



Bridging Learning Gaps: Teachers' and Students' Views on Remedial Education in Secondary Schools in Kericho County, Kenya

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Abstract: Remedial classes have been acknowledged as an essential element in the learning process. Remedial classes have however focused on the development with less consideration of how they are viewed by the teachers and students. This research was both a quantitative and qualitative research. This study examined the teachers' and students' perceived effectiveness of remedial classes on the academic performance of secondary school students in Kericho county, Kenya. This study used the correlational research design as it helped to show the degree of correlation between the remedial class ratings and the students' performance. The study targeted secondary schools in the six sub-counties of Kericho County. The study used stratified sampling to group the six sub-counties in Kericho counties. The researcher also used purposive to select the secondary schools in these six sub-counties. The study focused on markers of remedial classes which include; timing, frequency, and preparation. Data was collected using questionnaires and was analyzed using SPSS software, Levene's independent T-test analysis and Pearson's correlation analysis. The study employed Cronbach alpha coefficient to compute the internal consistency and the result was 0.971. The findings showed that students' academic performance had a significant relationship with the perceived effectiveness of remedial classes in secondary schools. The study recommended that communication between teachers and students should be increased in order to develop a remedial system that favors learning development and brings about mutual understanding between teachers and students.

Keywords: Remedial classes, Academic performance, Teachers' perceptions, Students' perceptions, Effectiveness

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1. Introduction

Huang (2010) defined remedial teaching as an intervention program where a child receives each diagnosing and treatment till the achievement of productive recovery. This helps teachers to understand the level and know the weaknesses and strengths of every student. Remedial education is an essential curative measure where learners attain critical knowledge and skills. With the development of remedial classes in schools, institutions have come to a conclusion that it should be used for sharpening of already taught ideas. Ellis, (2022) agreed that remedial classes are often used to stress basics in a subject such as math or language. Students can also use them to catch up with material after a long break from education. Remedial classes have kept

their original goal of helping students to succeed in their education.

According to Gus (2022), South Africa's policies on education reflect that for the last several decades, the need for quality basic education for all children has been recognized. For those who have a vested interest in remedial education, it is also encouraging to note that South Africa has had a long history of trying to address educational needs not catered for in mainstream teaching environments. Many of South Africa's policies and legislation have an entrenched, robust framework of inclusive education within the education sector. Collectively, these have the aim of seeing all students receiving quality education in the schools of this country. Various government initiatives explicitly aim to make

inclusive education available to the children of this nation.

Boone, (2015) commented that low education levels are common in many of the developing world, particularly in rural areas where traditional government-provided public services often have difficulty reaching beneficiaries. Providing trained teachers-assist to teach regular after-school remedial education classes has been shown to improve literacy and numeracy in children of primary school age residing in such areas in India.

According to the World Bank (2016), access to secondary school education in Kenya has improved rapidly since 1990. Schools have been striving to enhance students' understanding of classroom material by employing various teaching methods. Motivated by this goal, many schools have implemented e-learning platforms, audio-visual teaching styles, theater performances, and remedial classes to support students in their learning journey. The World Bank concluded that remedial classes have become increasingly prominent in recent years due to the competition to produce outstanding candidates and enhance school reputations across the country. To be able to understand the remedial classes empowerment one, has to understand the essence of education. With the help of The Universal Declaration of Human Rights (UNCRC, 1989), access to education and schools has grown rapidly over the years all over the world. This has prompted Kenya's education sector to experience a period of increased attention and investment. This is because parents and the government at large have realized the necessity and relevance of education. Along with the pressing demand created by a growing population, the government is focusing on improving access and quality across the education system. Due to the Education for All (EFA) initiative, most children have been viewed as an element of importance in terms of education (UNESCO 1964).

This initiative forced many schools, parents and the society at large to enhance the education development of all children all over the world. Von et al (2011) observed that quality education is of concern in all countries all over the world. However, personal contrasts in academic achievement have been related to variations in identity and insight. It is of significance to consider all types of students and acknowledge that they all have different types of understanding. With education becoming a necessity all over the world over the years, there is an increase in the demand for education which has led to students striving to become better in their academic performance.

Von et al. (2011) continued to argue that records have shown that there is an existence of the gap between the highly performing students and the lower performing students. This has led to the development of several ideas to help these students to be able to catch up with the ones that are performing better. The introduction of remedial classes into the teaching process was one of the

initiatives that were put in place to help these students. Remedial education was viewed as the concept of 're-teaching' and reinforcing previously taught basic skills to improve student outcomes in current or future coursework. Remedial education is one of the many aspects that have been empowered over the years all over the world.

Kenyan children persist on displaying meager fundamental skills in literacy and numeracy (Hoogeveen & Andrew, 2011). An assessment of the primary results reveals that the status quo has remained. The Uwezo 2011 evidence confirms that despite the government outlaw on paid remedial teaching, persists in our public primary schools. Further, the higher the class, the more likely it is that a child will receive remedial teaching. Mugo, et al., (2015) note children taking remedial instruction in 2011 was 67.3% while in 2012 were 73.8. In class seven, 7 out of 10 children in public primary schools are subject to remedial teaching. Further, 6 out of 100 grade seven learners cannot interpret a standard two story in the English dialect. Besides, here is a general reduction the learning levels despite the fact that more children are taking remedial teaching in 2012 compared to 2011.

The remedial programs are based on the assumption that if these barriers are removed or reduced, girls' performance, attendance and retention in school will improve. The program specifically targets two challenge areas: poor academic performance of girls in refugee camps and neighboring host communities, and low levels of community support for girls' education. Kenya Equity in Education Project 2022 recorded that, between 2014 and 2018, 10,580 girls benefited from the remedial program. Further, of the 1,207 remedial beneficiaries in 2018, 76.1% showed improved academic scores within the remedial period (McBride 2011)

Ndungu, (2022) wrote a journal on how the rush to complete the Kenyan syllabus has taken a toll on the high school students. He argued that almost all secondary schools across the country have imposed a heavy workload on learners who have consequently been forced to handle too much school work in the packed academic calendar precipitated by Covid-19 lockdowns and the election period. This brought about the necessity of the institutionalization of the remedial classes by most of the schools in the country.

Remedial classes have become a trend in Kenya over the years. As much as it is used by the majority of schools in the country at the moment, there is a need to understand the perceptions of the teachers and students on the institutionalization of remedial classes on the academic classes on the academic performance of students in Kericho County.

1.1 Statement of the Problem

Quality education and its access is an issue of concern in all countries all over the world. However, personal

contrasts in academic achievement have been related to variation in identity and insight (Von et al 2011). Pupils having higher mental capacity (those who can grasp information quicker) have shown to have higher intelligence and the same goes for the students with higher reliability on their own selves to understand the concepts taught, in terms of accomplishments. These types of students tend to accomplish well in academic settings. This therefore leaves the concern of the other group of students who fall under the opposite criteria.

Sudhakar (2018) argued that Students who have temporarily fallen behind in their studies or otherwise need short-term support in their learning have the right to get remedial teaching. Remedial teaching is viewed to be essential based on the necessity of the content being taught but there is a difficulty in the development of the appropriate process of institutionalization. He argued that it was essential to consider the students when institutionalizing a remedial program. For it to be a success, one should factor in the students' desire to study, their self-efficacy and their study habits. He argued that it helped in gauging the appropriate time that makes remedial classes effective.

The academic performance of students has become of great relevance to students' future developments. This research sought to assess the perception of the teachers and students on the institutionalization of remedial classes in secondary schools.

1.2 Research Questions

1. How do students rate their teachers in the institutionalization of remedial classes in terms of:
 - a. Timing, frequency and preparation of remedial classes
 - b. Preparation and motivation to study from teachers
 - c. Feedback from teachers
 - d. Optimism about the outcome of remedial classes
 - e. Repetition of difficult concepts by teachers
2. How do teachers rate themselves on the institutionalization of remedial classes in terms of:
 - a. Timing, frequency and preparation of remedial classes
 - b. Motivation of students to study
 - c. Feedback to students
 - d. Optimism about the outcome of remedial classes
 - e. Repetition of difficult concepts
3. Is there a significant difference in the students' and teachers' rating of the institutionalization of remedial classes?

1.3 Hypothesis

There is no significant difference in the students' and teachers' ratings of the institutionalization of remedial classes.

1.4 Theoretical Framework

Theoretical framework is the structure that can hold or support a theory of a research study (Susan, 2013). The theoretical framework introduces and describes the theory which explains why the research problem under study exists.

This research is guided by Vygotsky's social cognitive theory and Vygotsky's scaffolding theory.

1.4.1 Vygotsky's Social Cognitive Theory

Vygotsky, (1978) argues that cognitive abilities are socially guided and constructed. As such, culture serves as a mediator for the formation and development of specific abilities, such as learning, memory, attention, and problem solving. He justified that the remediating education differs from the general one in its aims. The aim of general education is to acquire knowledge; remedial classes are aimed to form new functional organs or a new functional system that make it possible to perform a mental process.

Perry, (2013) analyzed the point of view of Vygotsky's theory to have the main aim of general education as acquiring of knowledge; but remediation is focused on forming new functional organs or a new functional system that make it possible for the remedial student to perform a mental process.

The help of the remedial teacher must be interactive and adjusted in accordance with the student's achievement. In other words, the remedial teacher always works in a zone of the remedial student's proximal development until the student is able to work on his own. At the beginning of remediation, the remedial teacher, as described by Vygotsky, performs from common activity to an independent one, from an action mediated with external means to an internal one, from step-by-step analytic action to a global automatized one. For effective remediation, through support, the remedial teacher needs to teach from simple concepts to difficult concepts until the remedial student is able to perform the missed skill on his own.

1.4.2 Vygotsky's Scaffolding theory

Vygotsky's scaffolding is a theory that focuses on a student's ability to learn information through the help of a more informed individual (Vygotsky, 1978). When used effectively, scaffolding can help a student learn content they wouldn't have been able to process on their own.

According to Anggadewi, (2017), scaffolding is a method that provides a more adaptive way to the child's ability because this method uses a tiered learning method. This is where the materials and questions are given beginning with the easiest questions to the hardest. They are controlled by the child while accompanied by teachers or colleagues who are more capable of cognitive mastery of matter or matter is a marker for obtaining more complicated material or matter.

1.5 Conceptual Framework

Conceptual framework gives a diagrammatic view on the relations of the variables in the research. Ravitch

&Riggan, (2016) defined conceptual framework as one that lives at the center of an empirical study. The conceptual framework serves as a guide and ballast to research, functioning as an integrating ecosystem that helps researchers intentionally bring all aspects of a study together through a process that explicates their connections, disjuncture, overlaps, tensions, and the contexts shaping research setting and the study of phenomena in that setting. The following conceptual framework shows the independent and dependent variables of the study:

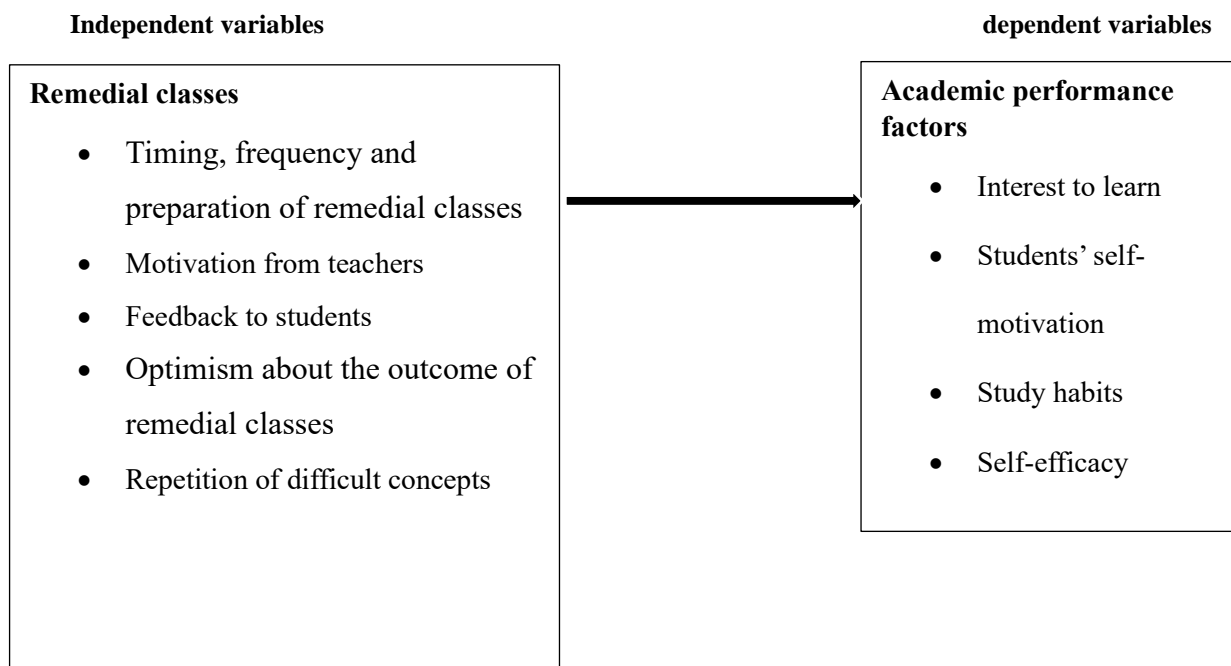


Figure 1: conceptual framework

The main purpose of this conceptual framework is to establish and clarify the effects of remedial classes on the students' academic performance in secondary schools in Kericho county. It consists of the independent, and the dependent variables. The independent variables include factors to be considered in remedial classes which include; timing, frequency and preparation of the remedial classes, motivation from teachers to study, feedback from the teachers to students, optimism in regards to the outcome of remedial classes and repetition of difficult concepts. The dependent variables include the factors influencing academic performance associated with remedial classes which involve either interest to learn, students' self-motivation, study habits of students and self-efficiency in studying.

2. Literature Review

2.1 The Institutionalization of Remedial Teaching

Remedial classes have always been viewed to be of importance in the education process by every educator. As the world continues to develop, it has been given a high pedestal of importance in the development of the teaching-learning process. Most countries have accepted the relevance of remedial classes in the development of the education of the students' social and economic development. Remedial classes have been accepted as an aid for the boosting of students' performance in other scenarios.

Students' Academic Performance is the basis on how teachers start remediation activities to their pupils through interventions and strategic methods of

increasing student retention of learning. Jackson (2016) found out that instructors who conducted remediation used instructional techniques that matched effective practices found in the current research literature. Everyone opt for teachers to give remediation until such time that learners are back on track. As Capuyan et al. (2019) revealed, there is a positive relationship between the previous and the current grade levels' grades of pupils attending remediation lessons. In relation, Tseng et al. (2016) also mentioned that remedial interventions by teaching advisors showed a great impact on students' improvement of final grades. Everybody rendezvouses schools for learning and experience both for teachers and learners. Each of them goes to school every day for the best learning experience to happen.

Bray (2007) commented that in the past, the broad utilization of remedial education was bound to a couple of nations in the previous two decades. Consumption on remedial instruction has extended quickly in the post-communist countries of Eastern Europe and also in several states such as India, South Africa, South Korea, Portugal, Brazil, Turkey and Kenya. More recently, remedial teaching has developed a policy concern in a few Western nations like Canada, France, England and Austria (Davies 2004, Ireson & Rushforth 2014). With the development of remedial teachings, there has been a necessity to create a system fit for this program. Most countries have developed a system to help in the institutionalization of the remedial program.

Pupils at all levels benefited significantly from the tracking program, and the differences persisted a year after the program had finished, (Duflo, Dupas, and Kremer, 2008) Given the similarities in educational context across Ghana and Kenya and the ready availability of extra (untrained) teachers in Ghana through the Youth Employment Program, the successes of the Kenya study indicated an opportunity to replicate and extend the results in a new context. The similarity of this program and the current remedial education in Kenya was a result that was obtained due to the similarity in the goal they have of increasing the quality of the students' education.

In some countries, remedial teaching seems to flourish most at specific pressure points. For instance, in Sri Lanka, these focuses are class four when pupils are called upon to take grant examinations and shape five and six when learners need to make "O" and "A" level examinations. This is on account of these examinations enable pupils to join renowned and excellent schools and be qualified for stipends, for example, boarding and other expenses (Raffick, 2004).

The usefulness of the remedial teaching program is analyzed given the change in the learning goals and which is estimated by appraisal marks. In an investigation directed in Tamil, the level of students scored checks in the middle of zero to twenty-five and twenty-six to fifty shows diminishing pattern from

beginning to final evaluation for Tamil dialect. The level of understudies who scored stamps in the middle of fifty-one to seventy-five likewise demonstrates a diminishing pattern for Tamil language aside from a slight increment in transitional appraisal in Tamil Language (Becker, 2010). Overall, the remedial teaching program ended up being successful in enhancing the learning accomplishment of the learners in Tamil Language (Heyneman, & Loxley, 2010).

The use of remedial teaching to supplement publicly funded school education is an international education policy issue. In many countries, household expenditure on private tutoring is so pervasive that it is called a "shadow education system" (Bray, 2007). In the past, the extensive use of private tutoring was confined to a few countries but over the past two decades' expenditure on private tutoring has expanded rapidly in the post-socialist countries of Eastern Europe as well as in countries as diverse as South Korea, India, Portugal, South Africa, Brazil, Kenya and Turkey (Bray 2006). More recently, private tutoring has emerged as a policy issue in several Western countries such as Austria, France, Canada and England (Davies 2004, Ireson and Rushforth 2005).

A study done by Asio, (2020) came to a conclusion that most remedial classes failed due to poor structuring of the remedial program. It showed that this impacted the students' performance negatively. A majority of schools have focused on providing the service without consideration of the impact of the structuring of the program on the students' performance.

In Gutierrez's, (2011) findings, he concluded that remedial teachers were poorly trained for remedial teaching. Therefore, it was the researcher's view that secondary school remedial teachers need to be trained for the program to be effective in the teaching and learning situations. According to Gutierrez, (2011), Mexican secondary school teachers who were teaching reading remediation did not have dynamic material, capable of helping remedial students.

This also concurred with the findings from Al Othman, & Shuqair, (2013) that the methods and materials used in the remedial teaching process were not effective in Arab nations. The remedial education programs that were offered in the colleges, focused on delivering the basic learning of the language, were quite ineffective in helping the students fit into the societies where they have to constantly use the English language (Al Othman, & Shuqair, 2013). The remedial teaching material was too basic to capture the attention of some of the remedial students. The above researcher's point of view was that materials for use for both teachers and students were grossly inadequate.

2.2 Timing, Frequency and Preparation of Remedial Classes

Munene, et al (2017) emphasized the need for detailed planning of the program, careful selection and matching of children, a wide choice of reading materials, an appropriate training of tutor and tutee and the careful monitoring and evaluation of the whole process. Furthermore, teachers should identify pupils' diverse learning needs before preparing for remedial lessons, so that they may design appropriate plans to facilitate effective teaching and learning. Since learners have different characteristics in learning, teachers must devise different learning activities.

Mburugu, (2012) claims that even if the MoE, (Ministry of Education) has permitted schools to offer remedial education, it has not specified orders on how remedial teaching ought to be conducted. Teachers may carry out paid remedial education and claim to offer free services to their students. Guidelines on remedial education by the government do not spell out well the roles of the head teachers; teachers and with other experts towards developing a common objective. Such teamwork must be intentionally and specially designed, and the tasks of each concerned should be defined and approved. Most schools have resorted to developing their own order on how remedial classes are run.

According to Banerjee et al (2007), education stakeholders often emphasize the need for additional teachers, focusing on over-enrolment and high pupil-teacher ratios as the critical problems in developing-world schools. However, research from studies such as the Balsakhi evaluation suggests that the key factor may be the emphasis on targeting instruction at the pupil's actual learning levels. A study in Kenya that provided extra teachers to classrooms in several treatment groups showed that simply reducing class size had no effect on pupil achievement, but when classes were tracked by ability level, students' test scores increased significantly.

While the past decade has seen tremendous increases in primary school access, secondary school access remains low, but with recent developments, there is an increase in the secondary school access due to the 100% transition policy. Kinoti, &Philpott, (2011) worked with the world university service of Canada in the promising practices in the refugee education and they stated that, In the crowded classrooms of Dadaab and Kakuma refugee camps in Kenya, students huddle together over unsteady desks that balance on crumbling floors. Under-qualified and overburdened teachers face the arduous task of teaching over one hundred students packed into a single classroom, often with only a chalkboard and a small number of textbooks as resources.

In schools, children advance on the primary objectives are frequently measured, checked much of the time, and the outcome of those evaluations are utilized to enhance the individual pupil practices and exhibitions, and also to

improve the educational modules in general (Lezotte, et al 2011). Appraisal in Kenyan schools depend on national examination that is relied upon to quantify the accomplishment of understudies (The Republic of Kenya, 2012). It has however been accounted for that these open examinations don't give a deliberate and intercession framework to enhance students' accomplishments (Oduol, 2006)

In Kenya, the decline in students' academic performance in National Examinations is as a result of nonattendance of checking of learning performance system that could give commencing to the course of action of remedial methodologies. This was to address the deficiencies delineated by competitors before they sit for the national examinations. These tests have been reported insufficient in evaluating incapable schools. These findings are supported by Hallak and Poisson (2007) concludes that provision of remedial teaching may help pupils to overcome deficiencies in learning to comprehend and enjoy mainstream lessons enabling them to compete fairly with their peers.

Wanyama & Njeru (2004) identify that remedial teaching tends to focus on subjects that are deemed to be instrumental particularly languages, mathematics and science. This was later confirmed by Mburugu (2012) in a study in Imenti North district of Kenya which found that remedial teaching was offered to form three and form four classes in all subjects with more emphasis on mathematics, sciences and languages. The study sought to identify areas of focus during remedial teaching.

Caras, (2019) states that there is still a need for direct instruction for students necessary to connect experiences knowing that they are learning. Students learn from various experiences that is why traditional teaching is still accepted and proven to be still effective through time. In this context, Mbwiri, (2016) concluded that the constructivist approach was not superior to the traditional approach of instruction on a 10-week remedial class. This means that approaches to remedial classes can vary depending on the students, environment, and the teachers themselves. There are some learners who perform very poorly in their academic subjects. They commit some of these learners to absenteeism because of family issues, financial problems, social matters, and other related issues.

According to the study by Jarrar, (2014), the Chicago Public Schools (CPS) instituted an accountability policy that tied summer or remedial school to performance on standardized tests for remedial students to assist them in their learning challenges. Using a regression discontinuity design, the researchers discovered that the net effect of these remedial programs was to substantially increase academic achievement among struggling third graders for them to move to next grade level. Based on teacher's assessment and diagnostic test results in developed countries, the student may be placed in classes (clinical remediation) which are most likely to provide

improved learning outcome benefits (Smith & Wallace, 2011).

Learners are the core of the education process, which entails day-to-day activities and performances. Teachers need to do extra efforts to supplement their teachings from time to time and Nazeha, et al (2020) identified ten factors that motivate teachers to develop supplementary learning materials. Most of these students attend their everyday classes to pass their assessments that will assure them that learning is essentially understood.

Vos, et al. (2004), pointed out that, in Kenya, attending school had both direct and indirect costs. Such costs lower the resources available for household consumption. The researcher tended to reveal certain important issues that are unique to pupils' performance in primary schools that require being addressed by the strategy makers, in their effort to improve performance in primary schools as one of the SDGs (Sustainable Development Goals).

3. Methodology

Nzoka, & Orodho (2010) define research design as one that characterizes an exploration outline as the pact of conditions for gathering and examination of data in a way that objectives join essential state to the exploration reason with least process. This research is both a quantitative and qualitative research. This research was looking to see looked at the perceptions of teachers and students on institutionalization of remedial classes. This study therefore used both descriptive and correlational research designs. Descriptive research design helped in describing the institutionalization of remedial classes. Correlational research design helped to show the degree of correlation between the remedial class ratings and the factors influencing academic performance associated with remedial classes. The approach also provided a fast, convenient and economic way of obtaining data on the perceived institutionalization of remedial classes in Kericho County, Kenya.

This study was done in Kericho County. There are two hundred and twenty-four (224) secondary schools in Kericho County. Nzoka, & Orodho (2010) posit that every one of the individuals under consideration in any field of study constitute a universe or targeted population, only a few items from the target population in universe are selected for study. The researcher therefore inquired of the schools that conduct remedial teaching and purposively chose them for the study.

Nsubuga., et al, (2000) argued that no particular principles on the most proficient method to get a satisfactory model have been planned. They propose that in a homogeneous circumstance a little sample would be required while in a heterogeneous variable circumstance a huge sample is required. The sample was chosen in view of the researcher's judgment that has the reason for the examination that was searching for the individuals

who had the experience identifying with the wonder to be inquired about (Creswell., 2005).

According to Mugenda and Mugenda (2013), when the study population is less than 10,000, a sample size of between 10% and 30% is a good representation of the target population and hence 10% will be adequate for this study. Kotz, et al (2006) states that sample sizes should be no less than 10% of the population. Purposive sampling technique was used to select 10% of the 224 schools which was twenty-two (22) boarding secondary schools that have remedial programs in Kericho county to participate in the study. This helped in ensuring that the information received was rich and it helped in utilizing the limited resources. It also helped in avoiding collecting unnecessary or inaccurate data. This sampling technique helped in time management and cost effectiveness. The study respondents were categorized into two groups namely, the teachers, and students.

The researcher then used purposive sampling to sample one form three class (approximately 40 students) and their teachers as the representative respondents so as to get an equal number of students from each school. The form three class was selected because they have used the remedial program longer than the form one and two classes. The researcher avoided using form four class because most schools oppose allowing their candidates to participate in the research. This was so as to ensure that the study benefited from a wide variety of views based on the topic under investigation. The researcher used questionnaire as the main research tool.

Content validity of the questionnaire in this study was ensured by conception of the variables from the literature reviewed. For high content validity, the researcher operated within the limits of the research topic and the research questions under investigation. After the consultation with experts, the vague, ambiguous or confusing items were modified for improvement.

To ensure the reliability of the instruments, the researcher did a pilot study in Chemundu zone. This involved respondents from seven of the schools that were chosen randomly. The test scores were then correlated to assess reliability.

The Cronbach's alpha coefficient was employed to compute the internal consistency in order to establish the degree to which the contents in the questionnaires are consistent in giving the same results every time the instrument is administered. Gay, & Kirkland, (2003) suggests that a coefficient of 0.60 is considered adequate but a coefficient of 0.80 is good. A reliability of 0.6 or 0.8 indicates that there is a 60 per cent or 80 per cent consistency respectively in the scores that are produced by the instrument. The acceptable Cronbach alpha acceptable to consider the instruments reliable was estimated to be 0.60 to 0.95. The Cronbach alpha for this study was 0.971 as shown in the tables two and three below. This showed that there was great deal of covariance among the items relative to the variance. This

showed that the items had relatively high internal consistency.

Reliability Statistics

Cronbach's Alpha	N of Items
.971	37

When the data had been collected from the respondents, it was first edited to organize the data. The raw data collected was then subjected to pre-processing where there were questionnaires that were not answered by the respondents. Data was then fed into the appropriate statistical software for analysis and interpretation. The demographic data was then analyzed and presented in

frequency distributions and percentages. The descriptive statistics (means and standard deviation) were used to analyze question one, two and four. Levene's Independent T-test analysis was employed for research question three. Pearson's correlational statistical treatment of data was employed for research questions five and six. The quantitative data was summarized and sorted out and displayed through graphs, charts and tables. The analyzed data was presented in form of pie charts, bar graphs and tables. The analysis of data was done using Statistical Package of Social Sciences (SPSS) version 25 of windows.

4. Results and Discussion

4.1 Demographic Information

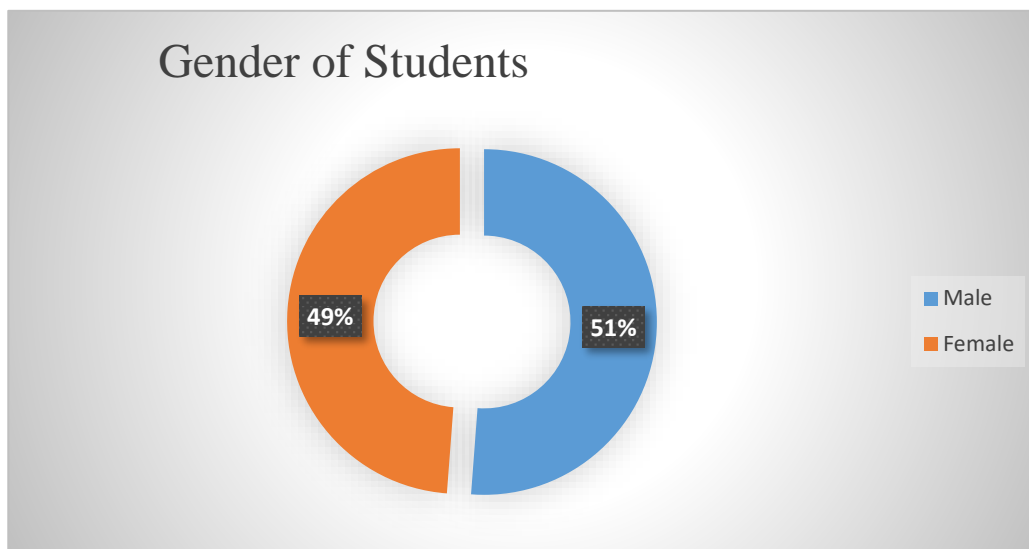


Figure 2: Gender of Students

As indicated in figure 2 above, Among the 880 students who participated in the study, 451 students (51.2%) were male, while 429 students (48.8%) were female. The study required student respondents to indicate their gender so as to help assess whether there would be a significant difference in the students' rating of their teachers when classified according to gender. Asking gender questions in a survey could provide an insight

into patterns among different gender categories. These questions help to determine how gender impacts the choices of an individual, thereby having an impact on the survey (Upchurch, 2020). Knowing the gender of our survey respondents is critical to a variety of analyses. Gender affects how a person views remedial classes and how it is viewed by the world.

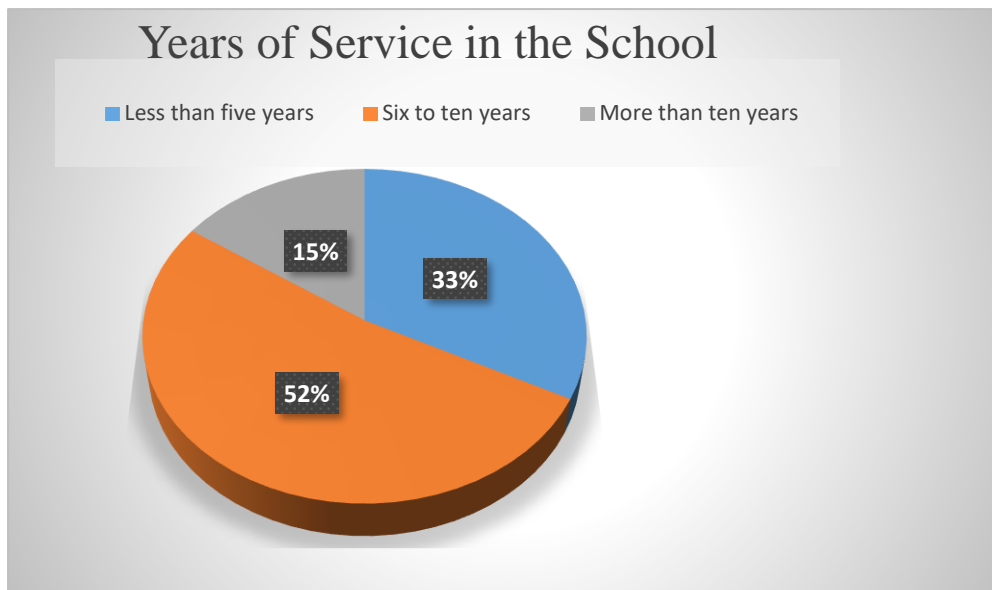


Figure3: Teachers' Years of Service

As indicated in Figure 3, 32.5% of teachers reported a tenure of "Less than five years," with 93 teachers falling into this category. Meanwhile, the majority of teachers, comprising 52.1% of the total respondents, reported serving for "Six to ten years," with 149 individuals falling within this tenure range. Furthermore, 15.4% of the surveyed teachers reported a tenure of "More than ten years," accounting for 44 teachers. This distribution shows a significant proportion of experienced faculty members among the respondents. Experience is an

important that reflects the teachers' career (Burroughs, et al 2019) and determines the success of education (Garcia & Weiss 2019). The longer a teacher has been working in the teaching sector, the more experience the teacher has had, so someone with a long working period is different from a new teacher (Garcia & Weiss 2019). Other studies mentioned that the more teaching experiences, the more teaching methods implemented during the remedial classes to boost an active and pleasant interaction between teachers and students.

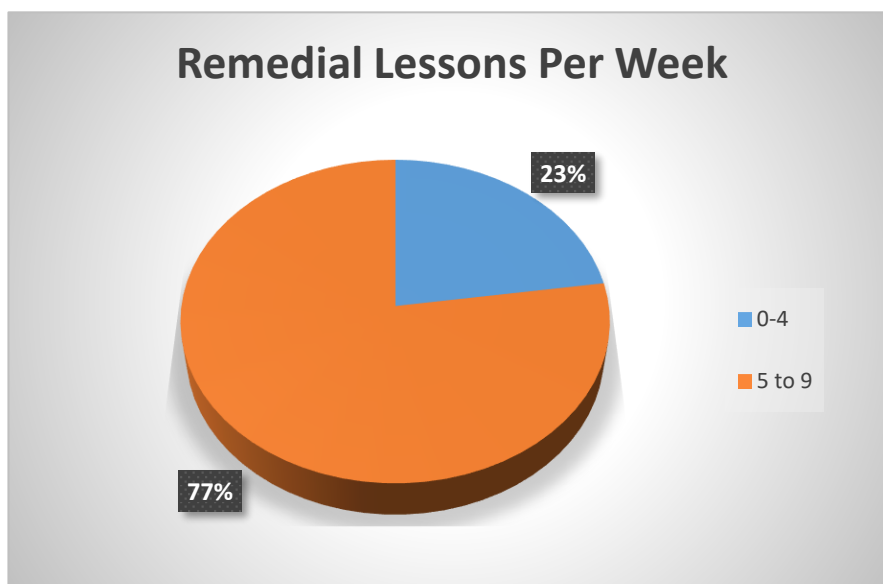


Figure 4: Redial lessons per week

Figure 4 indicates that a majority of teachers 77% (220) had 5-9 remedial lessons per week while 23% (66) of the teachers had 0-4 remedial lessons per week. Nyagosia, (2011) commented that, promoting extra-classes for students, introducing effective teaching-learning

methods and instructional strategies, using technology, rewarding students for good performance serves as a motivating factor and when they achieve low grades than they usually tend to work more to make improvements. Gayathri (2021) comments that remedial educational

classes mostly take around 2 years (45 mins and 5 days a week). But, it depends on the student and his/her level of learning difficulty. In conclusion, remedial lessons vary based on the subjects being taught.

Institutionalization of Remedial Teaching

Distribution of Remedial lesson times

This question sought to show the times that remedial classes are offered. These included morning, lunch breaks, and evening and weekend hours.

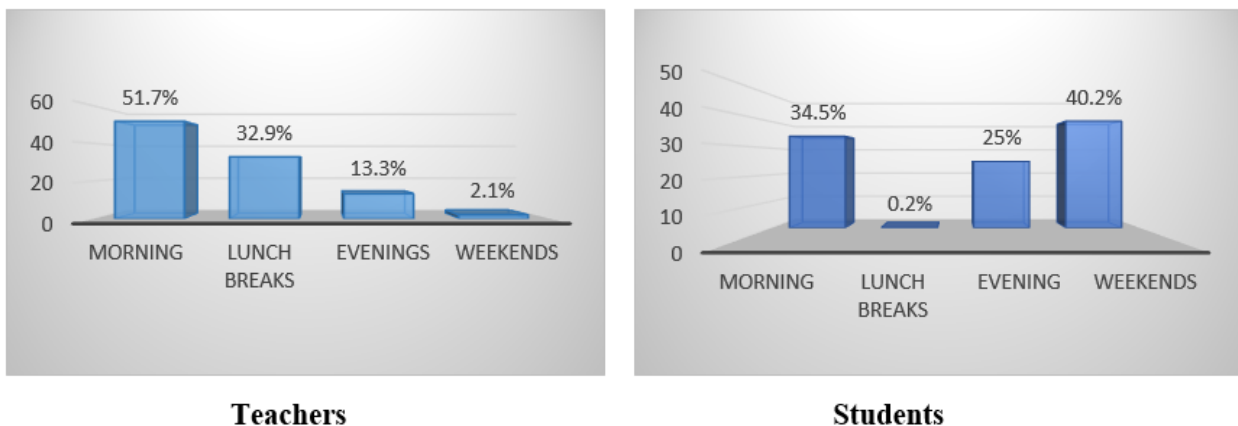


Figure 2 : Distribution of remedial lesson times

As indicated in figure 5, among 286 teachers, majority (51.7%) reported receiving remedial lessons in the morning, followed by (32.9%) during lunch breaks, and a smaller proportion (13.3%) in the evening. Only a minimal number (2.1%) reported having remedial lessons on weekends, suggesting that the majority of such sessions are scheduled on weekdays. However, according to 880 students who also responded to the same, majority of remedial lessons (40.2%) are conducted on weekends, followed by morning sessions (34.5%) and evening sessions (25.0%), while a very small percentage (0.2%) are scheduled during lunch break. The disparity in response between students and teachers on when remedial lessons are conducted may point to the remedial lessons not being clearly defined in the schools.

According to Kimonge (2024), he supported the statement made by the Kenyan Cabinet Secretary of education, Ezekiel Machogu who banned early morning and late evening remedial classes. He commented that waking up early and sleeping late was uncalled for. He argued this by saying that it was akin to torture and that schools shouldn't feel like prisons. With this argument, it is detrimental to note that the difference in ratings could be as a result of the instructions given by the education cabinet secretary.

Methods employed in Conducting Remedial lessons

This question sought to show the methods used when conducting remedial classes. These included notes taking, lecture, revision, experiments, revision, discussions and covering the syllabus.

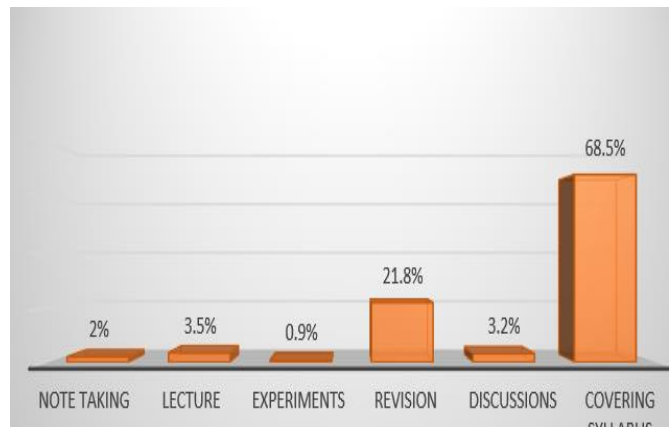
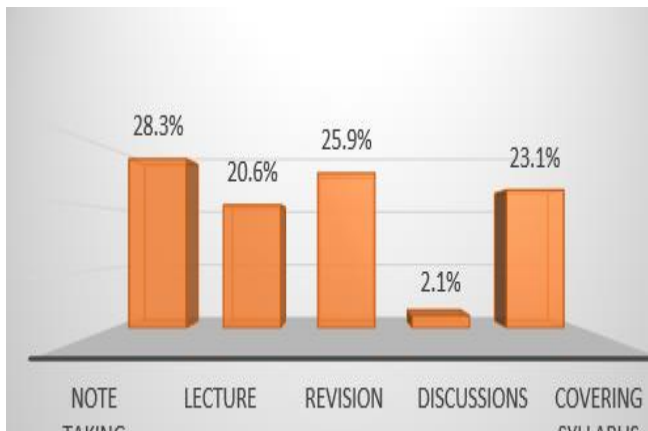


Figure 3 : Methods employed in conducting remedial lessons

Figure 6 illustrates the distribution of activities in remedial lessons as reported by teachers and students, with note-taking comprising 28.3% of the total number of respondents, followed by revision at 25.9%, covering syllabus at 23.1%, lectures at 20.6%, and discussions at 2.1% for teachers while the students differed greatly with a majority of the students (68.5%) reporting that the lessons involve covering the syllabus, while other methods include revision with (21.8%) of the students, lectures (3.5%), discussions (3.2%), note-taking (2.0%), and conducting experiments with (0.9%) of the students. This shows that there is a disparity between the reports of the teachers and those of the students. Salguero (2016) commented that most teachers are uninterested in the remedial classes because they expect students to understand everything they teach in the regular classes. This therefore makes them inclined to cover the syllabus

during remedial classes rather than focusing on the grasping of the revision content.

Sudhakar, (2018) commented that, each pupil is different in terms of learning ability, academic standards, classroom learning and academic performance, and each has his own in learning. The aim of remedial classes is to provide learning support to pupils who lag far behind their counterparts in school performance. By adapting school curricula and teaching strategies, teachers can provide learning activities and practical experiences to students according to their abilities and needs. They can also design individualized educational programs with intensive remedial support to help pupils consolidate their basic knowledge in different subjects, master the learning methods, strengthen their confidence and enhance the effectiveness of learning.

Subjects Taught During Remedial Lessons

This question sought to gauge the subject areas covered during remedial classes. These included sciences, languages and humanities.

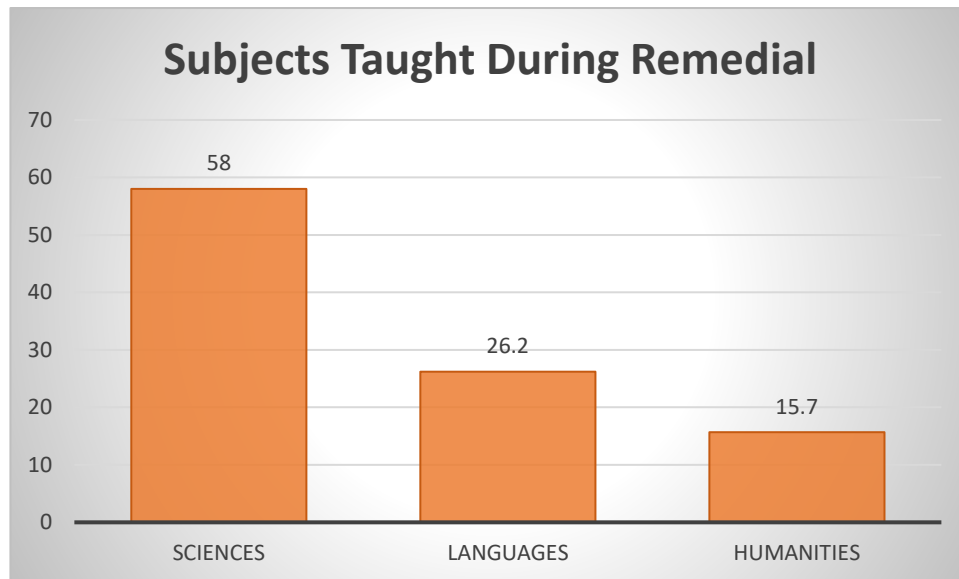


Figure 4 : Subjects taught during remedial

In Figure 7, as reported by the 286 respondents, Sciences emerged as the most commonly addressed subject, with 58.0% of respondents indicating their inclusion in remedial lessons. Languages follow, representing 26.2% of responses, while Humanities constitute a smaller proportion, reported by 15.7% of respondents. These findings suggest a focus on core academic subjects, particularly in the sciences, within the remedial education framework. Wanyama and Njeru (2004) suggested that remedial lessons tended to focus on subjects that are deemed to be instrumental, especially the languages, mathematics and sciences. This has been as a result of repeated poor performance in the so-called instrumental subjects.

Omondi, (2013) commented that dismal performance in the sciences limits individuals' opportunities in competitive professional courses that are science oriented. Furthermore, Kenya's vision 2030 initiative aims at making the country a newly industrializing middle-income country providing high quality life for all its citizens. The realization of this vision calls for the harnessing of the science ability of both men and women in the country so that they can contribute to nation building. As shown in the figure, the teachers showed that all the areas were considered but the majority of the remedial classes were sciences.

Teachers' and Students' Rating on the Institutionalization of Remedial Classes

Research Question 1. How do students rate their teachers in the institutionalization of remedial classes?

Research Question 2. How do teachers rate themselves on the institutionalization of remedial **Timing, Frequency and Preparation of Remedial Classes**

The study sought to examine the Teachers and Students ratings on remedial classes in terms of Timing, Frequency and preparation of remedial classes. Respondents were asked to indicate their level of agreement on a scale of 1 to 4 with 1 representing strongly disagree, 2 representing disagree, 3 representing agree and 4 representing strongly agree.

The average mean scale (institutionalization) was interpreted in a range of 1-4 where 1.00 – 1.49 is strongly disagree (poor institutionalization), 1.50 – 2.49, is disagree (fair institutionalization), 2.50 – 3.49 is agree (good institutionalization) and 3.50 – 4.00 strongly agree (excellent institutionalization).

Table 1: Timing, Frequency and Preparation of remedial classes

Respondents		N	Mean	Std. Deviation
Students	We have remedial classes everyday	880	2.9909	1.00620
	The notes used in remedial classes differ from normal class notes	880	2.6489	.99744
	We have remedial classes morning and evening revision time	880	2.9761	.95311
	Remedial classes are scheduled based on our comfort and desire to study	880	2.7693	1.05275
	We choose the topics to be covered during remedial classes	880	2.6489	1.00199
	I prepare for remedial classes times with my various needs in mind	880	2.7648	.97541
	The teachers prepare for remedial classes times with my various levels of abilities in mind	880	2.7557	1.02665
	The time intervals of remedial classes are spaced	880	2.8682	.88001
	The lesson(s) i am taught fit well with time scheduled for remedial lessons	880	2.8307	.99930
	I have remedial lessons during times that i have no other distractions	880	2.8170	.93931
	The best remedial hours are scheduled for the most demanding content areas to be covered	880	2.9250	.90445
	My remedial classes follow a fixed timetable	880	3.0341	.80313
	Average	880	2.8376	.97039
Teachers	Remedial lessons are offered during the morning and evening revision time	286	3.3881	.67517
	Remedial classes are scheduled based on students' comfort and desire to study	286	3.4301	.56847
	I prepare for remedial classes time with the various needs of the students in mind	286	3.3881	.59211
	I prepare for remedial classes time with the various abilities of the learners in mind	286	3.3706	.64540
	I space the intervals of remedial classes	286	3.2972	.63173
	The lesson(s) I teach fit well with the time scheduled for remedial classes	286	3.5455	.62382
	I schedule my best remedial hours for the most demanding content areas to be covered	286	3.4301	.59265
	I follow a stipulated timetable for my remedial classes	286	3.4196	.75312
	I teach remedial classes everyday	286	3.3566	.69993
	Average	286	3.3895	.65722

From table 2 above, students agreed that they have remedial classes every day, with a mean of 2.9909 and a standard deviation of 1.00620. Additionally, they indicated that the notes used in remedial classes differ from normal class notes, (M=2.6489; SD= 0.99744). According to Sudhakar (2018), diverse methods and materials are used in remedial teaching to provide support the subject being learned. Furthermore, students expressed agreement that remedial classes are scheduled based on their comfort and desire to study, (M=2.9761; SD= 0.95311).

Moreover, students agreed that they choose the topics to be covered during remedial classes, (M=2.6489; SD= 1.00199). They also indicated agreement with the statement that they prepare for remedial classes with their various needs in mind (M= 2.7648; SD=0.97541). Additionally, students agreed that the teachers prepare for remedial classes with their various levels of abilities in mind, (M=2.7557; SD=1.02665). Furthermore, students expressed agreement that the time intervals of remedial classes are appropriately spaced, (M=2.8682; SD= 0.88001). They also indicated that the lessons they are taught fit well with the time scheduled for remedial lessons, (M=2.8307; SD=0.99930). Moreover, students agreed that they have remedial lessons during times

when they have no other distractions, with a mean of 2.8170 and a standard deviation of 0.93931.

Additionally, students agreed that the best remedial hours are scheduled for the most demanding content areas to be covered, (M= 2.9250; SD= 0.90445). Finally, they indicated agreement that their remedial classes follow a fixed timetable, (M= 3.0341; SD= 0.80313).

The results gave an average (M= 2.8376; SD= 0.97039). The standard deviation yielded was a high standard deviation indicating that the individual scores were far from the mean. This result shows that the students rated the timing, frequency and preparation of remedial classes to be having a good institutionalization (2.50 – 3.49 good institutionalization). In agreement to these findings, Campbell, (2020) argues that remedial classes should not be carried out during activities that students love. He connotes that after school hours may seem like the prime time for remedial classes but if this is the time the student could be or wants to participate in extracurricular activities, you may be encouraging failure.

Moving on to the teachers' responses, they indicated agreement that remedial lessons are offered during morning and evening revision time, (M= 3.3881; M=

0.67517). They also expressed agreement that remedial classes are scheduled based on students' comfort and desire to study, (M= 3.4301; SD= 0.56847). Furthermore, teachers agreed that they prepare for remedial classes with the various needs of the students in mind (M= of 3.3881; SD= 0.59211). Moreover, teachers indicated agreement that they prepare for remedial classes with the various abilities of the learners in mind (M= 3.3706; SD= 0.64540). Additionally, they expressed agreement that they space the intervals of remedial classes appropriately, (M= 3.2972; SD= 0.63173). Furthermore, teachers agreed that the lessons they teach fit well with the time scheduled for remedial classes, (M= 3.5455; SD= 0.62382). Additionally, teachers indicated agreement that they schedule their best remedial hours for the most demanding content areas to be covered (M= 3.4301; SD= 0.59265). They also expressed agreement that they follow a stipulated timetable for their remedial classes (M= 3.4196; SD= 0.75312). Finally, teachers agreed that they teach remedial classes every day (M= 3.3566; SD= 0.69993).

The results gave an average (M= 3.3895; SD= 0.65722). The standard deviation yielded was low indicating that the individual scores were closer to the mean. This result shows that based on the teachers' ratings, timing, frequency and preparation of remedial classes had a good institutionalization (2.50 – 3.49 good institutionalization). Louge, et al. (2022) commented that successful remediation programs focus on the very skills that children are missing or struggling with. They don't simply reteach a skill or knowledge content in the same way that it was initially taught. The concept of preparation, timing and the number of classes are to be regulated for best institutionalization of remedial classes.

Significant Difference between the Students' Ratings and Teachers' Ratings of the Institutionalization of Remedial Classes

Research Question 3. Is there a significant difference in the students' and teachers' rating of the institutionalization of remedial classes?

Table 2: Independent Samples T Test (Students' and Teachers' Ratings of Institutionalization of Remedial Classes)

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Timing, frequency, and preparation of remedial classes	Equal variances assumed	8.321	.004	-16.248	1162	.000	-.56764	.03494	-.63619	-.49910
	Equal variances not assumed			-17.511	554.655	.000	-.56764	.03242	-.63132	-.50397
Preparation and motivation to study	Equal variances assumed	44.614	.000	-17.180	1162	.000	-.64620	.03761	-.72000	-.57240
	Equal variances not assumed			-21.030	735.638	.000	-.64620	.03073	-.70653	-.58588
Feedback to students	Equal variances assumed	90.744	.000	-16.008	1162	.000	-.57874	.03615	-.64967	-.50781
	Equal variances not assumed			-20.164	789.621	.000	-.57874	.02870	-.63508	-.52240
Optimism about the outcome of remedial classes	Equal variances assumed	3.951	.047	-8.164	1162	.000	-.42735	.05235	-.53006	-.32465
	Equal variances not assumed			-10.505	833.268	.000	-.42735	.04068	-.50720	-.34750
Repetition of difficult concepts	Equal variances assumed	204.221	.000	-18.512	1162	.000	-.83676	.04520	-.92545	-.74808
	Equal variances not assumed			-26.538	1071.714	.000	-.83676	.03153	-.89863	-.77489

From Table 2 above, For Timing, frequency, and preparation of remedial classes, Levene's Test indicated a significant difference in variances between the groups

($F = 8.321$, $p = 0.004$). The t-test results showed a significant difference in mean ratings between students and teachers ($t = -16.248$, $df = 1162$, $p < 0.001$).

Therefore, we reject the null hypothesis of no difference. For Preparation and motivation to study, Levene's Test indicated a significant difference in variances between the groups ($F = 44.614$, $p < 0.001$). The t-test results showed a significant difference in mean ratings between students and teachers ($t = -17.180$, $df = 1162$, $p < 0.001$). Therefore, we reject the null hypothesis of no difference.

For Feedback to students, Levene's Test indicated a significant difference in variances between the groups ($F = 90.744$, $p < 0.001$). The t-test results showed a significant difference in mean ratings between students and teachers ($t = -16.008$, $df = 1162$, $p < 0.001$). Therefore, we reject the null hypothesis of no difference. For Optimism about the outcome of remedial classes, Levene's Test indicated a significant difference in variances between the groups ($F = 3.951$, $p = 0.047$). The t-test results showed a significant difference in mean ratings between students and teachers ($t = -8.164$, $df = 1162$, $p < 0.001$). Therefore, we reject the null hypothesis of no difference. For Repetition of difficult concepts, Levene's Test indicated a significant difference in variances between the groups ($F = 204.221$, $p < 0.001$). The t-test results showed a significant difference in mean ratings between students and teachers ($t = -18.512$, $df = 1162$, $p < 0.001$). Therefore, we reject the null hypothesis of no difference.

For all aspects tested with regards to whether there is a significant difference between the students' and teachers' ratings on the institutionalization of remedial classes, there are significant differences between the ratings of students and teachers, indicating divergent perceptions between the two groups regarding the tested aspects of remedial classes. Ajai (2016) conducted a study where he commented that Mathematics teachers are not interested in the subject and do not help their students by way of catering for their individual differences and needs. We therefore reject the null hypothesis that there is no significant difference between students' and teachers' ratings on the institutionalization of remedial classes.

5. Conclusion and Recommendations

5.1 Conclusion

Based on the findings of this study, the following main conclusions could be drawn:

1. The institutionalization of remedial classes in terms of timing, frequency and preparation of remedial classes, preparation and motivation to study, feedback to students, optimism about the outcome of remedial classes and repetition of difficult concepts were rated by both students and teachers from good to excellent. The ratings of the two groups reveals that remedial classes are effective on academic performance of students.

2. Ratings on academic performance of students was excellent in relation to the following factors; interest to learn and good on motivation, study habits and self-efficacy.
3. There is a significant difference in the students' ratings of their teachers' perceptions on the institutionalization of remedial classes when classified according to gender.

5.2 Recommendations

Based on how the students rate remedial classes, the study recommended that:

- i. Remedial classes should be organized to ensure that the time is scheduled appropriately, and that the preparation should be different from the normal classes.
- ii. Students should be motivated to study during remedial classes. Using one remedial class as a motivational speech class is recommended.

Suggestions for further studies

This study focused on the teachers' and students' perceived effectiveness of remedial classes on the academic performance of secondary school students in Kericho county. Further research could be done on the following:

1. An investigation should be done on the challenges that face provision of remedial classes in secondary schools
2. A study on the influence of parents' involvement in remedial classes to students' academic performance in secondary school
3. A study on the development of a model for remedial curriculum and its relation to students' academic performance.
4. A study on the influence of teachers' attitudes in remedial classes in relation to students' academic performance.

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