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RESEARCH ARTICLE

INFLUENCE OF INCLUSIVE PEDAGOGICAL PRACTICES ON STUDENTS' ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN GATSIBO DISTRICT, RWANDA

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Abstract

Background: The most popular strategy for meeting every child's educational needs is inclusive education. Teachers in industrialized and developing nations have different perspectives on inclusive practice. The general objective of this study is to assess the influence of inclusive pedagogical practices on students' academic achievement in public Secondary schools of Gatsibo District, Rwanda. Specifically, the study focused on to examine effectiveness of inclusive lesson planning on students' academic achievements, to examine the influence of inclusive lesson evaluation on students' academic achievement, and to ascertain the relationship between inclusive pedagogical practices and students' academic achievement in public Secondary schools of Gatsibo District, Rwanda.

Materials and Methods: This study employed a quantitative with descriptive research design. Target population was with 121 teachers and head teachers including 19 teachers and one head teacher from G.S. Nyarubuye, 34 teachers and one head teacher from G.S. Bihinga, 34 teachers and one head teacher from G.S. Nyamirama and 30 teachers and one head teacher of G.S Nyakayaga. The census sampling technique was applied where all entire population of 121 participants were taken as sample size of the study. The instrument for gathering data was a structured questionnaire. Using the Statistical Package for Social Science (SPSS) version 26.0, the acquired data was examined descriptively. Inferential statistics will be shown to illustrate the link between the variables. The tables' frequencies, means, and standard deviations will be used to display the results. This research was quantitative approach, the results were presented relied on research objectives. The research adopted a regression equation to establish the influence of inclusive pedagogical practices on students' academic achievement in Public secondary schools.

Results: On the effectiveness of inclusive lesson planning on students' academic achievement in Public secondary schools, the results of data analysis presented that the overall mean was 4.14 that was between agree (4) and strongly agree (5) which presented that there was a significant effectiveness of inclusive lesson planning on students' academic achievement in Public secondary schools. On the influence of inclusive lesson evaluation on students' academic achievements in

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Public secondary schools, the results showed that the overall mean was 4.34 that was between agree (4) and strongly agree (5) which presented that there was a significant influence of inclusive lesson evaluation on students' academic achievements in Public secondary schools. The results of data analysis showed that the relationship between inclusive pedagogical practices and students' academic achievement was .947** which presented that there was a statistically significant relationship between inclusive pedagogical practices and students' academic achievement in Public secondary schools. The results presented that the variables were statistically significant with regression mean square of 102.587 and residual mean square was 0.099 while $F=1035.116$ and $P\text{-value} = .000b$ that concluded that there was a significant relationship between inclusive pedagogical practices and students' academic achievement in Public secondary schools of Gatsibo District, Rwanda.

Conclusion: Researcher suggested that teachers should apply the inclusive pedagogy in their teaching and promote the behavior that encourage students and create the friendship between teacher and students, this will promote the students' academic achievement in Public secondary schools.

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..... Introduction:-

The most popular strategy for meeting every child's educational requirements is inclusive education (Adhiambo & Ndalo, 2020). Macha, (2022) defines inclusion as having special needs kids enrolled in age-appropriate classes for the entirety of their schooling and attending general school programs. UNESCO (2020) states that inclusion is a widely recognized phenomena for two reasons: first, education is a fundamental right in contemporary society. In the quest for social fairness, inclusion can promote democratic principles (Meintjis, 2018). Second, it is a workable solution and a fundamental component of the educational equality tenets (Mitchell, 2010). According to recent research, inclusive education offers individuals with disabilities the best chances to assist their growth (Adhiambo & Ndalo, 2020).

Across the western world, inclusion is an educational paradigm that highlights every child's right to attend their local school. In developing nations like Bangladesh, the concept of inclusion is relatively new. The effects of inclusive education on students' quality of life have not yet been well documented by research. Furthermore, in order to guide practice and policy, inclusive education research was necessary (Adhiambo & Ndalo, 2020). The aim of this study is to provide light on the ways in which educators support inclusive education. It is expected that teachers with more experience working with children who have disabilities will be more effective teachers (Angelidies, 2008), which will have a big impact on the kids' overall quality of life. Occasionally, educators make explicit arguments for or against inclusive education. For others, it is implied: teachers show signs of interest or disinterest. It is evident that educators are aware of the influence they have over others or that they are being persuaded to support inclusion in both policy and education. In this way, inclusive education has developed into a very effective strategy for addressing education for underprivileged students.

For this reason, inclusive education is a general plan that authorities around the world want would be implemented to address the requirements of children with disabilities. As preoccupied as it is with compensation, inclusion provides a purpose for the extraordinary social force. Its purpose is to counteract prejudice and inequity in the educational system while advancing goodness and justice. According to the United Nations (UN), this is the fundamental goal of education in the modern day and the cornerstone of education for all. In order to support the inclusive education approach, policies must be fundamentally changed to allow schools to serve all children, especially those with special educational needs (UNESCO, 2020).

Teachers are crucial to the effectiveness of inclusive educational methods. In order to successfully implement inclusive education, educators need to have a positive attitude toward inclusion in the classroom in addition to the requisite skills and expertise. This is due to the fact that the teacher's mood has a significant impact on the behavior

of these students (Meintjies, 2018). The practice of teachers must be assessed in order to identify the appropriate intervention strategies. According to a recent study that examined teachers' practices in the context of sociocultural theory, inclusive effectiveness is directly correlated with instructors' positive attitudes and reflective practices (Andrew & Rebecca, 2018). Numerous researchers concentrate on the inclusive attitudes of instructors.

In India, which is similar to Bangladesh in terms of environment, 480 pre-service teachers were enrolled in the Bachelor of Education program. Sharma et al. (2009) investigated the attitudes and concerns of these students. They asserted that these professors' views toward inclusivity were not entirely positive. However, studies show that general education teachers' attitudes played a critical role in the effective integration of students with disabilities into regular classrooms (Sze, 2009).

Ferguson (2008) pointed out that while inclusive practice aims to make learning accessible to everyone, everywhere, and at all times, it is not simple. To be responsive to all students, teachers must use inclusive practices. The ability of educators to create a positive learning environment and their effectiveness in making sure that their instruction meets the needs of all students are key factors in the success of inclusive education (Malafantis, 2022).

Teachers' views on inclusive practice differ between developed and developing countries. For example, educators in developing countries perceive inclusion as difficult due to inadequate resources and assistance. In 2003, Moberg and Savolainen carried out a study with 1350 educators and parents from Zambia, a developing country, and 512 educators from Finland, a developed nation, to investigate inclusive education and ascertain the best setting for kids with different kinds of disabilities.

According to research, it might be challenging for instructors to build inclusive practices (Angelides et al., 2008), especially for those who work with young students (Petriwskyj, 2010). It's critical for educators to uphold a good atmosphere and have solid academic knowledge on how to support inclusive practice. There are particular ways in which these obstacles cast doubt on inclusive education. According to Macha (2022), inclusion serves as a global indicator of a specific union of ethos and practice. Teaching-learning practices must be our main concern if we are to comprehend such an ethos.

Throughout the procedure, the research focuses on providing answers to the questions of how educators should enhance their methods in order to welcome diversity in inclusive environments and how educators view inclusive education. Consequently, the research will investigate the significance of inclusive educational approaches on academic performance as well as the social and emotional growth of children in Rwandan Public secondary schools. The main objective of this study was to assess the influences of inclusive pedagogical practices on students' academic achievement in public secondary schools of Gatsibo District. It was guided by the following specific objectives:

1. To examine the effectiveness of inclusive lesson planning on students' academic achievement in public secondary schools of Gatsibo District in Rwanda.
2. To examine the influence of inclusive lesson evaluation on students' academic achievement in public secondary schools of Gatsibo District in Rwanda.
3. To ascertain the relationship between inclusive pedagogical practices and students' academic achievement in public secondary schools of Gatsibo District, Rwanda

Theoretical Framework

Three primary ideas are thought to support the inclusive education theory. Effective inclusive education strategies should use all of these theories to enable teachers to properly adapt curricula and lessons for each student. As a result, each of the theories guiding inclusive education practice is explained both theoretically and practically in the sections that follow.

Behaviorism-based Inclusive Education Practices

According to theory, behaviorism is the most established and conventional explanation of learning (Nalliah and Idris, 2014). The psychological model of behaviorism is widely acknowledged, as per the metaphor "learning as the acquisition of stimulus-response pairs" (Doolittle, 2014) (Harold and Corcoran, 2013). "Transmitting to the learner the knowledge of reality" is the aim of theory, according to behaviorists (Hickey, 2014). Behaviorism arises when rewards are associated with a stimulus or response and reinforcement is required to maintain the behavior (Ertmer &

Newby, 2013). Despite behaviorism's severe criticism throughout the years, the behaviorist approach is "still vital and is considered a scientific enterprise" (Abramson, 2013).

According to Harold and Corcoran (2013), behaviorism's core principles that support education are as follows: behavior is taught; behavior is controlled by the environment in which it arises; learning cannot occur without teaching; learning is the same as changing behavior; behavior is controlled by the consequences of actions; and attention to the observable is required.

Behaviorism is used in inclusive education contexts and is a useful part of behaviorism-based inclusive education approaches, (Ertmer & Newby, 2013). The emphasis on student performance and behavior when handling stimulus materials makes this clear. Behaviorism-based inclusive education approaches can be found in well-known instructional tactics such as explicit or direct instruction (AlShammari, 2019; Steele, 2005). For children with exceptional needs, the strategy has yielded good research results in general education courses (Al-Shammari, et al., 2008).

Methodical in nature, explicit or direct instruction-based practices entail students following a teacher-provided, sequential procedure while receiving instruction (Zhang, et al., 2016). Additionally, students with special educational needs are often taught in inclusive education classrooms using explicit or direct instruction-based methods that break assignments down into their most fundamental components (Ning, et al., 2023).

When deciding which reinforcers to use and when to start teaching, behaviorists assess children at each stage of the learning process. In this process, the teacher's duties include: (1) determining the cues that can elicit the desired responses from the students; (2) establishing practices in which prompts are combined with target stimuli that are expected to elicit the responses in a "natural" setting; and (3) establishing the conditions in which students can react appropriately to those target stimuli and receive reinforcement for their responses (Ertmer & Newby, 2013).

The core assumptions and characteristics of behaviorism are included into a lot of modern teaching strategies. Some of the best interventions for kids with special needs in inclusive education settings include functional behavioral analysis, direct instruction, and assessment, evaluation, and feedback (Hattie, 2008). Direct instruction is usually provided in a teacher-led environment, where the instructor guides the students' learning through targeted lessons. For example, the instructor sets up the classroom, delivers a lesson plan, assesses students' learning, and solicits comments from the class to ensure understanding.

Functional behavioral analysis assigns labels to specific behaviors and their antecedents in order to prevent disruptive behaviors in the classroom and encourage positive behavior changes. One method to perform a functional behavioral analysis on a student is to use a chart that lists certain targeted behaviors observed for frequency, time of day, antecedents, and consequences. Formative assessment, evaluation, and feedback monitor learning progress and pinpoint any areas in need of correction or enrichment. This may be seen in behavioristic classrooms, where teachers employ "exit slips," which are forms that students fill out before they depart for the day.

Subjects covered in the questions are "things I learned," "things I found interesting," and "questions I still have." Thus, the Behaviouristic theory is believed to be linked to several of the most inclusive education approaches. In a teacher-centered situation, direct instruction where the teacher organizes and leads lessons based on the students' goals is the primary behaviorism teaching approach. Constructed responses, the main topic of behaviorist learning settings, are the basis of functional behavioral analysis. The emphasis on condition responses, assessment, evaluation, and feedback in behaviorist classrooms, according to Ning, et al., (2023), makes them great instruments for determining how well taught material is transferred and applied.

Cognitive-based Inclusive Education Practices

Cognitive theory focuses on an individual's capacity for reasoning, memory, self-reflection, and motivation to learn. Piaget asserts that "every developmental stage has a distinct capacity for learning and learning process" (Evgeniou & Loizou, 2012). The cognitive method focuses on the learner's mental activities that influence answers while acknowledging the processes of goal-setting, mental planning, and organizational techniques.

Contextualizing knowledge, enhancing organizational abilities, and facilitating learners' ability to make connections between freshly learned content and previously stored knowledge are all highly valued aspects of cognitive theories.

Additionally, the importance of mental processes including abstraction, meta-cognition, remembering, thinking, and reflection in the learning process is highlighted by cognitivist approaches (Petersen, 2014). Erdmer and Newby (2013) contend that for cognitivist instruction to be successful, it must be predicated on the students' preexisting schema, or mental models.

The focus on mental interactions and information processing in guiding student learning is indicative of how cognitive-based inclusive education approaches really apply cognitivism to inclusive learning settings (Ertmer & Newby, 2013). Students are encouraged to explain and draw connections between their prior knowledge, experiences, and skills in order to comprehend the new content that is being presented to them. For instance, teaching strategies like concept mapping, mnemonics, advance organizers, framing, and outlining should be used especially to fulfill the cognitive demands of children with special educational needs (Ning, et al., (2023).

The following assumptions or principles specifically apply to instructional design practices: (1) emphasizing the value of the learner's active engagement in the learning process (e.g., self-planning, monitoring, and revision techniques); (2) using hierarchical analyses to identify and illustrate prerequisite relationships (e.g., cognitive task analysis procedure); (3) emphasizing the value of structuring, organizing, and sequencing information to facilitate optimal processing (e.g., using cognitive strategies like summaries, advance organizers, and outlining); and (4) creating learning environments that allow and encourage students to make connections between previously learned material (Tunmer, et al., 2002).

A variety of evidence-based meta-cognitive techniques, such as concept mapping, study skills, and reciprocal teaching, are further cognitivism-based approaches for children with special needs in inclusive education settings (Al-Shammari, 2019; Hornby, 2014). Hattie (2008), following Hornby's lead, offers specific best practice treatments in metacognitive techniques, for instance, that are most effective when applied for children with exceptional needs in inclusive education contexts based on cognitivism.

By employing meta-cognitive strategies, students get an understanding of how they think. Through the use of idea mapping, focused study techniques, and reciprocal teaching, students can plan, organize, and exchange knowledge and learning. In a cognitive-based classroom, another example of a meta-cognitive strategy is organizing the content using a flow chart. Thus, cognitivism can be associated with the key components of the best practices in inclusive education by helping students integrate and adjust to new information (Hornby, 2014).

Constructivism-based Inclusive Education Practices

According to theory, constructivism is primarily concerned with creating cognitive instruments that represent both the experiences and insights acquired throughout learning as well as the knowledge of the culture in which they are used. Constructivism is the idea that social interaction plays a critical role in learning as knowledge is processed, interpreted, and adjusted to construct a cognitive framework.

Ning, et al., (2023) emphasized the social aspect of learning since it affects children's cognitive development, as do learning and relationships with parents, instructors, and classmates. Constructivism is the study of creating, creating, and inventing to aid in the meaning and understanding-building process of humankind. Constructivists believe that understanding the brain has an impact on education (Lenjani, 2016). According to Akpan and Beard (2016), constructivism is the most effective paradigm for teaching all students, but especially those with exceptional educational needs.

Teachers are viewed primarily as facilitators who set up tasks and provide the information needed for students to understand what they have learnt (Liu & Ju, 2010). Lenjani (2016) states that constructivism's core principles are as follows: Learning is the search for meaning; 2) to understand meaning, one must comprehend both the whole and its parts; 3) teachers must be conscious of the mental models their students use to interpret the world and the presumptions that underlie these models; and 4) the ultimate goal of learning is for each person to create their own meaning, as opposed to merely memorizing facts or repeating what has been said.

Shi (2013) claims that the key tenet of constructivism is that learning should be task-based, learner-centered, hands-on, and mentally stimulating, as well as relevant and closely related to real-world experiences (Lenjani, 2016). Additionally, through constructivist-based classroom activities, all students should have access to both internal and external scaffolding mechanisms; this is crucial for kids with special education needs in particular (Shi, 2013).

Constructivism-based inclusive education practices are the implementations of constructivism in educational environments that enable learners to actively explore complex subjects. These might include instructional strategies and methodologies. Using real-world examples and contexts for tasks, utilizing cognitive apprenticeships (i.e., modeling and coaching), incorporating social negotiations (i.e., debate, discussion), encouraging reflective awareness, and providing extensive guidance on the use of constructive processes are some possible strategies for exploring these topics (Ertmer & Newby, 2013). Presenting multiple perspectives (i.e., collaborative learning to develop and share alternative views).

The focus is on the underlying ideas and relationships between these instruments rather than on discrete facts (Lenjani, 2016). To avoid overwhelming special needs children with the amount of material they need to remember, teachers should place an emphasis on giving them the most important facts or information related to the major themes being covered. Lenjani (2016) asserts that self-monitoring and using graphic organizers when teaching topic themes can promote confidence, success, accomplishments, and mistakes.

It is further claimed that insufficient training in inclusive education is the reason why educators are unaware of the range of inclusive strategies and the need to collaborate well with professionals such as psychologists and counselors. Constructivist-based communities of practice "embrace social engagement in practices that are directly related to the role of schools, families, and communities" since these kinds of partnerships are thought to be essential to inclusive literacy. It also presents opportunities to enhance children's social integration, particularly children who have behavioral issues at school. Additionally, it gives students the chance to collaboratively create knowledge that they have learned, like how to support these children in their communities (Botha & Kourkoutas, 2016).

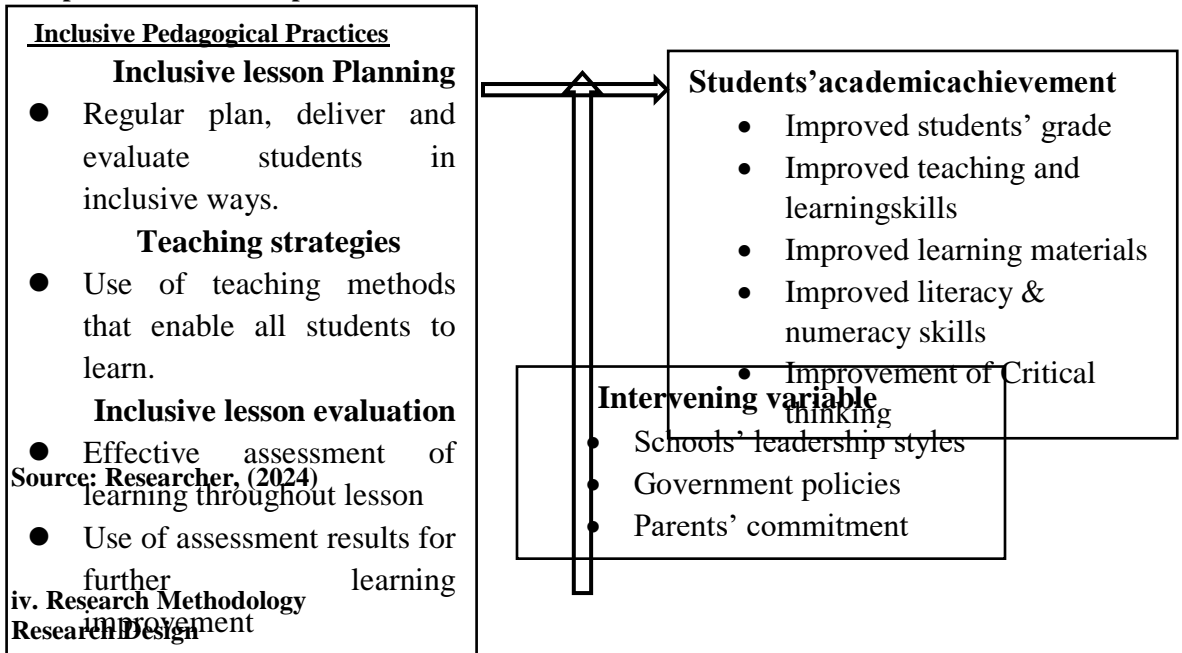
Hattie (2008) asserts that peer tutoring and cooperative learning are the two best practices that students would most benefit from in a constructivist inclusive education framework. Through peer tutoring and cooperative learning, students can participate in real-world engagement and active learning. For example, cooperative learning groups can be official or informal. While informal groups are more flexible and require students to discuss ideas in pairs, formal groups are organized according to the abilities or interests of the members. In an inclusive constructivist classroom, students learn by doing and applying what they see (Lenjani, 2016).

Conceptual framework

A conceptual framework is a diagrammatic research tool designed to help the investigator become aware of and comprehend the situation being studied, as well as to convey this knowledge (Kandampully, 2008).

Figure 1:- Conceptual framework.

Independent variable **Dependent variable**



Source: Researcher, (2024)
 iv. Research Methodology
 Research Design

The descriptive survey design was employed in the investigation. The instruments for gathering data will be questionnaires. The strategy for gathering and analyzing data that helped the study reach its goals is outlined in this chapter. The research employed a descriptive survey methodology, utilizing the quantitative technique for data analysis, summarize, and interpretation. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) Software Version 26. To determine the link between the variables, inferential statistics such as regression and correlation were utilized. Data analysis will be conducted using the Statistical Package for the Social Sciences (SPSS) Software Version 26.0. There will be a 95% confidence level in the study.

Target Population

All components that satisfy the study's assimilation requirements comprise the target population (Hamed, 2016). The study focused on 121 teachers and head teachers from two sectors in Kabarore (G.S. Nyarubuye and G.S. Bihinga) and Gitoki (G.S. Nyakayaga and G.S. Nyamirama) in the Gatsibo District, Rwanda. Specifically, the target population was with 121 teachers and head teachers including 19 teachers and one head teacher from G.S. Nyarubuye, 34 teachers and one head teacher from G.S. Bihinga, 34 teachers and one head teacher from G.S. Nyamirama and 30 teachers and one head teacher of G.S. Nyakayaga.

Sampling Design

The sampling design outlines the procedures for calculating the sample size and sampling strategies for choosing study participants.

Sample Size Determination

The population of Group Scolaire was divided into two strata; teachers and head teachers using the sampling approach. The identical sample techniques were applied to each stratum.

Table 1:- Sample size determination.

Group of Participants	Target population	Sample size
Head Teachers	4	4
Teachers	117	117
Total	121	121

Source: G.S Nyarubuye, Bihinga, Nyamirama and Nyakayaga, (2024)

The sample size, or 121 respondents, is shown in Table 3.1 and was used in this investigation. The head teachers and instructors from G.S. Nyarubuye, G.S. Bihinga, G.S. Nyamirama and G.S. Nyakayaga were made the sample size.

Sampling Techniques

The census sampling approach was applied in this study. We used all target populations as our sample size. Using non-probability sampling approaches, questionnaires for answering study questions were distributed to all participating populations.

Data Collection Instruments

The structured questionnaire that was used for this study is written in simple terms, making it simple to gather the necessary data. Next, a set of intersecting questions is arranged in a positive sequence with the goal of gathering data from the study's sample size. In essence, it could ask participants both open-ended and closed-ended questions. In closed-ended questions, participants answered by selecting one of the options; in open-ended questions, they must provide their personal ideas based on the study's objectives.

To find potential issues, a preliminary test of the data collection tools and protocols will be conducted. To conduct this test, teachers and the head teacher received questionnaires. Later on, the dependability of the completed questionnaires were examined. Through the pilot study, the researcher was able to discover elements that need to be modified and became familiar with the administration technique for research. The outcome assisted the researcher in resolving discrepancies resulting from the instruments to guarantee the instruments get the data that is supposed to be collected.

Research Findings and Discussion:-

Demographic Characteristics of Respondents

The analyzed demographic characteristics of respondents were very crucial to the researcher; these information was a baseline statistic to the research findings. The demographic characteristics were gender, educational level, job position, and marital status of respondents. The results were presented in the tables as follow:

Table 2:- Gender of Respondents.

		Frequency	Percent
Valid	Male	73	60.3
	Female	48	39.7
	Total	121	100.0

Source: Primary data, (2024)

The gender distribution of respondents is presented in Table 2. The researcher wanted to analyze the gender distribution of respondents. 60.3% of the 121 respondents were men and 39.7% were women.

Presentation of Findings

This subdivision presents the results from the data analyzed, the study was to assess the assess the influences of inclusive pedagogical practices on students' academic achievement in Public secondary schools in Gatsibo District, Rwanda. The analysis was based on the specific objectives of the study; to examine the effectiveness of inclusive lesson planning on students' academic achievement in public secondary schools, to examine the influence of inclusive lesson evaluation on students' academic achievement in public secondary schools, and to ascertain the relationship between inclusive pedagogical practices and students' academic achievement in public secondary schools of Gatsibo District, Rwanda. The results categorized in accordance of objectives.

EffectivenessOf Inclusive Lesson Planning On Students' Academic Achievement

The first objective examined the effectiveness of inclusive lesson planning on students' academic achievement in Public secondary schools of Gatsibo District, Rwanda. The results are presented and interpreted as follow:

Table 3:- Effectiveness Of Inclusive Lesson Planning On Students' Academic Achievement.

Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total		
	N	%	N	%	N	%	N	%	N	%	N	Mean	Sd
At our school, we apply effective inclusive pedagogical practices that motivate the students to perform their studies	0	0	0	0	0	0	83	68.6	38	31.4	121	4.31	.466
Our school respect students with different abilities, values, talents, social backgrounds and personal histories	0	0	0	0	0	0	98	81.0	23	19.0	121	4.19	.394
We identify and respond to the specific needs and additional learning objectives	0	0	0	0	0	0	72	59.5	49	40.5	121	4.40	.493
We create the supportive learning environment that promotes the learning of all students	0	0	0	0	0	0	62	51.2	59	48.8	121	4.49	.502
Our school promotes the use of assistive technology and devices to ensure that all students access to	0	0	18	14.9	30	24.8	73	60.3	0	0	121	3.45	.742

technology														
In our school, we properly use student-oriented teaching strategy in teaching and learning process	0	0	0	0	14	11.6	94	77.7	13	10.7	121	3.99	.474	
In our school, we use teacher oriented teaching strategy more that student oriented teaching strategy	0	0	6	5.0	18	14.9	69	57.0	28	23.1	121	3.98	.764	
In our school, we use teaching strategy combining both strategies (student & teacher-oriented teaching strategy)	0	0	0	0	0	0	81	66.9	40	33.1	121	4.33	.472	
Overall Mean												4.14		

Source: Primary data, (2024)

Table 3. Presents the results of the first objective of this study of examining the effectiveness of inclusive lesson planning on students' academic achievement in Public secondary schools of Gatsibo District, Rwanda. The data was analyzed, out of 121 respondents, on their school, they apply effective inclusive pedagogical practices that motivate the students to perform their studies, the 68.6% agreed and 31.4% strongly agreed. On their school respect students with different abilities, values, talents, social backgrounds and personal histories, the 81.0% agreed and 19.0% strongly agreed that they respect students with different abilities, values, talents, social backgrounds and personal histories. On that teachers identify and respond to the specific needs and additional learning objectives, the 59.5% agreed and 40.5% strongly agreed that they identify and respond to the specific needs and additional learning objectives.

On teachers create the supportive learning environment that promotes the learning of all students, 51.2% agreed and 48.8% strongly agreed. On their school promotes the use of assistive technology and devices to ensure that all students' access to technology, 14.9% disagreed, 24.8% were on neutral side, and 60.3% agreed that their school promotes the use of assistive technology and devices to ensure that all students access to technology. On that in their school, they properly use student-oriented teaching strategy in teaching and learning process, 11.6% were on neutral side, 77.7% agreed, and 10.7% strongly agreed. On that in their school, they use teacher oriented teaching strategy more that student oriented teaching strategy, 5.0% disagreed, 14.9% were on neutral side, 57.0% agreed, and 23.1% strongly agreed. On that in their school, they use teaching strategy combining both strategies (student & teacher-oriented teaching strategy), 66.9% agreed and 33.1% strongly agreed that they use teaching strategy combining both strategies. The overall mean was 4.14 that was between agree (4) and strongly agree (5) which presented that there was a significant effectiveness of inclusive lesson planning on students' academic achievement in Public secondary schools of Gatsibo District, Rwanda.

Influence of Inclusive Lesson Evaluation On Students' Academic Achievement

The second objective was to examine the influence of inclusive lesson evaluation on students' academic achievements in Public secondary schools of Gatsibo District, Rwanda. The results were presented and interpreted as follow:

Table 4:- Influence Of Inclusive Lesson Evaluation On Students' Academic Achievement.

Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total		
	N	%	N	%	N	%	N	%	N	%	N	Mean	Sd
Our review shows an increase in students' academic performance immediately	0	0	0	0	0	0	61	50.4	60	49.6	121	4.50	.502

after adapting and integrating lessons appropriately													
At our school, the skill development translated to positive effects on academic performance	0	0	0	0	0	0	68	56.2	53	43.8	121	4.44	.498
Inclusive pedagogical practices influence the performance in learning	0	0	0	0	0	0	46	38.0	75	62.0	121	4.62	.487
Inclusive pedagogical practices we apply have the positive benefits for all students which promote the academic performance	0	0	0	0	0	0	56	46.3	65	53.7	121	4.54	.501
The inclusive pedagogical practices used in teaching encourage the students' self-assessment skills	0	0	0	0	21	17.4	65	53.7	35	28.9	121	4.12	.673
Due to inclusive pedagogical practices, our students showed improved social and emotional skills, attitudes, and behaviors in learning to academic performance	0	0	0	0	12	9.9	61	50.4	48	39.7	121	4.30	.641
School's inclusive pedagogical practices motivate students to investigate knowledge from different Sources	0	0	0	0	0	0	62	51.2	59	48.8	121	4.49	.502
Students actively participate in every discussion that promote academic performance	0	0	20	16.5	11	9.1	75	62.0	15	12.4	121	3.70	.891
Overall Mean												4.34	

Source: Primary data, (2024)

Table 4 presents the results of the second objective of this study of examining the influence of inclusive lesson evaluation on students' academic achievements in Public secondary schools of Gatsibo District, Rwanda. The data was analyzed, out of 121 respondents, on their review show an increase in students' academic performance immediately after adapting and integrating lessons appropriately, the 50.4% agreed and 49.6% strongly agreed. On that at their school, the skill development translated to positive effects on academic performance, the 56.2% agreed and 43.8 strongly agreed that the skill development translated to positive effects on academic performance. On that inclusive pedagogical practices influence the performance in learning, the 38.0% agreed and 62.0% strongly agreed that inclusive pedagogical practices influence the performance in learning.

On that inclusive pedagogical practices they apply have the positive benefits for all students which promote the academic performance, 17.4% were on neutral side, 53.7% agreed and 28.9% strongly agreed. On that inclusive pedagogical practices used in teaching encourage the students' self-assessment skills, 17.4% were on neutral side, 53.7% agreed and 28.9% strongly agreed that inclusive pedagogical practices used in teaching encourage the students' self-assessment skills. On due to inclusive pedagogical practices, their students showed improved social and emotional skills, attitudes, and behaviors in learning to academic performance, 9.9% were on neutral side, 50.4%

agreed and 39.7% strongly agreed that their students showed improved social and emotional skills, attitudes, and behaviors in learning to academic performance. On that school's inclusive pedagogical practices motivate students to investigate knowledge from different Sources, 51.2% agreed and 48.8% strongly agreed. On that students actively participate in every discussion that promote academic performance, 16.5% disagreed, 9.1% were on neutral side, 62.0% agreed, and 12.4% strongly agreed. The overall mean was 4.34 that was between agree (4) and strongly agree (5) which presented that there was a significant influence of inclusive lesson evaluation on students' academic achievements in Public secondary schools of Gatsibo District, Rwanda.

Relationship between Inclusive Pedagogical Practices And Students' Academic Achievement

The third objective was to ascertain the relationship between inclusive pedagogical practices and students' academic achievement in Public secondary schools of Gatsibo District, Rwanda. The results were presented and interpreted as follow:

Table 5:- Relationship between inclusive pedagogical practices and Students' academic achievement.

		Inclusive pedagogical practices	Students' academic Achievements
Inclusive pedagogical practices	Pearson Correlation	1	.947**
	Sig. (2-tailed)		.000
	N	121	121
Students' academic achievements	Pearson Correlation	.947**	1
	Sig. (2-tailed)	.000	
	N	121	121

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data, (2024)

Table 5 presents the relationship between the inclusive pedagogical practices and students' academic achievement in Public secondary schools of Gatsibo District, Rwanda. The Statistical Package for SocialSciences (SPSS) software version 26.0 was used to find out the pearson coefficients. The pearson coefficients relationship are between -1 to 1 whereby -1 to 0 point negative relationship and 0 to 1 point positive relationship. From -1 to -0.5 marks high negative & from -0.5 to 0 marks low negative relationship, and from 0 to 0.5 presents low positive & from 0.5 to 1 presents high positive relationship. The results of data analysis showed that the relationship between inclusive pedagogical practices and students' academic achievement was .947**. It was presented that there was a statistically significant relationship between inclusive pedagogical practices and students' academic achievement in Public secondary schools of Gatsibo District, Rwanda.

Table 6:- Model Summary of inclusive pedagogical practices and Students' academic achievement.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947 ^a	.897	.896	.315

a. Predictors: (Constant), Inclusive pedagogical practices

Source: Primary data, (2024)

Table 6 presents the results on the overall model's significance of inclusive pedagogical practices and students' academic achievement in Public secondary schools, the results presented that the R Square=.897. It was clear that the 89.7% of all variables of students' academic achievement can be explained by one's of all variables of inclusive pedagogical practices in Public secondary schools of Gatsibo District, Rwanda. The standard error of coefficients was 0.315 which was not high.

Table 7:- ANOVA^a of inclusive pedagogical practices and Students' academic achievement.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	102.587	1	102.587	1035.116	.000 ^b
	Residual	11.794	119	.099		
	Total	114.380	120			

a. Dependent Variable: Students' academic achievements
b. Predictors: (Constant), Inclusive pedagogical practices

Source: Primary data, (2024)

Table 7 presents the analysis of variance of inclusive pedagogical practices and students' academic achievement in Public secondary schools. The results presented that the variables were statistically significant with regression mean square of 102.587 and residual mean square was 0.099 while F=1035.116 and P-value =.000b, it confirmed

that there was a significant relationship between inclusive pedagogical practices and students' academic achievement in Public secondary schools of Gatsibo District, Rwanda. Mean square residual presents the mean squared differences within students' academic achievement and it is a components of F used to test for differences between variables or is the estimate of the variance of the errors help to assess the variation in the data that is not accounted for by the inclusive pedagogical practices in the model.

Table 8:- Coefficients^a of inclusive pedagogical practices and Students' academic achievement.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.630	.112		5.621	.000
	Inclusive pedagogical practices	.875	.027	.947	32.173	.000

a. Dependent Variable: Students' academic achievements

Source: Primary data, (2024)

Table 8 presents the constant coefficients of independent and dependent variables of inclusive pedagogical practices and students' academic achievement in Public secondary schools. The overall constant results with P value= .000 showed that there was a significant relationship between inclusive pedagogical practices and students' academic achievement in Public secondary schools of Gatsibo District, Rwanda. For the detail, it was statistically significant since P-value was less than 0.05. The results showed that effectiveness of inclusive pedagogical practices was statistically significant with P-value =.000. Researcher considered the 95% as confidence interval.

Discussions:-

According to Deepty and Mohammed (2023), the findings of the study of impact of pedagogical practices on academic performance conducted in Bangladesh only 7% of courses employed a student-oriented teaching strategy, compared to 35% of teacher oriented teaching strategy, and 58% of the courses in both approaches combination. The current study resulted that Out of 121 respondents, 100% agreed that inclusive pedagogical practices influence the performance in learning. The 82.6% agreed that inclusive pedagogical practices teachers apply have the positive benefits for all students which promote the academic performance and agreed that inclusive pedagogical practices used in teaching encourage the students' self-assessment skills.

Teachers apply effective inclusive pedagogical practices that motivate the students to perform their studies, the 68.6% agreed and 31.4% strongly agreed. On their school respect students with different abilities, values, talents, social backgrounds and personal histories, the 81.0% agreed and 19.0 strongly agreed that they respect students with different abilities, values, talents, social backgrounds and personal histories. On that teachers identify and respond to the specific needs and additional learning objectives, the 59.5% agreed and 40.5% strongly agreed that they identify and respond to the specific needs and additional learning objectives.

Andrew and Rebecca, (2018) teachers' practices in the context of sociocultural theory, inclusive effectiveness is directly correlated with instructors' positive attitudes and reflective practices. This study resulted that 100% of respondents agreed that teachers create the supportive learning environment that promotes the learning of all students and 60.3% agreed that their school promotes the use of assistive technology and devices to ensure that all students access to technology.

These service delivery strategies are becoming more commonplace as a result of broader societal shifts toward inclusive behavior. Several research show that inclusive practices are good for SEN children' academic success; in particular, studies show that students who get assistance and are completely integrated into general education courses have better literacy abilities (Allan, 2010). This study results showed that 88.4% of respondents agreed that they properly use student-oriented teaching strategy in teaching and learning process and 80.1% agreed that they use teacher oriented teaching strategy more that student oriented teaching strategy. The 100% of respondents agreed that they use teaching strategy combining both strategies (student & teacher-oriented teaching strategy).

Numerous research have been done on the subject (Evins, 2015; Rovia, 2014; Garrote, 2017), and they all support the idea that students may build and sustain strong relationships with their teachers in an inclusive classroom. In actuality, a study by Garrote (2017) found that in order to make friends or gain acceptance from teachers. The

current study, out of 121 respondents, 100% agreed that teachers apply effective inclusive pedagogical practices that motivate the students to perform their studies and that their school respect students with different abilities, values, talents, social backgrounds and personal histories, and all respondents agreed that teachers identify and respond to the specific needs and additional learning objectives.

Conclusion:-

The inclusive approach known as Universal Design for Learning (UDL) outlines how educational resources and tasks are made such that every student has access to the information. The joint goal of Universal Design (UD) and Universal Design for Learning (UDL) is to design and create with various individuals in mind, as opposed to adding to or adjusting subsequently based on individual variances (Hall, et al., 2012). This study assessed the influences of inclusive pedagogical practices on students' academic achievement in Public secondary schools in Gatsibo District, Rwanda. The conclusions taken basing on the results form data analysis, on the effectiveness of inclusive lesson planning on students' academic achievements in Public secondary schools, the overall mean was 4.14 that was between agree (4) and strongly agree (5) which concluded that there was a significant effectiveness of inclusive lesson planning in Public secondary schools. On the influence of inclusive lesson evaluation on students' academic achievements in Public secondary schools, the overall mean was 4.34 that was between agree (4) and strongly agree (5) which concluded that there was a significant influence of inclusive lesson evaluation on students' academic achievements in Public secondary schools. The results of data analysis presented that the relationship between inclusive pedagogical practices and students' academic achievement was .947** which concluded that there was a statistically significant relationship between inclusive pedagogical practices and students' academic achievement in Public secondary schools of Gatsibo District, Rwanda.

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