



UNIVERSITY of  
RWANDA

**UNIVERSITY OF RWANDA**

**COLLEGE OF EDUCATION**

**A COMPARATIVE STUDY ON ACADEMIC PERFORMANCE  
OF LEARNERS WITH SPECIAL EDUCATIONAL NEEDS IN  
INCLUSIVE AND SPECIAL SCHOOLS. CASE STUDIES OF  
GROUPE SCOLAIRE DE GAHINI AND HVP GATAGARA  
(RWAMAGANA CENTER)**

**A thesis submitted to school of inclusive and special needs education in partial fulfillment  
of the requirements for the degree of master of education in special needs education**

**Submitted by:**

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**JUNE 2022**

## **CERTIFICATION**

This is to certify that the dissertation entitled “A comparative study on academic performance of learners with special educational needs in inclusive and special schools. Cases of Groupe Scolaire de Gahini and HVP Gatagara (Rwamagana center)” is the work of Mr. Jean Baptiste USABYIMANA, submitted in partial fulfillment of the Requirements for the Degree of Master of Education in Special Needs Education.

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Supervisor: Prof. Evariste KARANGWA

Date: ...../...../ 2022

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I, Jean Baptiste USABYIMANA, confirm that this thesis is my original work and has not been presented for a degree in any other university or any other award. This research has been complemented by referenced sources duly acknowledged. Where text, data, tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited in accordance in line with anti-plagiarism regulations.

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May the Almighty God bless you all!

**Jean Baptiste USABYIMANA**

## **DEDICATION**

This thesis is dedicated to my beloved wife and to the members of Light in Dark Specifically Sister Steven, Claudine and Marcel who assisted and gave me a lot of encouragement in my studies.

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## LIST OF ABBREVIATIONS AND ACCRONYMS

<b>CWDs:</b>	Children with Disabilities
<b>DPO:</b>	Disabled People Organization
<b>EDPRS:</b>	The Economic Development and Poverty Reduction Strategy
<b>EFA:</b>	Education for All
<b>ESSP:</b>	Education Sector Strategic Plan
<b>HVP:</b>	Home de la Vièrge des Pauvres
<b>ICT:</b>	Information Communications and Technology
<b>IDEA:</b>	Individual with Disabilities Education Act
<b>I E:</b>	Inclusive Education
<b>MINEDUC:</b>	Ministry of Education
<b>NCPD:</b>	National Council of Persons with Disabilities
<b>PWDs:</b>	Persons with Disabilities
<b>REB:</b>	Rwanda Basic Education Board
<b>RUB:</b>	Rwanda Union of the Blind
<b>SEN:</b>	Special Educational Needs
<b>SNE:</b>	Special Needs Education
<b>SPSS:</b>	Statistical Package for the Social Sciences
<b>UNDP:</b>	United Nations Development Program
<b>UNICEF:</b>	United Nations Children Education Fund
<b>UNISE:</b>	Uganda National Institute of Special Education
<b>USAID:</b>	United States Agency for International Development
<b>WHO:</b>	World Health Organization

## ABSTRACT

This research aimed at comparing academic performance of learners with special educational needs in inclusive and special schools. Case studies of Groupe Scolaire de Gahini and HVP Gatagara. Specifically, the study attempted to examine learners' academic performance in both special and inclusive schools, assess the relationship between academic performance and teaching/learning systems in inclusive and special schools and establish where academic performance is comparatively commendable for learners with SEN. Moreover, the study was guided by descriptive research design using quantitative and qualitative approaches. The target population was 160 individuals including 108 learners with special educational needs, 48 teachers, 2 dean of studies and 2 head teachers. Purposeful sampling was applied to determine the sample, and data were collected using questionnaires and interviews and observation checklists. The sample size was 62 respondents. The questionnaire was administered to 19 teachers, 39 learners with special education Needs, 2 head teachers. Data was collected by use of questionnaires. Interview and observation checklist. Furthermore, the findings of the study are as follows: the study considered that the majority of 63.1% of respondents who asserted that some learners with special needs perform better than the ones inclusive school especially in some subject like Economics. Some are evaluated by using Braille typed test. Also, results on the relationship between academic performance and teaching/learning systems in inclusive and special schools. The study revealed that the evaluation of academic performance of learners with special education needs in special /inclusive school was rated by 36.8% of respondents who accepted that assessment of academic performance of learners with special education needs was given through summative assessment. Finally, concerning where academic performance is comparatively commendable for learners with SEN, the study showed the majority of respondents (42.2%) agreed that learners with SEN towards acquiring competence knowledge and skills have ability in analyzing and they have also ability to think deeply. From the findings, it was concluded that teaching and learning materials provided to learners with SEN in special/inclusive school were not adequate because of sharing available learning materials. The study recommended that the Ministry of Education should procure urgently needed teaching and learning assistive devices which are appropriate to all range diverse of learners with SEN in special/inclusive school.

## **CHAPTER ONE: GENERAL INTRODUCTION**

### **1.0. Introduction**

This chapter presents background of the study, statement of the problem, objectives of the study, research questions, and significance of the study, delimitations and limitations of the study, conceptual framework and operational definitions of terms.

### **1.1. Background to the Study**

According to Ainscow (2007), there has been a clear international trend towards inclusive education since 1990s. By definition, inclusive education is the education of children with special educational needs in mainstream schools rather than in special schools. By focusing on students without special educational needs, it can be argued that inclusive education can have both negative and positive effects on academic performance. The learners with special educational needs could attract more attention from the teacher to the detriment of learners without disability and they could distract their classmates in class.

Children learn in different ways. For all children to thrive in terms of knowledge, social and physical skills, schools must create a holistic and inclusive environment for students. Students need more than just a strong foundation in a core curriculum; they also need to be supported by a community and to develop a compassionate understanding of the world around them (Clough & Corbett, 2000). As UNESCO (2020) stated educational ability of all children develop well when it is based on social and emotional skills. However, almost 25% of the billion children in the world are still out of school. Among them, at least 50% of children with disabilities are excluded from education, in low and middle income countries. In some countries, the figure is closed to 90%. They face many barriers, challenging journeys to school from mountainous terrain of rural areas which are not accessible even for wheelchairs, busy roads of capital cities, lack of accessible transport. For children with special needs to have a quality education in mainstream schools, school policies and activities need to be examined more closely to ensure that they can better accommodate all children with disabilities.

Children and adults with special needs are one of the universal educational groups. This was made clear at the Jomtien Conference, at the International Conference

on Special Education (Salamanca, 1994). According to Lewis (2009), there has been an attempt around the world to address discrimination against children with disabilities in education and schools were aware that disability is an educational issue and are joining forces with the government. Efforts to find ways to support children with disabilities in their learning and success.

In Rwanda, children with disabilities are less likely to start - and stay - at school than their peers without disabilities. Few schools have enough programs, resources and qualified teachers to support these students, and their families often lack information on the services available and the best way to help their children.(USAID, 2019). The ESSP 2013/14–2017/18 (2018,5) discusses:

*“Increased equitable access to education for students with special educational needs within mainstream and special schools.’ However, the general government policy as expressed in a number of documents encourages children with disabilities to be educated in regular inclusive schools wherever possible, except when they cannot due to the nature or severity of their disability”*

Rwanda Population and Housing Census (2016:2) revealed that:

*“Only 64% of children with disabilities were attending school, 27% of them had never attended school while 9% had prematurely left school”*

Accordingly, a seven to eight-year-old child with disability is three times less likely to start school at the proper age, has an 18% greater chance of repeating a primary school class, and is four times more likely to drop out of school than a child with no disability. Nearly all Rwandan schools and learning institutions are inadequately child friendly and/or disabled-friendly. Due to stigma and fear of being excluded by community members, particularly in rural areas, many CWDs are frequently hidden indoors. Families may not register their children with authorities (e.g., health centres, schools, census officers) for fear of familial shame. As a matter of facts, the education sector (ESSP 2013/14-2018/2019) affirms that:

*“Over 27% CWDs have never accessed schooling mainly because Rwandan basic education is not endowed with any form of standardized support provisions for CWDs. Consequently, the actual numbers of CWDs is likely underreported. This has implications*

*for the availability and expansion of services for CWDs and the strategies needed to strengthen inclusion”*

The government recognizes that students are believed to require additional education or special assistance in order to access and complete their studies effectively.

In response to this category of students, the 2007 Special Educational Needs Education Policy fulfills the national responsibility to view education as an equal right for all citizens and to help those with special education reach their full potential. It offers an equal opportunity in education in accordance to the National constitution of 2003 (article 40) relating to the right to education, and law No 01-2007 of 20/01/2007 (Article 11-13) of the Republic of Rwanda, relating to the right of education and special support for those with disabilities.

The policy complements the general political, national and international orientation of building fair and equal society which recognizes the value of every human being, irrespective of background, race, ethnicity, ability and disability; and in turn, the society benefits when more skilled educated workforce is enabled to contribute to the social and economic development of the country (Republic of Rwanda, 2007).

Two major schooling systems provision for learners with Special educational needs are known to operate in Rwanda (MINEDUC, 2007). Firstly, special school settings that are traditional institutions established to cater for learners with certain disabilities, and endowed with specialized support services such as rehabilitation, teaching methodologies, specialized instructional materials and assistive devices. Secondly, inclusive schools /or Child-friendly school settings, which constitute ordinary schools that have adapted an accessible and barrier-free school policy, in order to accommodate learners with a range of educational needs. Each of these approaches have indicated challenges that include staffing constraints, educational material inadequacy, needs for support services like sign language interpreters and others, but they still remain the only schooling options for Rwandan learners with special educational needs.

Despite the challenges and the diversity of learners with special educational needs and related barriers, an increasing number of learners with special educational needs continue to access all levels of schooling in Rwanda.

This trend continues to generate an equally rising demand for capacity building in order to realize the required minimum number of educators and related experts with specialized skills. There has not been any specific policy to address training needs to achieve the minimum teacher – pupil ratio in the domain of Special needs and inclusive education yet. (Education statistical yearbook, 2015).

The educational provision for children with disabilities in Rwanda is part of the children with special educational needs. This is because special educational needs include disabilities. However, many policies and other documents relating to special education also contain specific references to children with disabilities (Segahutu et.al,2013).

It is approximately 50 years since the first missionary introduced Rwandan children with disabilities to education and related services, and today, about three steps explaining the developments to the current stage of education, are distinctly traceable. One of the eminently historical reality is the fact that persistent marginalization of learners with SEN especially the disabled, is also owed to the colonial governments (German and Belgian 1894 – 1962) and even the post-colonial policies, both of which hardly accorded any consideration to the education of learners with disabilities and other SEN.

Up to 2000, only five small centers were known to cater for basic education and rehabilitation of learners with disabilities in Rwanda, and run under charity services of missionaries. Home de la Vierge des Pauvres, (HVP) was reportedly one of the oldest, founded in 1960 (Karangwa et al, 2013:20), and received the first government support in 2010 in form of support to the teachers' salaries and educational resources.

Today, over 53 special centers/schools for education and rehabilitation of children with disabilities are known to have developed around the country in the last five years only, especially through private initiatives. Over 105 Nine Year Basic Education (9YBE) schools have developed Child-Friendly and Inclusive Education (IE) approaches in order to accommodate learners with SEN of their respective neighborhoods since 2007; and an average of 10 to 15 students with severe sensory (Visual and Hearing) disabilities. And, at least 1-2 wheel chair users graduate in Rwandan Universities each academic year since 2011, though government-fostered affirmative

action. Basing on its wider experiences, this trend of events is actually cautioned by Save the Children's reports (2013) on Learning and Equity in post-2015 education, affirming with international evidences that:

*".....the last decade has seen enormous progress with Million more children in school' 'there are over 130 Million children in school who are not learning the basics ..... as well as the wider trends shaping the context and nature of education challenges, the situation within school systems themselves has changed rapidly and will change farther post-2015" (p. 5).*

Christian missionaries, especially Roman Catholics, were the first to educate disabled children in Rwanda. They built the first center for disabled children, HVP Gatagara, in 1962. In 1997, the government first showed interest in the education of children with disabilities and other special educational needs by establishing a special education office in the Ministry of Education. Since then, it has continued to demonstrate its commitment to the education of children with disabilities by adopting numerous policies and laws relating to special education and including it in its overall strategic plans.

## **1.2. Statement of the research problem**

Rwanda's commitment to the education of disadvantaged children is emphasized in the MINEDUC Education Sector Strategic Plan Framework for basic education (ESSP) 2018/19-2023/24 as a cross cutting issue, which also resonates with the National Constitution of 2003 as revised in 2015 article 20 stating that "Every person has the right to education .... The State has the duty to take special measures to facilitate the education of the disadvantaged learners" (ESSP, 2018: 4).

With all evident gaps surrounding Special Needs and Inclusive Education in Rwandan education sector, the need to put in place a guiding policy framework that will ensure equitable access to quality education for learners with Special Educational Needs, is a compelling imperative. It is a response to various barriers learners with Special Educational Needs continue to experience in education, arising from a range of limitations that include socio-cultural attitudes in relation to disabilities, socio-economic disadvantages, infrastructural and geographical barriers, and other forms of challenges (MINEDUC, 2018).



In primary school, the number of pupils with disability enrolled in primary schools decreased from 17,133 in 2018 to 16,021 in 2019 for both male and female pupils. The enrolment of pupils with disabilities decreased disproportionately to their grade. There is a big number of children with disability in Primary 1 and low number is observed in primary 6 (MINEDUC, 2018, p12). Besides in secondary school, between 2018 and 2019, there is an increase of secondary school with adequate infrastructure for disabilities from 494 schools to 634 schools and even the number of learners with special educational needs increased.

However, the academic performance is still low even though the percentage of schools meeting the standards of accessibility for Learners with Disabilities (LwD) increased from 28.6% to 35.6%, the ESSP target (27.8%) in 2019 was achieved (Rwanda Education statistics, 2019). Very few learners with disability achieved the level of higher learning. According to the 2012 Education Statistics Yearbook (MINEDUC, 2013), the ‘Net Enrolment Rate’ moved from 94.2% in 2008 to 96.5% in 2012. But the report indicates, at the same time, that few children with special educational needs (SEN) attend local mainstream schools, though most go to special schools and centers in urban areas, too far for most Rwandans and mainly for children with visual or hearing impairments. (Abatabizi, 2015).

The problem of students who shift from special to inclusive schools and vice versa has been a big issue for me as a teacher. Students with disabilities most of the time prefer to look for better school where they would be able to have a good performance. They are always looking for a new school in which they think, would be appropriate for them. This study seeks to establish a comparison in performance of students with disabilities and other special needs in special school and inclusive schools’ systems. However, learners with disability prefer to move from system to another one. It is in that perspective that the research was carried out in order to compare the academic performance of two different schooling systems for learners with SEN by focusing on G.S Gahini which is inclusive and HVP Gatagara which is a special school.

### **1.3.Objectives of the Study**

#### **1.3.1. General objective**

The purpose of this study was to compare the academic performance of learners with special educational needs in inclusive and special schools:

### **1.3.2. Specific objectives**

Specifically, this study attempted to:

- i. Examine learners' academic performance in both special and inclusive schools.
- ii. Assess the relationship between academic performance and teaching/learning systems in inclusive and special schools.
- iii. Establish where academic performance is comparatively commendable for learners with SEN

### **1.4. Research questions**

- i. How are academic performances in both special and inclusive schools?
- ii. What is the relationship between academic performance and teaching/learning systems in inclusive and special schools?
- iii. In which schooling system academic performance is comparatively commendable for learners with SEN?

### **1.5. Significance of the study**

The research will be useful in a sense that findings might inspire policymakers, educational practitioners, development partners, civil society organizations, local community, districts and sectors in order to raise awareness on Inclusive Education. It would be done by putting up plans to sensitize teachers, school administrators and communities on the need for inclusion of learners with special needs in inclusive and special schools. The sensitization would help in attitude changes so that many inclusive and special schools can be started and enroll all children with special education needs and other disabilities in the communities.

This study will be served for other schools to think about inclusive practices and create enabling environment capable of accommodating all learners with different abilities and disabilities. The findings could also be used as a guide to reforming and restructuring special education delivery programmes. Moreover, this study will assist educators by providing concrete data on the effects of inclusion to the academic achievement of regular education students assigned to inclusion classrooms with special education students.

## **1.6. Delimitations and limitations of the study**

### **1.6.1. Delimitations**

This comparative study on academic performance of learners with special educational needs in inclusive and special schools. Case studies of Groupe Scolaire de Gahini and HVP Gatagara is delimited in content, in space and in time.

In content scope, it covered the content related to academic performance of learners with special educational needs in inclusive and special schools.

Regarding, geographical scope, the present study was based on the information collected from different respondents of Groupe Scolaire de Gahini and HVP Gatagara.

Concerning time scope, the study covered a duration of four years; starting from 2017 to 2021. This interval is crucial because it helped the researcher to collect data, analyze and make a comparison on academic performance of learners with special educational needs in inclusive and special schools.

### **1.6.2. Limitation of the study**

The researcher encountered a number of limitations among of them there was time. The researcher being a teacher in secondary school, it was a requirement to be present at work. The researcher overcame this problem by using evening and weekend times, and when it was necessary, he used lockdown period as it took long time. Financial constraints also delayed data collection as well as the finalization of the entire research work. Also, costs were sometimes high specially in getting internet connection to use. However, the researcher gathered sufficient, reliable and first hand information from the research field.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0. Introduction**

This chapter presents a review of related literature under the following subheadings: the definition of key concepts, the theoretical orientation and the related literatures as well as conceptual framework.

### **2.1. Theoretical review**

There is a well-established worldwide agreement that all children have the right to education regardless of race, sex, nationality, disability, and so on. And this agreement is reflected in the most important documents for all. United Nations Declaration on the Rights of Persons with Disabilities (1971), United Nations Declaration on the Rights of Persons with Disabilities (1975), World Action Plan on Persons with Disabilities (1982) ratified by the General Assembly of the United Nations Convention on the Rights of the Child (1989), the United Nations Convention on the Rights of Persons with Disabilities (1993) and the Declaration of Salamanca and the activities of UNESCO (1994) provide a fundamental framework for international law on disability and its functioning as important documents that give children with disabilities the right to education and discrimination against them (Kokkala, 2006). The United Nations Convention on the Rights of Persons with Disabilities (1993) emphasizes the principle of equal opportunities in primary, secondary and tertiary education for children, youth and adults with disabilities in general.

But the UN guidelines for clarity provide a clear explanation: “Integration is seen as a way to address the diverse needs of all learners by increasing their participation in learning. Education, culture and community, and the reduction of exclusion in education and education (UNESCO, 2005). Admission must also confirm the participation of all students in various academic activities and academic activities. Implementing teaching strategies is a way to increase the standard and special needs of students. Role and development in a variety of programs are important for one to achieve a holistic environment. Students with special needs are categorized as regular students who are expected to be more likely to attend school, classes and face academic challenges at the same level as regular students.

Obviously, in all the classrooms, students study in different ways. This is a problem for teachers with different learning groups (Mazooe, 2011). He found that teaching a child with special needs requires a group approach that has pre-set goals. However, Muscelli (2011) found that although the idea is that principals and teachers work with parents and students, it is clear that these expectations are too high for a short period of time.

According to Macbeth (2005) pointed out that although there are many examples of social benefits for both children with special needs and their peers, there is very little evidence that the learning needs have been met. In the same way, Upchurch (2007) finds that integration is negatively related to happy learning and good relationships and negative behaviors. He added that teachers may not be able to meet the various demands made by students with common and specific problems in classrooms including students who do not understand what is being taught or need to be solved, can get bored, and discouraged.

Consistent with the foregoing discussion, Campbell (2009) felt that students with special needs could have an impact on their student learning, as the teacher suggests that students in need of additional help can have a negative impact on 63 students. Thus, it is expected that the performance of students with special needs may be disrupted when the focus is on university programs rather than health sciences so that they can function effectively in society.

For Fisher (1995) academic achievement refers to successful performance in schooling. Schooling, in its term, includes academic skills such as writing, reading and problem solving which are integral parts of academic content. School environment is critically important for advanced educational performance. The level of achievements of CSN in IE depends on several factors one of which is teaching approach of an educator.

Teaching strategy has appeared to improve academic success throughout all grade levels for both with and without special needs. Other techniques which have boosted educational attainments of CSN are the usage of didactic materials in addition to textbooks in the sphere of social studies

(Gerber, 2015), and using an inquiry-based approach to science with a focus on varied ways of communicating learning.

## **2.2. Empirical review**

The education involved is a loose term. In general, it refers to times when students with specific educational problems are enrolled in higher education and spend at least a lot of time in school with their peers who have no specific training (Huber,2001). Brief descriptions include criteria related to the activities of the education administration, support for students with various problems, and sometimes also the quality of educational needs specific to the role of students in the school as well as the educational environment which is appropriate for learning for all students (Booth, 2002).

This brief description feeds into our inquiry here, as it strengthens the learning potential that makes school a place of study for all students. Public education is needed, not only as a means of changing the education of people with disabilities, but also as a new model of school, which responds, in particular, to the different needs and conforms to the democratic values on which this society is built (Zhang, 2014).

### **2.2.1. Academic performance of learners with special needs in inclusive settings**

The concern of inclusive education is not only taking care of those who need affectionate care but also take care of those without disabilities so that they are not affected by participation of exceptional children. To look into this issue, several researches have been implemented most of which have resulted in favour of inclusive education.

Based on a pre-test – post-test research design Sharma et al. (2010) measured the influence of being educated in an inclusive classes on academic performance of children without special needs. The researchers investigated the two groups of pupils one of which included Children with special needs and the other without. The findings demonstrated that there were no great differences between the two groups. Moreover, the result of another study by Affleck et al., (2009) also came to conclusion that there were no huge differences between the achievements of two groups of pupils who attended inclusive and non-classes respectively. Salend et al. (1997)

studied achievements in more specific areas, general science. The researchers concentrated on the impact of participation of children with severe disabilities on other pupils.

The findings appeared in favour of inclusion showing that children without disabilities made statistically important progress in learning environmental education concepts. Regarding the achievement level of students without special educational needs in inclusive classrooms, contemporary research shows an even more contradictory picture. Rivkin (2002), for example, found positive effects on the achievement level (i.e., mathematics and reading) of children without special educational needs in inclusive classrooms. He found no significant effect of the presence of children with behavioral disorders in inclusive classrooms.

In this regard, Farrell et al. (2007) found no statistically significant effect of the presence of students with special educational needs on the academic achievement level of their classmates without special educational needs. On the other hand, Gilmardi (2009) pointed out that the presence of students with behavioural disorders has a negative effect of one standard deviation on the achievement level in mathematics of their peers without special educational needs. Similar weak negative results for the presence of students with special educational needs on the achievement of their peers were recently reported by a group of researchers for a longitudinal study of a large finish sample.

#### **2.2.1.1. Factors influencing academic performance of learners with special needs in inclusive and special schools**

Inclusion could be influenced either positively or negatively by factors such as family background, students' attitudes, physical facilities, instructional strategies and educational accommodations. These factors may create barriers towards academic performance for learners with special needs.

##### **✓ Family background**

Parents' social and economic well-being, including parental and vocational education, income, and employment, are also linked to student success (Ali et al, 2013). Living with a disabled child can have a devastating effect on the whole family. The time, cost, physical and emotional demands, and the complex tools of raising a child with a disability can have a significant impact.

They are unique to the family and can affect the functioning of the whole family. Studies have also shown that people with disabilities are more unequally represented among the poor and are more likely to be poorer than their peers without disabilities.

Mejel (2001) believe that parents are important partners in providing the special education needed as they provide the loving help, empowerment and health necessary for the child's life to grow up. They go on to say that parents have a responsibility to provide good housing and raise their children. It prepares them for school and supports learning. According to Grolnick & Slowiacek (1994), in their research, it was shown that the level of parents is related to their role in the education of their children. Davis (2005), in a study in one area, found that the number of schools with parents has a direct impact on how they organize their communities and how they work with their children to improve their education.

#### ✓ **Students' attitudes**

According to Knight (1995), the self-esteem of a student with disabilities has a critical effect on learning. Many difficulties that people experience throughout their lives are about what they can and cannot do. Bandura in his Social Cognitive Theory emphasizes on self-belief or efficacy as crucial in the formation of a can-do attitude which translates into personal accomplishments Bandura (1986) Individuals with disabilities are often stigmatized and often have a tougher time learning to feel good about themselves. He cites the few studies done as indicating that adolescents who are disabled feel they are often treated as socially inferior and vocationally undesirable. Many end up with a can't-do attitude, low confidence and self-esteem.

According to Hallum (1995), research done shows that young people with disabilities are at a risk of social isolation. He said that their leisure pursuits tend to be passive and solitary. In a number of studies, females with physical disabilities rate themselves as particularly low in social acceptance which leads to social isolation and feelings of loneliness.

#### ✓ **Physical facilities**

Students with disabilities on average express concerns related to the physical barriers within the school environment. Johnson (2014) went on to elaborate that student with disabilities often encounter physical barriers in the post secondary environment which remain a concern that has



not been addressed by these institutions. He explained that providing accessible environments across campuses is sometimes restricted by architectural and budgetary constraints and post secondary institutions often do not consider the immediate individual needs of students with disabilities. For instance, he said that rooms should be arranged in such a way that the students can move around easily, with interconnecting areas between buildings to allow for seamless movement and he continued and said that the use of non-slip materials and floor finishes for enhanced safety and mobility as well as accessible car parks and special toilets for the disabled are recommended.

### ✓ **Instructional strategies**

For many students with disabilities, the key to success in school is making the right changes, accommodations, and changes in teaching and other school activities (Hear, 2010).

A disabled pupil who attends primary school faces many challenges. Lack of access to information, lack of understanding and trained staff, and lack of awareness of the development of technology make higher education difficult for students with disabilities. The goals of educating students with disabilities are broadly the same for all students. It is social capacity, communication, employment and independence

In order to achieve the functional levels of students with special needs in the general category, it is necessary to make some modifications to the existing teaching materials and learning environments so that these students can play a greater role in the income generation process. Since students with disabilities often struggle in shared classrooms, giving them a variety of classroom instructions and modified lessons, teachers and advocacy staff can provide a balanced and accessible playground (Barbra,2012). He argues that the accommodation, modification and use of technology coexist in order to give a student with special educational needs access to learning materials that may not be feasible. Adapting to climate change is as easy as moving a busy student outside a school or away from a window. Other changes may include changing the way materials are delivered or the way the student reacts to demonstrate learning. Climate change adaptation, accommodation and change should be student-specific, based on their needs and personal learning.

### **2.2.2. Academic performance of learners with special needs in special schools**

All children and young people may experience learning difficulties at some point. This is not unusual. For most children the difficulties are temporary and are soon overcome with help and encouragement from home and school. The term 'Special Educational Needs' is used to describe learning difficulties or disabilities that make it harder for children to learn than most children of the same age. Children with Special Educational Needs (SEN) are likely to need extra or different help from that given to other children of their age. This help is known as special educational provision.

Educators rely on current research to make informed decisions on the placement of students with special educational needs as well as those without. Current policy requires that students be placed in the least restrictive environment, which oftentimes for students with special needs, is an inclusion setting. Therefore, it is necessary for educators and policy makers to understand the influence of such an environment on students with special needs as well as non-disabled students. It is difficult to draw clear conclusions about the potential benefits or drawbacks about this method of instruction based upon available research (McDonnell, 2009). Those in support of the practice of inclusion argue that students who are educated in an inclusive classroom setting may benefit both socially and academically from the environment. Those who advocate for inclusion contend that non-disabled students who are educated with students who have special needs are more tolerant of differences, and students with disabilities who are educated with typical peers are exposed to peers who demonstrate and model appropriate social behavior (Daniel, 1997).

Educators who oppose the practice of inclusion argue that non-disabled students who are educated among their disabled peers experience negative consequences. For instance, opponents state that when educated among students with disabilities, regular education students imitate undesirable behaviors displayed by their disabled peers. Additionally, those who do not support the practice of inclusion make the argument that non-disabled students become bored with the pace of instruction when educated among students with disabilities, while students with disabilities struggle to keep up with the pace of instruction (Daniel & King, 1997).

The majority of studies have found that there are no statistically significant differences in the performance of non-disabled students when placed in an inclusion setting (Ruijs & Peetsma, 2009). In an exploratory study by McDonnell et al. (2003) of the influence inclusive educational practices had on the achievement of students with disabilities and their non-disabled peers, it was determined that the placement of students with developmental disabilities in an inclusion setting did not have a statistically significant negative impact on their non-disabled peers as measured by state mandated assessments in language, arts or Mathematics. These results are consistent with the research that indicates neutral academic outcomes for non-disabled students who are educated in classrooms with peers who have special needs (Peetsma, 2009).

Several factors in addition to classroom setting may have an influence on student achievement. Such variables may include socioeconomic status, gender, ethnicity, and attendance. The combination of these variables in addition to placement in an inclusive setting may potentially influence student achievement. The current study contributes to the small body of research that exists on the factors that may influence the academic achievement of regular education students. It is important to explore this area further due to federal law requirements that students be educated within the regular education classroom when appropriate. In addition, with the increased accountability of educators to ensure that students perform at a proficient level on standardized tests, research on the effects of inclusive practices must be conducted and understood by individuals in the field (Hiller, 2009).

### **2.2.3. Academic performance and teaching/learning systems in inclusive and special schools**

Providing learning opportunities for students with disabilities in the public school system has changed dramatically in the past 50 years. While most disabled students were not allowed to enter public schools before 1950, educators today have found themselves including these students in the regular education settings for the majority of the school day (Idol, 2006). This inclusion of special education students into the regular education setting has often been mistaken for mainstreaming. However, there are distinct differences between inclusion and mainstreaming.

First, students who are mainstreamed are sent from the special education classroom to the regular education classroom at some point during the day for a determined period of time. On the other hand, inclusion focuses on keeping the special education student in the regular classroom for nearly the entire day. Responsibility of a teacher also differs between mainstreaming and inclusion. In mainstreaming, the regular education teacher plans and delivers primary learning activities while the special education teacher consults the regular education teacher in order to indirectly influence plans for the mainstreamed student. In an inclusive setting, the inclusion teacher should collaborate with the regular classroom teacher to develop and implement cooperatively a broad range of learning activities and teaching strategies within the classroom. Finally, the special education teacher is usually not a part of the mainstreamed classroom. In an inclusive classroom, the special education teacher should function with joint responsibility in the classroom setting with the regular education teacher (Schultz, 2011).

Research has shown definite advantages to inclusion programs for special education students found in the literature. Inclusion facilitated a more appropriate social behavior because of higher expectations in the general education classroom (British Columbia Teachers Federation, 2006). The inclusion classroom also offered a higher circle of support including social support from classmates without disabilities (Shultz, 2011). The more a child was included in the general school population, the less likely the child would miss important social events going on in the class, after school and on the weekends. Finally, inclusion improved the ability of students and teachers to adapt to different teaching and learning styles (BCTF, 2016). Research has shown that regular education students may also find advantages in the inclusive setting.

The research provided three barriers to educating students with disabilities in an inclusive setting: attitudes, knowledge, and organization (BCTF, 2006). The attitudes of both the special education teacher and the regular education teacher could have had a negative impact on inclusion. Both parties must be willing to work together and the collaboration that comes with inclusion calls for a shift in control of the learning environment. Perceived lack of knowledge was also shown to be a barrier to inclusion. Regular education teachers were found to feel inadequately trained to work with special education students, while the special education teacher had common feeling towards the content knowledge of the regular education teacher (Isherwood,

2008). Finally, school administrators were found to have organizational problems when using the inclusion approach in the school setting. Administrators found staffing, managing, evaluating, and scheduling for inclusion created barriers that forced negative feelings towards inclusion of special education students in the regular education classroom (Anderson, 2018).

### **2.3. Theoretical framework**

Theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions. The theoretical framework is the structure that can hold or support a theory of a research study. The theoretical framework introduces and describes the theory that explains why the research problem under study exists (Gabriel, 2008). It must demonstrate an understanding of theories and concepts that are relevant to the topic of your research paper and that relate to the broader areas of knowledge being considered. The following are the theories which guided this study:

#### **2.3.1 Social Cognitive Theory**

Social Cognitive Theory by Albert Bandura emphasizes on self-belief as critical elements in human behavior and motivation. This theory is particularly relevant to special needs students who by the very nature of the physical differences, often view themselves as lesser than others generally suffer from a low self-esteem which greatly impacts their academic performance. More often than not societal reactions and attitudes towards them tend to reinforce this negative view. According to Social Cognitive Theory, self-efficacy beliefs provide the foundation for human motivation, well-being and personal accomplishments. Unless people believe that their actions can produce the outcomes they desire, they have little incentive to act or to persevere in the face of difficulties.

Bandura (1986) says that individuals form self-efficacy beliefs by interpreting information primarily from four sources; Mastery experience, vicarious experience, social persuasion and physiological reactions. Mastery experience is the interpreted result of one's action or performance. Success raises self-efficacy while failure lowers it. Vicarious experience is the

observation of others" performance while the verbal messages and social perceptions received from others, whether intentional or accidental also influence us.

One of the main criticism of social cognitive theory is that it is not a unified theory that different aspects of the theory do not tie together to create a cohesive explanation of behavior. Besides not all social learning can be observed. This theory is related to this study as teaching/learning of students with SEN requires to pay much attention on their perception competence as this should help them to achieve academic performance differently once they are in inclusive or special schools.

### **2.3.2. Sociocultural theory**

Vygotsky perceived disability as a socio-cultural developmental phenomenon. This is the peculiarity of his approach to disability. Vygotsky argues that disability appears as disability when it appears in the social context. Vygotsky decisively argued that the challenge of developing the higher psychological functions and personality of child with special needs can be implemented by providing really differentiated learning environment.

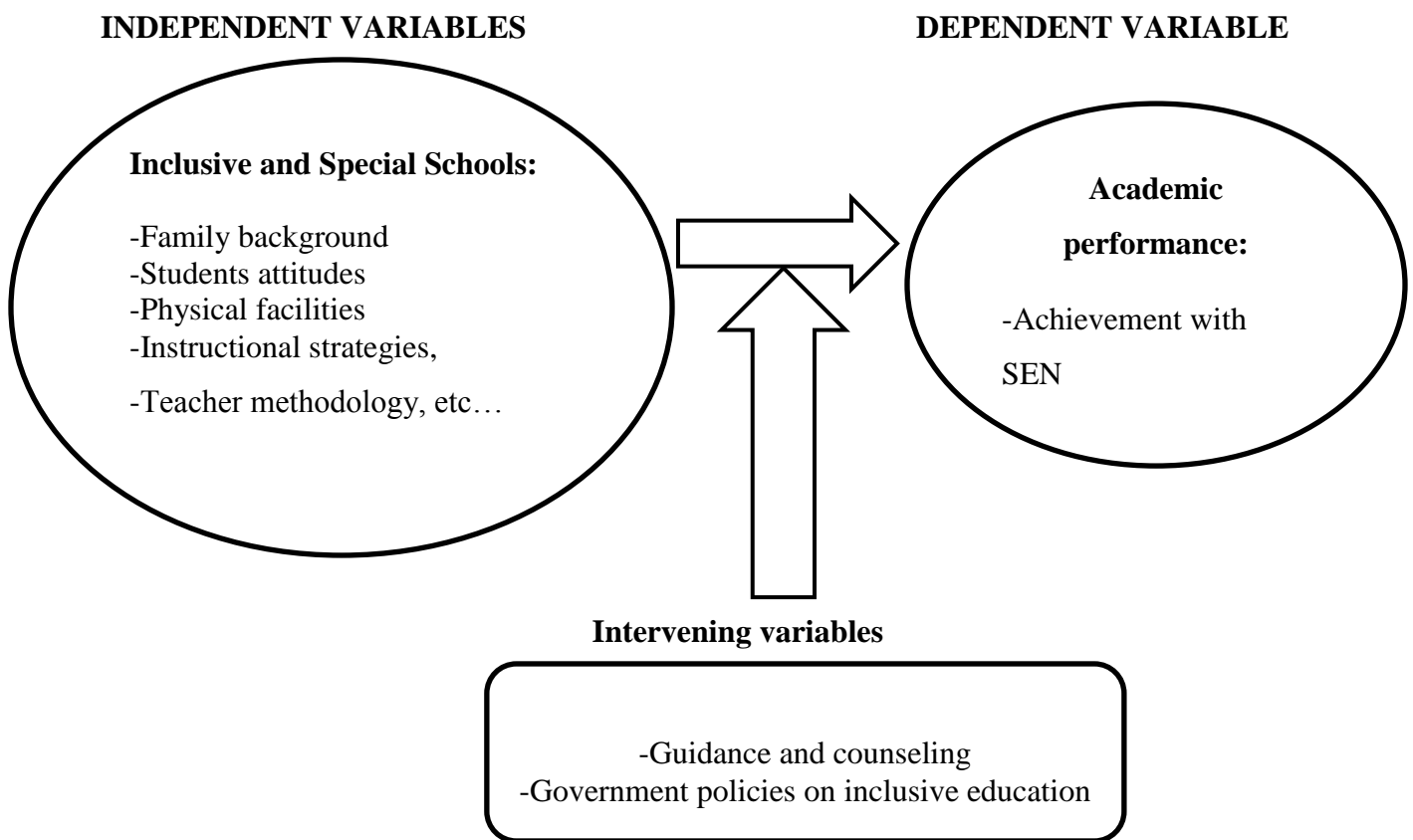
Vygotsky proposed to set a learning environment in which children with disabilities are supplied with alternative ways of communication and development. By alternative ways Vygotsky implies psychological tools which are especially suitable for a disability. Vygotsky's Social Constructivism has important implications for teaching methods in IE, and it is noteworthy for reference in inclusive education for several reasons. This theory is also called sociocultural theory which obviously indicates that it has dual concentrations: the history of human development and cultural tools which determine the direction of human development and give it specific shape.

In this theory on inclusive and special education, Vygotsky created a comprehensive and practice-oriented paradigm on educating persons with special needs. Vygotsky's idea that development by social aspect of his/her organic impairment creates a new perspective for socialization and acculturation of special needs. This theory is related with relationship between

academic performance and teaching/learning systems in inclusive and special schools where Vygotsky pointed out that it is decisively important for the teachers to pay attention while teaching learners with disabilities and help them in achieving the academic performance. This should be done through social activities learning cultural value in classroom setting and according to his disabilities.

#### 2.4. Conceptual framework

The conceptual framework in figure 2.1 (below) shows the interrelationship between academic performance of learners with special educational needs in inclusive and special schools. It shows details on the variables found in the study the variables which influence the academic performance of students with special needs.



**Figure 2.1.** Conceptual framework

The figure 2.1. above shows the interaction between variables which are independent variable, dependent variable and intervening variable. The independent variable is academic performance and dependent variables is inclusive and special schools. There is also intervening variables which interferes between them which are guidance and counselling and government policies on inclusive education.

The intervening variables affected the relationship between the independent and the dependent variables. Learner support, government policies or regulation on learners with special education needs as well as guidance are intervening variables. The academic performance of students with special needs first depend on the elements or factors such family background, students' attitudes, physical facilities and instructional strategies. These become leading factors for proper inclusion and attainment of children with special needs.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.0. Introduction**

This chapter describes the research design, target population, sample and sampling techniques, the research instruments, data collection and data analysis.

### **3.1. Research design**

According to Hennick et al. (2011) a research design is a framework or a plan for the study used as a guide in collecting and analyzing data. It is a blueprint that is followed in completing a study. He further defines a research design as a plan of action. For the purpose of this study, the researcher adopted a survey as a research design.

The study adopted descriptive survey. The purpose of this descriptive survey research design obtained pertinent and precise information concerning the current status of phenomenon and whenever possible to draw valid general conclusions from facts discovered. This method emphasized on the frequency of answers to the same question by different people. This design aimed obtaining information from a representative selection of the population known as a sample.

### **3.2. Target population**

Ledico (2010) defines target population as a group of individuals, objects or items from which samples are taken for measurement. Orodho (2008) says that it is the set of elements that the researcher focuses upon and to which the results obtained by testing the sample was generalized. The target population for this study was the students with special needs, the teachers, dean of studies and headteachers in two schools. One inclusive school which is in Groupe Scolaire de Gahini in Kayonza District and another special school of HVP Gatagara in Rwamagana District. The school of Groupe Scolaire de Gahini has (26) learners with special needs and all are visually impaired, 30 teachers in total and 1 dean of studies and 1 headteacher.

Besides, the study also was carried out in HVP Gatagara in Rwamagana center. That school has 82 visually impaired students, 18 teachers, 1 dean of studies and 1 head teacher. The following table gives details on the total population of this studies.

**Table 3.1. Table representing the sample size**

Category	Number of learners with special needs	Number of teachers	Dean of studies	Headteachers
GS de Gahini	26	30	1	1
HVP Gatagara (Rwamagana)	82	18	1	1
Total	108	48	2	2
<b>General total</b>	<b>= (108+48+2+2) =160</b>			

**Source:** Primary Data, 2021

The total population of this study is 160.

### 3.3. Sample Size and Sampling Technique

#### 3.3.1. Sample size

The sample size determination is the act of choosing the number of observation or replicates to include in a statistical sample. The sample size is an important feature of any empirical study in which the goal is to make inferences about population from sample. In practice the simple size is used in a study is determined based on the need to have sufficient statistical power (Smith, 2013).

Mugo (2017, 1) outlines the terms sample, sampling and population as follows:

*“A sample is a finite part of a statistical population whose properties are studied to gain information about the whole. When dealing with people, it can be defined as a set of respondents (people) selected from a larger population for the purpose of a survey.*

*Sampling is the act, process, or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population. A population is a group of individual persons, objects, or items from which samples are taken for measurement”.*

The sample size was calculated Using Yamane simplified formula to calculate sample sizes, with

$$n = \frac{N}{1 + N(e)^2}$$

a 90% confidence level and P =0 .1

Where n is the sample size, N is the population size, and e is the level of precision.

When this formula was applied to the above target population, we got:

$$n = \frac{160}{1 + 160(0.1)^2} = 62$$

A sample of 62 respondents was targeted to participate in this study. This formula was used to estimate a representative sample.

A total number of 62 respondents will be taken as s size.

**Table 3.2: Table showing the sample size**

<b>Sampled schools</b>	<b>Number of learners with special needs</b>	<b>Number of teacher</b>	<b>Dean of studies</b>	<b>Headteacher</b>
G.S de Gahini	9	12	1	1
HVP Gatagara	30	7	1	1
<b>Total</b>	<b>39</b>	<b>19</b>	<b>2</b>	<b>2</b>
Sample size	<b>= (39+19+2+2) = 62</b>			

**Source:** Primary data, 2021

### 3.3.2. Sampling techniques

Sampling technique is a method of determining the representative population for a study. This study used purposive sampling. According to Sadowski (2003), purposive sampling focuses on information- rich cases“ in which one can learn a great deal about issues of central importance to the research. A purposive sampling procedure was used to select the two schools that admit students with special needs which are inclusive and special schools. Purposive sampling was also be used to select all the students with special needs from the two institutions.

A total number of 39 students were sampled (9 students in Gahini Groupe Scolaire and 30 students in HVP Gatagara). Moreover, 19 teachers from both schools were purposively selected and they are teachers from special classes with students with special needs. Moreover, this study used purposive and random sampling techniques. The simple random sampling was used to select the students from the total population in order to get the sample size. This sample random simply gives each member of population a chance of being selected. This ensured that each member of the target population has unequal and independent chance of being included in the sample.

### **3.4. Research instruments**

According to Roger (2003), research instruments are methods that are utilized to get the data needed on the topic. In order to find effective information that eventually led to suitable answers, the following methods were used which are questionnaire and interview.

In this study, questionnaires were used purposely to elicit relevant information. In this technique, the researcher used a series of questions. The researcher set both two questionnaires. One administrated to learners with SEN and another one to teachers and dean of studies of those both schools. Moreover, the study adopted interview guide. Unstructured interview was used in order to enrich data from questionnaire. Thus, respondents were asked questions about academic performance of learners with special needs in inclusive and special schools. The researcher scheduled an interview with the headteachers of both schools.

Furthermore, an observation checklist was used in this study. It helped the researcher to know in which settings teaching or assess aids helped learners reach academic performance. Observation schedule was considered appropriately because; it yielded data which was used to supplement the questionnaires and interviews for relevant information.

### **3.5. Data collection techniques**

The research first skilled the research helper who assisted in piloting study, administration and took back of the questionnaire during the full-scale study. The questionnaire embossed in Braille,

were given to learners with visual impairment and the same questionnaire in print to their teachers and dean of studies for filling. All questionnaires distributed and answered in instantly to eliminate losses and cross sharing of information between the respondents. Data collection was done in two successive months.

The first day the researcher went to Rwamagana district where there is HVP Gatagara Rwamagana and the following day he went to Groupe Scolaire de Gahini. After completion of questionnaires, the researcher gave interviews to selected persons which are the head teachers of those two schools.

### **3.6. Data analysis procedure**

At every stage of analysis, data cleaning, computations, coding and analyses was done by the use of statistical methods. The data from questionnaire was analysed in order to get information on quantitative data and was focused mostly on comparison on academic performance of learners with special needs in inclusive and in special schools at GS de Gahini and HVP Gatagara in Rwamagana.

It is during the quantitative data analysis that the researcher inevitably attempted to test the research questions which was formulated for the researcher study. This was done by the first defining research questions and setting the parameters for the study. The researcher selected an appropriate test based on the variables defined in the study and on whether the distribution was normal or not.

### **3.7. Validity and reliability**

#### **3.7.1. Reliability**

In this part of research gives a reliability and a validity of research instruments.

Henry (2002,8) stated that:

*“Reliability refers to the consistency of respondents in answering items in the questionnaire. Reliability was insured through test/re-test method. Reliability also*

*insured by creating a strong research design, choosing appropriate methods and samples, and conducting the research carefully and consistently. Reliability considered throughout the data collection process, the researcher used the data and methods where the result precise, stable and reproducible.”*

For the research to be reliable it must prove that if it were to be done on a similar group of respondents in a similar context the similar results would be found and this was insured while piloting. The researcher administered the questionnaire to a certain number of teachers so that their responses could be compared with those which would come out from the study.

The researcher plan methods carefully to make sure he carries out the same steps in the same way for each measurement. This is especially important if multiple researchers are involved. For example, if when he is conducting interviews or observations, clearly, the researcher defines how specific behaviors or responses counted, and make sure questions are phrased the same way each time.

### **3.7.2. Validity**

To make the research valid, the researcher pretests the questionnaire by using research expert especially lecturers from University of Rwanda. These requested to judge whether questions in the questionnaire are relevant and able to collect valid data for the study. The researcher base on the judgment of this expert in measuring the validity of the questionnaire. In addition, to make the research valid (measure what it is supposed to measure), the framework and questionnaire have been elaborated considering the objectives of the study. The main tool of data collection which used is questionnaire. The benefit of questionnaire to this research is the confidentiality it offers to the respondent, which can contribute to provision of true information.

Brink (1993, 35) pointed out that:

*“Validity in research is concerned with the accuracy and truthfulness of scientific findings. A valid study should demonstrate what actually exists and a valid instrument or measure should actually measure what it is supposed to measure. The author goes on reiterating the ideas of Denzin to distinguish between internal and external validity as it is applied to qualitative research. Internal validity is the term used to refer to the extent to which research findings are a true reflection or representation of reality rather than being the effects of extraneous variables. External validity addresses the degree or extent*

*to which such representations or reflections of reality are legitimately applicable across groups.”*

### **3.8. Ethical consideration**

Data collection in case study arises various ethical issues. The main ethical issues deal with the question of how to protect the privacy of the participants, and how to act during data collection and data analyses process in order to assure anonymity of the participants. After getting a letter from the department which allowed the researcher to conduct research on the field, the researcher was first of all to go to look for the head teachers of both schools and explaining the purpose of the research and ensure them that the data was used for academic purposes.

While giving questionnaire, the researcher asked the respondents not to provide their names on questionnaires in order to let the respondents feel free to respond and this ensured them of confidentiality that the information requested was used for the purpose of the study only. This establishment of intimacy between the respondents and the researcher is helpful as it helps the researcher to gain an accurate and more data.

## **CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATIONS**

### **4.0. Introduction**

This chapter presents, analyzes and discusses the findings collected from the field. The study, A comparative study on academic performance of learners with special educational needs in inclusive and special schools. Case studies of Groupe Scolaire de Gahini and HVP Gatagara (Rwamagana center). This research was guided by three research questions namely:

- i. How are learners' academic performance in both special and inclusive schools?
- ii. What is the relationship between academic performance and teaching/learning systems in inclusive and special schools?
- iii. In which schooling system academic performance is comparatively commendable for learners with SEN?

This study was guided to achieve the following research objectives:

- i. Examine learners' academic performance in both special and inclusive schools.
- ii. Assess the relationship between academic performance and teaching/learning systems in inclusive and special schools.
- iii. Establish where academic performance is comparatively commendable for learners with SEN.

Findings were collected by using two research tools, which were questionnaire for teachers and dean of studies as well as head teachers' interview. It was important to use the two tools in order to have plenty of information on the diverse opportunities given to children comparing learners with SEN in inclusive and in special school.

In the presentation of the findings, verbal statements from the respondents were used in order to maintain the originality of the information collected. The findings are presented in consideration of the research objectives. In each part there started presentation of data, followed by discussion of the findings in relation to theoretical approach and literature which were reviewed in chapter two. The anonymity of respondents was ensured by the use of letters A&B



#### 4.1. Response Rate

The study focused on 108 learners with special needs, 48 teachers, 2 dean of studies and 2 headteachers from G.S Gahini and HVP Gatagara. The total population was 160. The survey used a sample of 60 respondents who answered the questions asked. As a result, the questionnaire was given to 60 respondents (96.8%) included 39 (65%) of learners, 19(31.6) for teachers and for dean of studies. Besides, the number of 2 headteachers (3.2%) were interviewed from two selected schools. Regarding the questionnaire given, only 58 (93.5%) were returned back that is 39(62.9%) of learners and 17(27.4%) of teachers and 2 (3.2%) for dean of studies. The survey ultimately found the results of 62 (100%) respondents who participated in this study.

**Table 4.3. Table showing response rate of respondents**

<b>Response rate</b>	<b>Frequency</b>	<b>Percentage</b>
Questionnaires returned back	58	96.6
Questionnaires not returned back	2	3.4
Total	60	100

**Source:** Primary data, 2021

#### 4.1. Demographic characteristics of respondents

The research established the sex, age of the respondents, education levels; terms of areas of employment and the results were combined in one table 4.2 as shown of respondents.

In this section, respondents provided the socio-demographic information including gender, age, marital status, year experience in teaching of the participants.

**Table 4.4. Demographic Characteristics of the Sample**

<b>Section</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Sex</b>	Male	45	72.5
	Female	17	27.5
	<b>Total</b>	<b>62</b>	<b>100.0</b>
<b>Age of respondents</b>	Below 11 years	0	0
	12-16 years	2	3.2
	17-21 years	8	12.9
	22-26 years	19	30.6
	27-31 years	12	19.3
	32 Above	21	33.8
	<b>Total</b>	<b>62</b>	<b>100.0</b>
<b>Year of study</b>	LFK	2	6.4
	EKK	3	7.6
	Senior 4 HEG	5	12.8
	Senior 5 HEG	9	23.0
	Senior 6 HEG	11	28.2
	<b>Total</b>	<b>39</b>	<b>100</b>
	<b>Teaching experience</b>	Below 3 years	1
4-6 years		8	42.1
7-9 years		6	31.5
10 years above		4	21.0
<b>Total</b>		<b>19</b>	<b>100</b>

**Source:** Primary data, 2021

Table 4.3 indicated that the sex composition of the respondents, 72.5% of them were males and 27.5% of them were females. The number of males is slightly greater than number of females. However, the difference in number does not affect the reliability of the data.

Moreover, the majority of the respondents i.e., 33.8% were above 32 years and 19.3% were between the age group of 27 and 31 whereas 30.6% were between 22 to 26. Besides, 12.9% were

between 17 and 21. Finally, there was a small portion of 3.2% who were between 12 and 16 years.

Furthermore, the table above also indicates the year of study of learners. The majority of them are in Senior 6 HEG with 28.2% of respondents, respectively 23.0% are in Senior 5HEG, 6.4% were in 6LFK, 7.6% were in 5and 6 EKK and lastly 12.4% are senior 4 HEG.

Besides, the table also highlights the teaching experience of respondents (teachers and dean of studies taken as sample size). The researcher found that the majority of them have an experience between 4 to 6 years, 31.5% rated with experience between 7 to 9 years, 21% of respondents have an experience of more than 10 years in teaching inclusive school and only 1 respondent represented by 5.2% have an experience in teaching special school which is under 3 years.

## **4.2. Presentation of Findings**

The research work was conducted on academic performance of learners with special educational needs in inclusive and special schools. Case studies of Groupe Scolaire de Gahini and HVP Gatagara Rwamagana center). This section consists of the presentation and analysis of research information and the discussion of the results. This is provided in the following sections in accordance with specific research questions.

### **4.2.1. Learning material of learners with SEN**

Learners with visual impairments were asked to explain if they were provided with learning materials in their special schools.

**Table 4.5. Respondents' views if learning material are provided to learners**

<b>Answers</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	37	94.8
No	2	5.2
Total	39	100

**Source:** Primary data, 2021

The table above indicates if learning materials are provided to learners. As findings indicated, the majority of 94.8% accepted that learning materials were provided to learners but whereas 5.2% said that they are not provided.

The findings revealed that students taught with instructional materials performed significantly better than those taught without instructional materials in special or inclusive school and also that the use of instructional materials generally improved students' understanding of concepts and led to high academic achievements. The study also revealed that the data were supported by teachers teaching in special schools that learning materials provided to learners with visual impairments but are not enough, continued to say, that these learners do not get enough school materials to help them in their studies.

During the interview with the headteachers, on that question, all of them (100%) asserted that :

*“Learning materials in these schools are not enough because in this school learners with SEN usually share learning materials available. They continued giving example that they have more braille machine who help them and also in case of the problem, they should be repaired that one embosser was not enough to serve almost one hundred and seventy learners. Besides, they also explained that the financial problems were the main challenges that caused the learning materials to be insufficient in these special schools.”*

Regarding learning materials used in special and in inclusive schools which are not available in those schools. All headteachers (100%) agreed that:

*“There were other learning and teaching resources which are not available and they felt that if provided they could support their learning in those special schools. These learners tried their best to mention these learning resources that embossers, recorders, Braille writers, Braille books are not enough and computers & screen readers and, special geographical devices are not available. The headteachers added to the data that if learners with special or inclusive schools given assistive technologies like computers with screen readers, enough recorders, braille and any other devices can help them, they can learn well. They also supported that the learners by saying that there are other learning resources which are not available when provided can support learning of learners like walking canes, talking globes, swell graphic machines and computers with screen readers.”*

#### 4.2.2. Comfortability of learners with SEN in special/inclusive classrooms

Throughout the years as special education has developed, the guidelines that define the qualifications of students needing special services have also become more specific. When looking at place a student into special education, there are several steps that must be followed prior to the actual placement of the student. The following table gives details on Comfortability of learners with SEN in special/inclusive classrooms.

**Table 4.6. Respondents' views if they are comfortable in special/inclusive classrooms**

Answers	Frequency	Percentage
Yes	31	79.5
No	8	21.5
Total	39	100

**Source:** Primary data, 2021

Over 79.5% of respondents accepted they are comfortable in special and inclusive classrooms whereas 20.5% do not accept that statement. Findings show that the majority of respondents are satisfied with the learning materials and the teaching methodologies used by the teachers are appropriate for them. Besides, most of them asserted that while learning, the teacher always gives attention to them as visual impairment learners and even in the exams they are having extra time to finish their questions. This data supported by the UNESCO (2009) that large number of learners with 53 disabilities in developing countries do not attend schools, few of them who were enrolled in special schools where they were away from their families, friends, and peers, they were marginalized and had not given a chance to study in the same school with their peers where they had to enjoy school life like to play, to learn, to grow up with siblings.

#### 4.3.3. The adaptation of curriculum used by SEN in special/inclusive school

Curriculum adaption is an ongoing dynamic process that modifies and adapts the prescribed programme of studies to meet the learning requirements of a student with special needs. It enables the teaching team to welcome learners of all abilities and ensures that every student is challenged to learn. The details are given by the table below:

**Table 4.7. Respondents' views if the curriculum used is adapted in special or inclusive school**

<b>Answers</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	11	28.2
No	28	71.8
Total	39	100

**Source:** Primary data, 2021

The table depicts the respondents' views if the curriculum used in school is well adapted to fit the learning needs of learners with visual impairments. The majority of 71.8% refused and do not agree with that statement. They said that curriculum used is not adapted while 28.2% accepted that statement. The findings show that there is a problem of curriculum which is not adapted and this did not help them in learning as they do not have a library which is well equipped to support learning needs of learners with SEN. The big number said that the curriculum is not adapted to their needs as adaptive instructional programs are characterized by combined teaching strategies, flexible scheduling, individualized instruction, mastery learning, large and small group instruction, individualized tutorials and cooperative learning. This was in agreement with Torrent (2013) who pointed out that to adapt the curriculum is not easy as it requires to use different visual aids; plan more concrete examples; provide hands-on activities; place students in cooperative groups. Adapt the skill level, problem type, or the rules on how the learner may approach the work.

During the interview with the headteachers on curriculum adaptation of learners with SEN in special/inclusive school, headteacher A (50%) asserted that:

*“Curriculum should always be dynamic to meet the problems of the students. Therefore, it should be treated differently. First, curriculum development should be viewed at an ongoing, dynamic process, always be in a state of planned changes. Second, the process of curriculum design should be adaptable and applicable to many different subjects and situations. Finally, the teacher should have a primary role in the design process. They should not be relegated to a secondary position in identifying appropriate curriculum for their students. Curriculum adaptation is an ongoing dynamic process that modifies and adapts the prescribed programme of studies to meet the learning requirements of a student with special needs.”*

#### 4.3.4. Problem encountered in teaching learners with SEN

There is a need to provide a school setting that will accord children with special education and an enabling environment, rather than making the children with disabilities to fit into specific educational or school settings. Most of time learners with SEN should encounter challenges in special school/inclusive school as indicated by the table below:

**Table 4.8. Problems encountered in teaching learners in special school/inclusive school**

<b>Problems</b>	<b>Frequency</b>	<b>Percentage</b>
Insufficient materials(resources)	8	42.1
Not be able to use normal handwriting	2	10.5
They always need special attention	5	26.3
Lack of enough learning skills	4	21.0
<b>Total</b>	<b>19</b>	<b>100</b>

**Source:** Primary data, 2021

Table 4.8. indicates that the majority of respondents (42.1%) supported that insufficient material is among the problem encountered by teachers while teaching in special/inclusive school. They said that they experience a problem of teaching aids which do not facilitate them in teaching. The second problem as stated by another group of 26.3% of respondents accepted that special learners always need special attention while learning which do not facilitate teachers as they need to be careful and it requires enough time to do their activities. Respectively, 21% also indicates a problem of lacking enough learning skills and finally 10.5% asserted that those learners they use Braille but still have problem of using normal handwriting. According to an earlier study of UNISE (2012) it focuses on inclusion how it is regarded as a process of addressing needs of the CWDs within the mainstream schools using the resources available. Factors like the quality of the education, accessibility, change of attitudes and behavior, teaching methods, and curriculum are the main focal points in meeting the specific needs of children with disabilities.

These findings concur with USAID (2015,27) which pointed out that:

*“Inclusion has its own disputes, which comprise of lack of services for early identification, poorly trained teachers and inadequate allotment of resources. Teachers are not trained to accommodate learners with difficulties fittingly, support and supplemental materials are not available and as well, learners with difficulty have asked for going back to segregated systems owing to the instructors were not prepared to meet their needs appropriately”*

Najjingo (2009) also concluded that, on one hand, lack of or insufficient special instructional materials and equipment prevented access to all special education services. On the other hand, Najjingo also established that there is no special curriculum for learners with disabilities.

#### **4.4.4. Modified curriculum to fit learners with SEN**

A curriculum which suits the educational needs of children with disabilities should be designed together with the pedagogical way of teaching as well as the educational environment that will suit the learners. It’s important to design a simple curriculum so as to make it easy for the participants to understand, achieve good outcomes, and prevent lack of participation from the student. To improve upon the capabilities of children with disabilities and children with special education needs or in inclusive school.

**Table 4.9. Respondents’ views on modified curriculum which fit the learning needs of learners**

<b>Answers</b>	<b>Frequency</b>	<b>Percentage</b>
Individualize a time line for completing a task	5	26.3
Hands on activities	3	15.7
Use visual aids	8	42.1
Place students in cooperative groups	3	15.7
Total	19	100

**Source:** Primary data, 2021

The above highlights if modified curriculum fits the learning needs of learners in special/inclusive school. The majority of 42.1% respondents accepted that it fits as it highlights how to use visual aids. They added that visual clues in modified curriculum are important as they are tools which assist learners in a variety way. They enhance learning by helping visual learners understand their task, directions and discussions. The second group of respondents that is 5



(26.3%) accepted that individualize a time line for completing a task or activities is very important the curriculum as it helps the teachers to follow what is in the curriculum and the methods used. Another group of 15.7% indicates hands activities as important in modified curriculum as it help learners to strengthen the muscles of the hand, improve accuracy, and learn functional skills that they will use for the rest of their lives. Place students in cooperative groups fits learning needs in modified curriculum as certified by 15.7% of respondents.

During the interview with the headteachers on modified curriculum, headteacher A, said that:

*“Teachers who teach in special schools added that curriculum used in the secondary schools in Rwanda is not modified to fit the learning needs of the learners with visual impairments because most of teaching materials used are not familiar with these learners for books brought in school from Rwanda Basic Education Board (REB) are for learners without visual impairments, and when REB brings to the special schools some special devices, there is no training on how to use those new devices.”*

The data also supported by the headteacher B indicated that there were many barriers in curriculum for teaching sciences like Chemistry for learners with visual impairments; lack of appropriate teaching aids; adapted teaching contents into Braille system; and assistive tools are insufficient.

UNESCO (2007:8) revealed that:

*“Elaborated on the inability of the curriculum to cater for the needs of these learners, insufficient preparation of teachers and education leaders, rigid and poor teaching methods and inadequate assessment procedures. And other research showed that rigid curriculum and lack of appropriate teaching methodology also could be challenge of learners with disabilities including learners with visual impairments. Lack of access to appropriate materials and equipment for Special Educational Needs (SEN) constitutes also a significant barrier. For example, very few learners with visual impairments have access to Braille textbooks, even in special schools.”*

#### **4.4.5. Academic performance of learners with SEN in special/inclusive school**

A learning disability has the potential to affect the student negatively in the classroom in multiple ways. Academic performance will suffer greatly in the specific areas, resulting in emotional struggles, which can affect social perceptions and success and acceptance by their peers.

**Table 4.10. Assessment of academic performance of learners with special education needs**

<b>Assessments</b>	<b>Frequency</b>	<b>Percentage</b>
Formative Assessment	5	26.3
Summative Assessment	14	72.7
<b>Total</b>	<b>19</b>	<b>100</b>

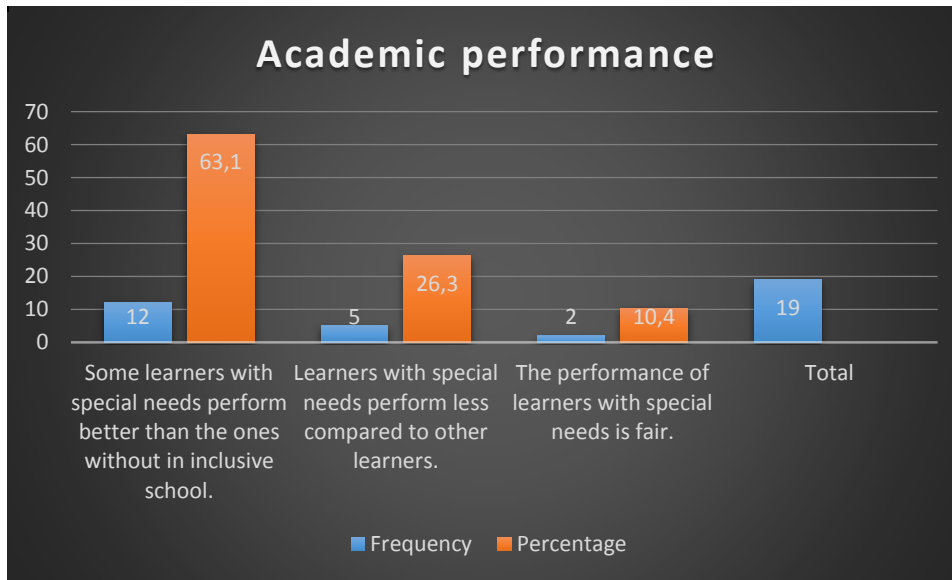
**Source:** Primary data, 2021

Table 4.10 indicates that the evaluation of academic performance of learners with special education needs in special /inclusive school. As indicated in that table, the majority of 14 (72.7%) accepted that summative assessment that is given at the end of the year play a very big role in academic performance of the learners as it finds learners being prepared, being known how the final exam should after doing on going assessment. The second group of respondents that is 26.3% argued that formative assessment is another way of assessment of academic performance of learners with special education needs. They accepted that formative assessment helps them to provide feedback to adjust ongoing teaching and learning to improve students ‘performance of the intended instructional outcomes.

On that point during the interview done with the headteachers, headteacher B agreed that:

*“Effective way to conduct a formative assessment with students who have special needs is to apply a well-known teaching accommodation called chunking. Chunking is a way to adapt the curriculum where you break skills or information into smaller, more manageable segments in order to help students succeed. Those assessments often are not graded. Rather, their purpose is to check for understanding and help inform instruction.”*

**Figure 4.2. Academic performance of learners in special schools compared with the ones in inclusive**



**Source:** Primary data, 2021

The figure 4.2. above compares academic performance of learners in special schools with the ones in inclusive school. The majority of 63.1% of respondents asserted that some learners with special needs perform better than the ones inclusive school especially in some subject like Economics. Some are evaluated by using Braille typed test. But in National exams they can fail because their exams which are well adapted. Besides, another group of 26.3% accepted that Learners with special needs perform less compared to other learners in inclusive classroom because once they studied, they encountered some problems in learning due to their curriculum which was not appropriate. The last group of 2 (10.4%) accepted that they performance of learners with special needs is fair.

**Table 4.11. Level of agreement on academic performance of learners with SEN**

Statement	SA	A	N	D	SD
	Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)
Parents' social and economic well-being are also linked to student success.	10 (53)	6 (32)	3 (15)	0 (0)	0 (0)
The self-esteem of a student with SEN has a critical effect on learning.	2 (10)	13 (68)	2 (10)	2 (10)	0 (0)
Physical facilities play an important role in success of learners with SEN.	13 (68)	2 (10)	2 (10)	1 (5)	1 (5)

Lack of understanding and trained staff and lack of awareness of the development of technology make higher education difficult for students with disabilities.	2 (10)	15 (79)	1 (5)	0 (0)	1 (0)
Effective teaching and learning cannot occur without congenial classroom environment.	1 (5)	18 (95)	0 (0)	0 (0)	0 (0)

**Source:** Primary data, 2021

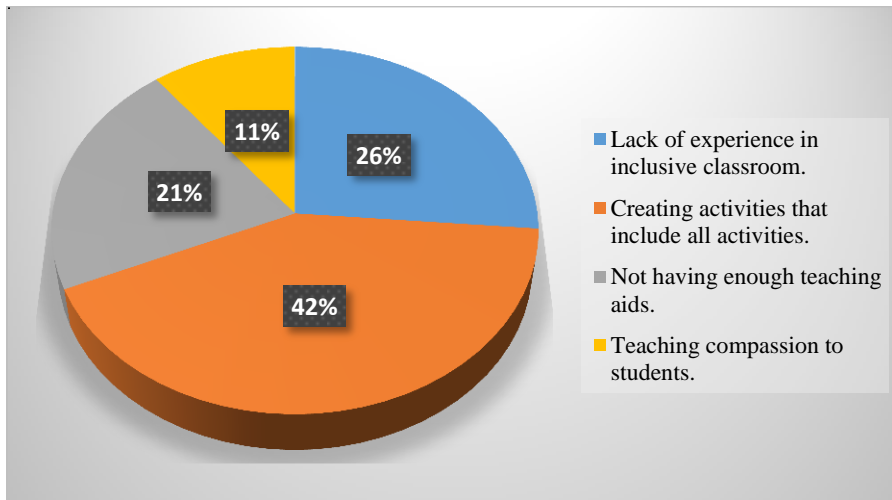
The table 4.11 above indicates the level of agreement on academic performance of learners with SEN in inclusive and special schools. As indicated by the table above, the majority of respondents strongly agreed (53%) and agreed (32%) that parents' social and economic well-being are also linked to student success. On second statement regarding the self-esteem of a student with SEN has a critical effect on learning agreed (68%) that the self-esteem of a student with SEN has a critical effect on learning and 10% strongly agreed that statement. Respectively, 10% were neutral, a small portion of 10% disagreed. Physical facilities also play an important role in success of learners with SEN as the majority of 68% strongly agreed but also lack of understanding and trained staff and lack of awareness of the development of technology make higher education difficult for students with disabilities as 79% agreed. Lastly, the respondents were asked if effective teaching and learning cannot occur without congenial classroom environment, almost 18(95%) agreed that statement only 1 (5%) strongly agreed.

During the interview, only headteacher A, stated that:

*“Teachers play a vital role in ensuring quality education delivery. They are best known for the role of educating students in their care. The most common role teachers’ play in the classroom is to dispense pertinent knowledge to students by following the curriculum. Teachers use various methods such as lecture, small group activities and hands-on learning activities to dispense knowledge to students. Beyond that, they serve many other roles in the classroom. Teachers set the tone of their classrooms, build warm environment, mentor and nurture students, become role models, listen and look for signs of trouble.”*

This concurs with William (2012) who said that teaching is demanding in a variety of ways which include time, effort and commitment. Teachers prepare pupils for the job market and the socio-economic development of every nation. They are required to exhibit good qualities and accommodate the academic, social and emotional needs of their students

**Figure 4.3. Challenges faced by teachers during teaching learners with SEN in special school or inclusive school**



**Source:** Primary data, 2021

In inclusive classroom, a teacher may encounter different challenges as highlighted the figure 4.3 above. The first group of 26% of respondents accepted lack of experience in inclusive classroom is the first challenge. Some teachers have not been exposed to special-needs classrooms, and this can be a disadvantage. New special education teachers may find the first year to be especially difficult. Educators need to coordinate efforts and understand the needs of the classroom in terms of developing skills and lesson plans.

The second group which is the majority of 42% argued that creating activities that include all activities is another challenge faced by teacher in inclusive classroom. Special-needs-inclusive classrooms must be able to involve all of the students in all of the classroom activities. Teachers need to address how the students will communicate with each other and encourage everyone's participation. If there is a lack of adaptive equipment or adaptive communication and language tools, it makes it difficult for teachers to lead a united classroom. Not having enough teaching aids is another challenge as 21.0% of respondents accepted. Normally, inclusive classrooms have a regular educators and a special-needs educator. Due to the nature of the classroom and its size, it is imperative to have an appropriate number of teacher aides to assist the teachers with day-to-day activities. But teachers often don't get the resources they need, including teacher aides.

The last group of 11% respondents said that teaching compassion to students is challenging. Not all students have been exposed to persons with special needs before, and this becomes a challenge for teachers. Teachers must not tolerate insensitivity and cruelty. They must teach that all students are to be treated with respect, regardless of ability.

**Table 4.12. Relationship between academic performance of learners with SEN in inclusive and special schools**

Answers	Frequency	Percentage
Yes	16	84.2
No	1	5.2
I don't know	2	10.5
Total	19	100

**Source:** Primary data, 2021

The respondents were asked if there is a relationship between academic performance of learners with SEN in inclusive and special schools. As indicated by the table above, the majority of them that is 84.2% agreed that. They said that both from inclusive and special schools perform well in class and even in the national examination. This was also emphasized when they added that the curriculum is the same and even the content. Besides, 1 (5.2%) disagreed that there is no any relationship between academic performance of learners with SEN in inclusive and special schools but 2(10.5%) said that they do not.

#### **4.4.6. Ability of learners with SEN in special /inclusive school**

Special education is of great importance for children with learning disabilities, because it gives them the opportunity to get quality education in line with their unique needs. Special education enables every student to gain a high level of independence and reach their full potential.

**Table 4.13. Ability of learners with SEN towards acquiring competence knowledge and skills**

Ability	Frequency	Percentage
They know how to play different games.	5	26.3
They are able to analyze and to think deeply.	8	42.2
They think quite well and they are collaborative.	3	15.7
They have some learning difficulties.	3	15.7
<b>Total</b>	19	100

**Source:** Primary data, 2021

The table above indicates ability of learners with SEN towards acquiring competence knowledge and skills. The majority of respondents (42.2%) agreed that learners with SEN towards acquiring competence knowledge and skills have ability in analyzing and they have also ability to think deeply. Respectively other groups said that they know how to play games (26.3%), they think quite well and they are collaborative (15.7%) and lastly, they have some learning difficulties as stated by 15.7%.

#### **4.4. Perception of respondents from the interview**

This section presents data from collected from the interview done with headteachers of both schools which are HVP Gatagara and Groupe Scolaire de Gahini on a comparative study on academic performance of learners with special educational needs in inclusive and special schools.

The researcher has asked if learners with SEN perform well in school (special/inclusive) during the regional tests and national examinations. On that question, the headteachers A, accepted that they perform well in special/inclusive in spite of their disabilities. On that question, the headteacher B agreed and said that learners who are mainstreamed will spend time in a resource room where they can receive more individualized attention from teachers. They did well even though sometime they faced some challenges especially in learning with others.

Further, they were asked if they involved academic staff when making decisions concerning special education for learners with SEN. All of them (100%) agreed that anyone who wants to contribute or to suggest something for the interest or for the improvement of SEN learning is welcome. A responsible decision making for learning helps a teacher to understand the realistic outcomes to which different paths of learning will lead. For example, a teacher and learner may choose the order of learning on the basis of interest, availability of materials or convenience.

Another question was asked regarding the curriculum barriers for the implementation special education for learners with SEN in special school/inclusive school in Rwanda. For that question the headteacher B, he said that they face many barriers but the most one is lack of teaching aids and even the curriculum is not adapted to their impairment. In any education system, the curriculum is one of the major obstacles or tools to facilitate the development of more inclusive

system. In our country curriculum is unable to meet the needs of a wide range of different learners. In it, there is little flexibility for local adaptations or for teachers to experiment and try out new approaches. As a result of the knowledge-based curriculum, the examinations are also too much content oriented rather than success oriented. This is also a barrier to measure the achievement of children with special needs.

On the same question, the headteacher A, added that lack of adequate financial resources is a big challenge to inclusion and special schools. For inclusion and special school, every institution would be required to make financial provisions for providing facilities like lifts, ramps, barrier free classrooms, toilets etc. Technology could be used in the form of motion sensors to open doors, flush toilets and automatic door buttons for easier access through doors. There would be a need to create learning resources for persons with disability. This could be in the form of digital library, braille literature and additional visual resources for students with hearing disability etc. Financial resources would also be required to train and retrain faculty for teaching persons with disabilities in inclusive environment. For this, the Government's expenditure on education will have to be increased to provide inclusive set up.

Regarding having enough staff especially teachers who teach learners with SEN in inclusive/special schools, all headteachers (A&B) agreed that they do not have enough teachers who are trained in the special needs' education in inclusive. Teachers' training, abilities and attitudes can be major limitations for inclusive education. The teachers are not trained adequately to teach the children with special needs. At present, training to teachers is fragmented, uncoordinated and inadequate taking place in a segregated manner i.e., one for special children and another for students with general capabilities. So, all teachers do not have proper skills and positive attitudes towards learners with special needs, it is unlikely that these children will receive satisfactory education.

Besides, the headteachers were interviewed if every learner with SEN has enough learning resources to support them in their academic performance. All accepted that the learning resources are not enough. They even give an example of the absence of library which does not allow learners to conduct or to do the self-direct study effectively. In addition, the headteachers were interviewed on the policy strategies that could be employed to address the factors that



hinder efficient provision of special needs. On that question the headteacher A, asserted that financial means is one thing that can be availed so that the school should come up with good library with the relevant Braille materials and labs which is sufficient so that it should support learners with SEN, but now they do not have such library and even to look for teaching aids which should help them that should vary advantageous for them. On the same question, the headteacher B, highlighted that the increased number of teachers with knowledge and skills should be helpful to the learning of learners with SEN in inclusive and special school.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.0. Introduction**

This chapter is made of summary of the findings based on the objectives of the study. First, the summary of major findings was presented. Then, the conclusion derived from the findings was offered and followed by recommendations made based on the conclusions. And finally, recommendation for further studies was provided.

### **5.1. Summary of major findings**

This study is a comparative study on academic performance of learners with special educational needs in inclusive and special schools. Case studies of Groupe Scolaire de Gahini and HVP Gatagara (Rwamagana center). The research work was guided through three research objectives and three research questions. That includes to establish where academic performance of learners with SEN is more appropriate between special and inclusive schools, to determine inability and ability of learners with SEN towards acquiring competence knowledge and skills and to assess the relationship between academic performance of learners with SEN in inclusive and special schools. The following section discusses the summary of the findings generated from data analysis. The summary was done along with the objectives of the study.

The first objective was to establish where academic performance of learners with SEN is more appropriate between special and inclusive schools. From the findings, the study revealed that the majority of 63.1% of respondents asserted that some learners with special needs perform better than the ones inclusive school especially in some subjects like economy. Some are evaluated by using Braille typed test. But in national examinations they can fail because their examinations which are not well adapted with braille typing. Besides, another group of 26.3% accepted that learners with special needs perform less compared to other learners in inclusive classroom because once they studied, they encountered some problems in learning due to their curriculum which was not appropriate. The last group of 2 (10.4%) accepted that the performance of learners with special needs is fair.

Furthermore, the second objective was to determine inability and ability of learners with SEN towards acquiring competence knowledge and skills. The findings indicated the ability of

learners with SEN towards acquiring competence knowledge and skills. The majority of respondents (42.2%) agreed that learners with SEN towards acquiring competence knowledge and skills have ability in analyzing and they have also ability to think deeply. Respectively, other groups said that they know how to play games (26.3%), they think quite well and they are collaborative (15.7%) and lastly, they have some learning difficulties as stated by 15.7%.

Besides, the third objective was to assess the relationship between academic performance of learners with SEN in inclusive and special schools. The findings of the study show that the evaluation of academic performance of learners with special education needs in special /inclusive school was rated by 36.8% of respondents who accepted that assessment of academic performance of learners with special education needs was given through summative assessment. They said that summative assessment aims at evaluating student learning and academic achievement at the end of a term, year or semester by comparing it against a universal standard or school benchmark.

Summative assessments often have a high point value, take place under controlled conditions, and therefore have more visibility. Another group of 26.3% pointed out formative assessment. They added that an effective way to conduct a formative assessment with students who have special needs is to apply a well-known teaching accommodation called chunking. Chunking is a way to adapt the curriculum where you break skills or information into smaller, more manageable segments in order to help students succeed. Those assessments are often not graded. Rather, their purpose is to check for understanding and help inform instruction. Respectively, evaluation would be done through quizzes (21%) and through assignments (15.7%).

## **5.2. Conclusion**

The study concluded that teaching and learning materials provided to learners with SEN in special/inclusive school were not adequate because of sharing available learning materials. The financial problems were the main challenges that caused the learning materials to be insufficient in special/inclusive schools. This shortage of materials hinders academic performance of learners with visual impairments. Findings indicated that all learners agreed that there were other learning resources which were not available and they felt that if provided they could support their learning in this special school.

Besides, the majority of learners were comfortable in special schools while others were not comfortable because of lacking socialization with other people without disabilities and being isolated from non-disabled people.

Lastly, the findings also demonstrated that the big number of respondents with visual impairments accepted that the curriculum used in special schools adapted to fit in learning needs of learners with visual impairments by saying that they got notes using materials provided by school. However, there were others who disagreed that the curriculum used in special schools adapted to fit in learning needs of learners with visual impairments adding that no appropriate books in Braille; and those books provided were not designed for visually impaired learners and they had not assistive devices (reading machines) used to help them to access books that are available.

### **5.3. Recommendations**

Based on the findings above, the following recommendations are forwarded:

#### **-To school management:**

- i. It is recommended that the school management could work together with different stakeholders so that they can solve many problems which hinder academic performance of learners with SEN in special/ Inclusive schools.
- ii. The study also recommended that extensive training of teachers combined with the exchange of expertise between special and inclusive schools could be planned and implemented in order to maximize the participation of learners with SEN in both social and academic activities.

#### **-To teachers:**

- i. The study recommended that teachers should be provided with in-service training in the form of workshops. Once the teachers are equipped with the necessary knowledge and skills related to the education of learners with SEN in special/inclusive schools that could change their views and perceptions towards special education for learners with SEN.

**-To MINEDUC:**

- ii. The Ministry of Education should procure urgently needed teaching and learning assistive devices which are appropriate to all range diverse of learners with SEN in special/inclusive school.
- iii. The Ministry of Education should give teacher training for targeted and effective instruction based on students' learning needs, strengths, and weaknesses.
- iv. The Ministry of Education should organize school visits to teachers in order share experience with others who are more experienced in special and inclusive schools.

## REFERENCES

- Ainscow, M., and Cesar, M. (2006). Inclusive education ten years after Salamanca: Setting the agenda. *European Journal of Psychology of Education*, 21(3), 231–38.
- Annie, W., Howard, W., Stoker; & Mildred, M. W. (1996). "Achievement and Ability Tests Definition of the Domain", *Educational Measurement*, University Press of America, pp. 2–5.
- Campbell, M. (2009). Inclusion of Special Education Students Doesn't Affect Classmates' Education. *Center for Education Research and Policy*. <http://cerpplus.wordpress.com>
- Hallum, A. (1995). Disability and the transition to adulthood: Issues for the disabled child, the family, the pediatrician. *Current problems in pediatrics*, January, 12- 50.
- Lewis, I. (2009). *Education for Disabled People in Ethiopia and Rwanda. Paper commissioned for the EFA Global Monitoring Report 2010, Reaching the Marginalized*. Retrieved August 17, 2011, from [ddp-ext.worldbank.org/Edit/ETHgmrpap09.pdf](http://ddp-ext.worldbank.org/Edit/ETHgmrpap09.pdf)
- Philippa, T. (2005). *Mainstreaming Disability in Development. Country-level research*. London: Disability Knowledge and Research.
- Simpson, J. A., & Weiner, E. S. C. (1989). *The oxford English dictionary (2nd ed.)* vol. 1. Oxford: Clarendon Press.
- Mukarwego, B.N. (2015). Academic impediments students with visual impairments encounter in the Colleges of University of Rwanda, from <http://irlibrary.ku.ac.ke/bitstream/handle/123456> retrieved on 3rd February 2021
- Fisher, J. B., Shumaker, J. B., Deshler, D. D. (1995). Searching for validated inclusive practices: A review of literature. *Focus on Exceptional Children*, 28(4), 1-20.
- Gersten, R., Baker, S., Smith-Johnson, J., and Dimino, J. (2006). Eyes on the Prize: Teaching complex historical content to middle school students with learning disabilities, *Exceptional Children*, 72(3), 264-280.
- Vygotsky, L. (1978). *Mind in Society*. Cambridge, Harvard University Press.
- Kokkala, H. (2006). *Five Years after Dakar*. In H. Savolainen, M. Matero and H. Kokkala

- (Eds.). *When All Means All: Experiences in Three African Countries with EFA and Children with Disabilities (1-18)*. Helsinki: Ministry of Foreign Affairs of Finland. Development Policy Information Unit.
- Gabriel, A. (2013). "*The Meaning of Theory*." *Sociological Theory* 26 (June 2008): 173–199; Swanson, Richard A. *Theory Building in Applied Disciplines*. San Francisco, CA: Berrett-Koehler Publishers.
- Upchurch, J. D. (2007). *As the Pendulum Swings: Impact of Inclusion on Academic Performance and Behaviour Referral*. North Central University. Arizona.
- Friend, M. (2008). *Special Education. Contemporary perspectives for school professionals*, 2nd Edition, University of North Carolina, USA.
- Fletcher, J. (2010). Spillover effects of classmates with emotional problems on test scores in early elementary school. *Journal of Policy Analysis and Management*, 29(1), 69-83.
- MINEDUC. (2016). *A study on children with disabilities and their right to education: Republic of Rwanda*, MINEDUC.
- Ministry of Education. (2007). *Special Needs Education Policy*. Kigali: Ministry of Education.
- Gerber, M.M. (2015). Inclusion at the high-water mark? Some thoughts on Zigmond and Baker's case studies of inclusive educational programs. *The Journal of Special Education*, 29: 181–91.
- Muscelli, G. B. (2011). The effect of co-teaching on ninth grade world history students' academic achievement and classroom behavior. *Unpublished doctoral dissertation*. Fort Lauderdale, FL: Nova Southeastern University.
- Huber, K.D. (2001). The differential impact of inclusion and inclusive practices on high, average and low-achieving general education students. *Psychology in the Schools*, 38: 497–504.
- UNESCO (2000), *The Dakar Framework of Action*. Paris: UNESCO.
- UN (1993), *The Standard Rules on the Equalization of Opportunities for Persons with Disabilities*. New York, United Nations.
- Macbeth, J., Galton, M., Steward, S., BacBeath, A. and Page, C. (2005), *The Cost of Inclusion*. University of Cambridge. Victoria Press.

- Sharma, U., & Furlonger, B. E. (2010). A new approach to training teachers to meet the diverse learning needs of deaf and hard of hearing children within inclusive Australian schools. *International Journal of Inclusive Education*, 14(3): 289- 308.
- Grimaldi, M. A. (2009). The academic achievement and engagement of non-disabled male and female students educated within middle-level inclusive and general education classrooms. *Unpublished doctoral dissertation*. Oakdale, NY: Dowling College.
- Johnson, B. (2014). *Designing the Physical Environment*. Prezi.
- Ali et al (2009). "Factors influencing students' performance at Universiti Teknologi MARA Kedah, Malaysia". *Canadian Research & Development Center of Sciences and Cultures: Vol 3*, p23-56.
- Salend, S.J., and L.M. Garrick Duhaney. 1999. The impact of inclusion on students with and without disabilities and their educators. *Remedial and Special Education*, (20) 114–26.
- Zhang, W., Yan, T-T., Du, Y-S. & Liu, X-H. (2014): Relationship between coping, rumination and posttraumatic growth in mothers of children with autism spectrum disorders, *Research in Autism Spectrum Disorders*, 7, 1204-1210.
- McDonnell, J., N. (2009). The achievement of students with developmental disabilities and them peers without disabilities in inclusive settings: An exploratory study. *Education and Treatment of Children*, 26, no. 3: 224–36.
- Ruijs, N.M., & Peetsma, T. (2009). Effects of inclusion on students with and without special educational needs reviewed. *Educational Research Review*, 4: 67–79.
- King, G. A et al (1993). Self-evaluation and self-concept of adolescents with physical disabilities. *American Journal of Occupational Therapy*, 47, 132-140.
- Bandura, A. (1986). *Social Foundations of Thought and Action*. Englewood Cliffs, NJ. Prentice-Hall.
- Bandura, A. (1997). *Self-Efficacy. The exercise of Control*. New York: W.H. Freeman.
- Meijer, C.J.W. (2001). *Inclusive education and effective classroom practices*. Middleford: European Agency for Development in Special Needs Education.



- Barbara, M., (2001) *Disability Definition Models, Classification, Schemes and Applications. Handbook of disability studies*. Thousand Oaks, C. A Sage publications
- Sagahutu, J., Kagwiza, J., Urimubenshi, G., & Mostert-Wentzel, K. (2013). The emerging pattern of disability in Rwanda. *Disability and Rehabilitation*, 36(6), 472–478.
- Davis-Kean, P (2005). The influence of parents Education and Family Income on Child Achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology*, 19 (2), 294-304.
- Lodico, M. (2010). *Methods in educational research: From theory to practice*, San Francisco: John Wiley and Sons.
- Sandelowski, M., & Barroso, J. (2003). Writing the Proposal for a Qualitative Research Methodology Project. *Qualitative Health Research*, 13(6), 781-820.
- Orodho J.A. (2008). Techniques of writing research proposals and reports in education and social sciences. Bureau of Educational research. Kenyatta University. Nairobi Kenya. Kanezja HP Enterprises.
- UNESCO. (2004). *The Salamanca Statement and Framework for Action on Special Needs Education. Salamanca, Spain. United Nations Convention on the Equal Rights of Persons with Disabilities (CRPD)*. (2006). United Nations. (2008). Convention on the Rights of Persons with Disabilities.
- Simonson, M. et al (1999). Theory and Distance education. A new discussion. *The American Journal of Distance Education*, (5), p.45-102
- Hennink, M., Hutter, I. and Bailey. A. (2011). *Qualitative research methods*. London, SAGE Publications Ltd.
- Republic of Rwanda. (2003a). *Education For All. Plan of Action*. Kigali: MINEDUC
- Republic of Rwanda. (2003b). *Education Sector Policy*. Kigali: MINEDUC.
- Republic of Rwanda. (2007). *Special Needs Education Policy*. Kigali: MINEDUC.
- UN (1948), *The Universal Declaration of Human Rights*. New York, United Nations.
- UN (1971), *Declaration on the Rights of Mentally Retarded Persons*, New York, United Nations.

UN (1975), *Declaration in the Rights of Disabled Persons*, New York, United Nations.

UN (1982), *World Program of Action Concerning Disabled Persons*, New York, United Nations.

UN (1989), *United Nations Convention on the Rights of the Child*, New York, United Nations.

## APPENDICES

### APPENDIX I: TIMEFRAME

No	Activities	MONTHS							
		NOV	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE
1	Proposal writing								
2	Literature review								
3	Preliminary survey of the study area								
4	Sample selection								
5	Data collection								
6	Data processing &								
7	Writing first draft and submission for comment								
8	Submission of final thesis								

## **INTRODUCTORY LETTER**

I am Jean Baptiste USABYIMANA a student at University of Rwanda College of Education, pursuing a Master of Education in Special Needs Education. I am currently conducting research on “ACOMPARATIVE STUDY ON ACADEMIC PERFORMANCE OF LEARNERS WITH SPECIAL EDUCATIONAL NEEDS IN INCLUSIVE AND SPECIAL SCHOOLS. CASE STUDIES OF GROUPE SCOLAIRE DE GAHINI AND HVP GATAGARA (RWAMAGANA CENTER)” Participation in this study will require that you answer questions from the questionnaire and the information you will give will strictly be kept confidential by the researcher and will only be used for the purpose of this study to improve the education of learners with special educational needs in the special schools in Rwanda. Please remember that participation in the study is voluntary. You may ask questions related to the study at any time. You may refuse to respond to any questions. You may also stop being in the study at any time without any consequences to the services you receive from your school now or in the future. If you accept to participate in this research, you will help the researcher and the country of Rwanda.

Jean Baptiste USABYIMANA

## APPENDIX II: QUESTIONNAIRES FOR LEARNERS

Please complete the questionnaire by responding to all questions. Information that you give will be kept confidential and only be used for the purpose of this study to improve education of students with special educational needs in Rwanda.

### Section A (Personal information).

Please tick where appropriate

1. Age:

Below 11 years

12 years – 16years

17 years – 21 years

22 years – 26 years

27 years – 31 years

2. Gender: Female  Male

3. Year of study and area of study where applicable:

Senior 1

Senior 2

Senior 3

Senior 4 HEG

Senior 5 HEG

Senior 6 HEG

### Section B

1. Are you provided with learning materials in your institution?

Yes  No

2. Are the resources provided enough for all students with special educational needs in your school/institution? Yes  No

3. Are there learning resources which are not available and you feel if provided they can support your learning in this special /inclusive school? Yes  No

If yes, write them down.....

4. Do you feel comfortable in special/inclusive classrooms? Yes  No

5. Are the teaching methodologies used by teachers appropriate? Yes/No

6. From your observation, do you feel that teachers give attention to you as learners with visual impairments? Yes  No

7. Are you given extra time during exams? Yes  No

If yes, how long time?

8. Is the curriculum used in your school adapted to fit the learning needs of learners with visual impairments? Yes  No

Explain the answer above

9. Do you think that the library in your school is well equipped to support learning needs for learners with visual impairments? Yes  No

### APPENDIX III: QUESTIONNAIRE FOR TEACHERS AND DEAN OF STUDIES

Please complete the questionnaire by responding to all questions. Information that you give will be kept confidential and will be used for the purpose of this study to improve education of students' special educational needs in Rwanda.

#### Section A (Personal information):

Please tick where appropriate:

**1. Age:**

20-25 years

26-30 years

31-35 years

36-40 years

41 Above

2. **Gender:** Male  Female

**3. Teaching Experience:**

Below 3 years

4-6 years

7-9 years

10 years above

4. **In which school are you teaching?** Special  Inclusive

5. Briefly explain the problems you encounter when interacting and teaching learners in special school /inclusive school....

.....  
.....  
.....  
.....

6. Is the curriculum used in the secondary schools in Rwanda modified to fit the learning needs of learners in special schools or inclusive schools? Yes  No

7. Do you adapt learning resources that you use during teaching to suit the needs of the learners in special school/ inclusive school? Yes  No

8. How do you evaluate the academic performance of learners with special educational needs in your special/inclusive school?

.....  
.....

9. How do learners with special educational needs perform in their assignments (school/regional tests, school/ regional exams and national examinations) compared with the ones in inclusive schools?

.....  
.....

10. What is the ability of learners with SEN towards acquiring competence knowledge and skills?

.....  
.....

11. Is there relationship between academic performance of learners with SEN in inclusive and special schools

.....  
.....

12.. As a teacher in special /inclusive schools in Rwanda, what recommendations would you give to improve on the curriculum and the academic performance in the secondary schools to accommodate the needs of learners with SEN?

.....  
.....



13. What is your level of agreement with the following statements which relate to the academic performance of learners with SEN? Using Rating scale 1-5, where: 1= Strongly Disagree, 2=Disagree, 3=Neutral, 4= Agree, 5= Strongly Agree

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	5	4	3	2	1
Education will help learners with SEN to get a good job in future					
Learners with SEN need to work very hard to go to another school					
My parents encourage me to work hard in my studies					
Our teacher encourages us to work very hard					
Parents' social and economic well-being are also linked to student success					
The self-esteem of a student with disabilities has a critical effect on learning					
Physical facilities play an important role in success of learners with SEN					
Lack of understanding and trained staff and lack of awareness of the development of technology make higher education difficult for students with disabilities.					
Effective teaching and learning cannot occur without congenial classroom environment					

**APPENDIX IV: INTERVIEW GUIDE FOR ADMINISTRATORS (HEAD TEACHERS)**

1. Have you included special /inclusive education in your strategic plan?

Yes/No Explain.....  
.....  
.....

2. Do learners with SEN perform well in school (special /inclusive), regional tests and national examinations? YES /No

.....  
.....

3. Do you involve other academic staff when making decisions concerning special education for learners with SEN? .....

.....  
.....

4. What are the curriculum barriers for the implementation of special education for learners with SEN in special school /inclusive school in Rwanda?

.....  
.....

5. Do you have teachers who are trained in the special needs' education/ in inclusive? Yes /No

If yes, are there enough?

Explain.....  
.....

6. Does every learner with SEN have enough learning resources to support them in their academic performance. Yes/ No

If no, how does it affect their academic performance? .....

7.Highlight on policy strategies that could be employed to address the factors that hinder efficient provision of special needs?

.....  
.....

8.Is the library equipped with the relevant Braille materials for the use by learners with visual Impairments? Yes/No

If no, how do they do the research? .....

9.Where academic performance of learners with SEN is more appropriate between special and inclusive schools?

.....  
.....

10.Do learners with SEN be able or enable to acquire competence knowledge and skills?

.....  
.....

11. What is the relationship between academic performance of learners with SEN in inclusive and special schools?

.....  
.....

12. Highlight on policy strategies that could be employed to address the factors that hinder efficient provision of special needs education

.....  
.....  
.....  
.....

**THANK YOU FOR COOPERATION**

## APPENDIX V

### 3. OBSERVATION CHECKLIST

S/N	Statements	Yes	No	Comments
<b>Teaching and learning resources</b>				
1.	Learners with disabilities have enough learning resources to support them in their academic performance			
2.	The learning resources affect the academic performance			
<b>Teaching and learning activities (Strategies, management, support to SEN, etc.)</b>				
3.	The teaching methods used in special /inclusive schools affect negatively academic performance of learners			
4.	Teachers faced challenges while teaching students with disabilities in special/inclusive school			
5.	Students with disabilities often need to learn special skills such as how to use special computer applications and any other materials to improve learners' academic performance.			
6.	When there is lack of learning resources, especially braille machine or special paper for braille machine should affect their academic performance.			
7.	School management while working together with different stakeholders should help in success of academic performance of learners			
8	Teachers' attitude plays an important role in academic performance of learners with disability			
	The peers of learners with disability should also play an important role in academic performance of learners with disabilities.			
9	School environment contribute in academic performance of learners with disabilities in special/inclusive school			
10.	There are different strategies used by teachers in which help learners with disabilities to achieve their academic performance			
<b>Teaching and learning environment (Physical &amp; social)</b>				
11	Students with disabilities use language that prioritizes the learner over his/her disabilities			
12	The noise level in the classroom is reduced to help children with a visual or hearing impairment			
13	Students with disabilities are offered alternative seating arrangement as great way to support them			
14	The layout of the classroom is rearranged for them			
15	Visual clutter is limited on walls in order to reduce			

	distraction for learner with disabilities (Autism)			
15	Soft music is played for students with disabilities to help sensory stimulation			
16	Furniture by lowering chairs or securing desks are adapted for learners with disabilities			
17	The noise level in the classroom is reduced to help children with a visual or hearing impairment			
18	Students with disabilities are offered alternative seating arrangement as great way to support them			
19	The layout of the classroom is rearranged for them			
20	Visual clutter is limited on walls in order to reduce distraction for learner with disabilities (Autism)			
21	Soft music is played for students with disabilities to help sensory stimulation			
<b>Curriculum and instruction designs</b>				
22	The curriculum should reflect the lives of the children and families;			
23	The curriculum reflects the diversity found in the society for example, gender, age, language, and abilities;			
24	The curriculum provides for children's safety while being appropriately challenging			
25	The curriculum encourages exploration, experimentation, and discovery			
26	The curriculum promotes action and interaction			
27	The curriculum is organized to support independent use			
28	The curriculum accommodates new interest and skills			