Accessibility of Inclusive Classrooms and Competences of Students with Special Educational Needs in Basic Education Classrooms in Rwanda
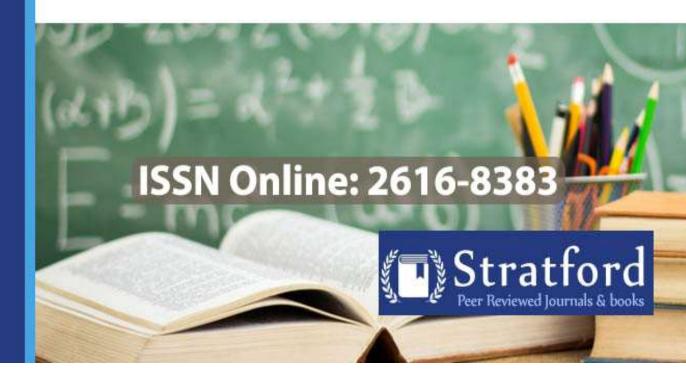
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Accessibility of Inclusive Classrooms and Competences of Students with Special Educational Needs in Basic Education Classrooms in Rwanda

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Abstract

The purpose of this paper was to examine the effects of accessibility of inclusive classrooms practices and competences of students with special educational needs in basic education classrooms in Rwanda. Specifically, this research paper analyzed age, number of students, provision of the equal opportunity to all students with and without disabilities, minimization of the long journey done by students with disabilities and student with impairments. Examining the inclusive practices, the researcher would identify whether students with disabilities had facilities for an effective learning such as; the availability of braille machines to help students with visual impairments learning successfully, students with and without disability have access to smart classrooms for developing competences in basic education classrooms in Rwanda. Thus, teaching and learning methods will improve effective learning in sampled schools. The research methodology for this study consisted of a descriptive research design using both qualitative and quantitative approaches. A sample size of 166 respondents was calculated using Slovene's formula. Both purposive and simple random sampling and stratified random sampling were adopted. Results were analyzed in accordance with specific objectives. Based on the findings, 73.8% of students strongly agreed that despite their age they were allowed to enroll in basic education schools, 80.2% of students strongly agreed that the number of students enrollment was increased, 77.8% strongly agreed that they are given equal opportunity to learning activities, 72.2% of students strongly agreed that there was a minimized long journey to schools, while, 69.8% of strongly agreed that they have braille machines. Finally, 74.6% students strongly agreed that in basic education inclusive classrooms, the use of ICT made them innovative and competent students. Results showed that 64.0% of teachers strongly agreed that their schools and classrooms have paths where wheelchairs can pass, 44.0% of teachers strongly agreed that their

schools have toilet of students disabilities, of 34.0% of teachers strongly agreed that they have counselor or nurse who provide student with guidance, counseling. It was shown that the use of sign language was statistically affecting literacy learning skills for children with special educational needs since the p value is less than 0.05 (B=0.261; p value =0.068). Finally, practical exercises was statistically significant with Creativity of SEN (B=0. 231; p value=0. 060).

Keywords*: Accessibility of Inclusive Classrooms, Basic Education Classroom, Students' Competences; Students with Special Educational Needs.*

1.0 Introduction

In Rwanda, the core mission of the Ministry of education is to transform Rwandan citizens into the skilled human capital of socio-economic development of the country, by ensuring equitable access to quality education and training, focusing on combating illiteracy, promoting of science and technology, critical thinking, and positive values. Furthermore, basic education schools in Rwanda tend to be inclusive schools that they are expected to enroll all students without any compromises. The competency-based curriculum; a new curriculum started being implemented from 2016 showed positive achievements in Rwandan citizens where learners who completed some levels of basic education were ready to compete with others to the labor market. Some students got labors after completing their secondary studies. The report of REB (2019), on the achievement of students with disabilities, showed that students with disabilities and those without disabilities acquire competences such as; interpersonal competence, communication, lifelong learning, critical thinking, entrepreneurial competence, creativity and innovation and others. The report of World Health Organization (WHO, 2011) showed that there was an average of 15% of disabled persons that this mission could not be fully achieved if they were not considered (ESSP III, 2018).

1.1 Statement of the Problem

The stakeholders in education designed many inclusive education practices of leading learning of students equally and equitably, where the capacity of schools to receive the enrollments of students with special education needs such as those with disabilities, learning difficulties played a very great role in Rwandan education. However, basic education schools are still experiencing many challenges to support students with special education needs such as lack of the ability to accommodate learners for different categories like students with disabilities, students with learning difficulties, slow learners, gifted learners and other with different impairments because basic schools do not have basic requirements to include them in general basic education. Some schools lack braille machines, white canes, and wheel chairs, experienced and trained teachers to facilitate students with disability. Therefore, some students with visual impairment lack braille machine, lack of hearing machine for those with hearing impairment, lack of wheelchairs for those with physical disabilities, lack of modern toilet for disabled people, poor paths well paved for physically disabled wheelchair users, some families are too poor to send their children to schools where schools are located in remote areas, some parents mindsets who think that investing in disabled children is wastage, they tend to send normal (non-disabled) children to school rather than disabled ones, school leaders who are still unskilled on inclusive school management, planning and leadership, which become helpless to students with special education needs to learn effectively and competently. If the students with special education needs are not

supported particularly in basic education schools, their competences would not be developed and their future to survival life would become a dream to themselves, their families, community and country at large.

1.2 Research Objectives

To examine the effects of Accessibility of Inclusive Classrooms Practices and competences of students with special educational needs in basic education classrooms in Rwanda.

2.0 Literature Review

Inclusive education practices are portrayed as activities contain provisions, actions and guidelines that support the full integration of all students in classrooms and schools, including those with disabilities, into a qualitative learning place (Education Sector Strategic Plan, 2010-2015).Inclusive education describes a situation when all students regardless of any challenges they may have, are placed in age-appropriate general education classes that are in their neighborhood schools to receive high-quality instruction, interventions, and support that enable them to meet success in the core curriculum. In the Rwandan socio-cultural context, the concept is often interpreted as 'Uburezi Budaheza' or 'non-exclusionary education' (Rwandan Inclusive Education Policy, 2018).

The term competence refers to the ability to perform a task in a very competent way with knowledge, skills, positive attitudes and the values in a certain domain. A competent student is different from a skilled one, knowledgeable one, and a performer one. Competence is all about the acquisition of a combination of knowledge, skills, attitudes and how effective a student performs their tasks with values. If a learner is competent is a great performer at the assigned tasks with wisdom and desired behaviour. The Ministry of Education confirmed that to be competent, students have to be taught and develop for basic and generic competencies (MINEDUC, 2015).

Special Education Needs (SEN) determine the education deserves to students who need other additional requirements to acquire competences as others to learn. A special educational need is also defined as a learning difficulty or disability that makes learning a challenge for a child. They will have greater difficulty learning than other children of the same age. Their disability prevents them making use of facilities (Kuroda & Yokozeki, 2005). Special Needs Education (SNE) represents the specialized education services delivery offered to children and adults who are unable to cope with the regular school or class organization and methods. Experiences in the Rwandan context continue to indicate that the concept is largely interpreted as 'Uburezi bw'abafite ubumuga' (education for those with disabilities) (MINEDUC Inclusive Education, 2018).

Basic education schools tend to welcome pre-primary, primary and secondary students and allow them to acquire competences in their early ages. In Rwanda, basic education policy was developed and implemented to raise the quality education of basic education school learners where the free education named Nine Years Basic Education and Twelve Years Basic Education was enhanced by the Government and different education stakeholders which increased the number of the students who enroll for studying in neighbouring schools without travelling long journey. A primary education students start from 5 to 12 years while secondary level starts from 11 to 18 years (Rwanda Education Ministry, 2014).

The issue of equality and inclusion in education has been on the international agenda for several decades up to now. This has been demonstrated by the different frameworks for action to address the different forms of inequality and disparities in education. Such inequalities are based on gender, race, religion, physical disabilities and ethnic background. UNESCO (1994), Salamanca Framework of Action, Article 3 states that schools and the education system as a whole "Should welcome all children regardless of their physical, intellectual, emotional, social, linguistic or other conditions". In addition to that, that the UNESCO, Dakar Framework of Action (2000) noted that "To attract and retain children from marginalized and excluded groups, education systems should respond flexibly to the promotion of inclusion in schools. The education systems must be inclusive, actively seeking out children who are not enrolled, and responding flexibly to the circumstances and needs of all learners" (Avramidis & Kalyva, 2007).

The study conducted by Bublitz (2016) concluded that in the inclusive education, a teacher takes a big role in enhancing the learning capacity of all the students including those with disabilities or learning difficulties. Learners' competences depend on the trained teachers and different teaching and learning methodologies, and strategies they use to engage learners in their learning process. According to Bublitz (2016), teachers and school leaders concern are to enhance the effective learning of learners including those with disabilities where a well-trained teacher leader increases the acquisition of skills, knowledge and competency. Unquestionably, school leaders play instrumental roles in ensuring the success of inclusive special education programs in the districts they oversee. Moreover, one of the largest indicators of successful inclusive education programs is school leaders' positive attitudes toward inclusion. With an increasing focus on providing quality and legally compliant inclusive special education services across the nation, it is more important than ever that school leaders and teachers understand their roles and responsibilities associated with inclusion to the competence of students.

2.1 Theoretical Framework

This research adopted the theories that support the study which is: Behavioral Learning Theory and Theory of multiple intelligences by Howard Gardner indicate that students with disabilities develop their competences and change their behaviors when they learn together with others without learning difficulties in the same inclusive classrooms.

2.1.1 Theory of Multiple Intelligences by Howard Gardner (1993)

In this model, Howard Gardner (1993) explores deferent ways of a learner use to acquire intelligence through multiple intelligences theory. Howard Gardner (1993) in the Theory of Multiple Intelligences differentiates human intelligence into specific modalities rather than looking intelligence as dominated by a single general ability. This theory describes how a student can learn in different ways. The multiple intelligences range from the use of words, numbers, pictures and music for the importance of social interactions, Physical movement, and introspection and in learning through nature. As this theory portrays, learners can learn through different ways and if a learner fails to learn some bits of intelligence can learn others rather than learning all aspects of bits of intelligence. For example, learners with disabilities may fail to learn using their psychomotor parts, but they use their mental ability by discovering the space, music by singing or verbally.

2.1.2 Behavioral learning theory

Behaviorism or the behavioral learning theory is a popular concept that focuses on how students learn. This learning theory states that students learning are recognized through developing and changing behaviors through the influential aspects. B.F Skinner (1975), the inventor of the behavioral theory stressed on the view that all learners' behaviors are applied through the interaction with the present environment of in social learning aspects.

The same behaviorist; Darby (2003) who also conducted studies on behavioral learning theory stated that behaviors are learnt from the surrounding environment and not through the innate factors which has very little influence in behavioral learning process. This theory clarifies how the students in their different classes acquire their skills through socializing and exchanging behaviors. This theory is applied to the students who have learning difficulties to enhance their effective learning for gaining new skills and competences (Darby, 2003).

According to Darby (2003), in his learning theories, stressed in the learning theory of students form different categories and concluded that when students are in the classroom learning as a team they acquire and develop competences through using strategies that boost their morale. In basic education of Rwanda students are given opportunity to enroll in school without any compromises where all public schools are required to welcome the multi-variety of the students. Therefore, some schools accommodate students with disabilities and they study in the same class as those without learning difficulties. The schools are believed to bring about the positive effects where students with disabilities are provided with basic learning facilities such as accessible classrooms with effective learning environment such as conducive building that are accessible to students with disabilities.

Parents, instead of sending their children with disabilities they prefer to send them in the neighboring basic education schools for the sake of the quality education. That is why the country of Rwanda has adopted and empowered the schools to accommodate the students from different families (Ng'andu, Hambulo, Haambokoma and Tomaida, 2003).Behavioral learning and social learning theory and clarifies that students study effectively when they socialize with their colleagues. Apart from the use of different methods of teaching and learning used by teachers to increase the students' performance, the teachers also engages the students with disability using the same strategies and they develop their competence during their daily learning.

Since education is an act of teaching and learning, then it can be stated here that learning takes a pivotal role in the whole educational process. Thus, learning can be defined differently depending on which perspective one takes in defining it. The complex process of learning is defined according to behaviorism, cognitivism and constructivism. According to behaviorist, learning can be defined as "a relatively enduring change in observable behavior that occurs as a result of experience (Eggen & Kauchak, 2001).

The above theories enabled the researcher to establish the conceptual framework as follows:

2.2 Conceptual Framework

This study explores effect of Accessibility of Inclusive Classrooms practices on competences of students with special educational needs in basic education classrooms in Rwanda. This shows the

interrelationship between the indicators. Therefore this indicates how independent variable indicators (causality indicators), impact on dependent variable indicators (effects indicators).

It is reproduced here in figure one, Accessibility of Inclusive Classrooms practices on competences developed by students with special education needs:

Independent Variable

Accessibility of Inclusive Classrooms practices

Dependent Variable

Independent Variable — Accessibility of Inclusive Classrooms practices:
- Age allowed me to enroll
- Increased number of students enrolled
- Equal opportunity
- A minimized long journey
- Braille machines

Moderating Variable
- Ministry of Education Officials
- Rwanda Education Board (REB)

Competences Developed to Students with SEN
- Increased enrolment number of SEN students
- Developed critical thinking and problem solving
- Basic competences
- Improved ICT literacy
- Improved literacy learning
- Improved lifelong learning
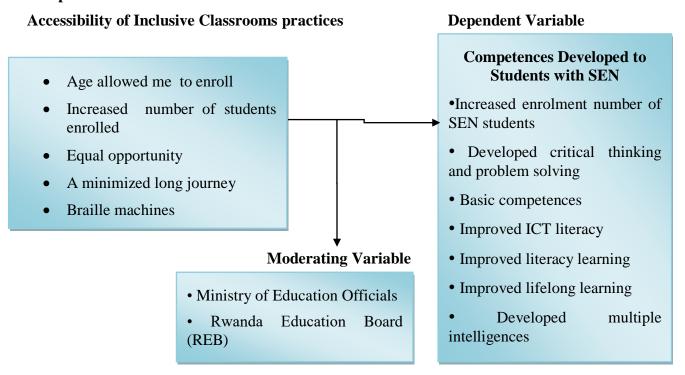- Developed multiple intelligences

Figure 1: Relationship between Inclusive Classrooms practices and competence developed by students with special education needs

Figure 1 shows the relationship between the independent variable indicators (causality indicators), and how they affect the dependent variable indicators (effects indicators). In the Inclusive Classrooms practices; as the independent variable indicators. The researcher investigates how the effective teaching practice enhance the competencies developed by students with disabilities such as age allowed me to enroll, increased number of students enrolled, equal opportunity, a minimized long journey, braille machines, smart classrooms, and competence in teaching children. In line with the competencies developed by students with special needs, the researcher particularly evaluated whether students with disabilities develop multiple intelligences such as verbal-linguistic, logical-mathematical, musical rhythmic, visual special, bodily-kinesthetic, interpersonal, intrapersonal, naturalistic and existential intelligence.

3.0 Research Methodology

This research used the triangulation method of data collection where the researcher used quantitative and qualitative approaches. Using triangulation method provided the research with adequate and enough information from the population. Triangulation theory of data collection involves using more than one method to collect and interpret data such as interviews, questionnaires, observations and secondary data analysis. In this study, the researcher used

questionnaires, interview guide for a focus group, and secondary data such as tests and different examinations. Triangulation facilitated the researcher to the validation of data through verification from two or more sources. In particular, it refers to the application and combination of several research methods in the study of the same phenomenon (Johnson, 2017).

The study was conducted within 5 locations including 4 provinces and 1 Kigali City; represented by 5 districts; represented by 5 sectors represented by 5 inclusive schools. Eastern Province was represented by Bugesera District, Nyamata Sector, GS Murama School. Western Province was presented by Rubavu District, Gisenyi Sector, and House of Children School Gisenyi. Northern Province was represented by Gakenke District, Janja Sector, Amies APAX Janja. Southern Province was represented by Nyanza District, Mukingo Sector, and GS HVP Gatagara School. While Kigali City was represented by Nyarugenge District, Nyamirambo Sector, Institut Filippo Smaldon Nyamirambo School.

4.0 Results and Discussion

Accessibility of Inclusive Classrooms for Students with Special Educational Needs

The Accessibility of Inclusive Classrooms for students with special educational needs in basic education schools of Rwanda were measured under age, number of students, provision of the equal opportunity to all students with and without disabilities, minimization of the long journey done by students with disabilities student with visual impairment have braille machines to help them learning students with /without disability have access to smart classrooms.

Table 1: Students' perception on Accessibility of inclusive classrooms for students with special educational needs

Accessibility of inclusive classrooms	SD		D		NS		A		SA		Total			
	N	%	N	%	N	%	N	%	N	%	N	Mean	Sd	
Despite my age I am allowed to enroll	2	1.6	0	0	3	2.4	28	22.2	93	73.8	126	1.3333	.68118	
The number of students enrolled was increased	0	0	1	8	8	6.3	16	12.7	101	80.2	126	1.2778	.61500	
We are given equal opportunity	1	8	0	0	4	3.2	23	18.3	98	77.8	126	1.2778	.60185	
There was a minimized long journey	0	0	1	8	6	4.8	28	22.2	91	72.2	126	1.3413	60877	
We have braille machines	1	8	1	8	4	3.2	32	25.4	88	69.8	126	1.3730	.66614	
We have access to smart classrooms	0	0	0	0	3	2.4	30	23.8	93	73.8	126	1.2857	.50370	
Teacher are competent enough to use ICT in teaching children with disability	0	0	3	2.4	5	4.0	28	22.2	90	71.4	126	1.3730	.67805	

The use of ICT made us innovation and competent students	1	8	1	8	5	4.0	25	19.8	94	74.6	126	1.3333 66933

Source: Primary Data (2022)

As shown in the table 1, 93 (73.8%) students strongly agreed that despite my age i am allowed to enroll, 101 (80.2%) students strongly agreed that the number of students enrolled was increased, 98(77.8%) students strongly agreed that they are given equal opportunity. Moreover,.91(72.2%) students strongly agreed that there was a minimized long journey, while, 88(69.8%) strongly agreed that they have braille machines.

Furthermore, 93(73.8%) students strongly agreed that they have access to smart classrooms, 90(71.4%) students strongly agreed that their teachers are competent enough to use ICT in teaching children with disability. Finally, 94(74.6%) students strongly agreed that in basic education inclusive classrooms, the use of ICT made us innovation and competent students. Moreover, other factors observed which were associated with pedagogical approaches were the use of chalkboard, space limitation in the classrooms, interaction between learners and interaction between teacher and the learner. The use of chalkboard was dominant as a teaching aid and as well as a learning aid in most of the classes studied. In this regards, constructivism as a teaching philosophy consistent with the position taken in this study would suggest that constructivist classrooms involve a holistic approach based on collective learning where classrooms are student driven and deep learning takes place because there is the opportunity for doing things differently (Macfarlane et al 2007). For most teachers, teaching seemed to be based more on the transmission approach. During the lesson, there seemed to be fewer opportunities given which allowed learners to work at their own pace or work on activities that were at their ability. This finding contradicts Lewis and Norwich (2000) argument that learners with learning disabilities should be given more time to solve problems, more chances to practice their skills, more examples to learn from and more strategies to help them learn information and skills.

Table 2: Teachers' perception on Accessibility of inclusive classrooms

Approaches	SD N	%	D N	%	NS N	%	A N	%	SA N	%	Total N	Mean	Sd
My school and classroom have paths where wheelchairs can pass	1	4.0	2	6.0	4	12.0	5	14.0	18	64.0	30	1.7200	1.14357
My school has toilet of students disabilities	1	2.0	2	6.0	6	16.0	9	32.0	12	44.0	30	1.9000	1.01519
We have counselor/ nurse who provide student with guidance, counseling	2	8.0	3	10.0	7	18.0	8	30.0	10	34.0	30	2.2800	1.26233
I give my students books to read regarding to their ability of learning	5	16.0	4	14.0	5	16.0	6	20.0	10	34.0	30	2.5800	1.48585

Source: Primary Data (2022)

According to table 2, 32 (64.0%) teachers strongly agreed that their schools and classroom have paths where wheelchairs can pass, 22(44.0%) teachers strongly agreed that their schools have toilet of students disabilities, 17(34.0%) teachers strongly agreed that they have counselor or nurse who provide student with guidance, counseling. Finally, 17(34.0%) teachers strongly agreed that they give their students books to read regarding to their ability and level of learning.

An authoritarian pedagogical style is what, perhaps most saliently characterizes schooling in Botswana (Tabulawa, 1997). As explained in chapter 3, traditional education functioned as a legitimation of the Tswana social structure where the aged act as repositories of wisdom. Cohen et al (2001), in their study, observed that the most striking features of contemporary classrooms today were a formal style as characterized by strict, overt discipline, a high degree of social distance between teachers and students, a „chalk and talk" type of lesson with little interaction between one student and the another, individual work with no talking and emphasis on book work.

Competences Developed by Students with Special Educational Needs in Basic Education

The competences developed by students with special educational needs in basic classrooms of Rwanda were assessed using critical thinking and problem solving, digital & ICT skill, literacy learning, learn out of school/classroom, psychomotor learning, research and innovation skills, cooperation &communication, and creativity. The respondents were asked questions that required them to respond by rating their opinions on a five level scale namely; strongly Agree (SA) =5 points, Agree (A) =4 points, Uncertain (UC) =3 points, Disagree (D) =2 points and strongly disagree (SD) = 1 point. This coding was used throughout the remaining session in this report for clear presentation of tables.

Table 3: Perception of Students towards competences development by students with special educational needs

Approaches	SD N	%	D N	%	NS N	%	A N	%	SA N	%	Total N	Mean	Sd
I have developed critical thinking and problem solving	0	0	0	0	8	6.3	35	27.8	83	65.9	126	1.4048	60898
I have improved digital & ICT skill	0	0	0	0	5	4.0	41	32.5	80	63.5	126	1.4048	.56821
I have improved literacy learning	0	0	1	8	2	1.6	37	29.4	86	68.3	126	1.3492	.55595
I can learn out of school/classroom	0	0	1	8	7	5.6	28	22.2	90	71.4	126	1.3571	62564
I have developed psychomotor learning	0	0	0	0	5	4.0	32	25.4	89	70.6	126	1.3333	55136
I have increased research and innovation	0	0	0	0	7	5.6	35	27.8	84	66.7	126	1.3889	.59292
I have developed cooperation &communication	0	0	1	8	2	1.6	27	21.4	96	76.2	126	1.2698	.52783
I have increased creativity	0	0	0	0	2	1.6	28	22.2	96	76.2	126		

Source: Primary Data (2022)

Results demonstrated that 65.8% of students strongly agreed that owing to inclusion education practices they have developed critical thinking and problem solving, 63.5% of students strongly agreed with improvement of digital and ICT skill, 68.3% strongly agreed with the improvement of literacy learning skills. In addition, 71.4% strongly agreed that students with disability can learn out of classroom,70.6% strongly agreed that students with disability developed psychomotor learning,66.7% agreed with increased research and innovation skills and ability. Moreover, 76.2% strongly agreed that students with disability have developed cooperation &communication, 76.2% strongly agreed that students with disability have increased creativity skills. From the findings, competences of students with SEN in basic inclusive classes were developed.

Table 4: Teacher's Perception on Competences Developed

Approaches	SD N	SD %	D N	D %	NS N	NS %	A N	A %	SA N	SA %	Total N	Mean	Sd
Students developed critical thinking and problem solving	0	0	2	6.0	7	22.0	14	48.0	7	24.0	30	2.1000	.83910
Student improved digital & ICT skills	1	4.0	1	4.0	4	12.0	11	34.0	13	46.0	30	1.8600	1.04998
Student improved literacy learning	0	0	2	6.0	5	16.0	13	42.0	11	36.0	30	1.9200	.87691
Student can learn out of school/classroom	7	22.0	17	58.0	4	12.0	1	4.0	1	4.0	30	2.1000	.93131
Student developed multiple intelligences	0	0	3	8.0	4	14.0	14	44.0	9	34.0	30	1.9600	.90260
Students developed psychomotor learning	1	2.0	2	6.0	5	16.0	12	40.0	10	36.0	30	1.9800	.97917
Students increased creativity, research and innovation	1	2.0	1	2.0	4	16.0	14	42.0	10	38.0	30	1.8800	.89534
Students developed cooperation and communication	1	2.0	0	0	4	12.0	15	48.0	10	38.0	30	1.8000	.80812
Students developed cooperation and communication	1	2.0	0	0	4	12.0	15	48.0	10	38.0	30	1.8000	.80812

Source: Primary Data (2022)

Results in the table 4, show that 48.0% of teachers agreed that students with disability developed critical thinking and problem solving, 46.0% of teachers strongly agreed that children with disability have improved digital & ICT skill, 42.0% of teachers agreed that children with disability have improved their literacy learning skills, 58.0% of teachers disagreed that students with the ability to learn out of classroom, 40.0% of teachers agreed that children with disability developed psychomotor learning, 42.0% of teachers agreed with research and innovation skills and ability. Obviously, 48.0% of teachers agreed that students with disability have developed cooperation &communication. Finally, 742% of agreed that students with disability have increased creativity skills. From the findings, competences of students with SEN in basic inclusive classes were developed. However teachers failed to acknowledge any improvement in the ability of student with disability to learn out of classroom.

4.3 Effect of Accessibility of Inclusive Classrooms Practices competences of students with special educational needs in basic education classrooms.

Inferential statistics established effect between Accessibility of Inclusive Classrooms practices and competences of students with special educational needs in basic education classrooms.

Table 5: Regression Coefficients between Accessibility of inclusive classrooms and critical thinking and problem solving

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
	(Constant)	1.215	.168		7.249	.000
	I am allowed to enroll	-.011	.115	-.012	-.093	.926
	Increased the number of students	.009	.163	.010	.058	.954
	Equal opportunity to all students	-.071	.177	-.070	-.399	.691
	Minimized long journey done	-.130	.126	-.130	-1.030	.305
	student have access to ICT tools	-.042	.127	-.044	-.332	.740
	student have braille machines	.199	.132	.218	1.506	.135
	students have access to smart classrooms	-.016	.153	-.013	-.104	.917
1	Teacher are competent enough to use ICT	.190	.110	.212	1.735	.085

a. Dependent Variable: Critical thinking and problem solving

Source: Primary Data (2022).

Information presented in table 4.5 evidenced that, student permission to enroll is not statistically significant with critical thinking and problem solving (B=-0.012; p value=0.926), an increased number of students is statistically significant with critical thinking and problem solving (B=-0.010; p value=0.954). In the same vein, equal opportunity to all students is not statistically significant with critical thinking and problem solving (B=-0.070; p value=0.691), the minimization of long journey done is statistically significant with critical thinking and problem solving (B=-0.130; p value=0.305), student have access to ICT tools is statistically significant with critical thinking and problem solving (B=-0.044; p value=0.740), having braille machines is not statistically significant with critical thinking and problem solving (B=-0.218; SIG=0.135), having access to smart classrooms is statistically significant with critical thinking and problem

solving (B=-0.013; SIG=0.917). Finally, competence of teachers in using ICT is statistically significant with critical thinking and problem solving (B=-0. 212; p value=0. 085).

Table 6: Accessibility of inclusive education & literacy learning

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
	(Constant)	1.136	.155		7.334	.000
	I am allowed to enroll	-.011	.106	-.014	-.104	.917
	Increased the number of students	.018	.151	.019	.116	.907
	Equal opportunity to all students	-.027	.164	-.029	-.165	.870
	Minimized long journey travelled	-.082	.116	-.089	-.702	.484
	student have access to ICT tools	.060	.117	.070	.516	.607
	student have braille machines	.227	.122	.272	1.859	.066
	students have access to smart classrooms	.069	.142	.063	.488	.627
1	Teacher are competent enough to use ICT	-.099	.102	-.120	-.970	.334

a. Dependent Variable: Literacy learning

 Source: Primary Data (2022)

Data presented in table 4.6, show that being allowed to enroll is not statistically significant with literacy learning (B=-0.014; p value=0.917), an increased number of students is not statistically significant with literacy learning (B=0.019; p value=0.907). Therefore, equal opportunity to all students is not statistically significant with literacy learning (B=-0.029; SIG=0. 870).

The minimization of long journey done is not statistically significant with literacy learning (B=-0.089; p value=0.484), having access to ICT tools is not statistically significant with literacy learning (B=-0.070; p value=0.607). In addition, students' access to smart classrooms is not statistically significant with literacy learning (B=0.063; p value=0.627) and teachers' competence in using ICT is not statistically significant with literacy learning (B=-0.120; p value=0.334). Interestingly, having braille machines is statistically significant with literacy learning (B=0.272; p value=0.066).

Table 7: Accessibility of inclusive classrooms and psychomotor learning

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
	(Constant)	1.124	.150		7.474	.000
	I am allowed to enroll	.023	.103	.028	.219	.827
	Increased the number of students	.024	.146	.027	.163	.871
	Equal opportunity to all students	.071	.159	.078	.449	.654
	Minimized long journey traveled	-.065	.113	-.072	-.577	.565
	Student have access to ict tools	.055	.114	.064	.483	.630
	Student have braille machines	.252	.119	.304	2.122	.036
	Students have access to smart classrooms	-.238	.137	-.217	-1.730	.086
1	Teacher are competent enough to use ict	.021	.099	.026	.211	.833

a. Dependent Variable: Psychomotor learning

Source: Primary Data (2022)

As reflected in table, 7, the permission to enroll is not statistically significant with psychomotor learning (B=-0.028; p value=0.827), an increased number of students is not statistically significant with psychomotor learning (B=-0. 027; SIG=0. 871), an equal opportunity to all students is not statistically significant with psychomotor learning (B=-0. 078; SIG=0.654). Furthermore, minimization of long journey done is not statistically significant with psychomotor learning (B=-0.072; p value=0.565), student access to ICT tools is not statistically significant with psychomotor learning (B=0.064; SIG=0.630). However, having braille machines is statistically significant with psychomotor learning (B=0.304; p value=0.036), students access to smart classrooms is statistically significant with psychomotor learning (B=-0.217; p value=0.086) and teachers' competence in using ICT is statistically significant with psychomotor learning (B=-0.026; p value=0.833).

Table 8: Accessibility of inclusive classrooms and creativity of SEN

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
	(Constant)	.919	.128		7.171	.000
	I am allowed to enroll	.079	.088	.113	.895	.372
	Increased the number of students	.125	.125	.162	.999	.320
	Equal opportunity to all students	-.082	.135	-.104	-.605	.546
	Minimized long journey travelled	-.071	.096	-.091	-.736	.463
	student have access to ICT tools	.044	.097	.060	.457	.648
	student have braille machines	.119	.101	.168	1.180	.241
	students have access to smart classrooms	-.007	.117	-.007	-.057	.954
1	Teacher are competent enough to use ICT	.040	.084	.058	.478	.634

a. Dependent Variable: Creativity of SEN

Source: Primary Data (2022)

The study findings presented in table 8, felt that the fact of being allowed to enroll is not statistically significant with creativity of SEN (B=-0.113; p value=0.372), an increased number of students is not statistically significant with creativity of SEN (B=-0.162; SIG=0.320), equal opportunity to all students is not statistically significant with creativity of SEN (B=-0.104; SIG=0.546), the minimized long journey done is not statistically significant with creativity of SEN (B=-0.091; p value=0.463), student access to ICT tools is not statistically significant with creativity of SEN (B=0.060; p value=0.648). In the same vein, student have braille machines is not statistically significant with creativity of SEN (B=0.168; p value0.241), access to smart classrooms is not statistically significant with creativity of SEN (B=-0.007; p value=0.954). Finally, teachers' competence in using ICT is not statistically significant with creativity of SEN (B=-0.058; p value=0.634).

Discussion of the Research Findings

In this regards, constructivism as a teaching philosophy consistent with the position taken in this study would suggest that constructivist classrooms involve a holistic approach based on collective learning where classrooms are student driven and deep learning takes place because there is the opportunity for doing things differently (Macfarlane et al 2007). For most teachers,

teaching seemed to be based more on the transmission approach. During the lesson, there seemed to be fewer opportunities given which allowed learners to work at their own pace or work on activities that were at their ability. This finding contradicts Lewis and Norwich (2000) argument that learners with learning disabilities should be given more time to solve problems, more chances to practice their skills, more examples to learn from and more strategies to help them learn information and skills.

An authoritarian pedagogical style is what, perhaps most saliently characterizes schooling in Botswana (Tabulawa, 1997). As explained in chapter 3, traditional education functioned as a legitimation of the Tswana social structure where the aged act as repositories of wisdom. Cohen et al (2001), in their study, observed that the most striking features of contemporary classrooms today were a formal style as characterized by strict, overt discipline, a high degree of social distance between teachers and students, a „chalk and talk" type of lesson with little interaction between one student and the another, individual work with no talking and emphasis on book work.

5.0 Conclusions

Therefore or accessibility of inclusive classrooms for students with special educational needs in basic education schools of Rwanda, it was indicated that teachers schools and classroom have paths where wheelchairs can pass, schools have toilet of students disabilities, students with disability have counselor or nurse who provide student with guidance, counseling, while teachers give students books to read regarding to their ability and level of learning.

6.0 Recommendations

It is recommended that an exchange enough teaching and learning resources which are designed for learners with special needs. It is further recommended that extensive training of teachers combined with the exchange of expertise between special and inclusive schools be planned and implemented in order to maximize the participation of students with special needs in both social and academic activities.

Ministry of Education should procure urgently needed teaching and learning assistive devices which are appropriate to all range diverse of students with disabilities. It is recommended that Ministry of Education should provide the schools with necessary assistive devices to help students with special educational needs.

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