

WEBSITE SYSTEM: A CASE STUDY OF ST ANDREW'S S.S RUBANDA

BY

TWEBEMBERE JUSTUS 17/A/BSCED/1015/F

AINEBYONA IMMACULATE 17/A/BSCED/0646/F

BYOMUGABE IVAN 17/A/BSCED/0673/F

**A PROJECT REPORT SUBMITTED IN PARTIAL FULFULMENT OF THE
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KABALE UNIVERSITY**

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DECLARATION

We **TWEBEMBERE JUSTUS, BYOMUGABE IVAN, and AINEBYONA IMMACULATE** declare that this project report is our original work and has never been submitted to any university or institution of higher learning for the award of a bachelor degree of science with education

Date

Signature:.....

TWEBEMBERE JUSTUS

Date

.....

Signature.....

BYOMUGABE IVAN

Date.....

Signature.....

AINEBYONA IMMACULATE

APPROVAL

This project report entitled "A website system" a case study of st Andrews secondary school Rubanda has been written under my supervision and is now ready for submission to the faculty of education, Kabale University with my approval

Signature

MR NABIMANY A DANIEL

Date.....

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DEDICATION

This work is dedicated to our parents, friends, and all our well-wishers for their great concern and prayers rendered to us throughout the struggle of our studies and this work as well

1)

ACKNOWLEDGEMENT

This work has been successful due to the assistance and cooperation of different personalities. First, we thank the almighty God, whose wisdom, ability and divine provision that has enabled us to complete this work. May his name be glorified forever.

Another vote of thanks goes to all our course mates and friends who through team work supported us academically, socially and spiritually. Our parents, sisters and brothers whose financial support, cooperation and love keeps us moving amidst all rough and smooth words

We thank our supervisor Mr. Nabimanya Daniel for all the support, guidance, encouragement and important ideas that have enabled us finish this work

We would also wish to acknowledge all our lecturers who have tirelessly trained us to who we are today. We shall live to remember you in all aspects of life

Many people deserve to be acknowledged, but we only ask the almighty God to bless them wherever they are. May God bless you!

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CHAPTER ONE

INTRODUCTION AND BACKGROUND 1.0

1.0 Introduction

ST Andrew's S.S, Rubanda is a government aided school found in southwestern Uganda and its motto is excellence through team work, its vision is to produce ladies and gentlemen who are God fearing, reliable and patriotic, It is located at 1 1/2 kilometer off Kabale kisoro road Ikumba sub county Rubanda district

St Andrew's S.S. Rubanda is increasing in terms of enrollment. This means that the school had to enhance and improve on means of communication so as to spread its information outside the school and even there was competition from private secondary Schools which were advertising and posting what was in their schools on websites.

At St Andrews therefore, all the work relating to the school's communication and information was done manually using noticeboards, assemblies, reports, which was not appropriate to the modern population. Therefore, in order to move in line with the current technology where everything is done electronically, there was need to develop a website system for various purposes. The development of a website for St Andrew's ss Rubanda was becoming a challenge in advance to be addressed. This had brought about delays in communication and delivery of information to parents, students, and other stakeholders outside the school, the information was not received in time as required which led to delays in attending school meetings by teachers, parents and stakeholders, students not responding quickly to school programs hence decline in standards of the school

1.1 Background of the study

Haforatron placed on the school web site is going to be on the market twenty-four hours each day, seven days of the week, and 12 months of the year. Therefore, all the knowledge ON the school web site should be timely correct. In real time data can offer stakeholder's confidence and

give information to the public in the right time. Whether or not it is somebody 1500 miles away, or a parent living down the road, everyone seems to be afforded identical chance to examine the school's web site on-line. directors college and college ought to see school web site because they act as the front entrance of the school, a chance to welcome all virtual guests and make them feel comfortable so as to create that nice 1st impression Used of computers and therefore the net was systematically increasing in faculties and in people's personal lives per the report 'The Swedes and therefore the Internet' (Internet Foundation in Sweden, 2016) over ninetieth of the Swedish population had access to the net, and there's currently a mean of two computers and one tablets per home in Sweden. The depth used of computers and therefore the net provided new opportunities and challenges for homeschool communication and relationships.

The school's web site was often seen as a window to the school, serving as a main location for public support and knowledge, significantly for friendly' used (both existing parents and prospective/potential parents). Construction of faculty websites, to some extent, reflects the school's beliefs, intentions, and techniques to speak and collaborate with families. Through learning college websites, we tend to gain data regarding the crucial parts and options for parental used to extend their involvement and influence on school management beneath the new condition of the digital society.

In the Swedish context, since the government provided a grant supported the amount of scholars, the inner value became the scholars, for whom their faculties compete (Lundahl, Erixon Arreman, Holm, & Lundstrom, 2013). Faculties usually conceive to use factors like geographical location, college profile, student action, or alternative advantages to draw in students through varied channels (Fredriksson, 2010) together with their websites.

It looks that personal faculties had a bigger intention to use the school web site to draw in and retain students and oldsters, and used their websites as an incident and place for advertising. This was often as a result of the market impact and competition within the curren! establishment affected personal faculties over public faculties. However, the education market had to create competition even between public faculties, within which the amount of scholars would play a crucial role, which inspires all faculties to figure intensely with promoting ways to drew in students and their folks (Fredriksson, 2011) Competition from private secondary Schools which

advertised and published what was taking place within the school premises on websites, some students not delivering reports to their parents. Information is passed on by used of noticeboards class teachers housed masters assemblies which was at times tiresome and expensive in a long run for some of the students, parents, and stakeholders who travelled long distances coming to the school for information like report forms, admissions, school projects and others, communication and information was not delivered well whenever it was needed and this degraded the school image and even the school lost students thus poor corporate identity of St Andrew's ss Rubanda therefore the school needs to develop a website in order to solve the above problem

According to (Fredriksson, A. 2010), Competition from personal secondary faculties that advertise and post what's in their faculties on websites, some students not delivering reports. to their folks, Currently, reports are provided at school to students though class teachers , data is passed on by used of noticeboards and then valuable in an exceedingly long-ter for a few of the scholars, parents, and stakeholders, World Health Organization travel long distances returning to the school for data like report forms, admissions, communication within the school and knowledge wasn't delivered well whenever it was required and this degraded the school image and even the school lost students thus poor co-operate identity of St Andrew's ss Rubanda and all these happened due to poor means of communication Therefore there was a need to develop web site management system to ease means of communication

1.2 Problem statement

Currently information is passed on by use of noticeboards, assemblies, through class teachers, housemasters which do not favor all the parties involved in the states of St Andrews Rubanda sec. school due to lack of information management system and this has resulted into Poor means of communication at St Andrews Rubanda causing to competition from private secondary Schools which advertised and published what was taking place within the school premises on websites, some students not delivering reports to their parents. Information was passed on by use of noticeboards class teachers house masters assemblies and this was at times tiresome and expensive in a long run for some of the students, parents, and stakeholders who travelled long distances coming to the school for information like report forms, admissions, school projects and others, communication and information was not delivered well whenever it was needed , this degraded the school image and even the school lost students thus poor corporate identity of St Andrew's ss Rubanda therefore the school needs to develop a website in order to solve the above problems.

1.3 Objectives of the study

1.3.1 General objective

To develop a website system for st Andrew's senior secondary school Rubanda.

Specific objectives

- ✓ To analyze the current means of communication at st Andrew's ss, Rubanda
- ✓ To design a website for St Andrew's ss Rubanda
- ✓ To test and validate the new system for st Andrew's ss Rubanda

1.1 Hypothesis

- m) What variables should be examined to establish how st Andrews secondary school is using its current means of communication?
- 2) What constitutes a useful and engaging school website to cater for various stakeholders including learners at st Andrews?
- 3) What development framework might be used to assist st Andrews secondary school to map its website in order to meet stakeholders' needs and learners?

1.5 Scope of the study

The study covered various scopes as explained below

1.5.1 Time scope

The system was conducted in six months from October 2019 to March 2020.

1.5.2 Content scope

The study was limited to developing and designing a website system for st Andrew's secondary school Rubanda

1.5.3 Geographical scope

The study was carried out in Rubanda district at st Andrew's ss Rubanda which is located in South Western Uganda. The study was basically to improve on the process of delivering information to parents, students, teachers, and stakeholders at large.

1.6 Significance of the Study

The study helped the administrators of st Andrew's ss Rubanda in determining which means of communication to use in order to meet the needs of the community especially parents and students.

The study findings helped future researchers since it will serve as a point of reference by any researcher who is likely to carry out research in a related field

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter analyzed the prevailing literature depicted by totally different scholars, writers, and authors.

2.1 Website Design and User Engagement

Internet usage has increased tremendously and rapidly in the past decade (Internet Used over Time 2014). Websites have become the most important public communication portal for most, if not all, businesses and organizations. As of 2014, 87% of American adults aged 18 or older are Internet users (Internet User Demographics 2013) Because business to consumer interactions mainly occur online, website design is critical in engaging users (Lee & Kozar, 2012). Poorly designed websites may frustrate users and result in a high rate of people visiting the entrance page without exploring other pages within the site (Google.com, 2015). On the other hand a well-designed website with high usability has been found to positively influence visitor retention (revisit rates) and purchasing behavior (Lee & Kozar, 2012).

Little research, however, has been conducted to define the specific elements that constitute effective website design. The International Standardized Organization (ISO) defines usability as the extent to which users can achieve desired tasks (e.g., access desired information or place a purchase) with effectiveness (completeness and accuracy of the task), efficiency (time spent on the task), and satisfaction (user experience) within a system. However, there is currently no consensus on how to properly operationalize and assess website usability (Lee & Kozar, 2012). For example, Nielsen associates usability with learnability, efficiency, memorability, errors, and satisfaction (Nielsen, 2012).

A remaining challenge is that the definitions of website design elements often overlap. For example, several studies evaluated organization by how well a website incorporates cognitive

architecture, logical and hierarchical structure, systematic information arrangement and categorization, meaningful headings and labels, and keywords. However, these features are also crucial in navigation design. Also, the implications of using distinct logos and icons go beyond graphical representation. Logos and icons also establish unique brand/identity for the organization (purpose) and can serve as visual aids for navigation. Future studies are needed to develop distinct and objective measures to assess these elements and how they affect user engagement (Lee & Kozar, 2012).

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Given the rapid increase in both mobile technology and social media used, it is surprising that no studies mentioned cross-platform compatibility and social media integration. In 2013, 34% of cellphone owners primarily used their cellphones to access the Internet, and this number continues to grow ("Mobile Technology Factsheet," 2013) with the rise of different mobile devices, users are also diversifying their web browser used. Internet Explorer (IE) was once the leading web browser. However, in recent years, FireFox, Safari, and Chrome have gained

significant traction (W3schools.com, 2015). Website designers and researchers must be mindful of different platforms and browsers to minimize the risk of losing users due to compatibility issues. In addition, roughly 74% of American Internet users used some form of social media (Duggan, Ellison, Lampe, Lenhart, & Smith, 2015), and social media has emerged &s an effective platform for organizations to target and interact with users. Integrating social media into website design may increase user engagement by facilitating participation and interactivity.

There are several limitations to the current review. Future studies may benefit from defining design to a specific topic, set of years, or other area to limit the number of search results. Second, we did not quantitatively evaluate the effectiveness of these website design elements. Additional research can help to better quantify these elements.

It should also be noted that different disciplines and industries have different objectives in designing websites and should thus prioritize different website design elements.

Others, such as academic researchers or healthcare providers, are more likely to prioritize privacy/confidentiality, and content accuracy in building websites (Horvath; Ecklund, Hunt, Ne;son, & Toomey, 2015). Ultimately, we advise website designers and researchers to consider

the design elements delineated in this review, along with their unique needs, when developing user engagement strategies.

2.2 School website as a platform for home school communication and parental involvement Previous research has reported some advantages of using school websites; for example, websites *enable* the conveyance of information to multiple families and the efficiently sharing and archiving of information about students' learning and progress, school policies and assignments, tips for family involvement, and other common topics (Goodall, 2016 Goodall, J. S. 2016). Thus, the importance of parent-teacher two-way communication and interaction using technologies is highlighted (Ho, Hung, & Chen, 2013).

2.3 Computer-based technology and student engagement

The digital revolution has profoundly affected daily living, evident in the ubiquity of mobile devices and the seamless integration of technology into common tasks such as shopping, reading, and finding directions (Zickuhr & Raine, 2014; Anderson, 2016; Smith & Anderson, 2016;). The use of computers, mobile devices, and the Internet is at its highest level to date and expected to continue to increase as technology becomes more accessible, particularly for users in developing countries (Poushter, 2016). In addition, there is a growing number of people who are smartphone dependent, relying solely on smartphones for Internet access (Anderson & Horrigan, 2016) rather than more expensive devices such as laptops and tablets. Greater access to and demand for technology has presented unique opportunities and challenges for many industries, some of which have thrived by effectively digitizing their operations and services (e.g., finance, media) and others that have struggled to keep up with the pace of technological innovation (e.g., education, healthcare (Gandhi, Khanna, & Ramaswamy, 2016).

Integrating technology into teaching and learning is not a new challenge for universities. Since the 1900s, administrators and faculty have grappled with how to effectively used technical innovations such as video and audio recordings, email, and teleconferencing to augment or replace traditional instructional delivery methods (Ka ware & Sain, 2015; Westera, 2015). Within the past two decades, however, this challenge has been much more difficult due to the sheer volume of new technologies on the market. For example, in the span of 7 years (from 2008 to 2015), the number of active apps in Apple's App Store increased from 5000 to 1.1-S-million. Over the next 4 years, the number of apps is projected to rise by 73%, totaling over 5 million

(Nelson, 2016). Further compounding this challenge is the limited shelf life of new devices and software combined with significant internal organizational barriers that hinder universities from efficiently and effectively integrating new technologies (Amirault, 2012; Kinchin, 2012; LinderVanBerschot & Summers 2015; Western, 2015).

Many organizational barriers to technology integration arise from competing tensions between institutional policy and practice and faculty beliefs and abilities. For example, university administrators may view technology as a tool to attract and retain students, whereas faculty may struggle to determine how technology coincides with existing pedagogy (Lawrence & LentleKeenan, 2013). In addition, some faculty may be hesitant to use technology due to lack of technical knowledge and/or skepticism about the efficacy of technology to improve student learning outcomes (Johnson, 2013; Lawrence & Lentle-Keenan, 2013; Lewis, Fretwell, Ryan, & Parham, 2013; Buchanan, Sainter, & Saunders, 2013; Reid, 2014; Ashrafzadeh & Sayadian, 2015;; Hauptman, 2015; Kidd, Davis, & Larke, 2016; Kopcha, Rieber, & Walker, 2016:). Organizational barriers to technology adoption are particularly problematic given the growing demands and perceived benefits among students about using technology to learn (Amirault, 2012;; Gikas & Grant, 2013; Paul & Cochran, 2013; Cassidy et al., 2014). Surveys suggest that two-thirds of students used mobile devices for learning and believe that technology can help them achieve learning outcomes and better prepare them for a workforce that is increasingly dependent on technology (Dahlstrom, 2012; Chen, Seilhamer, Bennett, & Bauer, 2015). Universities that fail to effectively integrate technology into the learning experience miss

opportunities to improve student outcomes and meet the expectations of a student body that has grown accustomed to the integration of technology into every facet of life (Revere & Kovach, 2011; Amirault, 2012; Cook & Sonnenberg, 2014;; Sun & Chen, 2016; Western, 2015).

We focused on computer-based technology given the specific types of technologies (i.e., web-conferencing software, blogs, wikis, social networking sites, and digital games) that emerged from a broad search of the literature, which is described in more detail below. Computer-based technology (hereafter referred to as technology) requires the use of specific hardware, software, and micro processing features available on a computer or mobile device. We also focused on student engagement as the dependent variable of interest because it encompasses many different aspects of the teaching and learning process (Wimpenny & Savin-Baden, 2013), compared

narrower variables in the literature such as final grades or exam scores. Furthermore, student engagement has received significant attention over the past several decades due to shifts towards student-centered, constructivist instructional methods (Wright, 2011), mounting pressures to improve teaching and learning outcomes (Axelson & Flick, 2011), and promising studies suggesting relationships between student engagement and positive academic outcomes (Center for Postsecondary Research, 2016; Hu & McCormick, 2012). Despite the interest in student engagement and the demand for more technology in higher education, there are no articles offering a comprehensive review of how these two variables intersect. Similarly, while many existing student engagement conceptual models have expanded to include factors that influence student engagement, none highlight the overt role of technology in the engagement

There is increasing recognition within the education sector that school websites will facilitate teaching, learning, and communication to reinforce the core operations and outcomes of education ; settings, however very little is understood concerning what constitutes an efficient and interesting college web site .Corresponding with advances in technology, college websites square measure evolving in their purpose, function, and used. to assist position the work conducted during this study, the college web site is outlined here as associate surroundings, that aligns with the college culture, mission and goals to modify and enhance teaching, learning, communication and innovation; connect and interact communities by facilitating the exchange of knowledge, ideas and resources to support the organizational and purposeful operations of a college. Information placed on the college web site is accessible twenty four hours every day, seven days per week, and three hundred and sixty five days a year. Therefore, all the data on the college web site should be timely and correct. In real time info can give stakeholder's confidence within the info denote. Up to now info is especially necessary for teacher websites that list assignments or schoolwork fer college kids and fogeys to envision whether or not it's somebody 1500 miles away, or a parent living down the road, most are afforded constant chance to envision the school's web site on-line. directors {and faculty and college and college} ought to see school web site because the outside door of the college, a chance to welcome all virtual guests and create them feel comfy so as to form that nice initial impression, Used of compvters and lheretore the web is systematically increasing in colleges and in people's non-public lives. per the report 'The Swedes and therefore the Internet' (Internet Foundation in Sweden, 2016) over

ninetyth of the Swedish population has access to the net, and there's currently a mean of two.07 computers and one.13 tablets per family in Sweden. The in depth used of computers and therefore the web provides new opportunities and challenges for home college communication and relationships, web site may be seen as a window to the school, serving as a main location for public support and data, significantly for folks' used (both existing parents and prospective/potential parents). Construction of college websites, to some extent, reflects the school's beliefs, intentions, and methods to speak and collaborate with families. Through finding out college websites, we have a tendency to square measure able to gain data concerning the essential components and options for parental used to extend their involvement in and influence on college management below the new condition of the digital society.

In the Swedish context, since the government provides a grant supported the amount of scholars, the inner market price becomes the scholars, for whom colleges compete; (Lundahl, Erixon Arreman, Holm, & Lundstrom, 2013). Colleges typically conceive to use factors like geographical location, college profile, student action, or different edges to draw in students through varied channels (Fredriksson, 2010) together with their websites. Thus, it's of interest to explore however colleges construct their websites to produce info that's helpful to oldsters so as to take care of and increase student volume.

A content analysis of selected government internet sites: A case study of Kingdom of Nepal looks that non-public colleges have a bigger intention to use the college web site to draw in and retain students and foyes, and to use their websites as an occurrence and place for advertising. This can be as a result of the market impact and competition within the current establishment maybe affects non-public colleges quite public colleges. However, the education market has attended make to competition even between public colleges, during which the amount of scholars will play a very important role, which inspires all colleges to figure intensely with promoting ways to draw in students and their folks (Fredriksson, 2010 Fredriksson, A. 2010)

Accessed via connectivity to the Internet or remote service, and used for a variety of purposes, school websites are increasingly becoming an embedded feature of the contemporary schooling landscape. Many schools are developing and using their websites to meet the needs of school communities and to extend their reach to the wider community. Yet, the investment that schools

commits to their website regarding time and finances are often driven by a number of different factors. In some instances, stakeholders, including students, parents, teachers and leaders, expect to access information related to school processes and events, and further communicate with staff anytime and anywhere (Piper, 2012).

Some schools choose to outsource the development and maintenance of their website to professional web developer. Others choose to have a much more hands-on approach, drawing on in-housed expertise from within the school community. Reasons for the varied approaches can be multifaceted. There may be a lack of available expertise to manage an online presence, inadequate resources or a need for greater understanding about the pedagogies that are best aligned with mobile learning (Rushby, 2012), which may steer a school towards a professional developer.

Further, a school that considers a website to be an avenue primarily for marketing may want to engage website developers with expertise in this domain. For others, however, the development and maintenance of a school website may not be an identified priority, with resources invested accordingly.

The authors propose that school websites can provide a platform that enriches and promotes learning and teaching (Piper, 2012), and that facilitates engagement and enhances communication processes (Gunduz, 2012; Piper, 2012), both within and beyond the school community. There is however, considerable variation in the ways schools are using their websites and the degree to which they align their websites with the needs of their various stakeholders.

Internet usage has increased tremendously and rapidly in the past decade (Internet Used over Time, 2014). Websites have become the most important public communication portal for most, if not all, businesses and organizations. As of 2014, 87% of American adults aged 18 or older are Internet users ("internet User Demographics," 2013) because business to consumer interactions mainly occur online, website design is critical in engaging users (Lee & Kozar, 2012). Poorly designed websites may frustrate users and result in a high "bounce rate" or people visiting the entrance page without exploring other pages within the site (Google.com, 2015). On the other

hand, a well-designed website with high usability has been found to positively influence visitor retention (revisit rates) and purchasing behavior (Kozar, 2012).

The International Standardized Organization (ISO) defines usability as the extent to which users can achieve desired tasks for example access desired information or place a purchase with effectiveness (completeness and accuracy of the task), efficiency (time spent on the task), and satisfaction (user experience) within a system. However, there is currently no consensus on how to properly operationalize and assess website usability (Lee & Kozar, 2012). For example, Nielsen associates usability with learnability, efficiency, memorability, errors, and satisfaction (Nielsen, 2012).

2.4 Student engagement

Given the rapid increase in both mobile technology and social media used, it is surprising that no studies mentioned cross-platform compatibility and social media integration. In 2013, 34% of cellphone owners primarily used their cellphones to access the Internet, and this number continues to grow (Mobile Technology Factsheet, 2013), with the rise of different mobile devices, users are also diversifying their web browser used. Internet Explorer was once the leading web browser. However, in recent years, FireFox, Safari, and Chrome have gained significant traction (W3schools.com, 2015). Website designers and researchers must be mindful of different platforms and browsers to minimize the risk of losing users due to compatibility issues. In addition, roughly 74% of American Internet users used some form of social media (Duggan, Ellison, Lampe, Lenhart, & Smith, 2015), and social media has emerged • an effective platform for organizations to target and interact with users. Integrating social media into website design may increase user engagement by facilitating participation and interactivity.

The potential use of technology for supporting parental involvement through websites could be utilized more optimally in order to reach the goal of involving all families. The advantages of technologies in providing readily accessible, flexible, and interactive resources for developing parental involvement through websites should be emphasized. Schools need to develop two-way communication opportunities and online interaction channels between home and school on their websites in order to increase transparency and understanding in a visual and non-verbal

environment that is of importance for parental involvement and partnership, especially in the decision-making process (Ho et al., 2013).

It seems that independent schools have a greater intention to use the school website to attract and retain students and parents, and to use their websites as an occasion and place for advertising. This is because the market impact and competition in the current school system perhaps affects independent schools more than public schools. However, the education market has tended to give rise to competition even between public schools, in which the number of students can play an important role, which encourages all schools to work intensely with marketing strategies to attract students and their parents (Fredriksson, 2010)

The results indicate that there was a lack of information and activities of parental volunteering on the school websites, which is one of the important aspects in school-based parental involvement. In fact, parental volunteering activities should be based on parents' own interests and initiatives, but their interests and initiatives are more or less influenced by the level of trust in the relationship with teachers. Parents are more likely to participate in school activities when they feel empowered by their interactions with the school staff (Homby & Lafaele 2011)

Regarding communicating, most schools emphasized informing parents about how the school was managed, rather than providing opportunities to invite parents into the work of school management. The evidence for this was that only one school mentioned the importance of home school cooperation and parental involvement in their vision description, and only a few schools provided information about the parental board. This could give rise to parents' negative perceptions and feelings about the fact that the school does not expect and trust the value of parental involvement, and could prevent their real involvement and influence (Grant, 2011).

The results also indicate that schools' expectations for parental involvement in education are more likely to be limited to the social aspects of student development (such as detailed information about the lunch menu, students' healthcare, and local policies and regulations for working towards equal treatment and against discrimination) rather than the pedagogical issues (absence of lesson schedule, class activities, students' choices, and students' work and progression). In this respect, it seems that the traditional separated responsibility model continues

to dominate practices, wherein teachers are regarded as experts in handling pedagogical matters while parents are expected to focus on students' health, well-being, and emotional and social development (Erikson, 2011). Websites enable the conveyance of information to multiple families and the efficiently sharing and archiving of information about students' learning and progress, school policies and assignments, tips for family involvement, and other common topics (Goodall. 2016)

2.4 Information sharing between staff and students

The traditional ways that educators have shared student data with families through quarterly report cards and during brief parent teacher conferences are valuable means of updating parents on their student's progress, but these data sharing opportunities don't occur frequently enough to promote ongoing school family communication and information sharing. Recognizing the benefits of ongoing communication, educators and families have begun sharing information about student progress much more frequently than in the past, aided by technology tools that have opened up new ways to stay connected. Educators are becoming more proactive in how they communicate with families by sharing information in between report cards and conferences. Parents are asking more questions about the data they see in progress notes or through online parent portals to get a better understanding of their child's learning. Parents are also seeking guidance about how to act on that information, such as by accessing academic support services to address challenges or finding learning opportunities in the broader community that build on a child's strengths and interests. These actions allow educators and families to engage in discussions about student progress more regularly than in the past, which helps promote a sense of shared responsibility for supporting student learning.

These tip sheets help school administrators, teachers, and families identify the best ways to share student data in meaningful ways, on a regular basis, to strengthen family school partnerships and promote student learning. Many of the tips represent small but significant and often overlooked steps in sharing data with families that can make a **big** difference in families' ability to access, understand, and act on information about their child's progress. While the tips can be used to guide the formal conversations that take place during parent teacher conferences, they are especially designed to help promote less formal, ongoing communication about student

progress among teachers, families, and students throughout the year. Examples of site-based practices illustrating the roles of administrators, teachers, and families in sharing data are included at the end of the tip sheets.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents the methods that were used in the study and covers the research design, study population, data collection instruments, interview, quality control, (reliability and validity), data analysis, procedure of data collection, ethical considerations

3.1 Research design

In order to satisfy the objectives of the research, a qualitative research was held. The main characteristic of qualitative research is that it is mostly appropriate for small samples, while its outcomes are not measurable and quantifiable. Its basic advantage, which also constitutes its basic difference with quantitative research, is that it offers a complete description and analysis of a research subject, without limiting the scope of the research and the nature of participant's responses.

However, the effectiveness of qualitative research is heavily based on the skills and abilities of researchers, while the outcomes may not be perceived as reliable, because they mostly come from researcher's personal judgments and interpretations. Because it is more appropriate for small samples, it is also risky for the results of qualitative research to be perceived as reflecting the opinions of a wider population

3.2 Research approach

The research approach that was followed for the purposes of this research was a mixed method. According to this approach, researchers begin with specific observation, which are used to produce generalized theories and conclusions drawn from the research. The reasons for occupying a mixed approach was that it takes into account the context where research effort is active, while it is also most appropriate for big samples that produce qualitative data.

3.3 Target population

The researchers targeted a population of 50 people at st Andrews secondary School, the population included teachers, students, parents, and administrators

3.4 Size determination

population, using published tables and applying formulas to calculate a sample size. This study applied a simplified formula provided by Yamane (1967) in order determine the required sample size at 95% confidential level, and 5% was considered as the margin of error

The Yamane formula for determining the sample size is given by $n=N/(1+N(e)^2)$

Where n is the sample size, N is the population target and e is 0.05 based on the research condition

$$n=45$$

There are several approaches to determine the sample size, these include using a census for small **3.5**

Sample Size

The researcher used a total of 45 respondents, teachers, students and parents **3.6**

Sampling technique

The researchers used purposive and simple random sampling techniques to select the respondents from teachers, students, parents, and administrators design a questionnaire for teachers, students and parents and attach it in the appendices

3.7 Data collection instruments

The researchers used a mixed approach during data collection so that to get detailed information and this helped them to analyze how the current means of communication was working at the school and lays out the foundation of developing the new system for the school

3.7.1 Interviews

The researchers used simple random. sampling techniques of interviewees to ensure selection of right people because of the time constraint

The following categories of people were interviewed during field work including teachers, students, Parents, and administrators. Time and dates would be at a convenience of the respondents. Interviews helped the researchers to get detailed information since they would be able to probe in areas where they feel some information could be found.

The researchers got supplementary data through interactive and wide discussions with teachers, students, at st Andrew's ss Rubanda. This method was good because it allowed the researchers to acquire information from those that would not have been considered in the sample size

3.7.2 Questionnaires

The self-administered questionnaires were filled by teachers, students, and stakeholders. This set of questions were organized by researchers and given to the respondents for answering and after being answered, the researchers would obtain the information that helped them get simplified information. The use of questionnaires would save time since they can be distributed and collected by one researcher while others are conducting interviews

3.7.3 Observation

Researchers used their naked eyes to observe and collect data concerning the current means of communication at st Andrews secondary school Rubanda, this helped researchers to get the first-hand information

3.8 Quality control (reliability and validity)

The researchers used randomization during selection of participants since samples would be fairly large to create equivalent representative samples that would essentially be similar in all the relevant variables that influenced the dependent variable. Randomization control the many extraneous variables and the imagined

3.9 Data analysis

Use of qualitative and quantitative techniques was employed to describe, present and make summaries of collected in frequency distribution tables. Under quantitative analysis a pre-test and a post test was used and the conditions designed in order to design the influence of the independent variables on dependent variables. These approaches helped the researchers to easily depict the findings and interpret them in-depth and in the appropriate manner in order to come up with valuable conclusions from the data collected

3.10 Procedure of conducting the study

The researchers followed a number of steps from the time of getting an introductory letter from the university to the field up to the time of submission. These steps included going to the field, data collection, data analysis, doing a project and submission of the report project. The

researchers obtained a letter of information from the department of education to introduce them to the school authorities. The researchers assured the respondents that the information needed was meant for academic purposes and assured of maximum confidentiality. The questionnaires was personally delivered to the respondents this ensured control of time. Interviews were conducted by the researcher's themselves, after data collection, data was checked for errors and compiled for analysis. A first draft was written and submitted to the supervisor, corrections were made, and a final project is underway

3.11 System development

The researchers used the prototype model because of its advantages. It gave the clear picture of software, what was being developed and it helped in saving the later part of issues that might occur since errors could be detected earlier. It helped in communication of clients and developers to make the product as per requirement and easier to understand them as well for the developers from the viewpoint of the school.

3.12 Testing

Testing refers to the process of executing the developed System in order to ensure that it conforms to the user requirements and that it was functioning correctly. The goal of testing was to ensure the system's reliability and conformity to the user requirements. Therefore, we involved users to test the functionality of the system. It was found that the system meets the user requirements then we implement the newly developed system and if it does not meet user requirements, then we shall go back and redesign the system till we meet satisfy the users

3.13 Tools for Implementation

In order to implement the design requirement of a Website System, the languages would be HTML and CSS, this language would be coded in notepad editor so that to get the product develo

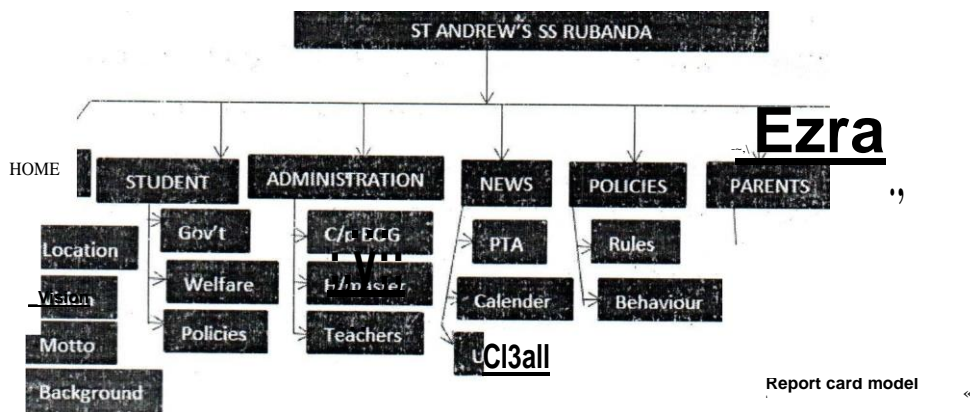
o)

CHAPTER FOUR: SYSTEM ANALYSIS & DESIGN

4.0 Introduction

4.1 The system design

After organizing the content, we developed a flowchart for our website, we used a hierarchical structure to link the pages of the website. This provided a high view of the system with the main components and the services they provide and how they communicate in the system. Next, researchers created a site structure that included all of the elements grouped in a logical way so that users can easily find information, during this process. we analyzed, grouped and linked similar content in order to create a flowchart of the site. As researchers design the flowchart, they kept in mind their initial decisions regarding the users of the site. Creating a flowchart can be done in several ways similar to brainstorming: note cards, concept mapping software, white boards, or butcher paper. Researchers developed an organized scheme that works for the goals of the school site. Although there are several ways of structuring a web site, we used a hierarchical scheme such as the one below.



4.2 DFD for student report card model

Dfd known as **context level** darn flow diagram, The cop.text level data flow diagram (dfd) was to describe the whole svstem .. The DFD describe the all user modules who nm the svstem Below

p)

context level data flow diagram of Student management system project shows the one Admin user can operate the system. Admin do all activities after login to system

Request for login

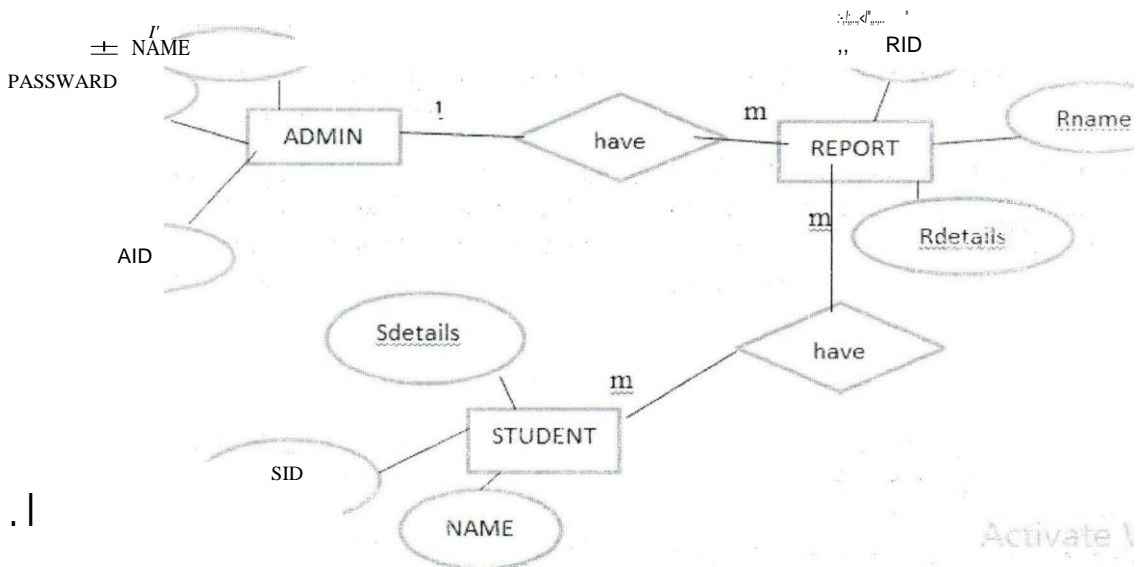
[A _ ~ ~ I N

J • ~ ----- R-EP-~ ~ -T 0 ~ ~ -R-D-~ ~
 Response

student

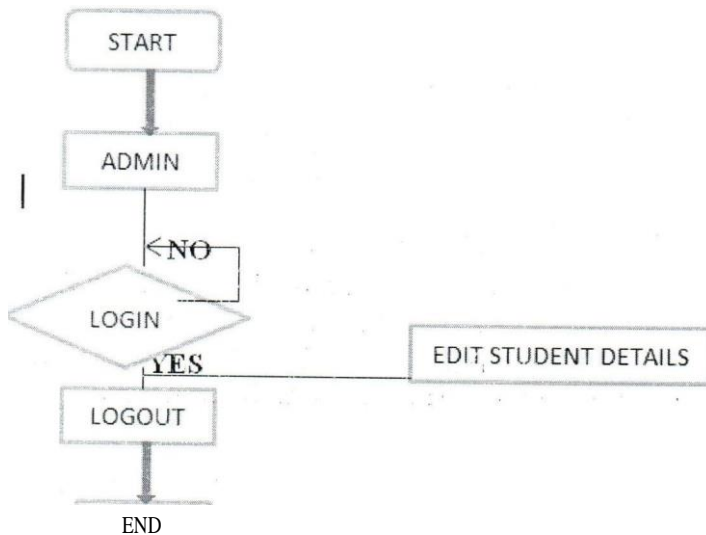
E-R (Entity-Relationship) Diagram is used to represents the relationship between entities in a table. ER diagrams represent the logical structure of databases. ER Diagram represented the relationship between two database tables.

E-R diagram means Entity Relationship diagram. Entity is a object of system, generally we refer entity as database table the e-r diagram represent the relationship between each table of database. E-R diagram represent entity with attributes, attributes is a property of entity. If we assume entity is a database table then all the columns of table are treating as attributes



4.4 Flow Chart for Student report card model

The system flow diagram is a visual representation of all processed in sequential order. The System flow chart diagram is a graphical representation of the relation between all the major parts or step of the system. Flow chart diagram cannot include minor parts of the system



4.5 System analysis

During system analysis phase, we analyzed and then after researchers designed and developed a new system that was tested in order to cater for the gaps that were prevailing

4.6 System specification

This section contains the functions the website system is expected to perform; these include User requirement, and system requirement

4.6.1 User requirement

The system should be usability so as to be simple to use by those with average computer skills

And have the capacity to handle expansion in case of further modification in future

4.6.2 Functional requirement

The system should deliver information about the school to the community especially to the school stakeholders. For example it should allow registration of *new* students and teachers and be able to handle the issue of report forms that is, it should be able to generate report cards for the learners.

4.6.3 Nonfunctional requirement

The system should be fast enough and user friendly to satisfy the user's needs

4.7 System requirement

These are requirements needed for the system to give out its functionality

4.7.1 Hardware requirement

This section discuss the computer hardware that is required for the system to run smoothly

Hardware	Minimum system requirement
Memory	4.00GB
Flash disk	4.00GB
Processor	Intel(R) Celeron(R) CPU <u>N3060@1.60GHZ</u> 1.60GHZ
System type	64-bit operating system,X64-Based processor
	4GB

4.7.2 Software requirement

Software	Minimum requirement
Text editor	Notepad++
Web browser	Internet explorer
Languages	Html and CSS, PHP,

CHAPTER FIVE: SYSTEM IMPLEMENTATION

5.0 Introduction

The purpose of design phase was to plan a solution of the problem; therefore this chapter shows how the system was implemented

5.1 Tools used in system and implementation

The system was designed on a notepad platform using HTML. Once the system is published, users will access it from anywhere as long as there is internet connection. The system was given a name called <http://localhost/project/index.html>

The system admin logs in using a username and password to have access to some models for example to the Report card model, they also have rights to make changes to the system

5.2 Home page. The home page presents a page where the admin navigates to the administration menu bar to get the report form and where the student searches for the report form from, by use of index number

st andrew's sec school rubanda X +

~ → C (1) localhost/project/index.html

Apps M Gmail D YcuTube O Maps 0 M mailgoogle.com

ST ANDREW'S SEC SCHOOL
RUBANDA DISTRICT
P.O. BOX 689

Search By **INDEX NO** to get your report form [is@irsss]

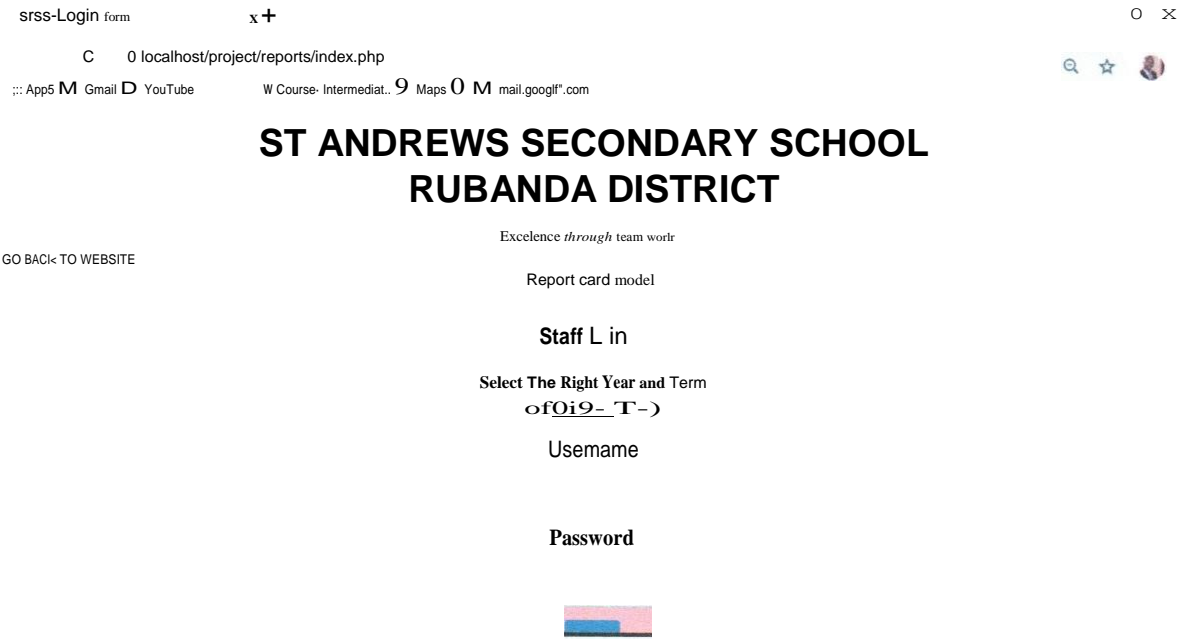
HOME ▾ STUDENT ▾ ADMINISTRATION ▾ NEWS AND EVENTS ▾ SCHOOL POLICIES ▾ PARENTS ▾ CONTACTS

WHY ST ANDREW'S SEC SCHOOL RUBANDA?

St Andrew's is a government aided, Catholic secondary school dedicated to produce ladies and gentlemen who are God hearing, Reliable and pertriotic. In partnership with parents, we foster academic excellence in g environment that snourages students to develop a deep concern for things of the heart as well as the mind hough leadership service and a lifelong commitment to Christian values. We provids students with a strong fo-undakin that p,apares IIIElm for a succ&Sifu1 transition into college and beyond We invite you to learn more about ourSMOOL programs, and look forw14d to m111QW1; yoo and-yoo, families thoo0114-Ul the-admissions process Excellence through team work

5.3 Report card Login page

The admin logs in using the username and a password to get access to the system and follow the prompts to use the functions of the system



5.4 This page allows the system admin to search for a report card



Search By Reg no:

Serch|

S.1 STUDENTS MARKS

FULL NAME	SUBJECTS>>>>>>>	ACTIONS			ENGLISH 112			MA THEMA TICS 466			PHYSICS SU	
		Report	TOTAL	AVG	lIdit	ENG	ENG	ENG	MATH	MATH	MATH	Mid
# PHAM!! LNAMI!	Registration Number	Preview		↓ POS	mid	end	Total	Mid	End	Total	Mid	
I ~ Isaac	19/J/BSS/001		601/1200	41.7% 61160	edit Maks	33	63	48	62	36	49	41
	19/J/1/BSS/002	m:lZll	430/1200	3:JJI, 10111-0	edit Marks	40	43	42	35	27		
3	t4/4gc gnp				2n		26	40			zz	

5.5 Enter marks page. This shows where the admin edits and puts the marks of students to the system

Enter st manes x+

© localhost/pmject/rpporls/olevel_marksheetB.php

!:0 Apps M Gmail YouTube UUR<e: L.....L 9 Maps M mailgoogle.com

STAN I

S. 1 MARKSHEET

Select Mid Term

Select End

#	FRana	Uname	REG NO	Mat	Moth	Pnv	Chom	Bio	Hist	Go	Com	Art	#gr	Kis	CRE	EnterMark
1	habve	satc	19/J/18SSJ001													Enter Marks
2	hark andira	Cloris	19u 1/B8ss/002													Enter Marks
3	Aharinpihya	Adon	19/J/1/BSS/003													Enter Marks
4	Ahn.2a		19.3/8.5so4													EnterMark<s
5	Ahimb iS	Defina	19-11BSS1008													Enter Marks
6	Mumuza	Joshua	19/J/1/BSS1006													Enter Marks
7	Ainamaan	Hillary	19/J/1/BSS/007													Enter Marks
8	Ainemb abszi	Doreen	19/J/1/S-SS"108													Enle<Marcs

CHAPTER SIX

DISCUSSION, RECOMMENDATION AND CONCLUSION

6.0 Introduction

This section includes a brief discussion about the project results and limitations of the study, it further gives a brief conclusion and states a few recommendation and future work

6.1 Discussion

Previous research has reported some advantages of using school websites for example websites enable the conveyance of information and archiving of information about student's learning and progress (Goodall, 2016), therefore basing on our findings, a website is a necessity to the development of a school

6.2 Conclusion

Basing on the analysis, a website was a venture to invest once taken serious and embraced, there is a lot of benefits that could be realized both to the school and the community

6.3 Recommendation

As the designers and implementers, we made the following recommendation on how the system should be used

- The system administrators should login using the given passwords
- All new students must be registered to the system in order to access the: school information
- All staff members must be registered to the system
- Researchers recommend future research on school websites so that to improve and provide better services and at least include modules like online fees payment, online learning and e-library

Codes used to develop the index page

```
<!DOCTYPE html>
<head>
<title>st andrew's sec school rubanda</title> <link
  rel="stylesheet" href="style.css ">
  <meta name=" description" content="school website">
  <meta name="viewport" content="width=device-width, initial-scale=1">
<link      rel="stylesheet"      href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/ 4. 7 .0/ css/font-aweso me.min.css ">

  <meta name="www"content="st andrew's">
<meta uame="author"content="JUSTUS, IVAN AND IMMACULATE"> <meta
  name="revised"content="20/12/2019">
  <style type="text/cs$" media="screen">

#horizontalmenu ul {
padding: 1; margin: 1; list--style:none;
}
#horizontalmenu li {
float:left; position:relative; padding-right: 100; display:block; border:1px
skyblue;
border-style:inset;
background:skyblue;
}
#horizontalmenu li ul {
  display:none;
  position:absolute;
}
#horizontalmenu li:hover ul{
display: block;
background:skyblue; height:auto;
width:8em;
}
#horizontalmenu li ul li{
  clear:both;
border-style:none;}
</style>

<style>
/ Style The Dropdown Button "/
.droptbn {
background-color: blue;
```

```

    color: white;
    padding: 15px;
    font-size: 16px;
    border: none;
    cursor: pointer;
}

/* The container <div> - needed to position the dropdown content*/ .dropdown {
    position: relative;
    display: inline-block;
}

/ Dropdown Content (Hidden by Default)*/
.dropdown-content {
    display: none;
    position: absolute;
    background-color: #f9f9f9;
    min-width: 160px;
    box-shadow: 0px 8px 16px 0px rgba(0,0,0,0.2);
    z-index: 1;
}

/ Links inside the dropdown */
.dropdown-content a {
    color: black;
    padding: 12px 16px;
    text-decoration: none;
    display: block;
}

/* Change color of dropdown links on hover*/ .dropdown-content
a:hover {background-color: skyblue;
}

/* Show the dropdown menu on hover /
.dropdown:hover .dropdown-content { display:
block;
}

/ Change the background color of the dropdown button when the dropdown Content is shown /
.dropdown:hover .dropbtn {
background-color: blue;
}
</style>

```

```

<style>
div.one {
  border: 4px solid #4FFFAI;
  width: 100%;
  height: 100%; border-width:
  4px; border-style: solid;
  border-color: transparent;
  background: #CCC;
  margin: auto;

}

div.two {
  border: 4px solid #CCCCCC;
  width: 100%;
  height: 100%;
  border-width: 4px;
  border-style: solid;
  border-color: transparent;
  background: pink;
  margin: auto;
}

div.three {
  margin: auto;
  border: 4px solid #CCC;
  width: 100%;
  height: 100%;
  border-width: 4px;
  border-style: solid;
  border-color: transparent;
  background-color: rgb(60,60,60);
}
</style>
</head>

</head>
<title>st andrew's sec school rubanda</title>
<link href="style.css" rel="stylesheet" type="text/css">
</head>

</body>
</html>

```

q)

APPENDIX A

A QUESTIONNAIRE ON THE SCHOOL WEBSITE DEVELOPMENT:

A CASE STUDY OF ST ANDREW'S SS RUBANDA

STUDENT QUESTIONNAIRES

Dear Student,

You have been randomly chosen as a respondent in the above titled survey which is being undertaken as part of an educational research in partial fulfillment of Bachelor of Science with Education of Kabale University. Your cooperation in filling this questionnaire will ensure success of the study. Please feel free to give your views on the items given by answering all the questions and indicate your choice by putting a tick in the checkbox before the answer you feel most appropriate, or Fill in the gaps by giving reasons or information in relation to a particular question. The responses will be for academic purposes only and will be treated with utmost confidentiality.

SECTION A

Background information of the respondent

Please provide information regarding you by ticking the appropriate boxes

1. Your Age

2. Your Gender:

Male

Female

3. CLASS:

a) S.1

b) S.2

c) S.3

d) S.4

e) S.5

f) S.6

Independent variable

Availability of ICT resources

6. How do you agree or disagree on the availability of the following ICT resources in your school

Not available	Fairly available	Available
i) Computers/PC in classroom		
ii) Internet & E-mail		
iii) Television set		
iv) Projector		
v) software		
vi) Computer laboratory		

APPENDIX B

QUESTIONNAIRE ON THE SCHOOL WEBSITE DEVELOPMENT SYSTEM : A CASE STUDY OF ST ANDREW'S SS RUBANDA

Teachers' questionnaire

Dear Respondent

You have been randomly chosen as respondent in a survey which is being undertaken as part of an educational research in partial fulfillment of the Bachelor of Science with education at Kabale University. Your co-operation in filling this questionnaire will ensure success of the study. Please feel free to give your views on the items by answering all the questions and indicate your choice by putting a tick in the checkbox before the answer you feel most appropriate or fill in the gaps by giving reasons or information in relation to particular questions. The information provided is purely confidential and to be used for academic purpose only.

Section I, Background information

Please provide information regarding you by ticking/checking the appropriate box 1.

Name of subject and level of teaching (optional)

1. Level of teaching

Both A and O level

A level

O level

1-satisfacts

Science subjects

Arts subjects

Both Arts and science subjects

2. How long have you been teaching in this school?

Less than 2 years between 2-5years More than 5 years

3. What is your designation?

Diploma holder Degree holder teaching Assistant 4. What is your administrative position? (Optional)

Head of department

Director of studies

Deputy Head teacher

Availability of ICT resources

5. How do you agree or disagree on the availability of the following ICT tools in your school?

Not Available	Fairly Available	Very Available
i) Computers/PC in classroom		
ii) Internet & E-mail		
iii) Television set		
iv) Projector		
v) On and off shelf software		
vi) Computer laboratory		
vii) Video conferencing		
viii) Scanner		
ix) What means of communication does the school use?		
x) others, specify		

Thank you so much for your participation

APPENDEX: C

Ebibuzo bya bazaire

Munywani waitu omuzaire nitukushaba ku ogarukamu ebaibuzo ebi.

Oine *omwana* oregyera st Andrews ss Rubanda?

Ego mwineyo

Ingaha tumwineyo

Oramanya **ora** omwana wawe yaba ashashwire ebishare byeishomero?

Orntunga ota amakuru agararuga aheishomero rya st Andrews ss Rubanda?

APPENDIX D: ESTIMATED BUDGET

ACTNITY	UGX
Transport	8,000/=
Food	45,000/=
Papers/stationary	30,000/=
Rent	100,000/=
Internet fee	400,000/=
Typing	1,5000/=
Printig	13,000/=

Bmdmg

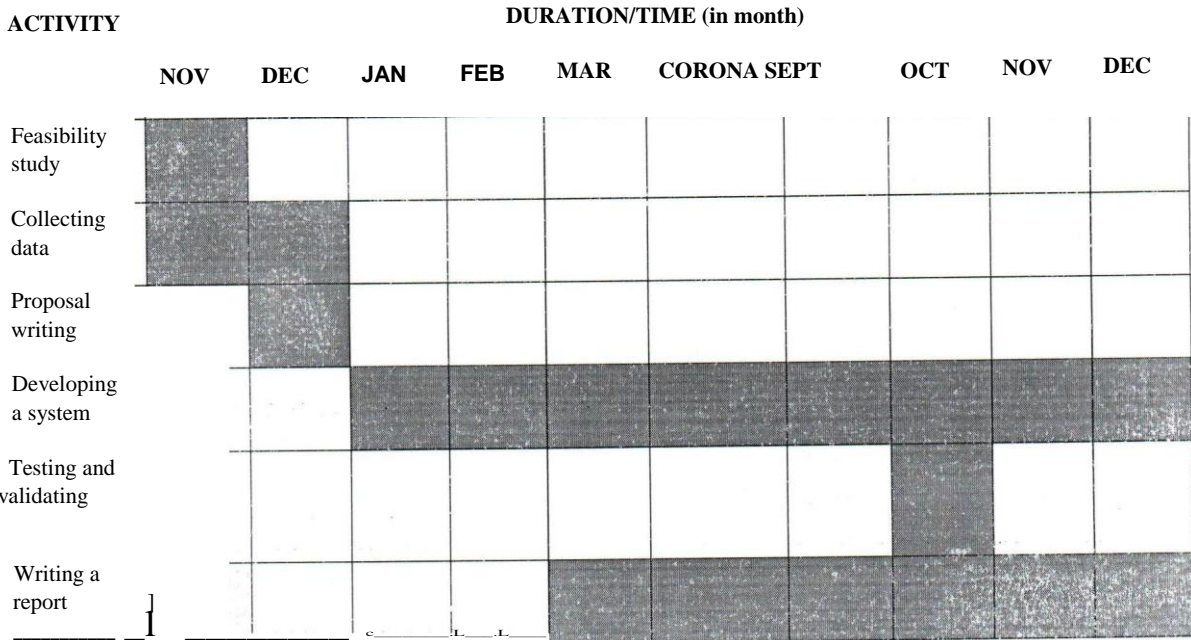
3,000/=

TOTAL

2_s_o_0_00_1_1_ = _____ ~_.

r)

A gantt chart showing activities and time taken to develop the system



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