Multimedia Presentation And Effective Teaching And Learning Business Studies In Secondary Schools In Ainabkoi Sub- County, Kenya

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Abstract

Despite the importance of business studies, less efforts have been made to ensure success in its delivery to students in secondary schools and consequently use it in real life after school for self-employment. Besides, the challenges confronting the educational system on the transformation of teaching and learning processes into the ability to function effectively in their various trades calling for the use of multimedia in teaching. Therefore, the current study was designed to explore the influence of multimedia presentation on the teaching of Business Studies in secondary schools in Ainabkoi Sub-County, Kenya. The study adopted a descriptive survey research design. Samples were drawn from teachers and learners taking business studies in forms 3 and 4, principals across, public secondary schools in Ainabkoi Sub- County, Kenya. The target population was 2666 respondents. Purposive sampling and census was used for teachers and principals while stratified and simple random sampling techniques were used for learners. A sample size of 335 learners of Business Studies in forms three and four were drawn from a total population by using Krejcie and Morgan table plus 52 teachers and 24 principals. Data was collected by use of questionnaires, interview schedule and an observation checklist. Data was analyzed by use of both inferential and descriptive statistics. From the findings multimedia presentation improves understanding of business studies concepts. Arising from the findings, the study concluded that students and teachers' perception implied that supplementing audio visual and text presentation styles enhance student engagement. Additionally diverse multimedia presentation styles impart critical thinking skills for preparing students for real-world applications and continuous improvement in business studies education. The findings and recommendations of this study would be of great importance to government policy makers to support integration of multimedia presentations in teaching of Business Studies.

Key Words: *Multimedia Presentation, Teaching and Learning*

I. Background

The social, economic and political needs of the citizens in a country may be met through effective teaching of business studies. This is justified by its role in equipping students with entrepreneurial mindsets and talents for catalyzing economic prosperity. This calls for teaching approaches which enhance students' innovative skills and attitudes for better performance (Kwangmuang, Jarutkamolpong, Sangboonraung, & Daungtod, 2021). In this regard, teaching approaches in all subjects must continuously evolve to meet the challenges of the fast-changing and unpredictable globalized world. Asif, Thomas, Awan, and Muhammad Din, (2020) posits that teachers and other stakeholders should institute the use of multimedia as an innovative teaching strategy to prepare students in a heterogeneous class to produce a desired effect. Progress towards this target gives credence to the impetus for the use of multimedia in teaching Business Studies. Despite the importance of business studies, less efforts have been made to ensure success in its delivery to students in secondary schools and consequently use it in real life after school for self-employment (Warui, 2015). Besides, limited studies have investigated the link between multimedia presentation and teaching business studies in secondary schools.

Teaching is a concerted sharing of knowledge and experience, which is usually organized within a discipline and, more generally, the provision of stimulus to the psychological and intellectual growth of a learner by the teacher or artifact (Perko, Lebe, & Basle, 2020). Teaching is the process of attending to people's needs, experiences and feelings, and intervening so that they learn particular things, and go beyond the given. According to Munna and Kalam (2021) teaching is an academic process by which students are motivated to learn in ways that have a sustained, substantial and positive influence on how they think, act and feel. Effective teaching is concerned with the student as a person and with his general development. Therefore, the teacher

must recognize individual differences among his/her students and adjust instructions to best suit the learners (Maria, Arnold & Euberta, 2022). Thus, to achieve the laudable objectives of teaching and learning business studies in Secondary Schools, the teaching of business studies should be well strategized to bring about meaningful learning which could improve students' performance.

Therefore, acquiring knowledge through multimedia, offers the students the opportunity to think, analyze and seek new information, this means that students cannot learn only in schools. The teacher can use an innovative multimedia presentation. Multimedia presentation is a form of innovative learning media (Zaim, 2016). Multimedia presentation (Powerpoint) has an influence on the explanatory text writing skills of students. According to Rahimi, Kashani, and Soleymani (2019 multimedia presentation is a learning media that utilizes an application called PowerPoint. This application is incorporated in the Microsoft Office which is already available in it which no longer needs to be downloaded and is more often found and is also familiar in the world of education which is relatively easy and cheap compared to other applications. Multimedia presentations can significantly enhance teaching effectiveness when designed and implemented thoughtfully. Teachers can create multimedia presentations that enhance teaching effectiveness, engage students, and improve learning outcomes. This is because, simply using multimedia does not automatically enhance teaching effectiveness. The success of multimedia presentations in education depends on how well they are designed and integrated into the overall teaching strategy. Thus, while multimedia has potential benefits, its effectiveness in education is not automatic. Clark and Mayer, (2023) points that that multimedia's impact on learning is highly dependent on the quality of design. They argue that poorly designed multimedia can lead to cognitive overload and detract from learning. Therefore teachers need to design multimedia presentations with clear, evidence-based guidelines to avoid pitfalls like redundancy and irrelevant content. Additionally, Mishra and Koehler, (2021) points out that mere inclusion of multimedia does not guarantee enhanced learning outcomes. This highlights the need for educators to focus on the interplay between technology, pedagogy, and content knowledge, rather than relying solely on multimedia tools. In this regard the current study filled the gap in literature by clarifying the influence of multimedia presentation on teaching business studies in secondary schools in Ainabkoi Sub- County.

Statement of the Problem

Business Studies as a subject is classified as a vocational subject meant to impart knowledge and skills for practical use. Thus, effective teaching of Business Studies is seen as one way of increasing employment and catalysing economic prosperity of the country as anchored in Vision 2030 (Anindo, Mugambi, & Matula, 2016). This has warranted the use of learner-centered instructional aids such as multimedia presentation to increase learning and simplify Business Studies lesson delivery while addressing diverse learners' needs. However, education stakeholders have expressed their concern over the poor performance of students in business studies in secondary schools due to pedagogical challenges (Kimotho, 2016). Lack of effective teaching and learning has resulted in inconsistent and poor performance of students in Business Studies in secondary school examinations. There has been student failure in national examinations as an indicator of poor teaching (Abuya, 2022; Nyamwange, 2018). In anapkoi subcounty the performance of business studies has been inconsistent and below avarage with with a mean of 4.712 in 2023, mean of 3.550 in 2022, mean of 4.039 in 2021   with a standard deviation of 1.1617 (Ainabkoi Sub-County,2023). If this trend continues then the realization of an intellectually flexible labour force for the transformation of the economy through business studies would be a challenge.   `

To address the problem of poor teaching and learning in business for better results, there is a need to strengthen the use of modern technologies such as multimedia to meet student expectations, improve student productivity (Mayes, Natividad & Spector, 2015). This is because Multimedia presentations can reinforce learning through a combination of visual, auditory, and kinesthetic stimuli. Basak, Wotto and Bélanger, (2016); Kurt, (2012) found a positive link between the use of multimedia and teaching. Moreover, the studies were not conducted in secondary schools in Kenya. In addition, there are limited studies in Kenya focusing on teaching business studies using multimedia which include (Kimotho, 2016; Kurgat, 2014; Wanza, 2013). These studies didn't focus on the influence of multimedia presentation on teaching business studies in Secondary Schools in Ainabkoi Sub- County providing a gap for the current study. In this regard, the study investigated the use of multimedia presentations which is a learner-centered approach in teaching which would eventually lead students to apply the concepts taught in life after school for self-employment. This might improve students' understanding and achievements in business studies.

Purpose of the study

The purpose of the study was to determine the influence of multimedia presentation on teaching business studies in secondary schools in Ainabkoi Sub- County.

II. Literature Review

A multimedia presentation is a standalone presentation that includes information presented with slides, video, or digital representations and includes sound which might be a narrative, music or sound effects (Kesharwani, 2020). Done right, they provide a perfect forum for combining images, text, and powerful oratory in any classroom situation. With digital presentations, teachers can more easily check in on student progress and offer instructional advice as well (Denby, 2016). The use of media to enhance teaching and learning complements traditional approaches to learning. Using media engages students, aids student retention of knowledge, motivates interest in the subject matter, and illustrates the relevance of many concepts (Mateer, 2020). The multimedia design, mainly of images and text, can influence the efficiency of these materials in the teaching-learning process.

Thus, educational technologies such as multimedia presentations are becoming commonplace. With a diverse array of multimedia technologies being used to create a plethora of presentation styles, it is little wonder that decisions facing multimedia producers can be overwhelming. This is compounded in large-scale intensive curriculum development where indecision on presentation style can impact on student learning, and mid-production changes in technologies can have repercussions on the curriculum development process (McInnes, 2019). Multimedia presentation styles range from fully instructor-centric to content-centric (Crook & Schofield, 2017). The appropriate use of ICT in teaching transforms the learning environment from teacher-centred to learner-centred Coleman, Gibson, Cotten, Howell-Moroney and Stringer (2016) just as it is transforming all aspects of human life (Guan, Song, & Li, 2018). Coleman, Gibson, Cotten, Howell-Moroney and Stringer (2016), emphasized that the shifting from teaching to learning creates a student-centred learning where teachers are there as facilitators and not sages on the stages, thus changing the role of the teacher from knowledge transmitter to that of a facilitator, knowledge navigator and a co-learner. Crook and Schofield (2017) add that other classifications of multimedia presentation styles include voice-over-slides, presence-in-picture, voice-over-screencast, and presence in full screen. Guo and Rubin (2014) notes that it appears as though the ideal scenario is for multimedia presentations to be mainly. Instructor-centric, cutting to content-centric styles for additional information as necessary. According to Abdulrahaman, et al., (2020) when used in the classroom or for educational purposes, the design quality and sophistication of multimedia application must be high enough to combine the different elements of the cognitive processes so as to achieve the best mimicking of the teacher.

Nazira (2020) investigated factors of successful group activities and application of multimedia technologies in teaching foreign language. From the findings, Some students respond better to visual forms of information presentation, such as slides,diagrams; others learn better by ear - through explanation and discussion; still others perceive more knowledge through participation in "learning by doing" exercises. Subaidi and Aziz, (2020) investigated the effectiveness of multimedia learning in enhancing reading comprehension among indigenous pupils. The result showed that the implementation of multimedia learning in teaching reading comprehension is useful as the combination of multiple elements of media scaffolded the process of understanding. On the other hand, audio is the least effective in helping pupils comprehend the information. Olusola-Fadumiye, Harun, and Megat (2023)The findings showed that the authentic-based multimedia learning strategy had a positive effect on the students' performance and the engagement level. Nevertheless, the results also suggest that the effect of using authentic-based multimedia learning should involve the engagement of students in the real-world learning situations in tackling challenges. The implications of the results shows that authentic-based multimedia learning strategy enhances students' performance, cognitive and behavioral engagement in the learning environment. Good design multimedia presentation is more important for more complex materials, and in system-paced environments (e.g., lectures) than self-paced ones (e.g., websites) (Noetel, et al., 2022). However the studies didn't focus on multimedia presentation on effective teaching of bussiness studies concepts in the Kenyan context.

Zhigadlo, Odinokaya and Sheredekina (2018) studied the "Use of Multimedia Training Presentations in Teaching a Foreign Language in a Non-Linguistic University". The study found that Multimedia educational technologies become not only the main teaching and methodological material for organizing independent work of students of a non-linguistic high school, but also the main means of informational support for public speaking students, stimulating students to learn a foreign language. The study also established that the certain principles of constructing a multimedia educational presentation, such as quality of teaching material and using interactive technology.

Shanaieva and Yamnych (2021) analyze the content of the latest multimedia technologies of foreign language learning using multimedia presentations. From the findings a multimedia presentation is an opportunity to develop fluency in English without the pressure of speaking live in front of an audience for students who lack confidence or language skills. The fear of errors can be eliminated, allowing students to focus on content, intonation, and organization. Exposito, Sanchez-Rivas, Gomez-Calero, and Pablo-Romero, (2020) adds empirical evidence to show the effectiveness of the use of instructional videos in the field of economics. Firstly, videos illustrating dynamic graphical representations of macroeconomic processes have been developed

and used in the class of one student group at the University of Seville (Spain), as complementary teaching materials in the macroeconomics curriculum. Secondly, the effectiveness of these videos has been tested by carrying out an inferential analysis on experimental and control groups. Syuhada, Wilantara and Febrina, (2021) determined how the influence of multimedia presentation (PowerPoint) of explanatory text writing skills on eighth grade students at Al-Bukhary Rantauprapat Islamic Junior High School 2020 academic year in Indonesia using quantitative method. Then the researcher chose one-group for pretest-posttest design research type with a sample of 40 students using multimedia presentations in the form of PowerPoint on a laptop. From the findings the use of multimedia presentations in writing explanatory text has a significant effect on teaching. However, the study didn't focus on the use of multimedia on teaching business studies.

Rahimi, Kashani, and Soleymani (2019) investigated the effect of incorporating multimedia presentations into the cycle of cognitive and metacognitive listening instructions on foreign language learners' development of listening comprehension in England. The study used two experimental and two control groups, with 16 students in each group. Considering the groups that experienced cognitive listening instruction, the result indicated a significant effect of multimedia on improving the experimental group's listening comprehension. Considering the groups that experienced metacognitive instruction, no significant effect of multimedia was found, as the listening skill of both groups (with and without multimedia presentations) improved significantly at the end of the experiment. Van Rooij and Zirkle (2016) studied balancing pedagogy, student readiness and accessibility: A case study in collaborative online course development Virginia. The study focused on collaboration between the Instructional Design and Technology faculty and the Assistive Technology Initiative (ATI) group at a 4-year public institution to address both of these issues simultaneously during the development of an online course designed to teach undergraduates to cultivate the self-discipline and self-direction required to become successful online learners. From the findings the effectiveness of various multimedia formats in achieving learning objectives and the multimedia's intended use continue to be crucial. In addition the majority of multimedia solutions used for teaching and learning focus on the pedagogical content of the subject of interest and the solution's user audience, according to Abdulrahaman et al. (2020), while the success of the various multimedia tools used for the various target groups and subjects can be attributed to the use of effective design.

Molina, Navarro, Ortega and Lacruz (2018) evaluated multimedia learning materials in primary education using eye tracking in Spain. The eye tracking method was used in the study's four tests to collect data. The eye tracking provided information not consciously controlled by the students. Its use is a particularly interesting and useful source of information. The primary contribution of this study is the recommendation for the application of this evaluation method, which enabled the study to empirically and objectively (physiologically) validate aspects like the comprehension of multimedia content, the students' attention while analyzing the information provided, or the cognitive load of the supplied materials. There was a gap in the previous study because it was experimental and didn't employ questionnaires. Ilhan and Oruc (2016) studied the effect of the use of multimedia on students' performance: A case study of social studies class in Kayseri, Turkey using experimental design. The sample of the study is 67 social studies 4th grade students. From the findings, multimedia technique increased the academic success of students in social studies lesson compared to the traditional classroom. However, the study was conducted in a non-Kenyan context limiting the generalization of the findings.

III. Research Design And Methodology

Research Design; The study adopted a descriptive survey research, a scientific method which involves observing (surveying) and describing the behaviour of a subject without influencing it in any way (Stangor, 2014). According to Kothari and Garg (2014) descriptive survey method is a popular and common strategy in business research.

Target population and Sampling Technique and Sample Size: The study targeted 2666 respondents from public secondary schools from Ainabkoi Subcounty County. The sample proportions respondents from the public secondary schools in Ainabkoi sub county was determined using the formula below:
$n_i = (N_i \times n)/N$

After which the number of principals and teachers were added the number of learners totaling to 411 respondents.

Table 3.2: Sample Size of Study

School Categories	Principals	Teachers	Learners	Sample Size for learners
National Schools	1	3	450	58
Extra County Schools	5	11	1140	147
County	4	8	660	85

Subcounty	20	20	340	45
Total	**24**	**52**	**2590**	**335**

Source (State Department of Early Learning and Basic Education Ainabkoi Sub-county**)**

A two-stage sampling technique was used to narrow down the number of respondents from the public schools. Teachers handling business studies and principals of respective schools were purposively selected and were not sampled but census technique was used for their small sample size. A stratified random sampling technique was used to select the School categories while Simple random sampling was used to select the learners from each school category.

Data Collection: The study used interviews, questionnaire as well as reviewing existing literature. An observation checklist was used to confirm some facts on the questionnaires. These instruments supplemented each other to give a deeper and wider exploration to research perspective. Close-ended questions was used because they are easier to analyze since they are in a format that allows one to use them. They are also easier to administer because they have alternative answers.The interview method was used to ensure participants shared information regarding their experience on the influence of multimedia on teaching business studies in secondary schools in Anabkoi Sub County.

Data analysis: was analyzed using descriptive (mean, standard deviation, frequencies) and inferential statistical techniques. Under inferential statistics simple linear regressions was used to determine the effect of a set of independent variable (multimedia presentation) on dependent variable (teaching and learning) and coefficient of correlation using the Statistical Package for Social Sciences (SPSS) version 25.0 package.

The regression model was as follows:
$y = \beta 0 + \beta_1 X_1 + \varepsilon$……………………………… Equation 3.1
Where y represented teaching which was the dependent variable x represents the multimedia presentation β is the standardized regression coefficient.
X_1 represent multimedia presentation.

IV. Data Presentation, Analysis, Interpretation And Discussion
Descriptive Statistics of the Variables
Multimedia Presentation

Using multimedia presentations in teaching offers numerous benefits for educators and students alike, including enhanced engagement, catering to different learning styles, clarification of complex concepts, promotion of critical thinking, facilitation of active learning, flexibility and adaptability, integration of multimodal literacy, and accessibility and inclusivity. The study focused on aspects of multimedia presentation as a construct of the use of multimedia in teaching business studies in secondary schools in Ainabkoi Sub-County, Kenya using five questionnaire items from the teachers' perspective and findings presented below in table 4.1.

Table 4. 1: Descriptive Statistics for Multimedia Presentations from the Teachers Perspective

	N	S.A (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Dev
Supplementing audio visual and text presentation styles reinforces content	35	60.0	20.0	0.0	20.0	0.0	4.20	1.183
Use of diverse multimedia presentation styles helps in overcoming limitations as large class sizes and time	35	40.0	20.0	0.0	20.0	20.0	3.40	1.649
Text presentations allow students to focus on business studies content	35	0.0	20.0	20.0	60.0	00.0	2.60	.812
Use of diverse multimedia presentation styles helps students to demonstrate a high level of content mastery	35	20.0	40.0	20.0	0.0	20.0	3.40	1.376
Audio visual presentation challenges students to think creatively	35	20.0	60.0	20.0	0.0	0.0	4.00	.642
Valid N (Listwise)	**35**							
Weighted Mean							**3.52**	

From the observation schedules it was observed at the time of the visit 50 % of the secondary schools were using multimedia during instruction. Besides from 40% of the schools their computer labs were booked for teaching the remaining 60% their LCD projectors were booked for use in class for lessons. However, majority of the schools lacked internet connections. The findings from Table 4.8 indicate that 80.0% of the teachers were

in agreement that supplementing audio visual and text presentation styles reinforced content while 20.0% disagreed while none 0.0% was neutral (Mean = 4.20; Std Dev =1.183). This was supported by an interviewee who had the following to say;

"...Categorically, at our school, we recognize the importance of leveraging diverse multimedia presentation styles to enrich the delivery of the business studies curriculum. Embracing diverse multimedia presentation styles like supplementing audiovisual and text presentation styles, helps to create engaging, immersive, and impactful learning experiences that prepare our students for success in the dynamic field of business studies..."

This implies that by providing multiple modes of presentation, teachers can cater to different learning preferences and engage students more effectively. This is in line with the findings of McInnes (2019) that indecision on presentation style can impact on student learning, and mid-production changes in technologies can have repercussions on the curriculum development process. This is further affirmed by the responses where a majority of the students 60.0% were in agreement that the use of diverse multimedia presentation styles helped in overcoming limitations such as large class sizes and time while 40.0 % were in disagreement and none 0.0 % were neutral (Mean = 3.40; Std Dev =1.649). One of the principals interviewed had the following to say;

"...incorporating diverse multimedia presentation styles into the delivery of the business studies curriculum. Teachers create video presentations covering various business topics, industry trends, and case studies, supplementing traditional teaching approaches with visual aids, demonstrations, ..."

This implies that diverse presentation styles catering of diverse learning preferences and needs among students which allows teachers to accommodate the varied needs of a large and diverse student population is catered for in business studies classes. This is in line with the argument of Crook and Schofield (2017) who notes that the use of diverse multimedia presentation styles provides students with multiple opportunities to engage with the material in various formats, leading to improved comprehension.

Similarly, this has been underpinned by a majority of the teachers at 60.0% who were also in disagreement that text presentations allowed students to focus on business studies content while 20.0% were in agreement and 20.0% were neutral (Mean = 2.60; Std Dev = 0.812). This implies that text-based materials allow students to focus their attention on the essential concepts and topics, without distractions that may be present in other forms of presentation. This supports the finding of Syuhada, Wilantara and Febrina, (2021) that the use of multimedia presentations in writing explanatory text has a significant effect on teaching. In this connection, 60.0% of respondents agreed that the use of diverse multimedia presentation styles helped students to demonstrate a high level of content mastery while 20.0% of the respondents were in disagreement and 20.0% were neutral (Mean = 3.40; Std Dev =1.376). This implies that the use of diverse multimedia presentation styles provides students with multiple opportunities to engage with the material in various formats, leading to improved comprehension. Mateer (2020) that using media engages students, aids student retention of knowledge, motivates interest in the subject matter, and illustrates the relevance of many concepts.

Finally, the study indicates that 80.0% of respondents were in agreement that audio-visual presentation challenged students to think creatively while none 0.0% were in disagreement and 20.0% were neutral (Mean = 4.00; Std Dev = 0.642). This implies that audio-visual presentation can engage learners with content in dynamic and visually stimulating ways, which promotes creative thinking and problem-solving skills. From the weighted mean 3.52, the respondents tended to be in agreement with the statement on multimedia presentations. Multimedia presentations provide opportunities for teachers to create dynamic and interactive learning experiences that cater to diverse learning styles and preferences among students. By incorporating multimedia resources into their lessons, teachers can accommodate different learning needs and promote active participation in the learning process. There is a significant effect of multimedia on improving the experimental group's listening comprehension for the groups that experienced cognitive listening instruction, unlike the groups that experienced metacognitive instruction (Rahimi, Kashani, & Soleymani, 2019). On *How is multimedia used in teaching in their schools* one of the interviewee noted that

"……. Teachers may use educational videos from reputable sources or create their own videos to explain concepts, demonstrate processes, or present historical events, providing visual and auditory cues to reinforce learning. Teachers can incorporate images, charts, graphs, and animations to illustrate concepts and make the material more accessible and memorable for students …….."

The study further sought for the perception of students on the multimedia presentations in teaching business studies and presented the findings on table 4.2

Table 4. 2: Descriptive Statistics for presentation as the students' response

	N	S.A (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Dev
During the lessons audio visual and text are used to make certain topics easy to understand	257	34.2	16.7	11.7	21.8	15.6	3.32	1.511
Our class size is too large to be assisted by the multimedia presentation used by the teacher	257	21.8	34.6	6.6	8.6	28.4	3.13	1.560

Business studies content is effectively covered by the text presentations	257	31.5	40.1	21.8	6.6	0.0	3.96	.894
I have a high mastery of business studies content due to the diverse multimedia presentation used in school	257	10.9	32.7	22.6	17.5	16.3	3.04	1.263
Valid N (Listwise)	**257**							
Weighted Mean							**3.37**	

The findings from Table 4.2 indicate that the respondents were in agreement at 50.9% that during the lessons, audio-visual and text were used to make certain topics easy to understand while 37.4% were in disagreement and 11.7% were neutral (Mean = 3.32; Std Dev =1.511). This implies that the utilization of a variety of presentation styles makes certain topics more accessible and comprehensible for students, catering to diverse learning preferences and needs. Using media engages students, aids student retention of knowledge, motivates interest in the subject matter, and illustrates the relevance of many concepts (Mateer, 2020). Moreover, 56.4% of the students were also in agreement that their class size was too large to be assisted by the multimedia presentation used by the teacher, while 37.0% were in disagreement and 6.6% were neutral (Mean = 3.13; Std Dev =1.560). This was supported by an interviewee who had the following to say;

"…while large class sizes may present challenges, we believe that strategic use of multimedia resources, combined with a focus on flexibility, self-paced learning, collaboration, and continuous improvement, enables us to create engaging and effective learning experiences for all students. Besides, we regularly assess and adjust our teaching methods based on student feedback and performance data. By soliciting input from students and monitoring their progress, we can identify areas where multimedia integration may be particularly effective or where adjustments are needed to accommodate the needs of a large class…"

This implies that larger class sizes may result in reduced opportunities for individualized instruction and interaction with multimedia resources. In a crowded classroom, teachers may struggle to provide personalized support or address the diverse needs of students, leading to difficulties in utilizing multimedia presentations to their fullest potential.

In addition, 71.6% of the respondents concurred that Business Studies content was effectively covered by the text presentations while 6.6% of the respondents were in disagreement and 21.8% were neutral (Mean = 3.96; Std Dev =0.894). This implies that the text-based materials effectively convey key concepts, theories, and practical applications clearly and understandably. This in line with the findings of Syuhada, Wilantara and Febrina, (2021) who also found that the use of multimedia presentations in writing explanatory text has a significant effect on teaching. Lastly, the study indicates that 43.6% of the students are in agreement that they had a high mastery of business studies content due to the diverse multimedia presentation used in school while 33.8% of the respondents were in disagreement and 22.6% undecided (Mean = 3.04; Std Dev = 1.263). This implies that the use of diverse multimedia resources provides students with multiple perspectives and representations of the material, which facilitates deeper understanding and mastery. The weighted mean of 3.37, implies that the students were neutral on the statements on the multimedia presentation. This implies that multimedia presentations cater to diverse learning preferences and styles among students. By offering a combination of visual, auditory, and interactive elements, multimedia resources appeal to different learners, allowing them to engage with the material in ways that best suit their individual needs. Multimedia techniques increased the academic success of students in social studies lessons compared to the traditional classroom (Ilhan & Oruc, 2016).

Teaching and learning of Business Studies as perceived by the teachers

The study further sought to determine the respondents' level of agreement with the various statements on teaching of Business Studies. Table 4.3 shows the findings.

Table 4. 3: Descriptive Statistics for teaching and learning of Business Studies as perceived by the teachers

	N	S.A (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Dev
The students are more motivated to learn when technology is part of their daily school experience.	35	0.0	80.0	20.0	0.0	0.0	3.80	.406
The students fully understood business studies content	35	20.0	40.0	20.0	20.0	0.0	3.60	1.035
Subject coverage over time is sufficient	35	20.0	60.0	20.0	0.0	0.0	4.00	.642
There is improved performance amongst students when multimedia resources are used.	35	0.0	60.0	40.0	0.0	0.0	3.60	.497

	N	S.A	A	N	D	SD	Mean	Std. Dev
Learners have become more, creative and innovative in expressing their business studies ideas	35	0.0	80.0	20.0	0.0	0.0	3.80	.406
Weighted Mean							**3.76**	
Valid N (Listwise)	**35**							

The findings from Table 4.3 indicate that the majority of the respondents agreed at 80.0% that the students were more motivated to learn when technology was part of their daily school experience while 20% were neutral and none was in disagreement (Mean = 3.80; Std Dev =0.406). This implies that when students have regular access to technology in their learning environment, they are more likely to be enthusiastic about their studies and actively participate in the learning process. Besides majority of the students at 60.0% were in agreement that students fully understood business studies content while 20.0% were in disagreement and 20.0% were neutral (Mean = 3.60; Std Dev =1.035). This infers that the use of multimedia employed by teachers is successful in conveying complex business concepts in a way that resonates with students. The interviewees were asked what were the outcomes realized by the school through the use of multimedia in teaching business studies with the following response:

"…Multimedia presentations has facilitated comprehension and retention of business studies concepts by presenting information in multiple formats, catering to diverse learning styles and preferences. Visual aids and real-world examples have helped clarify complex topics and reinforce key concepts, leading to deeper understanding and long-term retention…."

From the findings, according to 80.0% of the teachers agreed that subject coverage over time was sufficient while 20.0% were neutral and none 0.0% was in disagreement and undecided respectively (Mean =4.00; Std Dev =1.642). This suggests that the scope and sequence of topics and concepts are well-designed to align with the allocated instructional time. *Effective teaching* involves consistent, valuable interactions with students that bring them guidance. Characteristics of effective teaching include an engaging classroom presence, value in real-world learning, exchange of best practices and a lifelong love of learning (Zee & Koomen, 2016). According to the findings 60.0% of the respondents agreed that there was improved performance amongst students when multimedia resources are used while 40.0% were neutral and none 0.0% was in disagreement (Mean = 3.60; Std Dev = .497). This implies that the integration of multimedia resources into teaching practices positively impacts student performance, possibly leading to higher grades, better understanding of concepts, and increased engagement with the material. Effective teaching utilizes instructional strategies that are most appropriate for the content and the student, and is carried out in a proficient manner that allows for real learning (Tanya, 2021). Lastly, majority of the respondents at 80.0% agreed that learners had become more, creative and innovative in expressing their business studies ideas while 20.0% were neutral and none 0.0% was in disagreement (Mean = 3.80; Std Dev =.406). This implies that multimedia teaching approach used by teachers are successful in encouraging students to think beyond rote memorization and to explore alternative perspectives and solutions. From the weighted mean of 3.76 the teachers tended to be in agreement with the statements on teaching. This was supported by an interviewee who had the following to say;

"…Ensuring the relevance of multimedia content to the learning objectives in business studies is a priority for our school. By employing these strategies, our school ensures that the multimedia content used in teaching business studies remains relevant, engaging, and aligned with the learning objectives, ultimately enhancing the overall learning experience for our students…"

This implies that the integration of multimedia resources enhances the quality of business studies teaching by providing teachers with effective tools to engage students, facilitate learning, and promote academic success. This concurs with Carless, (2022) argument that teaching help the learners to combine acquired knowledge, and personal skills and attitudes to correctly interpret the obtained information. *Most (65%) observed schools showed multimedia professional practices as business studies teachers utilize multimedia tools and techniques (lesson notes in digital format and schemes of work) in their work.* The study further analyzed perception of the students on teaching Business Studies in secondary schools in Ainabkoi Sub- County, Kenya using five questionnaire items. Table 4.4 shows the findings

Table 4. 4: Descriptive Statistics for teaching and learning of Business Studies as perceived by the students

	N	S.A (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Dev
When the technology is used during teaching business studies, I get motivated	257	23.2	33.5	10.1	30.9	22.3	3.25	1.487
I fully understand business studies content	257	29.6	26.5	38.5	0.0	5.4	3.75	1.054
Over time subject coverage is sufficient	257	7.0	44.0	38.1	10.9	0.0	3.47	.781

There is improved performance amongst students when multimedia resources are used.	257	22.2	30.7	15.6	14.4	17.1	3.26	1.400
Weighted Mean							**3.43**	
Valid N (Listwise)	**257**							

The findings from Table 4.4 indicate that majority of the students were in agreement at 56.7% that when the technology was used during teaching business studies, they got motivated while 53.2% disagreed and 10.1% were neutral (Mean =3.25; Std Dev =1.487). This implies that technology serves as a catalyst for student motivation by making learning more interactive, dynamic, and relevant to students' lives. Majority of students also agreed at 56.1% that they fully understood business studies content while 38.5% were neutral and 5.4% were in disagreement (Mean =3.75; Std Dev =1.054). This suggest that students feel confident in their understanding of the content covered in the business studies curriculum. Effective teaching utilizes instructional strategies that are most appropriate for the content and the student, and is carried out in a proficient manner that allows for real learning (Tanya, 2021).

In addition, the findings further indicated at 51.0% that over time subject coverage was sufficient while 38.1% were neutral and 10.9% were in disagreement (Mean =3.47; Std Dev =.781). This infers that the curriculum is well-designed to cover key content areas effectively, ensuring that students receive a comprehensive education in the subject. Finally, the study indicates that majority of the respondents were in agreement at 52.9% that there was improved performance amongst students when multimedia resources were used while 31.5% disagreed and 15.6% were neutral (Mean =3.26; Std Dev =1.400). This implies that the integration of multimedia resources into teaching practices enhances students' understanding of the material, leading to improved academic performance. This concurs with (Carless, 2022) that teaching help the learners to combine acquired knowledge, and personal skills and attitudes to correctly interpret the obtained information. Based on the weighted mean of 3.43 the students had neutral opinion with most of the statement's teaching. *Basing on the observation schedule 62% of the observed schools had computer laboratory with 100% of the schools having electricity connections. Besides most (55%) observed schools showed that teachers use multimedia in teaching activities like use of digital format, schemes of work, typed exams, printed and lesson plan and audio visual in teaching.* This implies that majority of public secondary schools in Anabkoi Subcounty strategically use of multimedia resources to enhances their teaching effectiveness and student learning experiences in business studies, resulting in improved perceptions of teaching quality among students.

Regression Analysis
The study established combined influence of multimedia presentation on teaching and learning business studies in secondary schools in Ainabkoi Sub-County, Kenya. The results of multiple regression analysis shown in Table 4.5.

Table 4. 51: Influence of multimedia presentation on teaching and learning business studies in secondary schools in Ainabkoi Sub- County, Kenya

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.335[a]	.112	.109	.90533	2.284
a. Predictors: (Constant), multimedia presentation					
b. Dependent Variable: Teaching and Learning Business Studies					

ANOVA[a]					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	30.113	1	30.113	36.740	.000[b]
Residual	237.689	290	.820		
Total	267.802	291			
a. Dependent Variable: Teaching Business Studies					
b. Predictors: (Constant), multimedia presentation					

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.022	.263		7.694	.000
Multimedia presentation	.455	.075	.335	6.061	.000
a. Dependent Variable: Teaching and learning Business Studies					

From Table 4.5, R-Squared is used to evaluate the goodness of fit of a model. In regression, the R square coefficient of determination is a statistical measure of how well the regression line approximates the real data. It measures the proportion of the variation in dependent variable explained by independent variable. From the findings in Table 4.5 on model summary, ($R = 0.335$, $R^2 = 0.112$) and ($F (36.740)$, $p = 0.000$). The coefficient of determination is also called the R square=0.112 explains the variations in the dependent variable as explained by the independent variables. This implies that the effect of the predictor (multimedia presentation) explains 11.2% of the variations in teaching business studies in secondary schools in Ainabkoi Sub- County, Kenya. This implies that a change in the perceptions on multimedia presentation has a strong and a positive effect on teaching and learning business studies in secondary schools. This study thus assumes that the difference of 88.8% of the variations is as a result of other factors not included in this study.

The null hypotheses was tested using t statics. The test findings are shown in Table 4.5. The findings of the study in Table 4.5 show that there was a statistically significant effect of the independent variables on the dependent variable ($t=6.061$; $p=0.00$). This indicates that the regression model was a good fit for the data. It also indicates that perception on multimedia such as multimedia presentation, affect teaching and learning business studies in secondary schools in Ainabkoi Sub- County, Kenya. The findings indicate that effect of multimedia presentation on teaching business studies in secondary schools was positive and significant ($\boldsymbol{B}_1 = 0.455$, $p = 0.000$). The Equation 1 thus showed the regression equation for the regression model 1 in Table 4.19 as follows

$$Y= 2.022X_1+ 0.455 X_2 \text{ .... Equation 1}$$

In equation 1, the coefficients refer to the slope of the regression line and amount of variance each predictor contributes to the general regression equation. Therefore, adjusting multimedia presentation by 1 unit led to .455 units change in teaching and learning business studies in secondary schools. Hence all variables are statistically significant predictors of the dependent variable. The findings implied that multimedia presentation ($\beta = 45.5\%$). Finally, the results in the equation 1 also indicated that if secondary schools do not check on the perceptions of multimedia presentation, the results would be constant at 2.022 units.This study therefore rejected the null hypothesis and concludes that there is a statistically significant influence of multimedia presentation on teaching business studies in secondary schools in Ainabkoi Sub- County, Kenya. The study hence accepts the alternative hypothesis. This findings are in line with the findings of Syuhada, Wilantara and Febrina, (2021); Zhigadlo, Odinokaya and Sheredekina (2018) that the use of multimedia presentations in writing explanatory text has a significant effect on teaching.

V. Conclusion And Recommendations

Multimedia presentation significantly influences effective teaching and learning business studies business studies in secondary schools. The students and teachers' perception implied that supplementing audio visual and text presentation styles enhance student engagement. Additionally diverse multimedia presentation styles impart critical thinking skills for preparing students for real-world applications and continuous improvement in business studies education. The results are supported by the Cognitive Theory of Multimedia Learning which posits that effective multimedia presentations should promote active learning and accommodate individual differences in learning styles. Similarly, multimedia presentation significantly affects teaching and learning business studies in secondary schools. The students and teachers' perception on multimedia technology is that it is an effective tool for explanation of abstract concepts in teaching and learning business. This findings are supported by the Cognitive Theory of Multimedia Learning which offers insights to aid understanding how individuals may accept or reject multimedia technology in teaching and learning business studies. Therefore, Schools' ought to integrate multimedia presentations into their business studies programs by supplementing audio visual and text presentation styles, to enhance teaching and learning business studies.

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