

# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

## The 'School Bell' as a Tool to Instill Discipline and Foster Overall Performance in Curricular and Non-curricular Assessments among Students in Primary and Secondary Schools in Kenya

Patrick Kimutai Tum

Lecturer, Department of Chemistry, University of Nairobi, Kenya

### Abstract:

*This article outlines the significance of the 'school bell' as a medium to instill time management discipline and shape personality traits among adolescent students in Kenya. The 'school bell' remains a critical tool found in all primary and secondary schools that aids in sustaining daily school routines. In the present study, a total of 110 student respondents at two institutions of higher learning were randomly identified and interviewed using an on-spot questionnaire. The findings reveal that the respondents had a positive view of the role of the 'school bell' in 'conditioning', 'drilling' and 'coaching' excellent time management skills and subsequent excellence in academic and extra-curricular assessments as follows: [(prioritize, 36%, 40 students); (delegate, 9%, 10 students); (set study-time, 27%, 30 students); (manage distractions, 15%, 17 students); (schedule breaks, 13%, 14 students)]. 62 (56%) students reported using the handbell in their schools. The electronic bell with synchronized clocks was reported to have been used by 21 (29%) students. Notably, female students were more likely to have been ringers/timekeepers. In this study, 16 out of 25 (64%) bell ringers were female.*

*The handbell, owing to its simplicity and portability, was the most widely used. These findings indicate the central role of the school bell in developing time management discipline and promoting the overall performance in curricular/extra-curricular assessments in Kenyan educational institutions.*

**Keywords:** school bell, discipline, performance, curricular/extra-curricular, students

## 1. Introduction

### 1.1. Introduction of Formal Schools in Kenya

A school is a designated location designed to provide learning space and a conducive environment for the instruction of pupils (UNESCO, 2016). Formal schools are defined as centers of educational instruction where clear structures and systems have been set up to facilitate learning (UNESCO, 2016). This includes determining objectives, pedagogical methods, study period, and curriculum to facilitate graduation. The first formal school with a set of curriculum and use of student uniforms was established as Christ Hospital School in England in 1552 with King Edward VI as patron and founder (Seward, 1940). Historical records indicate that formal education structures already existed along the Kenyan coast among the Swahili people who inhabited the coastal region as far back as 1728 (Kiriama, 2005; Kusimba, 1999; Freeman, 1980; Barrett, 2011). Before the arrival of the Christian missionaries, the Arabs had already introduced schools at the coast where religious studies were administered (Pouwels, 1987; Fitzgerald, 1898). Prior to the arrival of the Christian missionaries, traditional societies in Kenya had a well-developed indigenous system of education (Werner, 1920). Through well-developed apprenticeship programs, children learnt cultural traditions and customs from their communities, including specific skills from elders, families, and other specialized individuals (Beck, 1966). This form of traditional education was delivered around fireplaces in the evenings in the forms of:

- Folksongs,
- Riddles,
- Proverbs,
- Poems and
- Lullabies

This indigenous knowledge was relevant to the survival of the individual communities in the prevailing socio-economic state at that time (Stock, 1950; Burton, 1959). Modern formal education was introduced in Kenya during the pre-colonial period by Church Missionary Society (CMS) missionaries at a mission station at Rabai near Mombasa (Sifuna, 1990). At the mission school, learners were introduced to 3Rs: reading, writing, and arithmetic to its students. In 1895, the Imperial British East African Company (IBEAC), headed by Scottish businessman Sir William Mackinnon was granted a royal charter by Queen Victoria in 1888 to administer the entire region comprising the East African Protectorate. The company,

which assumed administrative functions, built the first formal schools to educate the children of the Europeans who had settled in the East African Protectorate (Otiende & Wamahiu, 1992).



Figure 1: Rabai Mission School  
Source: Paukwa, 2019



Figure 2: Map of Kenya  
Source: World Atlas

Before 1900 the Christian missionaries restricted their evangelical and educational activities along the coast of Kenya. However, with the construction of the Kenya-Uganda railway, the movement inland was swift, enthusiastic, and widespread (Ranger, 1965; Stock, 1950). The period from 1900-1924 registered the founding of several schools in Kenya, including:

- Nairobi school 1902,
- Tumutumu Girls High School 1908,
- Kenya High School 1908,
- Thogoto Teachers Training College (Churu & Mwaura, 2011)

In 1908, the Christian missionaries jointly formed an educational committee that later transformed into the Missionary Board of Education (MBE), representing all Protestant missions in the Protectorate of Kenya (Gordon, 1971). In 1909, the colonial administration formed an education board with Henry Scott of the Church of Scotland mission (CSM) serving as its inaugural chairperson (Stock, 1950). In the same year, Prof. Fraser headed a commission that recommended the establishment of a functional educational structure for the Protectorate of Kenya (Thompson, 1981). The commission, headed by Prof. Fraser, further recommended the establishment of formal education along racial lines, i.e., European, Asian, and African (Sifuna, 1975; Fraser, 1909). The majority of the Christian missionaries had, by 1914, settled further inland and established 32 schools and mission stations (Thompson, 1981). The Christian missionaries laid the foundation of African education with minimal financial support from the colonial Government (Nasimiyu-Wasike & Waruta, 2000). The colonial Governor of Kenya, Sir. Charles Elliott built additional modern formal schools to cater to the children of British settlers moving to Kenya (Thompson, 1981; Osogo, 1970). Education provided by the missionaries was hampered by a shortage of financial resources and teachers to fully support the increased demand for secular education from Africans (Osogo, 1970; Ranger, 1965). As a result, the colonial Government provided the requisite financial resources for the construction of school infrastructure, and the missionaries provided the teachers (Sifuna, 1975). The teachers were employed by the missions, and the missionaries set their terms and conditions of service (Kimalat, 1998). After Kenya's independence in 1963, the Government of Kenya restructured the education system by introducing a three-tier education system developed into three types of schools, i.e., government, private, and mission (Ominde, 1964). The Ominde commission recommended that the management of schools in post-colonial Kenya be transferred from the Missionary Boards of Education (MBE) to Boards of Governors (BOGs) appointed by the Kenya Government for each school (Ominde, 1964). This policy decision was meant to streamline school administration by cutting down on bureaucracy and providing educational institutions with distinct identities (Ominde, 1964). The Ominde commission further recommended a unified education system and embraced the establishment of self-help schools, i.e., 'harambee' built through contributing communal resources together. The commission also recommended that free compulsory primary education be provided to all students in Kenya (Ominde, 1964). By 2020, Kenya had established over 28,000 primary schools and just over 10,000 secondary schools accommodating 3.5 million students (MoEST, 2020).

### 1.2. Time Management in Educational Institutions

Time is a priceless and non-renewable resource that can never be regained once lost. Any time wasted by students will have a negative impact on their academic performance (Orina, 2005). Studies show that academic achievement is influenced by time management. Time management in the school system could be seen as the art of arranging institutional and individual affairs in sequence such that activities are carried out properly and on time with the less amount of resources (time, energy, money, and people) necessary for institutional productivity (Aduke, 2015). Therefore effective time management is considered a precious resource in achieving excellent performance (Pedrosa *et al.*, 2007). A study by Miqdadi *et al.* (2014) investigated the relationship between time management and students' academic performance by considering procrastination, workload pressure, distraction, and disorganization as essential factors. The study found that successful students are good time managers (Khan *et al.*, 2016). Effective skills, techniques, and tools are adapted by both teachers and students to efficiently plan and complete specific tasks such as completion of school homework assignments, syllabus coverage, and revision for the examination. Therefore, it is assumed that teachers and students with effective time management will be successful in educational performance (Assey, 2009; Nkonge, 2010). According to Claessens *et al.* (2007), time management is possible through performance, ability, and self-motivation. Throughout the entire school time, students should develop good time management skills to ensure successful student and later adult life. Chaturvedi (2016) argues that time allocation, especially for university students, is quite essential as it helps to enhance their productivity and grades. According to George (2008), efficient time management positively influences a pupil's academic performance. Time management on pupils' academic performance is closely linked with:

- Early arrival and late departure from school,
- Having an adequate sleep and a healthy home environment

A study by Britton and Tessa (2008) on university students in the USA established that effective time management leads to improved academic performance, better time management skills, and aids academic success. Nonis *et al.* (1998) state that good time management skills reduce worry and stress among students, enhancing their productivity and academic grades.

### 1.3. Types of Bells Used in Kenyan Educational Institutions

The school bell as a tool that is required to maintain efficient administration in schools is found in nearly all schools in Kenya. It supports daily routines in all schools. The melodic tune from the bell at a pre-determined time interval directs and psychologically reminds the students of their next course of action, i.e., meal-time, chapel services, class time, waking up time, preps time, games-time, etc. The bell was first used to call town dwellers congregating in the 3<sup>rd</sup> century B.C. in China (Phillips, 2002). The bell was made of pottery from the Neolithic period (Le Blanc, 2012). In 1700, two brothers, William and Robert Cor in England invented the handbell, which is widely used due to its simplicity (Le Blanc, 2012). The types of bells currently used in Kenyan Educational institutions are shown below in figures 3, 4, 5 & 6.



Figure 3: School Hand Bell



Figure 4: Traditional Physical School Bell



Figure 5: Electronic Synchronized Clock



Figure 6: Electronic Bell with Synchronized Clock

The most famous bell was found to be the handbell (Kyriakides *et al.*, 2010). However, the most convenient bell was the Electronic bell with a synchronized clock, shown in figures 5 & 6. This type of bell is automated and automatically rings at pre-determined time intervals as per the school schedule and routine. Its main drawback is that it requires electrical energy to operate. In recent times, it has slowly found applicability in various schools in Kenya. The traditional physical bell illustrated in figure 4 was the earliest form of the school bell introduced by European missionaries in Kenya during the pre-colonial times.

#### 1.4. Correlation between Effective Time Management Skills among Students and Teachers and Performance in Curricular and Extra-Curricular Assignments

Time management involves organization and planning how to divide time between specific activities. Time is a critical resource that can neither be expanded nor contracted, and its effective management is a precondition for any other form of effective management (Davis, 2000). A study by Igun and Adogbeji (2007) on the influence of time management and perceived academic outcomes in Nigeria found a positive correlation between time management and improved academic performance among students. Time management and improved academic performance were related to daily routine activities such as reading habits, priorities, and minimizing distractions (Igun & Adogbeji, 2007). Studies by (George *et al.*, 2008) indicate that class punctuality and availability of adequate time to cover the required syllabus enhanced academic performance. Students with good time management skills scored higher than those with poor time management habits. Time as an inaccessible resource is difficult to manage (Claessens *et al.*, 2007). Effective time management skills among teachers, including teaching time, compliance to start and end of lesson time, and prioritization of activities limiting time wastage due to meetings and co-curricular activities, directly impacts school academic performance (Kyriakides *et al.*, 2010). Improved time management techniques by teachers ensure proper lesson planning skills and complement academic performance among their students (Khan *et al.*, 2016). Additional studies by Farooq *et al.* (2020) found that academic student performance is influenced by their self-effort and time management skills. Student performance in academic and non-academic assessments depends on how effectively they manage their own time, minimize distractions and plan their priorities (Swart *et al.*, 2010). Studies in Nigeria by Ugwulashi (2011) show that effective time management skills led to enhanced teaching and learning that led to exemplary educational performance. Studies by Chandi *et al.* (2013) showed that effective teaching and learning require adequate time management, indicating a strong correlation between efficient teacher time management techniques and student academic outcomes among students in secondary schools in Kenya. Similar studies by Adhiambo *et al.* (2016) established a direct correlation between time management skills and student performance in curricular and extra-curricular assignments among students in Kenya.

#### 1.5. Consequences of Poor Time Management in Schools

Time is one of the most valuable resources that should be utilized wisely Phillips (2002). Poor time management skills often result in teachers being unable to complete the teaching syllabus on time, thereby leading to a decline in student performance, especially for final-year students sitting for their examinations (Adhiambo *et al.*, 2016). Poor time management resulted in inadequate coverage of the lesson plan leading to poor teaching and learning among students. Prudent utilization of available time by students and their teachers leads to the achievement of lifetime goals while maintaining the balance between the requirements of work, private life, body, spirit, and mind (Le Blanc, 2012; Riessman, 2002; Nwaiwu, 2000). Time management decides the importance of achieving the set targets and objectives. In the daily routine of a school, time is a critical resource that determines the imperativeness of any other resources in accomplishing academic excellence among the students (Ugwulashi, 2011). Time is an essential resource that all students and teachers need in order to achieve their academic goals and objectives (Adejo, 2012). Time as a resource is delicate. It cannot be saved but only spent, and once misused, it can never be regained (Nwaiwu, 2000).

Time management can be defined as a period, either short or long, which involves how people use their time well to produce desired results (Adejo, 2012). Effective time management facilitates teachers and students to accomplish various tasks scheduled despite insufficient time available. This is resolved by skills that assist students and their teachers in identifying and prioritizing activities that contribute to improved overall performance in curricular and extra-curricular assignments (Ezine, 2008). Without good time management skills, teachers and students would not be able to efficiently utilize all other resources available in the schools. Therefore effective time management realizes the goals and objectives set by the schools (Ugwulashi, 2011). This, therefore, implies that poor time management leads to inefficiencies in the teaching and learning process leading to poor academic performance.

## 2. Literature Review

### 2.1. Prioritization

Time is a scarce and priceless resource that is available for students and teachers to utilize wisely. According to Amuli (2008), time management is the art of arranging, organizing, and scheduling time to generate more effective work and productivity (Gordon & Borkan, 2014). Prioritization as a principle of time management involves setting clear priorities, which enables school administrators to accomplish designated tasks according to the objectives of the institution (Grahman, 2002). The various activities in the various schools that require implementation within a limited time frame require prioritization to ensure their implementation. Therefore, designated school administrators, teachers, and students prioritize their activities appropriately. Gupta (2001) refers to time management as a process constituted by a series of steps that involve the analysis of our time habits, clarifying objectives, establishing priorities, and planning for appropriate results. Aduke (2015) argued that prioritizing tasks can make work and studying more pleasant, which reduces inefficiencies, anxiety, and stress. According to Shirley (2008), better time management can be achieved if goals have been set, and all future work is prioritized based on how it moves the individual or organization towards meeting the goals. Prioritization enables a clear distinction between urgent and important priorities. Setting clear priorities in an organization means all people together move on a meaningful and clear path. Time is utilized efficiently, and time-wasting is minimized by avoiding time-wasters, procrastination, and poor planning. The ability to manage one time effectively limits burnout, advances progression, and eventually raises individual and collective fulfillment in an organization (Gordon & Borkan, 2014). Activities are scheduled according to the degree of importance or urgency in chronological order. To maximize returns from effective time management, students should prioritize academics and spend less time watching television, surfing the internet till late hours, playing video games, etc. Insufficient prioritization leads to poor sleep quality, less concentration on studies, and also indiscipline (Aduke, 2015); Chandi *et al.*, 2013).

### 2.2. Delegation

Delegation in educational institutions involves entrusting duties and responsibilities to teachers and school prefects. It implies assigning decision-making autonomy to achieve desired outcomes. Delegation enables school managers to maximize the time available and ensure students are assisted to grow and develop critical social and managerial skills by sharing responsibilities (Gordon & Borkan, 2014). Delegating school duties by Boards of Management (BOMs), school heads, and senior teachers onto duty teachers, class prefects, bell-ringers, and junior students has the potential to increase levels of productivity in a school setting. It seeks to empower individuals and provide required training to manage and direct students under their care, resulting in increased speed, responses, and satisfaction (Riisgaard *et al.*, 2016). The students and teachers that receive delegated responsibilities have the responsibility to ensure that work is accomplished timely to achieve improved curricular and non-curricular assignments (Hubbard, 2016). They can entrust their job to someone else they can trust and can facilitate their duties without their presence to achieve effective results (Sevari & Kandy, 2011). Effective delegation provides a higher degree of efficiency, saves time, and helps achieve more within a short stipulated time (Venton, 1997). There is increased utilization of diverse strengths and capabilities of students and teachers who have been assigned various roles (Muir, 2006). Time management strategies through delegation by school heads involve assigning subordinate teachers' leadership of various departments and committees within the school system (Hubbard, 2016). Delegating the various tasks effectively utilizes individual teacher strengths in various fields and disciplines, e.g., games, drama, music, discipline, Guiding, counseling, etc.

Moreover, school heads ensure smooth school routines are followed by delegating roles to teachers and students and communicating instructions clearly and thoroughly (Venton, 1997). Some of the roles delegated to selected students include:

- General school cleaning programs,
- Prefects duty rota, whose handover is signaled by a bell at 6 pm on Sundays,
- Bell-ringers in individual classrooms, entertainment captain, sports captain, etc

This form of delegation promotes resilience and social relationships among students in a school. Sevari and Kandy (2011), in their study, noted that despite students realizing the significance of time management habits on academic achievement, they fail to adequately set clear priorities that improve their performance in curricular and non-curricular assignments.

### 2.3. Set Study Time

According to Khanam *et al.* (2017), a student spending long daily hours in classes and preps has a significant relationship with academic performance. The study established a correlation between the ability of students to manage their time, plan for their study time, revision, and their eventual academic achievement (Khanam *et al.*, 2017). Since time is a scarce resource, the focus is on students' time management skills in the short and long run during the entire school calendar. The study concluded that students with effective time management achieve high grades, and those who do not manage their time effectively achieve low grades. It has been observed that only 30% of students set their plans and work according to their priorities, while the majority spends their time without planning (Zulauf & Gortner, 2000). Findings show a positive and significant relationship between time management and students' success. Several other investigators, including Macan *et al.* (1994), Britton and Tesser (1991), and Olawalu and Ahaiwe (2011), reported that there exists a positive relationship between academic performance and effective time management. Effective time management among students and their teachers will result in improved performance in curricular and non-curricular assessments (Adejo, 2012). Instinctively if there is poor time management in the allocation of study time, there is a probability of decreased

academic performance in the schools. Students should learn good time management skills because their transition to adulthood and professional life will result in orderliness and increased productivity (Adejo, 2012).

#### 2.4. Manage Distractions

For both students and teachers, knowledge of critical thinking and study skills provides strategies to manage time instead of time managing them. Frequent interruptions in the school routine and lesson time contribute to the retardation of teaching and learning in schools. According to Grahman (2002), management of time in school management and performance is absolutely critical to attaining academic excellence. Effective time management strategies among school administrators require the management of distractions (Zulauf & Gortner, 2000). These distractions act as time wasters that prohibit and hinder school administrators, students, and teachers from accomplishing scheduled tasks. In some instances, time wasters, i.e., unexpected visitors who were not part of the planned daily schedule, should be limited. In the case of unexpected visitors, the school administrator or student should limit lengthy conversations to strictly meaningful ones. Effective time utilization is key to limiting time wasters, i.e., frequent interruptions, ineffective planning, and procrastination of scheduled tasks (Hubbard, 2016). During an active class session, a teacher and the students can be interrupted by an unexpected visitor or a phone call, disrupting the learning process that will require additional study time to compensate. Repeated interruption of lesson time due to external distractions cumulatively will affect the student's understanding of the subject matter and eventual academic performance (Adejo, 2012). In cases where a teacher receives a phone call during class hours, they should limit the conversation. According to a study by Leonard (2003), the continued interruption of scheduled class time due to regular encroachments from outside the precincts of the classroom erodes instructional time and minimizes learning opportunities.

For impromptu meetings, teachers and school administrators could delegate to avoid postponement of scheduled learning hours.

#### 2.5. Schedule Breaks

Educational institutions are managed based on strict routines that sequence and pre-determine activities that students and teachers should accomplish daily, including weekends and national holidays. This rigid program has to be followed. Daily activities, from waking up in boarding schools to bedtime in the evening, are signaled by the 'school bell' that conditions the mind to an essential activity through a defined daily cycle. Strict compliance to every scheduled activity and task determines success in both curricular and non-curricular assessments in the schools (Ugwulashi, 2011). These activities and tasks can be overwhelming to the students and teachers since all tasks, i.e., morning assembly, lesson times, breaks, school opening/closing, mid-term break, prep time, sports, and clubs, must be accomplished within a specified time period. The school program whose implementation is effected by the 'school bell' defines a list of scheduled tasks for students and teachers to accomplish. The school schedules help teachers and students become better managers of time (De Jong et al., 2000; Macan et al., 1990; Misra & McKean, 2000). School bell promotes effective communication around the school. The monotonous program often leads to fatigue that requires adequate breaks to resolve (Aduke, 2015). Purposefully scheduling breaks from the program facilities to refresh the brain, increase body energy, productivity, and ability to focus. The school bell ensures that consistent bell ringing eliminates excuses for lateness, instills discipline in students and teachers, prevents overlapping of a lesson causing unnecessary delays for the next teacher, and ensures the syllabus is finished on time (Ngowo, 2011; Ugwulashi, 2011).

### 3. Methodology

#### 3.1. Research Question

The research work intended to evaluate the role of the 'school bell' as a tool to:

- Instill time management discipline and
- Promote overall academic and non-academic excellence among primary and secondary school students in Kenya

#### 3.2. Statement of the Problem

Poor time management skills lead to declining performance among students in educational institutions in Kenya. The present study investigated the role of the 'school bell' as a tool to promote better time management skills by 'conditioning' and 'coaching' students to effectively manage time as a critical resource as per the school routine.

#### 3.3. Research Design

A total of 110 student respondents at two institutions of higher learning in Kenya were interviewed. The survey targeted both male and female respondents who were randomly identified. The study used a combination of descriptive survey and naturalistic design methods of data acquisition, employing qualitative and quantitative research approaches (Kombo & Tromp, 2006). The data collection instruments were the on-spot questionnaire and interview guide to enhance comprehensive data collection, i.e., data were collected by asking respondents questions, and the responses were recorded simultaneously (Kothari, 2004). Statistical procedures were used to arrange, analyze and summarize the raw data into frequencies and percentages. The qualitative data generated in the research were analyzed thematically. The respondents were assured of the confidentiality of their identity.

### 3.3.1. Research Instruments

The raw data were first handwritten in the questionnaires before being reported in themes, frequencies, and percentages. The questionnaires were sub-divided into various sub-sections based on research objectives.

Each respondent was then expected to respond to questions in the questionnaire as the researcher recorded responses. The researcher used questionnaires for this study because it was the most suitable research instrument for descriptive research design (Kombo & Tromp, 2005). The obtained data were quantified using descriptive statistics, i.e., frequencies and percentages, and the findings were presented in charts, tables, and graphs.

## 4. Results and Discussion

### 4.1. Gender of Respondents

Figure 7 below shows the classification of the respondents by gender.

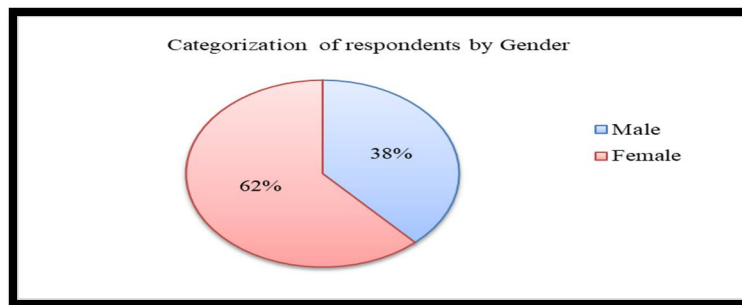


Figure 7: Classification of Respondents by Gender

A total of 110 student respondents participated in the study. Of them, 68 respondents (62%) were females, and 42 (38%) were males. The results shown in figure 7 indicate that female respondents were more willing to participate in the survey compared to male respondents. The findings are supported by results illustrated in section 4.4, where 16 respondents out of 25 student's bell ringers (64%) were females.

### 4.2. Secondary Schools Attended

Figure 8 below indicates the location of the secondary schools attended by the respondents.

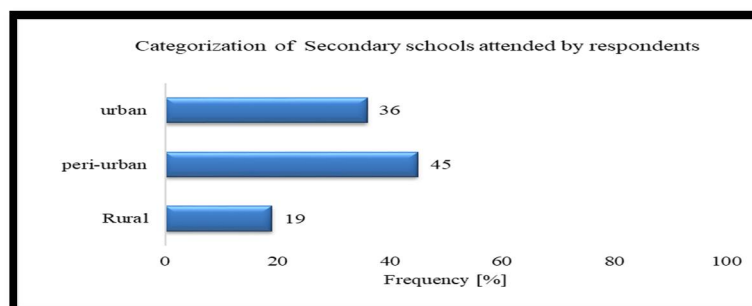


Figure 8: Location of Secondary Schools Attended by Respondents

The respondents in the study (110 students) were reported to have attended primary and secondary schools in the following locations:

- Urban= 39 respondents (36%),
- Peri-urban= 50 respondents (45%),
- Rural= 21 respondents (19%)

From the results indicated in figure 8, most respondents attended secondary schools in peri-urban areas and the least in rural areas.

### 4.3. Categorization of School Bell Type Used in Kenyan Primary and Secondary Schools

Figure 9 below summarizes the various types of 'school bells' used in primary and Secondary schools in Kenya.

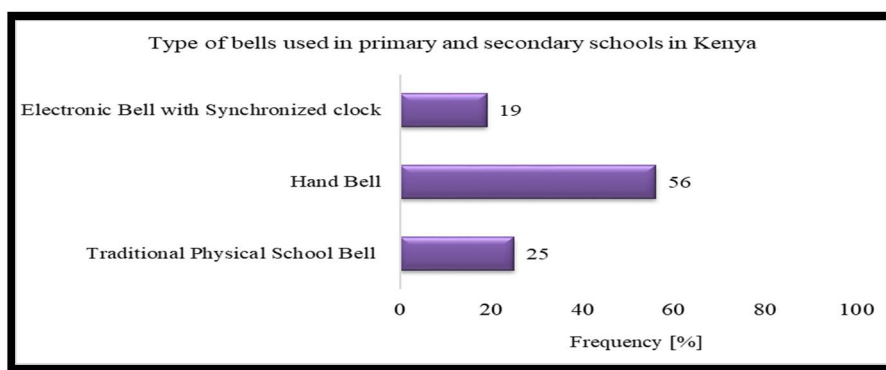


Figure 9: Types of 'School Bells' Used In Primary and Secondary Schools in Kenya

The respondents reported using the following 'school bells' in the primary and secondary schools they attended:

- Electronic Bell with Synchronized clock= 21 respondents (19%),
- Hand Bell= 62 respondents (56%),
- Traditional Physical School Bell= 27 respondents (25%)

The results show that the Electronic Bell with a Synchronized clock was reported to have been used in the least schools (19%), while the handbell was widely used in the schools attended by respondents (56%) due to its simplicity in design and usage. The Traditional Physical school bell was reported to be used mainly in rural schools, including selected peri-urban schools.

4.4. Representation of Respondents Who Served as Bell Ringers/Time-Keepers in Primary and Secondary Schools

Figure 10 below indicates the number of respondents, i.e., male/female, who served as bell ringers and timekeepers in primary and secondary schools.

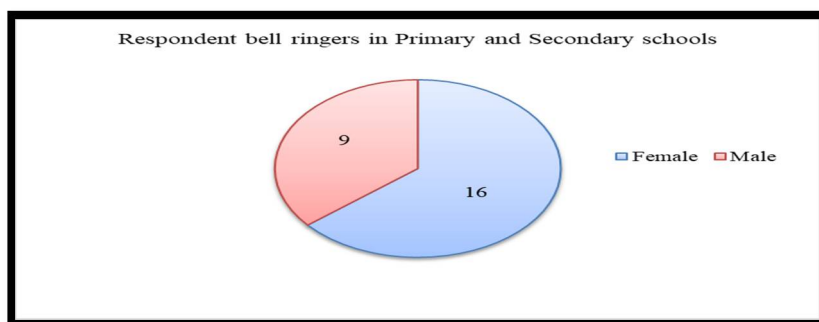


Figure 10: Respondent Bell Ringers/Time-Keepers

The results shown in figure 10 indicate that most timekeeper respondents that participated in this study were females (64%, 16 respondents) and males (36%, 9 respondents). The handbell was reported to have been used by all 16 female respondents due to its simplicity and portability. Of the male bell ringers, 8 reported using the handbell, while one student confirmed to have used the Traditional Physical School bell.

4.5. Significance of the 'School Bell' in Fostering Student Discipline/Academic Performance among Primary and Secondary School Students

Figure 11 below illustrates the school bell's significance in enabling students to achieve excellent time management skills.

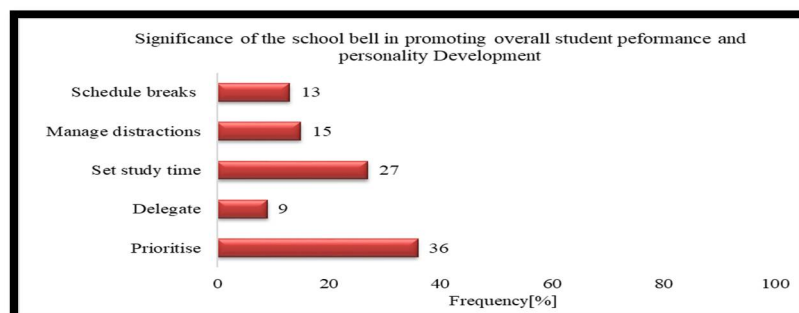


Figure 11: Significance of the 'School Bell' in Fostering Overall Student Time Management Skills among Students in Primary and Secondary Schools in Kenya



From the findings in figure 11, the 'school bell' promotes effective communication around the school by acting as a technical component and medium for school routine management. Without the 'school bell', the regular school routine would fail, thereby affecting learning and development among students. The respondents reported the significance of the 'school bell' as follows:

- Schedule breaks (13%),
- Manage distractions (15%),
- Set study time (27%),
- Delegate (9%),
- Prioritize (36%)

The results indicate that students should improve their time management skills by increasing awareness in their attitudes, planning, thinking, and behavior regarding time management and how managing time can affect academic performance.

Students should minimize time wastage and take responsibility for overall time management.

## 5. Conclusions

The article identified the 'school bell' as a technical component in primary and secondary schools that instills in students a sense of discipline as they transit to professional life. The 'school bell' drills and coaches the students on good time management skills by repeatedly reminding them to manage distractions, setting study time, scheduling breaks, delegating, and prioritization. In an individual sense, proper time management skills provide an opportunity for career planning and preparation for the future, learning, following new developments and technology, allocating more time to social activities, relaxation, and developing new ideas and projects.

## 6. References

- i. Leonard, L. (2003). *Journal of Educational Enquiry*, 4(2), Optimizing by minimizing Interruptions and the erosion of teaching time; Louisiana Tech University Ruston, Louisiana, United States of America.
- ii. Adebayo, F. A., and Omojola, I. (2012). Influence of time management on administrative effectiveness in higher institutions in Ekiti State, Nigeria. *International Journal of Educational Research and Technology* 3(1), 27-34.
- iii. Olawolu, O. E., and Ahaiwe, C. N. (2011). Managing time in an educational organization: Policy implications for educational managers in Rivers State, Nigeria. *Mediterranean Journal of Social Sciences*, 2(4), 63-70.
- iv. Britton, B. K., and Tesser, A. (1991). Effects of Time Management Practices on College Grades. *Journal of Educational Psychology*, 83: 405-410.
- v. Misra, R, and Mckean, M. (2000) College Students' Academic Stress and Its Relation to Their Anxiety, Time Management, and Leisure Satisfaction. *American Journal of Health Studies*, 16 (1): pp. 41-51.
- vi. Aduke, A. F. (2015). Time Management and Students Academic Performance in Higher Institutions, Nigeria – A Case Study of Ekiti State. *International Research in Education*, 3(2), 1-12.
- vii. Chaturvedi, A. (2016). Impact of Time Management on the Academic Growth of Students in Universities, Nigeria. *Intl J Engg Sci Adv Research*, 2(4), 7-9.
- viii. Nonis, S. A., Hudson, G. I., Logan, L. B., & Ford, C. W. (1998). Influence of Perceived Control over Time on College Students 'stress And Stress-Related Outcomes. *Research in Higher Education*, 39(5), 587-605.
- ix. Claessens, B. J., Van Eerde, W., Rutte, C. G., and Roe, R. A. (2007). A review of the time management literature. *Personnel review*, 36(2), 255-276.
- x. Miqdadi, F., Almomani, A., Masharqa, M., & Elmousel, N. (2014). The Relationship between Time Management and the Academic Performance of Students from the Petroleum Institute in Abu Dhabi, the UAE. Paper presented at the ASEE 2014 Zone I Conference.
- xi. Khanam, N., Sahu, T., Rao, E., Kar, S., and Quazi, S. Z. (2017). A study on university student's time management and academic achievement. *International Journal of Community Medicine and Public Health*, 4(12), 4761-4765.
- xii. Zulauf, C. R., and Gortnet, A. K. (2000). Use of time and academic performance of college students does studying matter? *American Agricultural Economics Association*, 3(2), 8-11.
- xiii. Phillips, C. (2002) Time for Literacy, Paper presented at the Annual Meeting of the Conference on College Composition and Communication, Chicago, March (53).
- xiv. Le Blanc, R. (2012) Time Management Tips, Tools and Techniques: Learn the most important time management skills for personal life and career success, Cranendonck Coaching.
- xv. Riessman, B. E. (2002) Time Tactics of Very Successful People, Audio-Tech Business Book Summaries, ISBN0071415890, 9780071415897.
- xvi. Gordon, E.C. and Borkan. S.C. (2014). Recapturing time: a practical approach to time management for physicians. *Postgraduate Medical Journal*, 90 (1063), 267-272.
- xvii. Gahrman, N.A. (2002) Top Ten Time Wasters. *Time Management Journal*. Hall G. *Journal Managing Meetings*. The Art of Successful Meetings.
- xviii. Pedrosa, F., Sergio, R., and Pedro, J.C. (2007). University students' Academic Performance. An integrative conceptual framework and empirical analysis.
- xix. Assey A. A., (2009). The impact of integrating ICT into student support service in Distance Education. The case of bachelor of the education program of the university of Nairobi unpublished Ph.D. theses of University of Nairobi, Nairobi.

- xx. Nkonge, P. K. (2010). Factors that influence job satisfaction among secondary school teachers in Imenti South District in Kenya; Unpublished M.Ed. Thesis, Chuka University College.
- xxi. Orina, K. B. (2005). Role of the principals' leadership behavior on students' academic performance in secondary schools, Manga division, Nyamira district, Nyanza province, Kenya.
- xxii. George, D. (2008). Time diary and questionnaire assessment of factors associated with academic and personal success among university undergraduates. *Journal of American College Health*, 56, 706-715.
- xxiii. Britton, B. K., & Tesser, A. (2008). Effects of time management practices on college grades. *Journal of Educational Psychology*, 83, 405-410.
- xxiv. Davis, M.A (2000). Time and the nursing home assistant relations among time management, perceived control over time, and work-related outcomes. 'A Paper presented at the Academy of Management, Toronto.
- xxv. Igun, S.E., and Adogbeji, O.B. (2007). 'Study habits of postgraduate students in selected Nigerian Universities' *Library Philosophy and Practice (e-Journal)*. Paper 153 Available online at <http://digitalcommons.unl.edu>. Retrieve on 26<sup>th</sup> July 2022.
- xxvi. Claessens, B.J.C., Eerde, W.V., Rutte, C.G., and Roe, R.A. (2007). 'A Review of the Time Management Literature' Available online at <http://www.arno.unmaas.n> retrieved on 26<sup>th</sup> July 2022.
- xxvii. Kyriakides, L., Creemers, B., Antoniou, P., & Demetriou, D. (2010). A synthesis of studies searching for school factors: implications for theory and research. *British Educational Research Journal*, 36(5), 807- 830.
- xxviii. De Jong, R., Westerhof, K.J., and Creemers, B.P.M. (2000). Homework and student math achievement in junior high schools. *Educational Research and Evaluation*, 6(2), 130-157.
- xxix. Farooq, S.A., Firdouse, R.K., & Abdulrazzaq, T.H. (2020). Do time management factors impede students' academic achievement? : A case study – Sohar University, Oman. *Humanities & Social Sciences Reviews*, 8(4), 201-212.
- xxx. Swart, J.A., Lomberd, K. and Jager, H. (2010). Exploring the relationship between time management skills and the academic achievement of African engineering students – a case study. *European Journal of Engineering Education* Volume 35, Issue 1, 65. Unpublished MEd Thesis, Kenyatta University, Nairobi.
- xxxi. Khan, H.M.A. Farooqi, M.T.K, Atif, K and Imran, F. (2016). Exploring Relationship of Time Management with Teachers' Performance. *Bulletin of Education and Research*, Vol. 38, No. 2 pp. 249- 263.
- xxxii. Ngowo, A.A. (2011). Relationship between time management and academic performance for primary schools: A case study of Morogoro Municipality. (Unpublished, Master's thesis) Mzumbe University, Tanzania.
- xxxiii. Chandi, J., Ndiritu, A., Kidombo, H., Mbwesa, J. and Keiyoro, P. (2013). The effect of time management on academic performance of Distance learners: A case of the University of Nairobi Distance Learners. *Educational Journal* 6(7), 34-40.
- xxxiv. Adejo, A. (2012). Effective time management for high performance in an organization (Doctoral Dissertation). International Business Department, Seinäjoki University of Applied Sciences.
- xxxv. Nwaiwu (2000). Time congruity in the organization. *Journal of Business & Psychology*, 6(9), 106-116.
- xxxvi. Shirley (2008). Time management and administrative effectiveness. *International Journal of Social Science Research*, 2(2), 97-104.
- xxxvii. Ezine, J. (2008). Time management: Test of a process model. *Journal of Applied Psychology*, 7(9), 381-391.
- xxxviii. Ugwulashi, C. S. (2011). Time management and school administration in Nigeria: Problems and prospects. *Journal of Educational and Social Research*, 1(2), 56-64.
- xxxix. Hubbard, T.N. (2016). Research: Delegating More Can Increase Your Earnings. *Business Review*. Accessed from <https://hbr.org/2016/08/research-delegating-more-can-increase-your-earnings>.
- xl. Muir, J. (2006). 'Effective Management through Delegation', work-study, Vol. 44 Issue: 7, pp. 6-7.
- xli. Riisgaard, H., Nexoe, J., Le, J., Sondergaard, J and Ledderer, L. (2016). Relations between Task Delegation and Job Satisfaction in General Practice: A Systematic Literature Review. *BMC Family Practice* 2016. 17. 168.
- xlii. Werner, A. 'The Native Tribes of the British East Africa.' *Journal of the Royal African Society*, Vol. 19 No. 76 (1920), 285-294.
- xliii. Beck, A. 'Colonial Policy and Education in British East Africa, 1900-1950.' *Journal of British Studies*, Vol. 5. No.2, (1966), 111-138.
- xliv. Barrett, W H. 'Ethnographic account of the Giriama.' *Journal of Anthropological Institute*, Vol. 17 (1911), pp. 20-39.
- xlv. Burton, R F. The lake regions of central equatorial Africa. London: Macmillan, 1959.
- xlvi. Churu, B., and Mwaura, B. The Catholic Church and Schools in Kenya: A Historic Perspective on Education for Holistic Development. Nairobi: Unpublished, 2011.
- xlvii. Stock, E. 'History of the Church Missionary Society.' *Journal of Religion*, Vol. 2 (1950), 431-32.
- xlviii. Fitzgerald, W W. Travels in the coastlands of the British East Africa and the Islands of Zanzibar and Pemba. London: Oxford University Press, 1898.
- xlix. Freeman, Grenville. The Mombasa Rising Against the Portuguese. London: Oxford University Press, 1980.
- I. Gordon, Hewitt. Problems of success: A history of the Church Missionary Society 1910-1942. Bristol: Western Printing Services Ltd, 1971.
- li. Macan, T. (1994). Time management: Test of a process model. *Journal of Applied Psychology*, 79, 381-391.
- lii. Gupta, C.B (2001). *Human Resources Management*, Sultan Chand and Sons, New Delhi
- liii. Amuli (2008). *Time Management in Tanzania Secondary Schools, Lindi Rural District*.
- liv. Osogo, J.N.B. 'Educational Developments in Kenya 1SH-1924 (with particular reference to African Education), in Hadith 3, East African Publishing House, 1970.

- lv. Ranger, T. (1965). 'Education in East and Central Africa' 1900-1939. Past and Present, 32, 57-85.
- lvi. Sifuna, D. (1990). Development of education in Africa. The Kenya Experience. Nairobi.
- lvii. Otiende and Wamahiu. (1992). Management of Education. Nairobi Education Research and Publications (ERAP).
- lviii. Fraser, J. (1909). Kenya Colony Education Commission Report. Kenya National Archives
- lix. Sifuna, D.N. (1975) Revolution in Primary Education. The New Primary Approach in Kenya. Nairobi: East African Literature Bureau
- lx. Thompson, A. R. (1981). Education and Development in Africa. London: ESBS: Imprint.
- lxi. Kimalat, W. (1998). Decentralization and Deployment of Teaching Service in Kenya: MOEST.
- lxii. Nasimiyu-Wasike, A., and Waruta, D. Mission in African Christianity (critical essays in missiology Nairobi: Action 2000, 123-149.
- lxiii. Ominde, S.H. (1964). Kenya Education Commission Report, Republic of Kenya, Nairobi Government Printer
- lxiv. MoEST (2020). Ministry of Education, Science, and Technology, Basic Education Statistical Booklet, Nairobi: Government Printer.
- lxv. Paukwa. (2019, October 29). Rabai Mission School. <https://paukwa.or.ke/rabai-mission-school/> accessed on 15<sup>th</sup> July, 2022.
- lxvi. UNESCO. (2016). Instructional Manual: Survey of Formal Education. UNESCO institute for statistics.
- lxvii. Seward, A.C. (1940). Christ's Hospital and the Royal Society: The Royal Society Journal of the History of Science. The Royal Society Publishing.
- lxviii. Kiriama, H. (2005). The Swahili of the Kenyan Coast. Eight Publishers, Mombasa.
- lxix. Kusimba, C.M. (1999). The rise and fall of Swahili states. Walnut Creek, Altamira Press London, New Delhi.
- lxx. Pouwels, R.L. (1987). Horn and crescent: cultural change and traditional Islam on the East African coast, 800-1900. African Studies Series53. Cambridge University Press, Cambridge & New York.
- lxxi. Kombo, D, and Tromp, D. (2006). Proposal and Thesis Writing. An Introduction. Nairobi: Pauline Publications.
- lxxii. Kothari, C. R. (2004). Research Methodology Methods and Techniques. (2<sup>nd</sup> Ed.). New Age International Publishers.
- lxxiii. Adhiambo, P.O., Raburu, P and Aloka, J.O. Relationship between time management and academic performance among orphaned Secondary school students of Kenya. Scientific and Academic Publishing, 2016.
- lxxiv. Sevari, K and Kandy, M. (2011). Time Management Skills impact on self-efficacy and Academic Performance. Journal of American Science, 7, 720-726.
- lxxv. Venton, J.P. (1997). A General Theory of Delegation, Accountability, and Empowerment. The Canadian Journal of Program Evaluation, 12(2), 163-188.