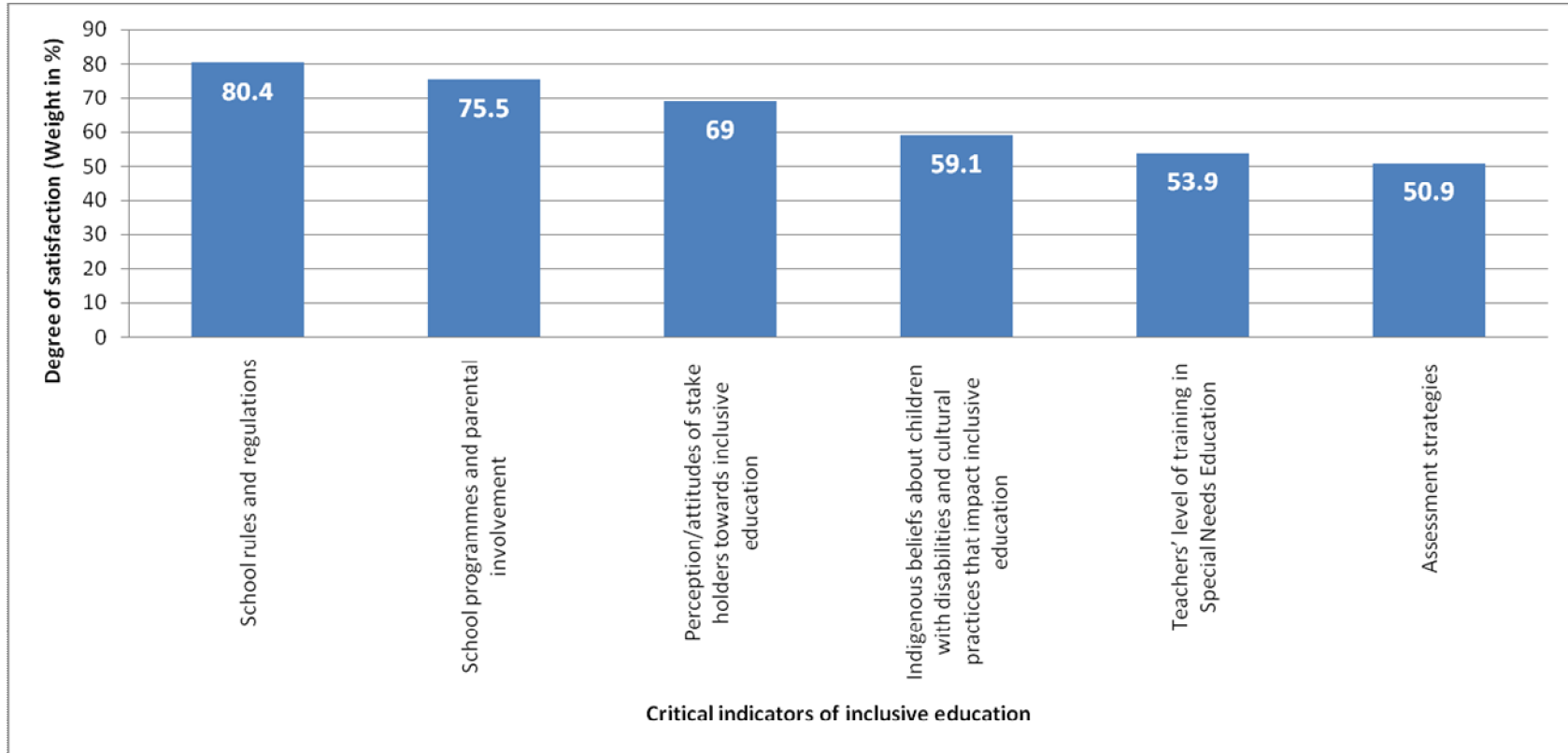


Figure 10: Critical indicators of inclusive education in Cameroon: system, processes and efficiency as perceived by the respondents

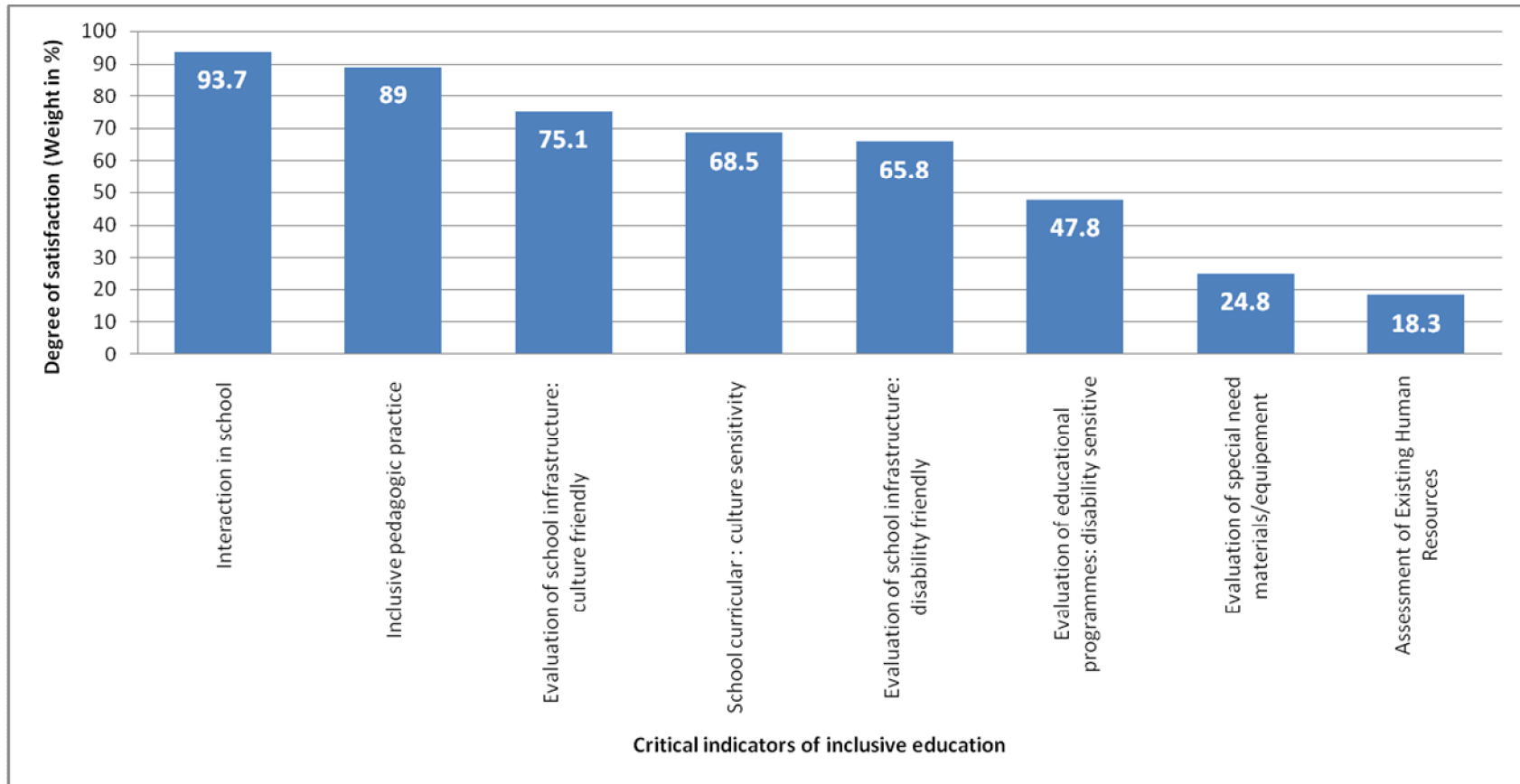


Figure 11: Critical indicators of inclusive education in Cameroon: system, processes and efficiency as derived from observations

From the analysis above, it appears that the following indicators are the most hindering factors to the implementation of inclusive education in Cameroon:

- Lack of human resources notably specialists;
- Lack of materials/equipment;
- Inadequacy of educational programmes generally not disability sensitive;
- Inadequate evaluation strategy;
- Teachers' level of training on inclusive education though some how weak was better compared to the four others which were very dissatisfactory and dissatisfactory.

N.B. 0%= do not exist; 0.1-25%=Very dissatisfactory; 25.1-49.9%= dissatisfactory; 50-75%: weakly satisfactory; and 75.1% and above very satisfactory.

Detailed statistics on the above critical indicators of inclusive education are presented in Appendices 7 and 8.

Objective 6: Identify best practices for inclusive education practice in Cameroon schools

In the final objective best practices were identified from inclusive education practices in Cameroon. In this regard, the focused was on a number of issues: the nature of school in terms of school and classroom legislation defined in rules and regulations, pedagogic practices and assessment practices as presented on table 22, 23 and 24.

Table 22: Emerging best practice in school rules and regulations by school types in Cameroon

Indicator	School Type.(n and % for those who Agree)		Total
	Special	Regular	
Classroom rules and procedures are written and explained in language that is clear to students from culturally and linguistically diversified backgrounds	26(86.7%)	128(86.5%)	154(86.5%).
The school knows when and how to provide accommodation to students with special needs.	26(86.7%)	104(71.7%)	130(74.3%)
Pupils are taught school sanctioned behaviours, particularly as they might conflict with specific behaviours	27(90.0%)	106(72.6%)	133(75.6%)
Pupils are made aware of behaviours that might be culturally specific so they can learn how to interact appropriately with students from cultures other than their own	28(93.3%)	133(89.9%)	161(90.4%)
Classroom size is controlled to ensure an optimal learning environment that addresses the needs of all the students	24(80.0%)	124(83.8%)	148(83.1%)
Aggregated score (MRS)	131(87.3%)	595(81.0%)	726(82.0%)

$2=3.44$; d.f.=1; $P=0.636$

The best practice identified is clear school and classroom legislation. In relation to school rules and regulations, the implementation was very high in both special and regular schools. Though the respect of these rules was more pronounced in special schools, this difference was not statistically significant. Educating pupils on school rules and regulations and the implications for the nature of sanction, when these are violated is evidence of best practice. The findings also illustrated best practices in how pupils are made to be aware of cultural differences among them for appropriate interactive behaviours and establishing good interpersonal relationships with others. Effective control of classroom size to reach out to the needs of all students was found to be positive to inclusion. From identifying best practices in

school and classroom legislation, table 23 presents some best practices from the perspective of inclusive pedagogical practices.

Table 23: Emerging best practice in the use of inclusive pedagogies by school types in Cameroon

Inclusive pedagogic practices (practiced or not practiced)	School of investigation (n and % of those who termed indicators as practiced)		N
	Special schools	Regular schools	
Lecture and demonstration	5(100.0%)	17(94.4%)	22(95.7%)
Lecture and illustration	5 (100.0%)	16(88.9%)	21(91.3%)
Discussion	5(100.0%)	14(82.4%)	19(86.4%)
Role play	5(100.0%)	17(94.4%)	22(95.7%)
Dramatization	4(80.0%)	13(72.2%)	17(73.9%)
Group or cooperative learning	4(100.0%)	16(88.9%)	20(90.9%)
Aggregated score (MRS)	28(96.6%)	93(86.9%)	121(89.0%)

2=1.29; d.f.=1; P=0.256

The best practice identified is the use of participatory pedagogic approach that is not intrusive. Inclusive sensitive pedagogic strategies as found in table 23, employ teaching methods that encourage pupils' participation and peer group work. From the findings therefore, eclectic pedagogic approaches (that is many approaches are being used in any given teaching context) are used thus permitting each pupil in both regular and special schools full opportunity to be involved. Of great importance is the fact that in both special and regular schools even when lecture method is used, it is accompanied by demonstrations and illustrations. Active methods such as discussion, role play, dramatization and group or cooperative learning are valuable inclusive pedagogic approaches. The next area to search for best practice was in assessment. The findings are in table 24.

Table 24: Emerging best practice in assessment strategies by school type in Cameroon

Indicator	School Type.(n and % for those who Agree)		Total
	Special	Regular	
The pupil is assessed by someone who speaks his/her native language and who is knowledgeable about the impact of second language acquisition on IQ and achievement tests	10(34.5%)	71(52.6%)	81(49.4%).
English language learners are assessed in their native language as well as English	6(20.7%)	50(35.5%)	56(32.7%)
In assessment the pupil is observed in his or her classroom as well as in other contexts and settings	19(65.5%)	101(72.7%)	120(71.4%)
The assessment team uses alternative assessments(e.g curriculum based assessment, portfolio assessment) to assist in determining eligibility for special education	17(63.0%)	78(57.4%)	95(58.3%)
The assessment team uses culturally appropriate and culturally valid assessment tools	14(53.8%)	52(38.0%)	66(40.5%)
Administrators, teachers, and related support personnel are knowledgeable about the special education evaluation process	16(57.1%)	83(59.3%)	99(58.9%)
The school ensures that high stakes tests have been validated for the purpose for which they are used and have been standardized on populations of students similar to their students	13(50.0%)	74(55.6%)	87(54.7%)
There is the use of other cultural methods of assessing intelligence	17(58.6%)	91(66.4%)	18(65.1%)
Assessment test are only based on IQ test	10(34.5%)	50(36.8%)	60(36.4%)
Aggregated score (MRS)	122(48.4%)	650(52.6%)	772(51.9%)

$Z=1.49$; d.f.=1; $P=0.222$

An important best practice was that assessment was

The findings of this study present the basis to depict what can be identified as the model of inclusive education for Cameroon. Table 25 therefore presents the Regression Model comparing predictive power among components of inclusive education in Cameroon and the Integrated Value Mapping (IVM).



Figure 12: Emerging best practices of inclusive education



Modeling inclusive education in Cameroon

Table 25: Regression Model comparing predictive power among components of inclusive education in Cameroon and the Integrated Value Mapping (IVM)

Predictive Variables to be considered in policy for Inclusive Education

Predicting components	Chi-Square statistics	Cox & Snell R Square	Explanatory Power	N
Teachers' level of training in special needs education	<0.001	0.200	20.0%	98
School rules and regulations	0.008	0.105	10.5%	141
Assessment strategies	0.421	0.073	7.3%	122
School programmes and parental involvement	0.005	0.137	13.7%	139
Perception/attitude of stakeholders towards inclusive education	0.205	0.232	23.2%	103
Indigenous beliefs about children with disabilities and cultural practices that impact inclusive education	0.266	0.124	12.4%	135
IVM	0.004	0.750	75.0%	62

From the logistic regression model, as observed the Perception/attitude of stakeholders towards inclusive education and teachers' level of training in special needs education predicted benefits to pupils with special needs (disability/ disadvantaged and marginalised groups) better than other predictive components; these two components had higher predictive power of 23.2% and 20.0% respectively. However, their predictive powers are quite low as compare to that of the Integrated Value Mapping (IVM) which is 75.0%, indicating that though these two components contributed more, enough attention has to be paid to other model components to optimize benefits to inclusion (All pupils with special needs in same classroom space). Four model components out of seven were relatively stable (Chi-Square test: $P < 0.05$). The IVM was equally stable, which is a good indicator for the validity of the mode as presented in figure 12 below.

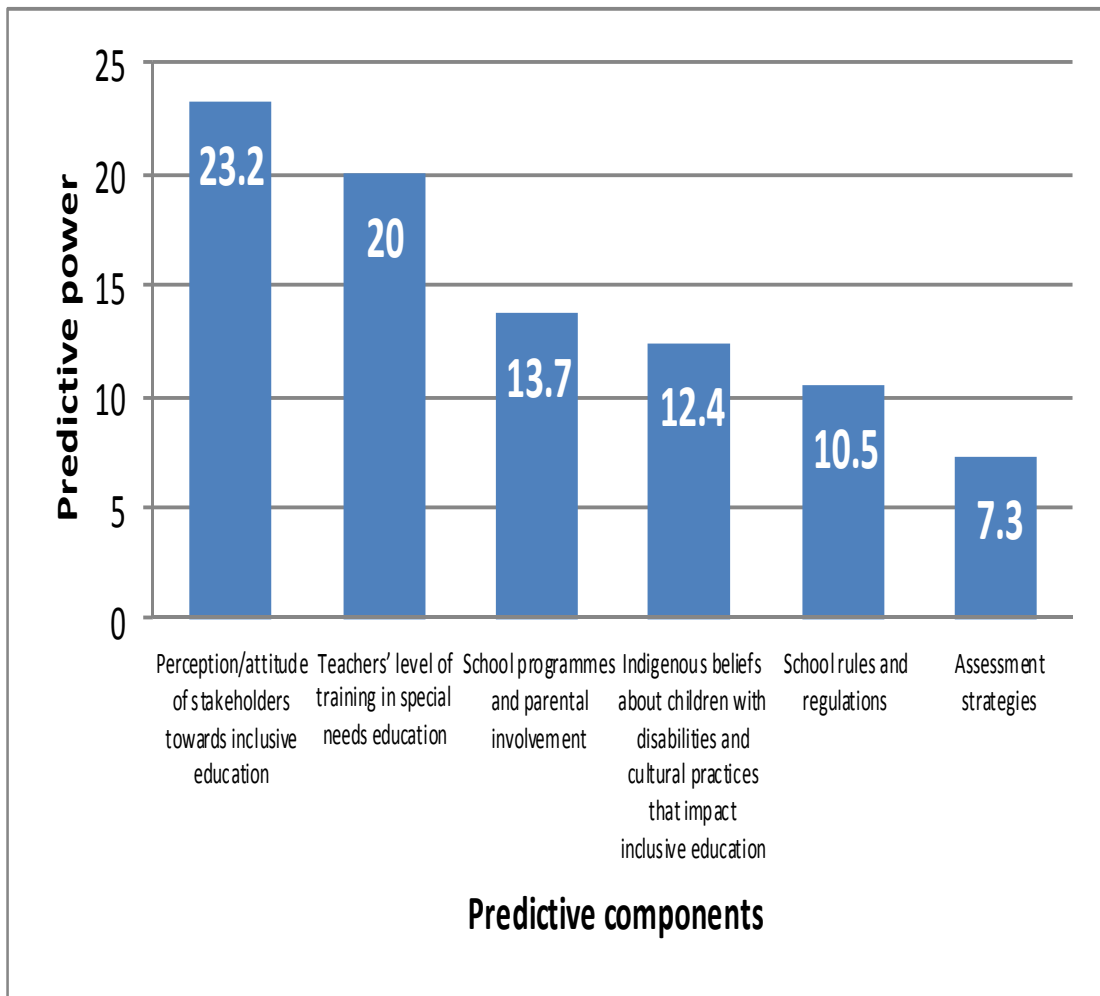


Figure 13: Logistic Regression Model comparing predictive power among components of inclusive education in Cameroon

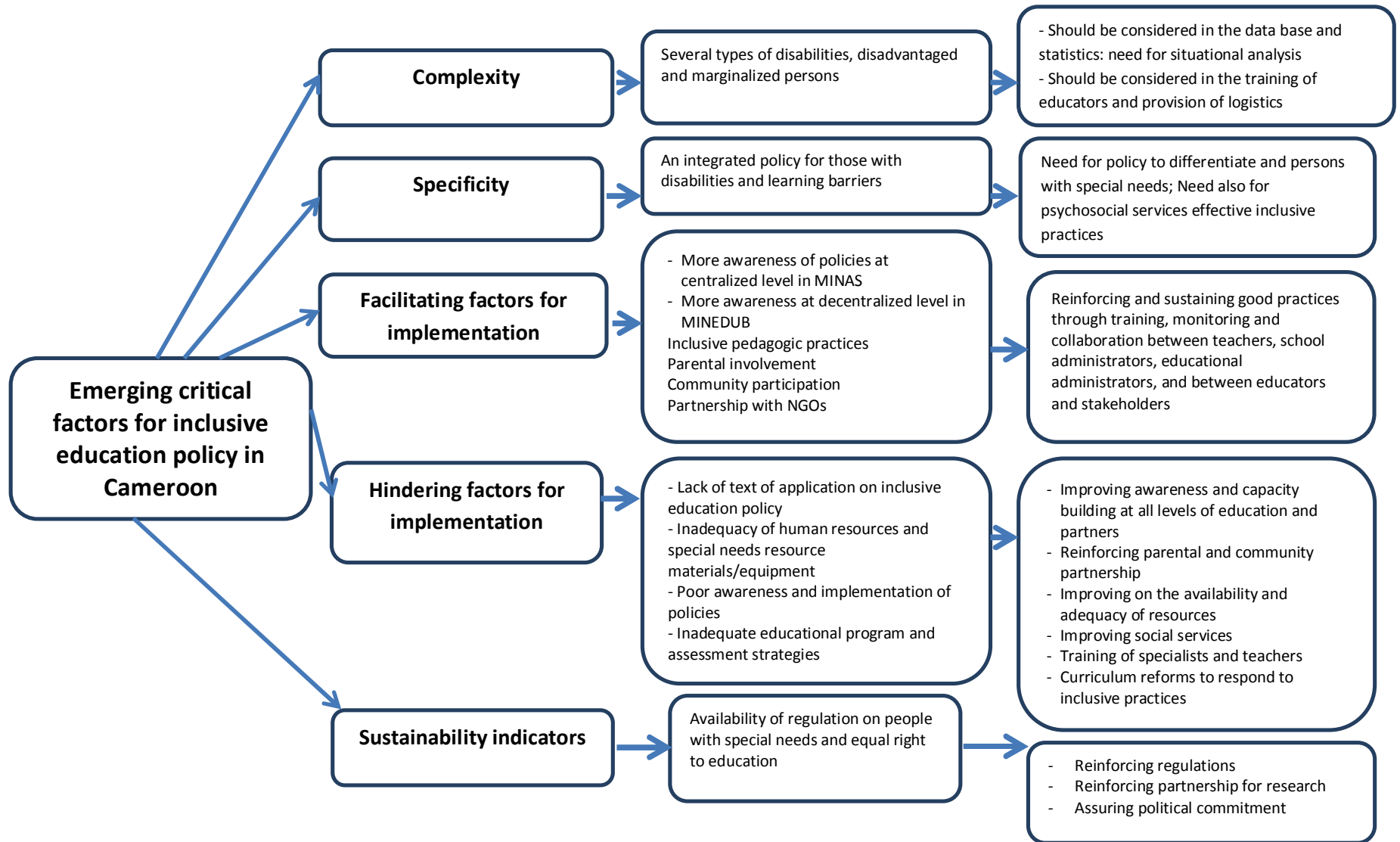


Figure 14: Diagram explaining critical factors of inclusive education in Cameroon

Figures 12 and 13 present two important concepts the first in figure 12 demonstrated a model drawn from components with predictive power for inclusive education for Cameroon. These components have implications for the underlying philosophy, expectations and the nature of partnership necessary for inclusive education practices. For figure 13, the findings of the study enabled the identification of five critical factors for inclusive education policy in Cameroon. The analysis permitted not only the identification of strengths and weaknesses but provided orientations for amelioration of existing practices, implied suggestions for reforms and perspective for sustainability.

Discussion

The findings of this study have been illuminating particularly concerning the absence of knowledge and awareness of guiding policies pertinent for practices in school contexts. Six objectives guided by five research questions directed this research process. The basic findings already signal that there are differential disabilities and impairments in most classrooms be they special or regular schools. Some of these mentioned are visual impairment, hearing impairment, emotional/behavioural disorder, speech/language impairment, physical disability, learning disability, hyperactivity, autism, dyslexia (reading difficulty), dysgraphia (writing difficulty), mathematical learning difficulty, gifted and talented. What immediately comes to mind is the question of how regular schools cope when the vocabulary of these disabilities or impairments are not common in texts or even in training programmes. As observed, the policies have not put great accent on the training of inclusive teachers or on a curriculum that should address inclusive practices in terms of infrastructural development, resource provision, pedagogy and assessment. Policy statements made references to issues of access and free education yet the findings are insisting on free education and the issue of the absence of finances. What this signals is that this may not be the case in practice contexts. Evidence also points to diverse interpretations of the inclusive education policy, limitations of the education policy, lack of capacity at individual, institutional and regional levels, lack of support for the implementation process and negative attitudes towards inclusion.

The emphasis on inclusive practices for teacher education training programmes ought to be a major policy consideration in Cameroon. Teachers are the most important element in the implementation of inclusive education programmes. They see different children manifesting different normal and abnormal behaviours everyday. With all the emerging issues related to practice, any policy prescriptions should be based on the realities of the field, meaning that

teachers must be part of the decision making process on inclusive education. This has significant implication for the need for the spirit of continuous action research in Cameroon educational practices; and also adds value to this situational analysis of inclusive education in Cameroon which should shed light on the way forward. These findings also support the experience on the field where educators of the central services and some of the decentralized services referred researchers to the front line of action. What this is announcing is that awareness may not be enough. There is need to go beyond just knowledge of existing policies to analysing them on the bases of the level of commitment to the policy, content of the policy, attitudes of actors towards the implementation of the policy, and even the suitability of the implementation contexts, the school and classroom settings (Stofile, 2008). This is very pertinent in this study as some of those who were aware of the existence of an inclusive policy in Cameroon could not specify the policies. Admission in regular schools was the most highlighted policy statement, followed by Free education and then Equal rights. What the findings are highlighting therefore is that the existing policies are addressing more the issues of access and not process. Educational administrators saw the training of specialists (58.5%) as the most important strategy to improve on the implementation of inclusive education policies. They also recommended among others, the presence of general support/aid (49.6%); the provision of assistive devices (42.3%); and the employment of specially trained teachers (38.2%). These findings translate in the fact that there is no clarity in the policy of inclusion in Cameroon so much so that diverse interpretations of inclusive education abound. There seems to be no common understanding of inclusive education between actors and particularly between leading ministries of education and social affairs. With the absence of such synergy, the reality on the field is that schools and individual teachers are often compelled to work out their own interpretations and mechanisms of practicing inclusion.

In most cases, actors in Cameroon saw inclusive education as offering special education services, whereas this is not the case. That is why awareness and application of policies are better understood and employed in special than in regular schools. The regular schools are battling with inclusion and are still lagging behind. Policy references focus more on identification and provisions. Of particular interest here is the fact that lack of capacity to implement an inclusive education policy in Cameroon is evidenced. At individual level, majority of teachers in the regular schools claimed that they could identify barriers to learning but that they did not have the relevant competencies to address the needs of learners in the classrooms. Such lack of capacity could be blamed on absence of adequate pre-service and in-service training programmes on inclusive practices. At institutional level, large class sizes, the

conditions of the school buildings and lack of facilities still remain a major threat to inclusion in Cameroon schools. For example, overcrowding usually does not only hamper effective teaching and classroom management, but it also prevents learners from receiving individual attention. It also further hampers the teacher's capacity to address diversity needs in the classroom.

Moreover the special schools require specialist actions whether these exist or not is not the question. An interesting issue is the rural /urban dichotomy in awareness and practice. Since there are few schools in rural areas, it is only normal that schools should try to accept and manage all children seeking access, though cultural beliefs, labeling, stigmatization, and discrimination tendencies may be common practice as are also the case in some urban contexts.

The gaps in policy have been amply demonstrated in terms of the narrowness of the prescriptions that in some if not most cases do not match field realities and the need for a shift to address inclusive practices with a focus on process. Furthermore as observed the gap in policy statement on strategies of implementation needs to be clear and these factors in all practice and training programmes. Barriers are many as observed from findings. Some of these are Community based problems such as inadequate environment/infrastructure, exclusion of people with disability, lack of education and sensitization, financial constraints/poverty, shortage of resources, lack of exposure, Distance to school, and shortage of assistive devices and other resources.

On identifying strategies to improve on existing policies and practices on inclusive education in Cameroon, the following findings were obtained. The most prominent perceived strategies to improve on the implementation of inclusive education policy in Cameroon from the perspective of institutions was continuous training and in-service teaching programmes (54%); educating the community (45.2%); and facilities to facilitate accessibility to the school environment/special consideration (27%). These findings enabled the identification of a social model for Cameroon based on its cultural specificities presented in figure 14.

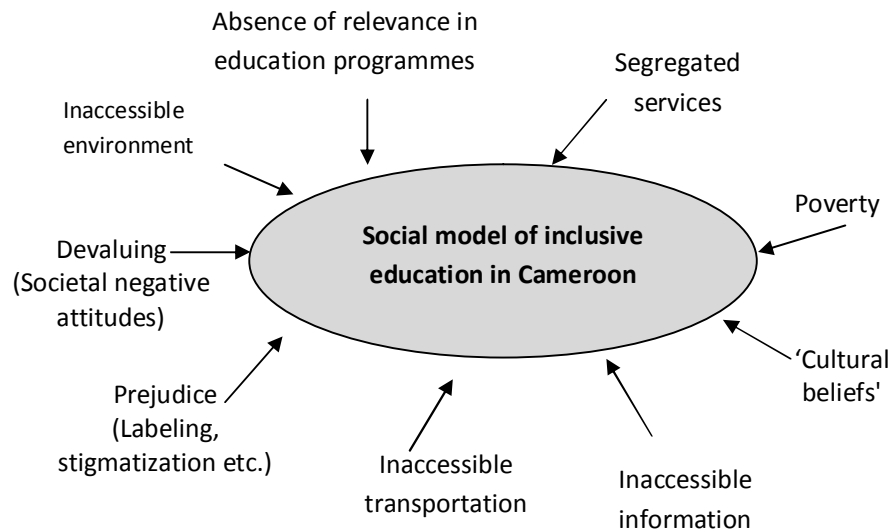


Figure 15: Social model of inclusive education in Cameroon

Pooling Best Practices

Best practices framework was also the concern of this study. We found very insignificant indicators for best practice in Cameroon schools. However, a significant dose of perceptions of what should constitute an effective inclusive education programme was recorded by stakeholders. Among others, they pointed to school rules and regulations, inclusive pedagogies, and effective assessment strategies.

From the Canadian experience (Saskatchewan Teachers' Federation ,1986) though still at an early stage , best practices for inclusion is based on the principles that "all children attend age appropriate regular classrooms in their local schools," "all children receive curriculum relevant to their needs," and "all children benefit from cooperation and collaboration among home, school and community," among others. These principles serve as a basis for eleven categories of best practice, including the following:

- A school learning environment that holds positive expectations and opportunities for all learners
- Collaborative planning among administration, learners, teachers, parents, and community partners

- An administration that provides an enabling and empowering school environment for all learners
- A school environment that enables and expounds the importance of social responsibility, including the celebration of difference
- The inclusion of learners and parents in the planning of curriculum to learners with disabilities, and the accommodation of individual strengths and needs;
- Support programmes and services (e.g. counsellors, health and social service workers, educational assistants) that meet the needs of learners with disabilities
- The use by teachers of a range and variety of instructional and assessment practices in order to accommodate various learning preferences
- Transition planning that involves all stakeholders in the life of a particular learner (i.e. receiving teachers and administrators, job counsellors, parents, external service workers, etc.)
- Partnerships between the school, the learner's family, and the greater community
- Innovative system and staff growth through evaluation and professional development
- School accountability, both to learners/parents and to the Ministry of Education

Uniting stakeholders behind inclusion has been identified as key to the success of inclusive education in the Southern Africa region (Rieser, P. 2008). Parents, teachers, communities, donors and governments, not to mention the pupils themselves, all require a certain amount of knowledge and skills in order to promote inclusion and tackle stigma associated with disability and special needs. The child to child approach to empower and educate children about disability through the use of songs and plays are very vital strategies. In Uganda as concern the normads instruction is through the use of their language. Here the focus is on active teaching methods, having a responsive curriculum, and encouraging team teaching.

Conclusions and Recommendations

The main orientation from this study is that focus on inclusion should be need-based rather than categorical assessment and placement. Inclusive education requires an investment in those assets that enable teachers, as change agents, to construct and reconstruct new ways of thinking, and to cope with the complexities that arise, which are further compounded by poverty-related issues. It also requires a proactive and conscientious policy understood by every stakeholder so that every such stakeholder is committed to its implementation. The findings of this study have revealed that the majority of teachers and other implementing stakeholders felt overwhelmed by their roles at each level of implementation (either as

teachers in classrooms, head teachers in schools or authorities in the regions), and that they had not been trained to address the diverse needs of learners. It is not reasonable to ask teachers to accept new responsibilities and to expand their roles without the provision of adequate training. To address these challenges we recommend as follows (objective by objective):

A.

- Create awareness on existing policies of inclusive education with regards to the systems and application. A re-visitation of the policies on inclusive education is also very necessary so as to inform processes to facilitate implementation of policies.
- In this regard the central services should be oriented towards the policies and be empowered so that they can facilitate the dissemination of the policies to the decentralized services (delegations, schools and other service institutions) as an empowerment process.

B.

- The absence of knowledge of inclusive education policies for education managers, affects implementation in a serious manner. In this regard, a sensitization campaign is necessary for managers that should enable them to have a mastery of inclusive education policies and thus enable them to facilitate implementation. For this reason, we are also recommending participating organs at the central, decentralized and school levels to enforce the systematic mainstreaming of inclusive education practices at the urban and rural regions.

C.

- The gaps/barriers identified amply illustrated the weaknesses in the implementation of the inclusive education policies. The policies are more of prescriptions rather than of processes that should be addressing content, resources and strategies. For the policies to address these objectives, such gaps/barriers must be closed by addressing pedagogical practices, curriculum issues, disability friendly environments, integrated curriculum, relevant assessment strategies, teacher education at the initial and in-service training for personnel at managerial level (central and decentralized). Create partnerships with community/parents, social centers and other related services and NGOs to ensure that all types of schools benefit.

- Focusing on the numerous barriers such as inadequate school environment/infrastructure, inadequacy of assistive technology devices/other resources, absence of schools in catchment areas, absence of the comprehension of disability problems, inability to manage barriers in regular classrooms, parental discrimination and inadequate parental collaboration, overcrowded school time table, the absence of specialists in regular schools to support teachers, negative cultural beliefs, labelling, stigmatizing, discrimination, lack of statistics and field experts and communication.

D.

- Encourage partnership between parents/community in inclusive education practices.
- Encourage positive relationship between teachers and students.
- Employment of qualified personnel and the provision of assistive technology devices.
- School structures should be disability friendly.
- Counseling services should be created.

E.

- Creation of partnerships with social centers and other related services and ensure that all types of schools benefit.
- Eradicate through sensitization negative indigenous beliefs about children with disabilities through cultural practices that impact inclusive education negatively.
- Sight savers in collaboration with the Ministry of Basic Education and its other partners should organize seminars for capacity building in inclusive practices for teachers, school administrators and educational administrators.
- To support the vision, mission and values of Sight Savers and the desire of Ministry of Basic Education to address a transformative Education for All, the UNESCO Chair for Special Education Needs and inclusion at the University of Buea, solicits their support for capacity building and research activities to enhance sustainable education development.

- In order to identify strategies to improve upon inclusive education, from the finding of the studies, a model for inclusive education in Cameroon is recommended. The model focuses on teachers' level of training on special education, clarity on rules/regulations governing school systems, diversify assessment strategies, integrated school programs and parental involvement address perception and attitude of stakeholders towards inclusive education.

F

- A well adapted inclusive education policy should be formulated and proposed by partner ministries, organisations and civil society. Such a policy should spell out clearly the commitment of the policy on inclusion; the content of the desired curriculum; desired attitudes towards inclusion; capacity building opportunities to enhance teachers' capacity; the commitment of both teachers and learners to the success of inclusion; the nature of implementation context; and perspectives for collaborative partnerships to enhance the implementation of the policy
- The Ministries of education simplify strategies for implementing inclusive education and avoid complex initiatives
- Ministries of education and social affairs should conduct quantitative and qualitative analyses of teachers' training needs in different contexts, and in the context of an analysis of the requirements of inclusive education
- Ministries of education and social affairs should support the improvement or transformation of the curriculum by revisiting the relevance of learning outcomes for all learners
- The Ministries of education should explore how training may be pursued in pre-service and in-service teacher training programmes - training that is informed by both the expectations of the inclusive education system and the needs of the teachers
- Teachers should undertake research and use existing research publications to develop their own teaching practices
- School governing bodies, in collaboration with the community should develop school policies that address overcrowding in schools
- School management teams should organise ongoing school-based training and regular meetings to discuss the progress, the challenges, as well as the needs of the teachers.

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Appendices

Appendix 1: Content analysis conceptual report

Question	Code	Quotation
Existing policies on inclusive education	Free education	
	Admission in regular schools	
	Registration at the social insurance	
	Accessibility to institutional environment	
	Coming to school early	'They coming to school very early' [special school teacher]
	Should look neat	'They are neat' [special school teacher]
	Special consideration	'They should be treated with love and give a sense of belonging' 'prise en charge des enfants en difficulté(établissement des actes de naissances, scolarité, insertion sociale) [Regular schooladministrator] 'Des associations pour la prise en charge des orphelins' [Regular schooladministrator] 'Politique de positionnement' [regularschoolteacher] 'Program de bourse scolaire et programme de démunis' [Regular schooladministrator] 'remédiation, enseignement individualisé, remise à niveau, politique de tutorat' [Regular schoolteacher] 'La pédagogie différenciée' [Regular schoolteacher]
	Pupils right to education	'Politique de l'éducation obligatoire' [Regular Schooladministrator] 'La nouvelle politique de l'éducation, suivi individuel' [Regular schoolteacher]
	Equal rights	'Law N° 2010/002 of 13 April 2010 relating to the protection and welfare of persons with disabilities' UN convention on rights of child (1989), UNESCO Salamanca statement (1994); the UN Convention on the rights of persons with disabilities' [Teacher, regular school] 'Disability Act, Dakar conference' [Regular school administrator] 'Ecole de promotion collective' [Regular school administrator] 'Club de theatre, club de santé, club de journalism pour tous' [Schooladministrator] 'La politique de la protection de l'enfant' [Regular schoolteacher]
	Parent-teacher relationship	'Instaurer un dialogue entre les enseignants et les parents' [Regular schooladministrator]
How effective are these policies implemented in your institution	Averagely	

	Most often	
	Very effective	'Very effective because they friends are been educated on this' [special school teacher]
	About 90%	
	Not effective	'They are not effective because parents are not aware' [regular teacher]
	It is practice	
To what extend do pupils with special needs benefit from these policies in your institution	Averagely	'Right to participate in all activities in the community' [regular school teacher]
If yes which are some of the existing policies	Social integration	'Contribute in development in their environment' [regular school teacher] 'It has caused them to feel free and interact with each other' [Special school teacher]
	Improve conditions	'Dans la mesure ou ils se sentent égaux aux autres' [Teacher, regularschool] 'Dans la mesure où elles permettent d'avoir d'autres aspirations pour leur avenir' [Regular schooladmonistrator]
	Effective inclusion/special consideration	'They have everything the same as the sighted pupils' 'Ils ont le droit d'aller à l'école avec les valides et participer au sport ensemble pour le défilier' [Specialschooladministrator] 'Absence de complexité, favorise les démunis et les moins intelligents' [Regular schoolteacher] 'Suivi particulier' [Regular school teacher]
	Scholarization	'They are going to school' 'Etablissement des actes de naissances, les frais d'examen et concours' [Regular schooladministrator] 'Les enfants du PBS (Programme de Bourse Scolaire) et du PRF (Program du renforcement des familles) ont une scolarité gratuite [Regular schooladministrator]
	No complain from parents/problem solved	No parent or family has ever report such a contrary situation to us' 'Dans la mesure où la plupart des difficultés détectées en début d'année sont rémédiés jusqu'en fin d'année scolaire' [Regular schoolteacher]
	Psychological follow up and prise en charge	'Suivi psychologique des enfants, prise en charge des enfants indigents ' [Regular schooladministrator]
Existing policies addressing persons with special needs	All impairments admitted	'Admission for all pupils with disability' [special school administrator]
	Adequate institutional environment	'The school is accessible to all' 'Amélioration du cadre à travers la construction des rampes pour enfants handicapés' [Regular schoolteacher]
	Right to education	

	Use of assistive devices	'Use of lenses and stylus[special school teacher]'
	Equal employment opportunity	'They should have employment like others'[special school teacher]
	Financial support	'Helping them financially'[special school teacher]
	Material support	'Helping them with materials'[special school administrator]
	Registration to social insurance	
	Scholarization	
	Policy on inclusive education	'Free education' [Regular school administrator]
	Policy on social wellbeing	UNICEF, l'assistance du ministère des affaires sociales' [Regular school administrator] 'La promotion collective' [Regular school teacher]
	Law Related to disabled persons	Law No 83/13/ of 21 July 1983 relating to the protection of disabled persons and ministerial Order No 0001 of 13 March 1993[special school teacher]
How effective are these policies implemented in your school	Averagely	
	Most often	
	Well implemented	
	Improved social interaction	'The policies are implemented very well, they do everything together with normal pupils'[special school teacher]
	Effective inclusion	'Special pupils sit in the same class with normal pupils'[special teacher]
Extend to which pupils with special needs benefit	Free education/reduction of fees	'Reduction des frais d'inscription' [Regular school teacher]
	Improvement in performance/participation	'They can write and read' 'Des solutions sont souvent proposées par ses enfants' [Regular school administrator]
	Donation/assistance	'Gifts are always brought to them' 'Il sont assistés par les structures citées' [Regular school administrator]
	Improved learning	It has caused most of them to learn faster 'Apprentissage individuel (pédagogie individuelles' [Teacher, regular school]
	Free registration in exams	
	Registered at the social insurance	
	Disability cards are issued to the pupils	
	Equal treatment	'Parce qu'il sont promu en classe supérieure au même titre' [Regular school administrator] 'Parce que les enfants à besoins spécifiques font les mêmes examens que les enfants normaux' [Regular school administrator] 'Il réussissent autant que les autres enfants' [teacher regular school']
Assessment services for	Examination of all the levels of impairments	'Examination of all levels of impairments, physical examination[special school administrator]'

special need education		
	Hospital	'Go to hospital for eye check'[regular school administrator]
	Sensitization unit	'Moral, education civique' [Regular school administrator]
	Payment of fees	'To help them sit in class'[regular school teacher]
	Inclusive practices	'School and public exams are brailled [educational administrator]'
	Training services	
	Workshops	
	Brailist and special teachers	'Questions are brailled during exam' 'Special teachers for blind pupils' 'Au lycée ou collège, il y a un accompagnateur scolaire qui transcrit les épreuves du noir en braille et le devoir en braille en noir pour les professeur de l'élève pour la correction pour les aveugles' [Special school administrator]
	Nurses	
	Counselors/social center	
	Use of sign language	'Sign language is used to a little extend'[regular school teacher]
	Physical education	
	Oral education	
	Catch-up class	'Remontant le niveau des élèves'[regular school teacher]
	Teachers/school administrators	
	Parent	
	Service de recensement et de suivie	'Recensement des enfants en difficulté et élaboration du programme de remédiation' [Regular school teacher]
How do these services address the needs of persons with special needs	Assessment of eye acuity	
	Assessment of mobility	'Assessment of mobility level'[special school teacher]
	No service	
	Public sensitization	
	Improve performance	'It enhance pupils outcome'[regular school teacher]
	Evaluation in physical and oral education	
	Availability of equipment and trainers	'Disponibilité du matériel adéquat' [Regular school administrator] 'En mettant à leur disposition des éducateurs [Regular school administrator] 'L'accompagnateur scolaire travaille avec les censeurs dans les lycées et le directeur au collège' [Special school administrator]

	Follow up	On fait le suivi de ces personnes dans un cadre approprié et à chaque période (mensuelle et séquentielle) on apprécie l'évolution' [Regular school teacher]
Who does the diagnosis	Eye department	
	Physiotherapy department	
	Specialists	
	Medical Doctors	
	Nurses	
	Special educators	
	Brailist	
	Teachers or school administrator	'Le directeur et sont adjoint' [Teacher, regularschool]
Diagnosis services provided in institution	Ophthalmology	'Low vision', 'Blindness'[special school teacher]
	Physiotherapy	
	Dental therapy	
	HIV	
	Diabetes	
	Technical services	Technicians [special school teacher]
	Resource room	'Resource room'[special school teacher]
	Recruitment test	'Test de recrutement' [Regular school teacher]
Some of the referral services	Ophthalmology	For serious cases [regular school teachers]
	Dental therapy	For serious cases [regular school teachers]
	B.B.H, SAJOCAH	Special rehabilitation centers [special school teacher]
	Hospital	
	Specialists	'Help them write well'[special school teacher]
How are these remedial teaching strategies beneficial to pupils with disabilities	Intervention on disability	'Disability cannot continue to a certain stage[regular school teacher]'
	Improvement on disability	'Disability is reduced'[regular school teacher]
	Improved understanding	'It hasten their level of understanding' 'Mise au même niveau avec les autres élèves' [Regular schooladministrator]
	Remedial teaching	'During extra lessons, slow learners are exposed to previously taught concepts'[regular school teacher]
	Improved interaction	'they bridge the gap between the normal pupils and those with special need' 'Ils permet de reexpliquer en langue maternelle les incompréhensions' [Teacherregularschool]

	Equal treatment	'Lors des évaluations ou des examens les élèves ont les mêmes épreuves que les valides transcrites en braille' [Specialschooladministrator]
What are some of the barriers faced by your institution in the implementation of inclusive education		
Disability related barriers	Inadequate environment/infrastructure	'Poor environment, inaccessible' 'Badly constructed buildings' 'Les toilettes ne sont pas adaptées aux handicapés' [Regular schoolteacher] 'Le cadre n'est pas approprié (outils, matériels inadéquats)' [Regular schoolteacher]
	Distance to school	'Distance to school'[special school teacher]
	Assistive devices and other resources	'Didactic material/Aids' 'Shortage of materials'[special school teacher] 'Lack of basic needs' 'Absence de médicaments' [Regular school teacher] 'Manque de matériel appropriés' [Regional pedagogic inspector] 'Manque de structure appropriées pour les déficiences visuelles auditives' [Regular school teacher] 'Moyen de transport' [Special school teacher]
	Financial problems	'Finance to send disable pupils to school'[regular school teacher]
	Expensive education	'The education of the disabilities is expensive'[regular school teacher] 'Difficultés scolaires' [Regular school teacher]
	Personnel	'There is no trained personnel' 'There is no trained personnel to take care of these cases' 'Manque de personnel spécialisé' [Regional pedagogic inspector] 'La capacité à identifier ces déficiences' [Regular school teacher] 'Lack of will'][Regular school teacher]
	Difficult to follow time table	'the time table cannot be followed strictly'
	More teaching effort/comprehension problems	'More time spent on a particular subject, teacher need to teach and demonstrate' 'Teacher spend more time on them'[regular school teacher]
	Difficult to manage disability	'Disability is difficult to manage' [Regular school teacher] 'Notez qu'il n'existe pas de service de diagnostic pour les enfants déficients' [Regular schoolteacher] 'Service d'orientation pour les enfants handicapés' [Regular schoolteacher]
	Inadequate trained personnel	'Most of the teachers are not trained in special education so they find it difficult to teach pupils with visual problems' 'Different teaching methods' 'Problème de la disposition de la classe'[Regular school teacher]

		'Nous pouvons contribuer à cette élimination au cas où nous sommes formés, transformation de notre attitude' [Regular school administrator]
	Discrimination from parents	'Refus des parents des enfants normaux d'inscrire leur enfant par peur de contamination' [SpecialSchooladministrator]
	Not implemented	"Ces pratiques n'existent même pas dans notre établissement' [Teacher, regularschool] 'Lenteur des pouvoirs publiques à implémenter la politique de l'Education inclusive' [Teacher, regularschool] 'Manque d'information sur les pratiques inclusives' [Regularschoolteacher] 'L'ignorance des caractéristiques des autres formes de handicaps' [Regular schoolteachers]
	Inadequate parental collaboration	'Manque de collaboration de certains parents' [Regular schoolteacher]
Culture related barriers	Labels/stigmatization/discrimination	'Giving names to pupils with disabilities' 'Stigmatisation, discrimination' [Regional pedagogic inspector]
	Cultural beliefs	'Some parents believe they are witches they bring evil to family' 'Some cultures say that they are witches and even kill them' 'La religion, les rites' [Teacher, regularschool]
	Ignorance	'Ignorance on the part of the community' 'Incompréhension et manque de communication des parents' 'Beaucoup de parents pensent que l'enfant qui a des déficiences ne doit pas aller à l'école, ils les gardent à la maison' [Regular schooladministrator]
	Cultural diversity	'l'école à plusieurs élèves de toutes les ethnies' 'Non-maîtrise des ethnies environnantes' [Head teacher, regularschool]
	Tribalism	'le tribalisme' [regular school teacher]
Faced by community in helping pupils with special needs	Exclusion	'Since they cannot do something, they should not say anything'[regular school teacher]
	Shortage of resources	'They are many and the thinks to give are few' 'Lack of material, resources' 'Disposition d'un moyen de transport pour les élèves éloignés' [Regularschoolteacher]
	Poor road network	'Inaccessible roads' 'Most of the communities are not accessible to pupils with disabilities'[regular school teacher]
	Inaccessible school environment	'Inaccessible school environment'[special school teacher]
	Identification process	'Some problems of pupils are hardly identified'[special school administrator]
	Lack of education and sensitization	'There is no person to educate the community about pupils with special needs' 'lack of knowledge and education, the pupils have no use for them' 'Ignorance des premiers soins avant l'arrivée des spécialistes' [Regular Schooladministrator] 'Superstition' [Regionalpedagogicinspector]

	Lack of assistive devices at community level	'lack of their learning materials'[]
	Financial constraints/poverty	'Lack of financial needs' 'Pauvreté' [Regional pedagogic inspector] 'La malversation financière des fonds affectés pour les aides' [Regular schoolteacher]
	Lack of exposure	'Some of these pupils are hidden from the community'
	Communicative obstacles	'Poor communication and language barriers'
	Ethnic diversity	'Diversité des ethnies' 'Religions, tribues'
	Refuse to collaborate	'Pas d'effort visible par la communauté à aider les enfants ayants les besoins spécifiques car elle pense que l'éducation des handicapés doit être gratuite, que l'état doit prendre en charge nos institutions. Donc il y a résistance dans les aides à apporter aux enfants.' [Specialschooladministrator] Taux d'abandon élevé [Regular schoolteacher]
	Lack of coordination	'Manque de coordination des efforts' [Head teacher, regular school]
	Lack of statistics	'Absence de recensement de ces derniers dans les différents établissements scolaire' [Regular schoolteacher]
	Lack of field experts	'Absence d'expert en la matière sur le terrain' [Regular schoolteacher]
Way that your school can help overcome these barriers	Home-school relationship	'We advice the parents on how to go on with them; we also take information from parents' 'Advising the parents/guardians' 'Collaboration écolefamille' [Regular school teacher]
	Educating the community	'Educating the community to accept pupils with disability' 'Educate the community and the parents' 'Educate the people or communities on the importance of education to these type of pupils' 'Educate community on using appropriate language for pupils with disabilities' 'Educating the community' 'We advice the parents on how to go on with them' 'Sensibilisation pendant les reunions de l'APE' [Head teacher] 'Sensibilisation des parents ayant des handicapés physiques d'amener leur enfants à l'école, encouragement des enfants orphelins à l'école' [Regular schoolteacher]
	Enhancing inclusive education	'Admitting them in mainstream schools' 'Accepting pupils with disabilities' [special school teacher]
	Good teacher-pupil relationship	'Teacher should consider pupils with special needs in all aspects'[regular school teacher]
	Assessing the Educational environment	'Assessing the classroom and school environment' 'Providing inspectors and head teachers'[regular school administrator]
	Parent participation/fund raising	'Parents can help to provide special structures' 'teachers should encourage parents on the need to carter for their pupils with special need' [Regular school teacher] 'Organization des tranches de collecte' [Regular

		school teacher]
	Improve social interaction	'Make them friendly with others' 'Pousser les handicaps à jouer avec les autres enfants' [regularschoolteacher]
	Facilitate accessibility to the school environment/special consideration	'Make places clear so that they should be moving freely' 'Donner la priorité aux élèves en difficulté' [Teacherregularschool] 'Faire assoir les élèves déficients visuels sur les premiers banks' [Regular schooladministrator]
	Equal treatment	'Punish them when punishing sighted pupils' 'Treat them equally in school'[special school teacher]
	Continuous training	'Frequent training through seminars and workshops' 'Organiser les séminaires afin de sensibiliser le personnel d'appui sur l'urgence à venir en aide aux personnes handicapées' [Regular schooladministrator]
	In-service teaching program	'En sensibilisant les enseignants à accepter les nouvelles données de l'éducation' [Teacher, regularschool]
	Re-education	'Par voieséducatives et de ré-éducatives' [Regular schooladministrator]
	Employment of qualified personnel and adequately equipped environment	'Recrutement du personnel qualifié pour la prise en charge des handicapés' [regularschooladministrator] 'Faire fabriquer le matériel approprié à ces apprenant' [Regular schoolteacher]
	Sent them to special centers	' En les envoyant dans les centres spécialisés' [Regular schoolteacher]
	Census	'En recensant les différents cas' [Regular schoolteacher]
	Counseling service	'Organiser des services d'orientation pour les enfants handicapés' [Regular schoolteacher]
	Partnership	'Soliciter d'autres partenaires et personnes ressources dans le domaine' [Regular schoolteacher]
Way that community can help overcome these barriers	Participatory Infrastructural adaptation	'Construction of bridge, taking ideas from those with disability'
	Participatory policy development/acceptance	'Plan with them' 'Acceptation des enfants dans notre communauté' [Regular schoolteacher]
	Assistance	'Assisting them financially' 'Provide assistance to these pupils' 'Assist these pupils with school fees' 'provide food and even clothing and take care of their bills when they are sick' 'Le non payement de l'APE pour les enfants handicapés' [Regular schoolteacher]
	Promotion of education and sensitization	'Train people on this aspect' 'Par l'éducation des parents' [Regular school teacher] 'en informant sur les droits des enfants sans exclusive' [regularschoolteacher]
	Community evaluation	'Assess the community'[regular school teacher]
	Visitation	'Create room to visit them'[special school teacher]

	Leadership position for the persons with disabilities	'They should appoint some of them in post in their group meetings' [special school teacher]
	Set laws	'Set laws to protect these pupils' [regular and special school teacher]
	Change of mentalities	'Change of mentality, and assume their duty as part of the teaching learning process' 'En restant ouvert à la modernité' [teacher, regular school] 'Arrêt de mise à mort de certains handicapés, albinos au Nord' [Regular schoolteacher] 'L'abandon de certaines croyance vis-à-vis des enfant souffrant et de certains handicaps' [Regular schoolteacher]
	Improve accessibility	'Make communities accessible to people with disabilities'
	Curbing communication barriers	'By using appropriate language' 'Enseignement de la langue maternelle dans le processus enseignement-apprentissage' [Regular schoolteacher] 'Absence des langue maternelles qui pourrait être une base de l'éducation' [Special schoolteacher]
	Solidarity	'Tout simplement en étant solidaire les uns les autres' [regular schoolteacher]
	Curb exclusion	'Acceptation du brassage entendants/sourds' [Special School Administrator] 'Par les represailles' [Regular schoolteacher]
	Creation of association and small enterprises	'La creation des association de lutte contre l'ignorance, la création de petites entreprises' [Regional pedagogic inspector]
	Create special school	'Créer une école des élèves qui ont les difficultés' [Regular schoolteacher]
	Providing equipment	'En mettant l'accent du matériel approprié pouvant être mis à la disposition d'un personnel formé à cet effet' [Regular schoolteacher]
	Census	'La communauté peut eessayer de recenser les cas existant déjà pour pouvoir les regrouper et présenter ces cas aux services y afférant' [Regular schoolteacher]
Ways that government can help to overcome these barriers	Free education	'Provision of free education' [regular school teacher]
	Assistive devices	'Provide the school with didactic aids' [special school teacher]
	General support/Aids	'Give support to the pupils' 'The government should provide aids to them' 'The government should provide special fund' 'En octoyant les subventions nécessaire au maintien de l'équilibre financière de l'institution' [Special School administrator]. 'Mise sur pied d'une structure spéciale pour mobiliser les fonds' [Head teacher] 'Accorder des bourse scolaires pour enfants handicapés, créer une ligne pour les enfants handicapés dans le budget des affaires sociales' [Regular schoolteacher]
	Adequate learning environment	'Constructing accessible school environment' 'Construction of roads or paths in school for pupils'

		with disabilities'
	Promoting inclusive education/promoting the right of the disabled	'Provide inclusive schools' 'Voter les lois favorisant les handicapés' [Regular schoolteacher]
	Employing specially trained teachers	'Employ teachers who are specially trained' 'Affectation équilibrée du personnel dans les structures scolaires' [Regional pedagogic inspector]
	Training specialist	'Training specialist' 'The government should open training school for the teachers' 'Training more people in that aspect' 'En continuant à former les assistants sociaux' [Regular schoolteacher] 'Introduire les modules spécialisés dans les écoles de formation pour les enseignants et ensuite la prise en charge des enfants handicapés' [Regular schoolteacher]
	Special centers	'Creating special centers for pupils with special needs' [regular school teacher] En créant les centres spécialisés pour les enfants [Regular schoolteacher]
	Employing persons with disabilities	'Government should also be employing some as civil servants' [regular school teacher]
	Motivate teachers	
	Improvement of training scheme	
	Continuous training	Organize seminars and workshops for those already on the field 'Les séminaires, les colloques' [Regular school administrator]
	Construction of resource centers	
	Infrastructural development	
	Special consideration during exams	
	Good financial management	'Donner à Cesar ce qui appartient à Cesar, C'est-à-dire mettre chacun à sa place, combattre d'abord la corruption'. [Teacher regular school] 'Contrôler la gestion des fonds alloués pour les aides aux enfants handicapés' [Regular schoolteacher]
	Education of parents and the population	'L'éducation des masses sur l'importance et la nécessité de l'éducation inclusive' [Regional pedagogic inspector] 'Organiser des séminaire à l'intention des membres d'APE' [Teacher, regular school] 'Sensibilisation des masses à travers les media' [Regular school administrator]
	Creating special schools	'Il faut les école pour les enfants handicapés et d'autre pour les enfants nomades pour que les handicapés ne se sentent pas tristes' [regular schoolteacher]
	Census	'En organisant un recensement général pouvant permettre de mieux résoudre les différents cas et faciliter l'acquisition du matériel approprié et la formation d'un personnel qualifié à cet effet' [Regular schoolteacher]

	Promoting national languages	'La mise en application des lois relatives à la valorisation des langues nationales' [Regular schoolteacher]
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Appendix 2: Description of the sample

North West	INTEGRATED SCHOOL FOR THE BLIND	Special	Urban
North West	SAJOCAH	Special	Rural
North West	GOVNT PRACTICING SCHOOL MBUE RURAL	Regular	Rural
North West	CBC KUMBO PRIMARY SCHOOL	Regular	Urban
North West	CATHOLIC SCHOOL MAMBU BAFUT	Regular	Urban
North West	SECRET HEART NURSERY AND PRIMARY SCHOOL BAFUT	Regular	Rural
Littoral	CRES NEW-BELL	Special	Urban
Littoral	ECOLE PUBLIQUE DOPO GROUP I	Regular	Rural
Littoral	MARIA GORETTI	Regular	Urban
Center	GSBA LA PENSE	Regular	Rural
Center	ECOLE PRIMAIRE SOS HERMAN GMEINER	Regular	Urban
Center	ECOLE PUBLIQUE NEW TOWN 4	Regular	Urban
Center	EP NGALLAM	Regular	Rural
Center	MESSA IV	Regular	Urban
Center	ECOLE SPECIALISEE POUR ENFANTS DEFICIENTS AUDITIFS	Special	Urban
South West	MOTHER AGNES BAROMBI KANG	Regular	Rural
South West	GOVERNMENT PRACTICING SCHOOL GP I 8 II KUMBA	Regular	Urban
South West	P.S BUEA TOWN	Regular	Rural
South West	G.S BUEA TOWN GROUP 1	Regular	Urban
South West	EPHATA INSTITUTE FOR THE DEAF AND DUMB KUMBA	Special	Urban
South West	BUEA SCHOOL FOR THE DEAF	Special	Rural
Far North	CENTRE DE FORMATION ET DE PROMOTION DES AVEUGLES DE MAROUA	Special	Urban
Far North	GOVERNMENT PRACTISING SCHOOL FOUNANGUE I A	Regular	Urban
Far North	ECOLE PRIMAIRE D'APPLICATION DE FOUNANGUE	Regular	Urban
Far North	ECOLE PUBLIQUE MISKINE II	Regular	Rural

School distribution by type of school

	Frequency	Percent
Special	5	20.8
Regular	19	79.2
Total	24	100.0

Distribution by type of schools and by setting type

			School type		
			Special	Regular	Total
Setting type	Urban	N	4	10	14
		%	28.6%	71.4%	100.0%
	Rural	N	2	8	10
		%	20.0%	80.0%	100.0%
Total	N	5	19	24	
	%	20.8%	79.2%	100.0%	

Distribution by school type, setting type and respondents' category

Classification	Categories	N	%	N
School type	Special	33	17.5	189
	Regular	156	52.5	
Setting type	Urban	144	70.2	205
	Rural	61	29.8	
Respondents' category	Teacher	147	72.1	204
	Educational administrator	23	11.3	
	School administrator	34	16.7	

Distribution of respondents by category and by setting type

Categories		Respondent category			Total
		Teacher	Educational administrator	School administrator	
Setting type	Urban	N 97	18	25	140
		% 66.0%	90.0%	73.5%	69.7%
Rural	N	50	2	9	61
	%	34.0%	10.0%	26.5%	30.3%
Total	N	147	20	34	201
	%	100.0%	100.0%	100.0%	100.0%

Distribution of educational administrators in the study

Respondent category			Region					Total
			North West	Littoral	Center	South West	Far North	
Teacher	Respondent type	TEACHER	50	10	30	40	17	147
	Total		50	10	30	40	17	147
Educational administrator	Respondent type	PEDAGOGIC INSPECTOR	0		0	0	1	1
		DIVISIONAL DELEGATE	0		0	1	0	1
		EDUCATIONAL ADMINISTRATORS	13		1	2	0	16
		REGIONAL DELEGATE	1		0	0	0	1
		REGIONAL PEDAGOGIC INSPECTOR	1		1	0	1	3
		SUB-DIVISIONAL INSPECTOR	1		0	0	0	1
Total		16		2	3	2	23	
School administrator	Respondent type	DIRECTOR	0	1	1	0	3	5
		HEAD TEACHER	0	1	1	0	0	2
		SCHOOL ADMINISTRATOR	1	0	0	0	3	4
			7	1	5	6	4	23
Total		8	3	7	6	10	34	

Sample at the decentralized level

Officials interviewed:

Center: Regional delegate of Basic education, pedagogic inspector

South West: Divisional Delegate of Basic Education and pedagogic inspectors

Far North: Regional Inspector Coordinator and Regional Pedagogic Inspector for Computer Science

North West: Regional Delegate, Regional Inspector, Sub-divisional Inspector and pedagogic inspector

Littoral: Refuse to collaborate, researchers referred to front line educational facilities, regional delegate absent.

Distribution of respondent type by region of investigation

Categories		Respondent category			Total	
		Teacher	Educational administrator	School administrator		
Region	North West	n	50	16	8	74
		%	67.6%	21.6%	10.8%	100.0%
	Littoral	n	10	0	3	13
		%	76.9%	.0%	23.1%	100.0%
	Center	n	30	2	7	39
		%	76.9%	5.1%	17.9%	100.0%
	South West	n	40	3	6	49
		%	81.6%	6.1%	12.2%	100.0%
	Far North	n	17	2	10	29
		%	58.6%	6.9%	34.5%	100.0%
Total	n	147	23	34	204	
	%	72.1%	11.3%	16.7%	100.0%	

Distribution of sample by category and by setting type

Categories		Respondent category			Total	
		Teacher	Educational administrator	School administrator		
Setting type	Urban	N	97	18	25	140
		%	66.0%	90.0%	73.5%	69.7%
	Rural	N	50	2	9	61
		%	34.0%	10.0%	26.5%	30.3%
Total	N	147	20	34	201	
	%	100.0%	100.0%	100.0%	100.0%	

Distribution of sample by school type and by setting type

Categories		School type		Total	
		Special	Regular		
Setting type	Urban	n	29	99	128
		%	87.9%	63.5%	67.7%
	Rural	n	4	57	61
		%	12.1%	36.5%	32.3%
Total	n	33	156	189	
	%	100.0%	100.0%	100.0%	

Appendix 3: Distribution of characteristics of impairment types in classroom by school types

Presence of impairment	Statistics	School type		N	Chi-Square test
		Special	Regular		
Presence of visual impairment	N	22	57	79	$\chi^2=9.77$ P=0.002
	%	68.8%	38.5%		
Presence of hearing impairment	N	18	31	49	$\chi^2=16.55$ P=0.000
	%	56.3%	20.9%		
Presence of emotional/behavioural disorder	N	19	68	87	$\chi^2=1.90$ P=0.168
	%	59.4%	45.9%		
Presence of speech/language impairment	N				

Appendix 4: Classroom diversity and impending barriers to learning

Presence of impairment	Statistics	Setting type		Total	Chi-Square test
		Urban	Rural		
Presence of visual impairment	N	61	26	87	$\chi^2=0.04$ P=0.851
	%	45.5%	44.1%		
Presence of hearing impairment	N	42	13	55	$\chi^2=1.74$ P=0.187
	%	31.3%	22.0%		
Presence of emotional/behavioural disorder	N	70	23	93	$\chi^2=2.88$ P=0.089
	%	52.2%	39.0%		
Presence of speech/language impairment	N	65	26	91	$\chi^2=0.32$ P=0.569
	%	48.5%	44.1%		
Presence of physical disability	N	40	12	52	$\chi^2=1.88$ P=0.170
	%	29.9%	20.3%		
Presence of learning disability	N	73	26	99	$\chi^2=1.78$ P=0.183
	%	54.5%	44.1%		
Presence of hyperactivity	N	42	11	53	$\chi^2=3.32$ P=0.069
	%	31.3%	18.6%		
Presence of autism	N	23	5	28	$\chi^2=2.49$ P=0.114
	%	17.2%	8.5%		
Presence of dyslexia (reading difficulty)	N	87	36	123	$\chi^2=0.27$ P=0.602
	%	64.9%	61.0%		
Presence of dysgraphia (writing difficulty)	N	82	36	118	$\chi^2=0.00$ P=0.981
	%	61.2%	61.0%		
Presence of mathematical difficulty	N	79	38	117	$\chi^2=0.51$ P=0.475
	%	59.0%	64.4%		
Presence of gifted and talented	N	73	25	98	$\chi^2=2.40$ P=0.121
	%	54.5%	42.4%		
Presence of street pupils	N	28	7	35	$\chi^2=2.25$ P=0.134
	%	20.9%	11.9%		
Presence of culturally segregated pupils (e.g. albinos, orphans, etc)	N	14	4	18	$\chi^2=0.65$ P=0.419
	%	10.4%	6.8%		
Presence of delinquent	N	45	12	57	$\chi^2=4.99$ P=0.025
	%	33.6%	20.3%		
Presence of minor prisoners	N	8	1	9	$\chi^2=0.86$ P=0.354
	%	6.0%	1.7%		
Presence of orphaned pupils	N	89	42	131	$\chi^2=0.43$ P=0.513
	%	66.4%	71.2%		
Total	Count	134	59	1264	

Appendix 5: Evaluation of system, process and effectiveness of inclusive education: opinion survey

Teachers' level of training in special needs education: classification by type of school

Indicator	School Type.(n and % for those who have average and above)		Total
	Special	Regular	
Level of training in special Needs Education	18 (75.0%)	52 (43.3%)	70 (48.6%).
Level of experience in teaching Pupils with Special Needs Education	19 (79.2%)	63 (52.5%)	82 (56.9%)
Level of Knowledge about the type of Equipment for use in special needs education	20 (83.3%)	48 (40.3%)	68 (47.6%)
Level of confidence in teaching pupils with special needs.	22 (91.7%)	68 (56.7%)	90 (62.5%)
Aggregated score (MRS)	79 (82.3%)	231 (48.2% ^o)	310 (53.9)

2-test: $Z=37.5$; d.f. = 1; $P<0.001$

Teachers' level of training in special needs education: Classification by setting type

Indicator	School Zone.(n and % for those who have average and above)		Total
	Urban	Rural	
Level of training in special Needs Education	51 (53.7%)	19 (38.8%)	70 (48.6%)
Level of experience in teaching Pupils with Special Needs Education	56 (58.9%)	26 (53.1%)	82 (56.9%)
Level of Knowledge about the type of Equipment for use in special needs education	45 (47.9%)	23 (46.9%)	68 (47.6%)
Level of confidence in teaching pupils with special needs.	62 (65.3%)	28 (57.1%)	90 (62.5%)
Aggregated score (MRS)	214 (56.5)	96 (49.0)	310 (53.9)

2-test: $Z=2.91$; d.f. = 1; $P=0.088$

Teachers' level of training in special needs education: Classification by region

Indicator	Region.(n and % for those who have average and above)					Total
	North West	Littoral	Centre	South West	Far North	
Level of training in special Needs Education	15 (30.6%)	1 (14.3%)	17 (54.8%)	24 (64.9%)	13 (65.0%)	70 (48.6%)
Level of experience in teaching Pupils with Special Needs Education	22 (44.9%)	2 (28.6%)	21 (67.7%)	23 (62.2%)	14 (70.0%)	82 (56.9%)
Level of Knowledge about the type of Equipment for use in special needs education	22 (44.9%)	5 (71.4%)	9 (30.0%)	21 (56.8%)	11 (55.0%)	68 (47.6%)
Level of confidence in teaching pupils with special needs.	24 (49.0%)	1 (14.3%)	21 (67.7%)	30 (81.1%)	14 (70.0%)	90 (62.5%)
Aggregated score (MRS)	83 (42.3%)	9 (32.1%)	68 (55.3%)	98 (66.2%)	52 (65.0%)	310 (53.9%)

2-test: $2=23.93$; d.f. = 4; $P<0.001$

Teachers' level of training in special needs education: Classification by respondent types

Indicator	Respondent Type.(n and % for those who have average and above)			Total
	Teacher	Educational Administrator	School Administrator	
Level of training in special Needs Education	68 (48.6%)	1 (5.0%)	0 (0.0%)	69 (48.3%).
Level of experience in teaching Pupils with Special Needs Education	81 (57.9%)	1 (5.0%)	0 (0.0%)	82 (57.3%)
Level of Knowledge about the type of Equipment for use in special needs education	67 (48.2%)	1 (5.0%)	0 (0.0%)	68 (47.9%)
Level of confidence in teaching pupils with special needs.	88 (62.9%)	1 (5.0%)	0 (0.0%)	89 (62.2%)
Aggregated score (MRS)	304 (54.4%)	4 (5.0%)	0 (0.0%)	310 (53.9%)

χ^2 -test: $\chi^2=27.64$; d.f. = 2; $P<001$.

Appendix 6: Perception/attitudes of stake holders towards inclusive education

ATTITUDES OF TEACHERS AND SCHOOL ADMINISTRATORS

Classification by type of school

Indicator	School Type.(n and % for those who Agree)		Total
	Special	Regular	
Inclusion of learners who are visually impaired in my classroom would be a worthwhile undertaking	26(89.7%)	114(76.0%)	140(78.2%).
I would like to have learners with physical disabilities in my classroom	28(93.3%)	118(79.2%)	146(81.6%)
Having slow learners in my classroom would be acceptable to me	29(96.7%)	115(78.2%)	144(81.4%)
Inclusion of learners who are mentally ill in my classroom would be a good initiative	17(60.7%)	79(53.0%)	96(54.2%)
Disobedient learners n my classroom would be acceptable to me	22(73.3%)	106(71.6%)	128(71.9%)
Inclusion of learners with auditory impairment in my classroom would be acceptable to me	22(75.2%)	86(58.5%)	108(61.4%)
If learners who are highly gifted are included in my classroom I would enjoy teaching them	28(96.6%)	142(94.0%)	170(94.4%)
I would not be adverse to have learners with epilepsy in my classroom	18(62.1%)	86(57.0%)	104(57.8%)
I would like to have children of different cultural backgrounds in my classroom	29(100.0%)	144(95.4%)	173(96.1%)
I would like to have delinquent learners	24(85.7%)	100(66.7%)	124(69.7%)
If learners who are hyperactive are included in my classroom I would enjoy teaching them	23(79.3%)	104(73.8%)	127(74.7%)
I would like to have stammering learners in my classroom	26(89.7%)	116(77.3%)	142(79.3%)
I would like to have aggressive children in my classroom	19(65.5%)	59(39.1%)	78(43.3%)
If learners with short attention span are mixed with normal learners in one classroom I would feel embarrassed to teach them	17(58.6%)	50(33.1%)	67(37.2%)
If learners who cry often are included in my classroom I would be well prepared to teach them	24(82.8%)	117(77.5%)	141(78.3%)
I would love to have learners with malnutrition problems included in my classroom	19(63.3%)	103(68.2%)	122(67.4%)
I would appreciate to have learners with speech problems in my classroom	23(79.3%)	95(65.1%)	118(67.4%)
I would like to have children who are talkative in my classroom	23(79.3%)	78(54.2%)	101(58.4%)
I would tolerate learners who do not concentrate when I teach	20(69.0%)	72(50.0%)	92(53.2%)
I would like have children who have reading problems in my classroom	24(85.7%)	93(64.1%)	117(67.6%)
I would like to have girls who study hard sciences in my classroom	28(96.6%)	128(89.5%)	156(90.7%)
I am concerned that my workload will increase if I have students with disabilities in my class	21(75.0%)	96(66.2%)	117(67.6%)
Aggregated score (MRS)	510(79.9%)	2201(67.6%)	2711(69.6%)

$t=38.46$; d.f.=1; $P<0.001$

Classification by Zone

Indicator	Zone Type.(n and % for those who Agree)		Total
	Urban	Rural	
Inclusion of learners who are visually impaired in my classroom would be a worthwhile undertaking	99(73.9%)	51(83.6%)	150(76.9%).
I would like to have learners with physical disabilities in my classroom	107(78.7%)	53(89.8%)	160(82.1%)
Having slow learners in my classroom would be acceptable to me	102(75.6%)	52(89.7%)	154(79.8%)
Inclusion of learners who are mentally ill in my classroom would be a good initiative	74(56.1%)	32(52.5%)	106(54.9%)
Disobedient learners in my classroom would be acceptable to me	92(68.7%)	45(75.0%)	137(70.6%)
Inclusion of learners with auditory impairment in my classroom would be acceptable to me	75(56.4%)	39(66.1%)	114(59.4%)
If learners who are highly gifted are included in my classroom I would enjoy teaching them	118(87.4%)	60(98.4%)	178(90.8%)
I would not be adverse to have learners with epilepsy in my classroom	81(60.4%)	32(52.5%)	113(57.9%)
I would like to have children of different cultural backgrounds in my classroom	123(91.8%)	58(95.1%)	181(92.8%)
I would like to have delinquent learners	89(67.4%)	44(72.1%)	133(68.9%)
If learners who are hyperactive are included in my classroom I would enjoy teaching them	95(76.0%)	41(68.3%)	136(73.5%)
I would like to have stammering learners in my classroom	108(81.2%)	44(72.1%)	152(78.4%)
I would like to have aggressive children in my classroom	73(54.1%)	16 (26.2%)	89(45.4%)
If learners with short attention span are mixed with normal learners in one classroom I would feel embarrassed to teach them	57(42.2%)	18(29.5%)	75(38.3%)
If learners who cry often are included in my classroom I would be well prepared to teach them	101(75.4%)	50(82.0%)	151(77.4%)
I would love to have learners with malnutrition problems included in my classroom	85(63.0%)	44(72.1%)	129(65.8%)
I would appreciate to have learners with speech problems in my classroom	78(67.8%)	40(66.7%)	118(67.4%)
I would like to have children who are talkative in my classroom	73(64.0%)	28(47.5%)	101 (58.4%)
I would tolerate learners who do not concentrate when I teach	64(56.6%)	28 (46.7%)	92 (53.2%)
I would like have children who have reading problems in my classroom	70(61.9%)	47(78.3%)	117(67.6%)
I would like to have girls who study hard sciences in my classroom	102(91.1%)	54(90.0%)	156(90.7%)
I am concerned that my workload will increase if I have students with disabilities in my class	75(66.4%)	42(70.0%)	117(67.6%)
Aggregated score (MRS)	1941(68.9%)	918(69.2%)	2859(69.0%)

$F_{2,1941} = 0.05$; d.f.=1; $P = 0.826$

Classification by Respondent

Indicator	Respondent Type.(n and % for those who Agree)			Total
	Teacher	Educational Administrator	School Administrator	
Inclusion of learners who are visually impaired in my classroom would be a worthwhile undertaking	109(77.3%)	16(72.7%)	26(81.3%)	151(77.4%)
I would like to have learners with physical disabilities in my classroom	114(80.9%)	20(90.9%)	26(81.3%)	160(82.1%)
Having slow learners in my classroom would be acceptable to me	116(82.9%)	15(71.4%)	24(75.0%)	155(80.3%)
Inclusion of learners who are mentally ill in my classroom would be a good initiative	80(56.7%)	13(61.9%)	15(48.4%)	108(56.0%)
Disobedient learners in my classroom would be acceptable to me	101(71.6%)	15(68.2%)	21(67.7%)	137(70.6%)
Inclusion of learners with auditory impairment in my classroom would be acceptable to me	89(64.0%)	10(45.5%)	51(51.6%)	115(59.9%)
If learners who are highly gifted are included in my classroom I would enjoy teaching them	136(95.1%)	13(59.1%)	28(90.3%)	177(90.3%)
I would not be adverse to have learners with epilepsy in my classroom	80(55.9%)	15(71.4%)	19(61.3%)	114(58.5%)
I would like to have children of different cultural backgrounds in my classroom	136(95.1%)	14(66.7%)	31(100.0%)	181(92.8%)
I would like to have delinquent learners	96(68.1%)	15(71.4%)	22(71.0%)	133(68.9%)
If learners who are hyperactive are included in my classroom I would enjoy teaching them	99(74.4%)	15(71.4%)	22(71.0%)	136(73.5%)
I would like to have stammering learners in my classroom	112(78.3%)	15(75.0%)	25(80.6%)	152(78.4%)
(skipped) I would like to have aggressive children in my classroom	57(39.9%)	14(63.6%)	18(58.1%)	89(45.4%)
If learners with short attention span are mixed with normal learners in one classroom I would feel embarrassed to teach them	53(37.1%)	12(54.5%)	11(35.5%)	76 (38.8%)
If learners who cry often are included in my classroom I would be well prepared to teach them	111(77.6%)	16(76.2%)	24(77.4%)	151(77.4%)
I would love to have learners with malnutrition problems included in my classroom	94(65.7%)	10(47.6%)	24(75.0%)	128(65.3%)
I would appreciate to have learners with speech problems in my classroom	95(66.4%)	1(33.3%)	22(78.6%)	118(67.8%)
I would like to have children who are talkative in my classroom	79(55.6%)	3(100.0%)	19(70.4%)	101(58.7%)
I would tolerate learners who do not concentrate when I teach	72(51.1%)	3(100.0%)	17(60.7%)	92(53.5%)
I would like have children who have reading problems in my classroom	93(65.5%)	3(100.0%)	20(74.1%)	116(67.4%)
I would like to have girls who study hard sciences in my classroom	127(90.1%)	3(100.0%)	25(92.6%)	155(90.6%)
I am concerned that my workload will increase if I have students with disabilities in my class	100(70.4%)	1(33.3%)	15(55.6%)	116(67.4%)
Aggregated score (MRS)	2149(69.1%)	242(67.2%)	470(70.8%)	2861(69.2%)

$\chi^2=1.46$; d.f.=2; $P=0.482$.