THE EFFECT OF STUDIO TECHNOLOGY AND MOTIVATION OF LEARNERS TOWARDS FINE ART IN SECONDARY SCHOOLS IN KABALE DISTRICT

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UGANDA CHRISTIAN UNIVERSITY

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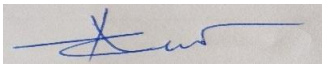
DECLARATION

I Aharizira Collins, declare to the best of my knowledge that this research dissertation is as the result of my own effort and has never been submitted for any academic reward to the university and any other institution.

Signature.,  Date., 26. August 2025

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APPROVAL.

This dissertation on 'The effect of studio technology and motivation of learners towards fine art in secondary schools in Kabale District' has been submitted with my approval.

Signature.  Date 27/08/2025

Mr. LARDYSLAS TURYAKIRA.

DEDICATION

As a replica I dedicate this research dissertation to Almighty God who is the Author and Finisher of my faith.

ACKNOWLEDGMENT.

It’s in order to thank Almighty God for his enabling grace in allowing me to pursue a Master's Degree in Education Planning and Administration from Uganda Christian University, I will sincerely honor him academically.

I want to thank Mr. Lardyslas Turyakira for helping me, even with his other demanding responsibilities. He listens, reads, and corrects helpful remarks about my mistakes. I also like to thank all of the Bishop Barham University College lecturers who have shared their knowledge with me. May the Almighty bless them abundantly and forevermore.

ACRONYMS

1. SDT Self-Determination Theory
2. TEL Technology Enhanced Learning
3. ZPD Zonal of Proximal Development
4. NCDC National Curriculum Development Centre
5. TPACK Technological Pedagogical Content Knowledge
6. UNEB Uganda National Examination Board.

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ABSTRACT

This study examines the effect of studio technology on learners' motivation towards fine art in secondary schools in Kabale District. It investigates how access to and utilization of studio technology resources influence learners' interest, engagement, and performance in fine art, focusing on three principal factors: materials and tools, preparation, and experimentation. Using a mixed-method approach, data were collected from fine art learners and teachers through questionnaires and interviews. Quantitative analysis highlights that learners' perception of accessibility and safety of materials was low, though the availability of tools (mean = 1.77) and teacher guidance in preparation (mean = 1.72) were highly rated. Experimentation fostered a supportive environment, positively impacting motivation (mean = 1.76). Correlation and regression analyses reveal that experimentation had the strongest positive correlation with motivation ($r=0.571$), followed by preparation ($r=0.411$) and materials and tools ($r=0.341$). The regression model shows an R^2 value of 0.350, with an R value of 0.591, indicating that approximately 35% of the variance in motivation is explained by these factors. Preparation emerged as the most significant predictor of motivation ($\beta=0.497$). The study concludes that a well-equipped fine art studio, with varied resources and opportunities for experimentation, significantly enhances learners' motivation. Recommendations include increasing resource availability, structured lesson planning, and holistic approaches to resource management and experiential learning. These findings have implications for curriculum development and educational policy in fine art education.

CHAPTER ONE

1.1 Introduction.

The study aimed to examine the effect of studio technology on the motivation of learners towards Fine Art in secondary schools in Kabale District. In this study, studio technology was considered the independent variable, while the motivation of learners towards Fine Art was the dependent variable. The motivation of learners towards the Fine Art subject was measured based on factors such as the availability of tools and resources, training and support of learners, learning objectives, experience and support of learners, attention, level of seriousness, and performance expectations that could motivate learners to engage with studio technology and pursue Fine Art in secondary schools. Studio technology, on the other hand, was evaluated based on areas such as lack of exposure, learner engagement, and learner interest.

1.2 Back ground

1.2.1 Historical back ground

Doe (2010) stated that behind a masterpiece of Fine Art, there was not only attention, skill, and originality but also a rich and concrete history that dated back centuries. Art was often taken for granted, and its weight in our lives was ignored unless we needed it. At such times, we opened our senses and appreciated art, conveying emotions from the art products we cherished.

According to Doe (2010), studio technology had its own particular history that was never-ending. Its beginnings could be traced back to the Italian Renaissance of the 16th century. Renaissance Art focused on pedagogy and the aesthetic value of art, which gave rise to art academies. These academies spread throughout Europe after Italy, allowing apprentices to understand the language of art, shape their minds, and enhance their skills through painting and drawing, which were considered less practical but aesthetically artistic in still life, portraits, and landscapes. This tradition lasted for two centuries, and during the 19th century, the term "fine art" was coined, emphasizing advanced skill levels and aesthetic value.

In the 1860s, art began to gain prominence in Europe, giving birth to art movements such as

Impressionism, Romanticism, Cubism, Symbolism, and Naturalism. By the end of the 19th century, art had crossed to America, where artists focused on improving formal artistic education, leading to the civilization of fine art. Museums and galleries were founded across Europe.

Previously established methods of teaching fine art, such as free exploration, graph or visual organizers (observation), exhibition, and chalk and talk, primarily relied on conventional classroom setups, the skill of learners, and basic art materials and tools. Material knowledge was limited, and art as a subject relied heavily on drawing, painting, and manual graphics (Smith, 2005).

The introduction of studio technology in fine art in the 21st century began incorporating teaching methods like experimentation, focused explanation, and free exploration, along with guiding materials such as books and tools into the curriculum. This practical approach to the discipline, coupled with visual aids, gradually progressed to include theories and the use of modern tools like the throwing wheel and computers. As the curriculum changed, so did the integration of studio technology in the fine art subject. Learners were required to complete projects that contributed 30% to their final mark, with the theory paper contributing 70% (Doe, 2018).

The incorporation of studio technology aimed to make learning transformative, interactive, and aligned with contemporary practices. This allowed learners to explore creativity with various techniques and receive instant feedback, thus boosting their interest in the subject. Over time, issues such as the availability of studio technology books, the need for refresher training for instructors, and integration into the curriculum emerged. These issues were addressed by implementing programs in infrastructure, equipment, and curriculum enhancement to ensure a seamless blend of studio technology and traditional methodologies.

1.2.2 Theoretical back ground

Brown, A. L., Metz, K. E., & Campione, J. C. (2013) Social interaction and individual understanding in a community of learners “Constructivist Learning Theory”, attributed to theorists like Piaget and Vygotsky, who emphasizes that learners actively construct knowledge and understanding through their experiences and interactions with the environment. In the context of fine art, this theory suggests

that learners, when exposed to studio technology, actively engage in creating and interpreting Art, fostering a deeper understanding and appreciation for the subject matter.

Experiential learning, proposed by Kolb, emphasizes the importance of direct experience and reflective observation in the learning process. In the context of studio technology, providing learners with hands-on experience using advanced artistic tools and equipment may enhance their understanding and interest in fine art, thus increasing their motivation to learn and create according to Kolb Experiential Learning Theory. Morris, T. H. (2020). This theory underpins my study.

Other theories are motivational theories that include Self-Determination Theory and the Expectancy Value Theory.

According to the Self-Determination Theory (SDT; Ryan and Deci 2017) emphasizes the importance of autonomy, competence, and relatedness in motivating individuals. The integration of studio technology in fine art classrooms may increase learners' autonomy in expressing themselves through art, thereby enhancing their motivation and engagement.

Next is the Expectancy Value Theory that posits that learners' motivation is influenced by their beliefs about their capabilities (expectation) and the perceived value or importance of the task according to Eccles, J. S., & Wigfield, A. (2020). Integrating technology can positively influence the perceived value of fine art, linking it to modernity and relevance, potentially increasing learners' motivation.

Nicolaou, C., Matsiola, M., & Kalliris, G. (2019), Technology-Enhanced Learning (TEL) by B.F. Skinner focuses on how technology can enhance the learning experience. In the context of fine art, integrating studio technology can facilitate interactive learning, immediate feedback, and a more engaging and dynamic learning environment, potentially boosting learners' interest and motivation.

The Zonal of Proximal Development (ZPD), a concept by Vygotsky according to Lasmawan, I. W., & Budiarta, I. W. (2020), suggests that learners can accomplish tasks with guidance and support that they cannot do alone. Applying this to the context of studio technology, educators can use advanced tools to pulpit learners' artistic skills and understanding, promoting their motivation by enabling them to achieve more with guidance.

Other theories include the Art Education theories, which is Art for Art's Sake and the Value Culture theory.

1.Art for Art's sake:

The notion that art has intrinsic value and should be pursued for its own sake. Integrating studio technology can enhance the artistic experience and help students appreciate art as an expressive form, potentially motivating them to engage more deeply with the subject.

2.Visual Culture Theory:

Understanding fine art within the context of broader visual culture. Studio technology gives learner's an opportunity to engage with contemporary visual culture, connecting traditional art forms with modern mediums thus potentially increasing motivation by showcasing the relevance and evolution of fine art.

Therefore, theoretical frameworks like Constructivist Learning, Experiential Learning, motivation theories, technology-enhanced learning, and various art education theories provide a foundation for understanding how integrating studio technology can influence learners' motivation and engagement in fine art education within Kabale District secondary schools. This research aims to explore the practical implications of these theories in the local context and shed light on the effectiveness of integrating studio technology in enhancing fine art education

1.2.3 Conceptual background.

The intersection of studio technology and fine art education presents a dynamic landscape, especially within the secondary schools of Kabale District. This conceptual background aims to delve into the theoretical underpinnings of how studio technology influences learner motivation, specifically examining the study variables

Studio technology encompasses the tools, equipment, and resources utilized within fine art studios to facilitate artistic creation and learning processes. These technologies include but are not limited to

computers, software applications, cameras, printers, lighting equipment, and audiovisual devices (Lester & Loadman, 2018; Kuriakose & Fidalgo, 2020).

Studio technology represents the technological infrastructure available within educational settings that supports artistic exploration and expression. It enables learners to engage with various mediums, techniques, and digital resources to enhance their creative endeavors.

Motivation in the context of fine art education refers to the internal drive, interest, and enthusiasm that learners exhibit towards engaging in artistic activities and pursuing artistic goals. It encompasses intrinsic factors such as curiosity, enjoyment, and self-efficacy, as well as extrinsic factors such as recognition and achievement (Deci & Ryan, 1985; Pintrich & Schunk, 2002).

Motivation of learners towards fine art reflects their level of engagement, passion, and persistence in artistic endeavors. It influences their willingness to explore new artistic techniques, invest effort in refining their skills, and overcome challenges encountered during the creative process.

Studio Technology: "Studio technology refers to the range of digital tools and equipment utilized within art studios, including computers, software applications, digital drawing tablets, cameras, printers, and audiovisual devices, to support artistic creation and learning processes" (Lester & Loadman, 2018; Kuriakose & Fidalgo, 2020).

"Motivation in fine art education refers to the internal drive, interest, and enthusiasm that learners exhibit towards engaging in artistic activities and pursuing artistic goals. It encompasses intrinsic factors such as curiosity, enjoyment, and self-efficacy, as well as extrinsic factors such as recognition and achievement" (Deci & Ryan, 1985; Pintrich & Schunk, 2002)

1.2.4 Contextual back ground.

The Kabale District, located in the Kigezi area of southwest Uganda, is renowned for its diversified population, stunning landscape, and rich cultural legacy. This district is distinguished by a mild climate and a picturesque landscape of hills and abundant water sources. The educational system in Kabale District significantly shapes the futures of its inhabitants. The region hosts a network of secondary schools that cater to the academic needs of a varied student body, including institutions such as Solberg College, Bishop Kivegere Girls School Muyebe, and Kigezi College Butobere.

Various elements, including infrastructure, curriculum, teacher preparation, and the accessibility of materials, influence the educational landscape, presenting both opportunities and challenges (Uwezo Uganda, 2016; Muwagga & Kakuru, 2018).

Kabale District's cultural fabric is notably rich in fine art, evident in the crafting of ceramic objects like pots and charcoal stoves and the transformation of leather (backcloth) into garments. This underscores the importance of fine art education in preserving and promoting cultural identity. Despite the high regard for fine art, it faces challenges common to many educational institutions, such as limited resources. Poor student engagement and lack of exposure can negatively impact the quality of art education in secondary schools (Bamwine, 2016).

Some scholars argue that fine art provides a platform for students to explore various artistic techniques, tools, and equipment, allowing them to present their work innovatively and fostering increased enthusiasm and passion for the subject (Smith, 2016). However, schools in Kabale have expressed concerns about the introduction and integration of studio technology into fine art education. They believe that studio technology enhances students' enthusiasm and creativity by empowering them in a more dynamic and participatory manner, enabling experimentation and discovery with accuracy and pride in their work. This technological integration allows learners to modify and develop their artistic creations more effectively (Kagoda, 2017; Mugabi, 2019).

1.3 Problem statement

In Kabale District secondary schools, learners consistently exhibited poor performance in the studio technology component of the fine art curriculum at the advanced level, primarily due to a lack of motivation. This issue led to a noticeable decline in learner enrollment for fine art at the advanced level since the introduction of studio technology as a compulsory paper according to the annual education sector performance report (Ministry of Education, 2023).

Data from the Uganda National Examinations Board (UNEB) indicated a decline in percentages of learners passing studio technology in Kabale: 2015 (29%), 2016 (26%), 2017 (24%), 2018 (22%), 2019 (21%), 2020 (20%), 2021 (19%), and 2022 (18%). Only 18% of students in Kabale District passed the studio technology paper in 2022, significantly lower than the national pass rate of 60% (UNEB, 2023).

The identified gap concerned the inadequate integration and utilization of studio technology components alongside insufficient motivational support for learners, despite the National Curriculum Development Center (NCDC) drafting the syllabus for it without a suitable guidebook for the advanced level. This study sought to address the gap by investigating the relationship between studio technology and learners' motivation towards fine art in Kabale District secondary schools, aiming to enhance performance and increase learner interest in the subject.

1.4 Purpose of the study.

The purpose of the study was to establish the effect of studio technology on motivation of learners towards fine art subject in secondary schools in Kabale district.

1.5 Significance of the study.

The significance of this study lay in understanding the effect of studio technology on students' motivation towards fine art, aiming to increase enrollment and cultivate productive individuals capable of addressing societal challenges. The study will be beneficial to the researcher, university and other academic institutions, other researchers, policy makers and schools.

The study gives the researcher a chance to understand how studio technology influences students' interest in fine art. By focusing on Kabale District, the researcher learns about the challenges schools face in using technology for fine art education. This experience helps the researcher improve skills in collecting and analyzing data. The findings may also guide the researcher in future work, helping them come up with practical solutions for similar issues in other schools. Additionally, the study helps the researcher grow academically and strengthens their expertise in education technology and fine art teaching.

The study helps Uganda Christian University and other universities by adding to the research on how technology can improve education, especially in the arts. It shows the university’s dedication to solving current educational problems and positions it as a leader in fine art education. The findings could help the university improve its fine art curriculum to include modern technologies. The study may also

encourage partnerships between the university and secondary schools in Kabale, boosting the university's influence on local education.

The study provides useful information for other researchers who are interested in how technology affects student motivation in fine art. It offers a thorough review of existing research, theories, and data that others can use in their own studies. By focusing on a specific area like Kabale District, the study adds a unique perspective to the global conversation on education technology. It may also encourage further research into how technology affects creativity, student engagement, and learning outcomes in other subjects beyond fine art.

The findings are helpful for education policy makers at the national and district levels. The study identifies the challenges and opportunities of using studio technology in fine art classes, offering evidence-based suggestions for better policy decisions. It may influence policies on resource distribution, teacher training, and curriculum improvements, ensuring that studio technology is used effectively to motivate and improve student performance. Policy makers can also use the study to address gaps in the National Curriculum Development Center's (NCDC) syllabus, especially in supporting teachers and students in fine art education.

The study is also relevant for secondary schools in Kabale District. It provides practical ideas for school leaders and teachers on how studio technology can improve student interest and performance in fine art. The findings may encourage schools to invest in studio technology and training, creating a more engaging and interactive learning environment. This could lead to more students choosing to study fine art and achieving better results. Schools will also learn how tools, preparation, and hands-on experiences with studio technology can motivate learners, helping teachers adjust their teaching methods to better suit student needs.

1.6 Objectives of the study.

i. To investigate the effect of materials and tools on the motivation of learners towards fine art subject in secondary schools in kabale district.

ii. To assess the effect of preparation on the motivation of learners towards fine art subject in secondary schools in kabale district.

iii. To examine the effect of experimentation on the motivation of learners towards fine art subject in secondary schools in kabale district.

1.7 Research questions

i. How do the materials and tools used in studio technology affect the motivation of learners towards the fine art subject in secondary schools in kabale district?

ii. What is the effect of preparation in the use of studio technology on the motivation of learners towards the fine art subject in secondary schools in kabale district?

iii. How does experimentation with studio technology affect the motivation of learners towards the fine art subject in secondary schools in Kabale district?

1.8 Scope of the study.

The scope of the study involved the geographical scope, content scope and time scope.

1.8.1 Geographical scope.

This study was based in schools across Kabale District, including Hornby High School, Solberg

College, Bishop Kivegere Girls' School Muyebe, Kigezi College Butobere, Kabale Trinity College, Rock High School, and Kigezi High School, spanning all three divisions: Central, Southern, and Northern.

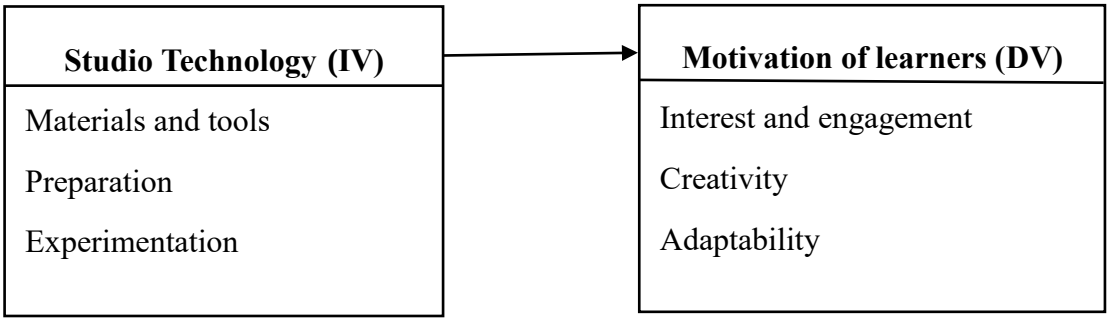
1.8.2 Content scope

The study aimed to determine the relationship between studio technology and students' interest in fine art and explore the reasons behind the low enrollment rates in specific schools, despite the potential for higher enrollment. The integration of studio technology and student motivation in Kabale District Secondary Schools remained a significant concern. Stakeholders and scholars lacked a thorough understanding of how studio technology affected students' desire to pursue fine art. Therefore, this study sought to investigate the relationship between studio technology and students' motivation towards fine art in Kabale District secondary schools to increase the popularity of the subject.

1.8.3 Time scope

This study will cover a period of 10 years from 2012 to 2022. This particular time was chosen because studio technology was introduced in 2012 during the knowledge-based curriculum and since 2022 learners are studying it in the competence-based curriculum and the researcher was offering the subject and later graduated as a teacher and taught fine art at Solberg College and Kigezi High School respectively from 2019 until 2022 while noticing learners shying away from the subject even when they had the capacity to perform in the subject.

1.9 Conceptual frame work.



Source: The framework was adopted from Heinemann (2019) and Dutton (2017) and modified by the researcher to reflect the particulars of the study.

Figure 1 Conceptual frame work of studio technology and motivation and represents above.

The conceptual framework presented in Figure 1 shows the relationship between studio technology and learners' motivation towards fine art in secondary schools in kabale district. It shows up the independent variable studio technology (components such as materials, tools, preparation, and experimentation) and the dependent variable (learners' motivation). The framework suggests that effective use of studio technology can positively influence student motivation, leading to increased interest and participation in fine art subjects.

1.10 Operational definitions of key terms.

These are created by the researcher in the conduct of the study and are meant to operationalize variables in this research (how variables will be measured and operations it will perform).

Self-expression. Ability to convey some one's personality, ideas and emotions through a creative means like embroidery, weaving and printing.

Renaissance. Refers to period of 14^{th} to 17^{th} century that is the 'rebirth' of Classical values in art that influenced artistic thought for the next five hundred years

Impressionism. This art movement was a practice in painting especially among the French painters of the late eighteenth century that depicted the natural appearances of objects by means of strokes of primary unmixed colors in order to reflect light.

Romanticism. Was an intellectual and artistic movement running from the late eighteenth century through the nineteenth century? It portrayed strong emotion as a source of artistic experience emphasizing fear and the awe experienced in confronting the climax of nature.

Free exploration. Is an active learning method that allows learners to experience new tools and materials on their own without having their learning diverted to a narrow-specified way?

Studio technology. Refers to the preparation and experimentation of tools and materials for an art work.

Motivation. Refers to the powering/ orienting of learners to achieve high levels of performance and tame barriers in order to adjust.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction.

This chapter reviewed related literature about the concept of studio technology, the conceptual framework, and how it influenced the continuity of learners to offer fine art at the advanced level. It explored its materialization and examined possible measures to motivate learners to take up the subject at the advanced level.

2.2 Theoretical literature review.

The study is grounded in several theoretical frameworks that explain how studio technology affects learners' motivation toward fine art.

2.2.1 Constructivist Learning Theory

Constructivist Learning Theory, as introduced by Brown, Metz, and Campione (2013), posits that learners actively construct knowledge through interaction and experience. This theory, closely linked to the works of Piaget and Vygotsky, suggests that the integration of studio technology in fine art education fosters an environment where learners engage with materials and techniques, thereby deepening their understanding and appreciation of art.

For example, the use of modelling tools like the throwing-wheel/Potter’s wheel allows students to experiment with different styles and techniques, reinforcing their learning through practical application. The active engagement promoted by studio technology aligns with Vygotsky's emphasis on social interaction as a crucial component of cognitive development. By collaborating on projects using technology, learners can share insights and feedback, enhancing their collective artistic understanding.

In addition, researchers like Healy and Dwyer (2018) highlight how constructivist approaches in art education promote critical thinking and problem-solving skills. Students learn to navigate ambiguity and uncertainty, which are essential qualities in creative processes. This interplay between studio

technology and constructivism underscores the necessity of fostering a collaborative environment where learners can explore and innovate

2.2.2 Experiential Learning Theory

Kolb's Experiential Learning Theory highlights the importance of direct experience and reflective observation in learning processes. The hands-on experiences provided by studio technology such as using three-dimensional(3D) modeling machine that is a potter's wheel enhance learners' interest and comprehension, facilitating a deeper connection to the subject matter (Morris, 2020).

Kolb's learning cycle consists of concrete experience, reflective observation, abstract conceptualization, and active experimentation, directly relating to how learners navigate the challenges of fine art education. In addition, when students use tools to create art, they engage in a concrete experience. Reflecting on this experience allows them to conceptualize new artistic ideas and experiment further, thus creating a continuous cycle of learning.

Empirical studies (e.g., McCarthy, 2019) have shown that students who engage in experiential learning through studio technology tend to demonstrate greater engagement and retention of artistic concepts. This finding suggests that immersive learning environments can significantly influence students' motivation and commitment to fine art education.

2.2.3 Self-Determination Theory (SDT)

Self-Determination Theory, proposed by Ryan and Deci (2017), emphasizes the roles of autonomy, competence, and relatedness in motivating students at an individual level. The integration of studio technology in fine art education can empower learners by enhancing their autonomy in artistic expression. When students are given the freedom to choose their tools and methods, they are more likely to feel a sense of ownership over their creative processes, leading to increased intrinsic motivation.

Besides, technology can facilitate personalized learning experiences, allowing learners to progress at their own pace and explore their interests in depth. This sense of competence, coupled with a supportive

classroom environment that fosters relatedness through peer collaboration, can significantly boost learners' motivation to engage with fine art.

Research by Jang, Reeve, and Deci (2010) supports this notion, illustrating that students who perceive their learning environment as autonomy-supportive demonstrate higher levels of motivation and engagement. By integrating studio technology in ways that promote autonomy and competence, educators can create a more stimulating learning environment that encourages learners to explore their artistic potential.

2.2.4 Expectancy Value Theory

Expectancy-Value Theory, as articulated by Eccles and Wigfield (2020), posits that learners' motivation is influenced by their beliefs about their capabilities and the perceived value of the task. The relevance of technology in fine art education can enhance learners' motivation, as they view their engagement with modern artistic tools as valuable and connected to contemporary artistic practices.

For example, students might be more motivated to learn fine art when they see how digital tools can lead to career opportunities in fields like graphic design, animation, and digital media. By illustrating the real-world applications of fine art skills, educators can increase the perceived value of the subject, encouraging more students to pursue it at the advanced level.

Moreover, research conducted by Wigfield and Eccles (2000) emphasizes that when students understand the applicability of their art education to future career prospects, their motivation levels increase significantly. Therefore, integrating technology in a manner that connects artistic skills to career outcomes is crucial for motivating students.

2.3. The effect of materials and tools on the motivation of learners towards fine art in advanced level.

Historically, artists have employed various materials and tools to articulate their creative visions. Innovations, such as the introduction of oil paint during the Renaissance, revolutionized artistic practices and expanded expressive possibilities (Mancini, 2016). The materiality of art, encompassing physical qualities and sensory impact, significantly shapes aesthetic experiences (Ingold, 2010). Scholars discuss how artists manipulate materials to evoke emotions and engage viewers in

multisensory experiences (Heinemann, 2019), emphasizing the role of material choices in artistic intent and expression.

Mastery of artistic techniques and tools is crucial for realizing artistic visions with precision and finesse (Crow, 2013). Technical proficiency in various mediums allows learners to express their ideas more effectively, leading to increased motivation to experiment and innovate (Gage, 2009). The effective integration of materials and tools within studio environments can thus directly influence learners' motivation and willingness to explore fine art at the advanced level.

Moreover, the advent of digital tools and technologies has transformed the artistic landscape. The accessibility of software like Blender for 3D modeling or procreate for digital painting opens new avenues for creative expression. Research shows that exposure to diverse materials, including digital media, enhances learners' motivation and engagement by allowing them to create art in ways that resonate with their experiences and interests (Eisner, 2002). This adaptability in artistic tools encourages learners to find their unique voice and style, further motivating them to pursue fine art.

Furthermore, the impact of tactile experiences with traditional materials remains significant. Studies indicate that the physical act of manipulating materials whether clay, paint, or digital tools contributes to learners' sensory engagement and artistic exploration (Dewey, 1934). This sensory interaction with materials can enhance motivation, as students feel a more profound connection to their artistic processes.

2.4 The Effect of Preparation on Motivation towards Fine Art at the Advanced Level

Historically, preparation in fine art has included apprenticeships and studio practices that emphasize rigorous training and mastery of traditional techniques (Smith, 2008; Berger, 1972). Effective preparation is essential for nurturing creativity, fostering conceptual exploration, and refining artistic expression (Amabile, 1983; Csikszentmihalyi, 1996).

Deliberate practice, emphasized by Ericsson et al. (1993), focuses on goal-oriented preparation in skill acquisition, highlighting the significance of early exposure and formal training in shaping artistic development (Winner, 1996; Gardner, 1983). Structured preparatory programs in fine art education are

essential, as they equip learners with the necessary skills and knowledge to excel at the advanced level. For instance, offering workshops on digital painting techniques can enhance students' confidence in using technology, directly impacting their motivation to engage with the subject.

Furthermore, teacher preparation plays a critical role in motivating learners. Well-prepared instructors who integrate studio technology into their teaching practices can inspire learners to embrace the subject matter more fully (Katz-Buonincontro et al., 2018). Studies indicate that teachers' attitudes toward technology and their competency in using it significantly impact learners' perceptions and willingness to engage with studio technology (Brunner et al., 2018). When teachers demonstrate enthusiasm for technology and its applications in art, students are more likely to mirror that enthusiasm, enhancing their motivation to participate actively in fine art education.

Recent research by Efland and Stow (2018) also underscores the importance of educators' professional development in art education. Training programs that focus on integrating studio technology into the curriculum can enhance teachers' pedagogical skills, ultimately leading to improved student motivation and engagement.

2.5 The effect of experimentation on the motivation of learners towards fine art in advanced level.

Experimentation in fine art encourages exploration, risk-taking, and innovation (Dewey, 1934; Csikszentmihalyi, 1997). This section explores how experimentation is conceptualized within art theory, emphasizing inquiry, improvisation, and transformation (Ingold, 2013).

Scholarly studies analyze how experimentation fosters creative breakthroughs and advances cultural discourse (Corbett, 2016; Miller & Lee, 2011), reviewing approaches from material manipulation to conceptual inquiries (Elkins, 2007; Bishop, 2012). Experimentation in art education promotes creativity, critical thinking, and self-expression among students (Burton, 2010; Efland, 2002). When learners are encouraged to experiment with different materials and techniques, they develop critical thinking and problem-solving skills, which are essential for artistic growth.

For example, allowing students to experiment with various digital tools in their art-making process can lead to new styles and techniques that enhance their artistic voice. Additionally, creating a classroom environment that fosters experimentation can cultivate a mindset geared toward innovation and

creative problem-solving. Teachers can support this by providing opportunities for collaborative projects where students can share their experimental processes and learn from each other's successes and failures.

Furthermore, integrating technology into the experimental process can facilitate real-time feedback, allowing learners to refine their work and deepen their understanding of artistic principles. The immediacy of feedback afforded by technology can help learners overcome challenges and maintain their motivation. Research has shown that when learners feel they have the freedom to experiment without the fear of failure, their intrinsic motivation to engage with fine art significantly increases (Freedman, 2003).

The integration of studio technology also allows for new forms of experimentation that may not be possible with traditional methods. For instance, digital art forms, such as generative art and virtual reality, offer unique opportunities for artistic exploration that can captivate and motivate students (McCormick, 2019). These innovative practices can not only engage students but also expand their understanding of what constitutes fine art.

2.5 Summary of literature review/Research gaps.

This literature review has explored the multifaceted relationship between studio technology and learners' motivation toward fine art in secondary schools, specifically focusing on the objectives of investigating the effects of materials and tools, preparation, and experimentation on motivation.

The findings suggest a robust correlation between the effective integration of studio technology and enhanced motivation among learners. Theoretical frameworks, including Constructivist Learning Theory, Experiential Learning Theory, Self-Determination Theory, Expectancy-Value Theory, and Socio-Cultural Theory, provide a comprehensive understanding of how studio technology can foster motivation by promoting active engagement, autonomy, competence, and relevance to contemporary artistic practices.

The literature highlights that both traditional and digital materials and tools play a significant role in motivating learners. Exposure to a variety of artistic mediums facilitates creative expression and engagement, allowing learners to articulate their artistic visions more effectively. However, while

existing studies have documented the impact of specific tools, there is a need for more empirical research that examines how various combinations of materials and tools collectively influence motivation in diverse educational contexts.

The importance of preparation in fine art education is underscored, with structured training and teacher preparedness being vital components in motivating learners. The literature points to the necessity of equipping educators with the skills to effectively integrate technology into their teaching practices. However, there remains a gap in understanding how different preparatory approaches such as formal training programs or informal workshops impact students' motivation and engagement in specific contexts. Further research is required to identify best practices in teacher preparation and its direct correlation with student motivation.

The role of experimentation in promoting motivation is evident, as it fosters an environment of risktaking, creativity, and innovation. While existing studies illustrate the benefits of experimentation, there is a limited focus on how various forms of experimentation both digital and traditional affect learners' motivation across different demographics and learning environments. Research is needed to investigate the dynamics of experimentation in fine art education and how technology can further enhance this process.

Despite the valuable insights gained from the literature, there existed a notable gap in understanding the relationship between studio technology and learner motivation within the context of fine art education. This gap in knowledge inhibited stakeholders and scholars from comprehensively grasping the effect of studio technology on learners' inclination towards pursuing fine art.

The researcher sought to address this gap by investigating the relationship between studio technology and the motivation of learners towards fine art secondary schools in kabale district. The researcher utilized a mixed-method approach by combining quantitative surveys and qualitative interviews and gathered comprehensive data from learners and teachers in fine art education within secondary schools in Kabale District. By doing so, the study aimed to contribute to the existing body of knowledge and provide practical recommendations for educators and policymakers to enhance learners' motivation in fine art education and also was to increase learners' engagement and attract more students to the subject, as learners were shying away from it despite having the capacity to perform better.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter provides a detailed description of the research methodology employed in this study.

Methodology refers to the detailed procedures followed to achieve the research objectives (Oso & Onen, 2008, pg. 69). The methodology includes a description of the research design, population and sample size, sample selection, distribution of sample selection, instrumentation, questionnaire, interview methods, documentary analysis, validity, reliability, data collection and management, as well as limitations and delimitations

3.2 Research design.

A cross-sectional research design was utilized to gather data from a population with varied attributes and demographics (variables) such as age, gender, and education. This design aimed to validate assumptions and replace them with actual data pertaining to specific variables studied over the duration of the cross-sectional study. A mixed-methods approach incorporating qualitative and quantitative methods was employed. Qualitative methods facilitated an in-depth exploration of respondents' thoughts and experiences, while quantitative methods quantified the extent of issues using statistical data.

3.3 Study population.

The study focused on fine art learners at the advanced level and practicing fine art teachers in secondary schools in Kabale district. Advanced level learners were included due to their direct engagement with studio technology and its impact on their motivation towards the fine art subject. Fine art teachers were selected for their theoretical and practical expertise, critical thinking ability, awareness, and subject knowledge concerning studio technology.

3.4 Sample size determination.

A sample of 140 respondents were selected from a population of 220. This included 10 practicing fine art teachers, chosen using purposive sampling, and 130 learners pursuing fine art at the advanced level, following the Krejcie and Morgan (1970) method for determining sample size in research activities.

3.5 Sampling procedure/ techniques.

Table 1 outlines the sampling procedures adopted across various schools in Kabale district, detailing the selection of teachers and learners through purposive and simple random sampling techniques.

Table 3.1: Sampling procedure.

School	**Respondent Category**	**N-Population**	**Sampling technique**	**Sample**
School A	Teachers	01	Purposive	01
	Learners	18	Simple Random	10
School B	Teachers	01	Purposive	01
	Learners	18	Simple Random	10
School C	Teachers	01	Purposive	01
	Learners	18	Simple Random	10
School D	Teachers	01	Purposive	01
	Learners	22	Simple Random	14
School E	Teachers	03	Purposive	02
	Learners	46	Simple Random	26
School F	Teachers	03	Purposive	02
	Learners	42	Simple Random	31
School G	Teachers	01	Purposive	01
	Learners	25	Simple Random	15
School H	Teachers	01	Purposive	01
	Learners	19	Simple Random	14
TOTAL		**220**		**140**

This section identifies the strategies for data collection (Alston Philip 2011) and describes the instruments and sources used. The primary instruments included:

Data Collection methods.

3.6.1 Questionnaire survey:

To gather data for this research, a structured questionnaire survey method was employed, following the guidelines set by Rea and Parker (2014). This method was designed to collect comprehensive insights from learners regarding the impact of studio technology on their motivation in fine art education.

The survey was divided into two main sections. The first section focused on demographic information, asking respondents about their age, gender, and class level. This information was crucial for analyzing trends and patterns in responses across different demographic groups.

3.6.2 Interview method:

Face-to-face interviews were conducted following Smith's (2012) method to gain deeper insights into participants' perspectives on studio technology in fine art education. The interviews allowed for a more nuanced understanding of the complexities surrounding the use of technology in teaching. By using semi structured interviews, the researcher could ask follow-up questions based on participants' responses, fostering a more dynamic and engaging conversation. This method encouraged participants to elaborate on their views regarding the integration of technology in their teaching practices.

3.7 Data collection tools:

The main tools used for data collection were self-administered questionnaires and interview guides, commonly employed in educational research.

3.7.1 Self-administered questionnaire.

The self-administered questionnaire consisted of structured questions designed to gather information across various areas, such as demographic data, technology usage, teaching methods, and perceived challenges. Participants were instructed to complete the questionnaire independently, ensuring that responses reflected their personal views without influence from others. The design included Likert-scale items, multiple-choice questions which collectively enhanced the richness of the data collected.

3.7.2 Interview guide.

An interview guide was utilized to ensure that the interviews remained focused while allowing for exploration of specific aspects related to studio technology among fine art teachers. The guide included key topics and questions aimed at understanding the teachers' experiences, attitudes toward technology, and perceived benefits or drawbacks. This structured approach facilitated interactive dialogue, enabling the researcher to probe deeper into responses and uncovering underlying themes relevant to the study.

3.8 Data Quality control (Validity and Reliability)

Data quality control measures included rigorous validation and reliability testing of the research instruments. Validity was ensured by comprehensive coverage of study dimensions aligned with the theoretical framework. A content validity index (CVI) was calculated based on expert reviews of the questionnaire and interview guide, as suggested by George and Mallery (2003).

Content Validity Index (CVI)

A panel of five experts evaluated the relevance of each item in the questionnaire, utilizing a 4-point scale. That is ‘1-not relevant, 2- somewhat relevant, 3-quite relevant and 4- highly’ relevant using a total of 10 items.

Table 3.2: Content Validity Index (CVI) of questionnaire items based on expert’s ratings

Item	No of experts rating 5	No of ratings 4	Total relevant ratings	Item level-CVI
1	1	4	5	1.00
2	3	1	4	0.80
3	2	2	4	0.80
4	1	3	4	0.80
5	2	3	5	1.00
6	3	1	4	0.80
7	1	3	4	0.80
8	2	2	4	0.80
9	4	1	5	1.00
10	2	3	5	1.00

CVI= $\frac{Sum\ of\ item-level\ CVIs}{Number\ of\ items}$ $\frac{00+0.80+0.80+0.80+1.00+0.80+0.80+0.80+1.00+1.00}{10}$ = 1.

CVI= 0.88

To ensure the validity and reliability of the data collection instruments, a pilot study was conducted involving 15 participants from selected schools in Kabale district. The pilot study aimed to assess the consistency of responses across participants, leading to necessary adjustments in the instruments used for the main study.

The reliability of the questionnaire was assessed using Cronbach's alpha, calculated from the responses collected and analysed. Data was gathered from 15 participants, who rated 10 items on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The variance for each item, as well as the total variance of the summed scores across all items, was calculated.

A Cronbach's alpha value of approximately 0.769 was obtained, indicating that the instrument has acceptable reliability. According to George and Mallery (2003), a Cronbach's alpha of 0.7 or higher is generally considered suitable for research purposes, underscoring the reliability of this questionnaire.

3.9 Research procedure.

Permission was obtained from the head of the Postgraduate and Research Studies Department at Uganda Christian University - Bishop Barham Campus before commencing data collection. This step ensured that the research adhered to institutional guidelines and ethical standards. Informed consent was sought from all participants, emphasizing their right to withdraw at any time without any repercussions. Participants were provided with clear information regarding the purpose of the study, the use of their data, and the measures taken to ensure their anonymity. Confidentiality of information was strictly maintained throughout the research process, with all data securely stored and accessible only to the research team. This approach not only protected participants' privacy but also enhanced the credibility of the research findings.

3.10 Measurement of variables.

All variables were measured using a Likert scale with five response categories (1 = Strongly Disagree to 5 = Strongly Agree), which is suitable for capturing nuanced responses related to decision-making and sustainability in educational contexts (Mugenda & Mugenda, 2015). The use of this scale allowed participants to express varying degrees of agreement or disagreement with statements pertaining to studio technology integration in fine art education. This method not only facilitated quantitative analysis but also provided insights into the attitudes and perceptions of participants, helping to identify areas of strength and potential improvement within the educational framework.

3.11 Data analysis procedures

Data analysis involved both quantitative and qualitative approaches to ensure a comprehensive understanding of the research questions. Quantitative data were analyzed using descriptive statistics, which summarized the basic features of the data, and inferential statistics to identify relationships and differences among groups using SPSS (Version 19). This included calculating means, standard deviations, and conducting tests such as t-tests or ANOVA as appropriate. On the qualitative side, data from interviews

underwent thematic analysis to identify patterns and relationships within the transcripts (Nahavandi & Malekzadeh, 2019). This approach allowed for the exploration of deeper insights and contextual factors influencing participants' views on studio technology, providing a richer interpretation of the findings. The integration of both data types contributed to a more holistic view of the impact of technology in fine art education.

3.12 Ethical considerations.

Ethics play a crucial role in research, guiding moral choices that impact decisions, standards, and behaviors. In this study, the researcher was committed to ensuring that the research was politically, religiously, socially, and culturally acceptable to all stakeholders involved. This commitment was vital not only to uphold the integrity of the research but also to foster trust and respect within the community being studied.

A primary ethical consideration was the responsibility to acknowledge all sources of information used throughout the research process. By properly citing existing literature and ideas, the researcher honored the contributions of others, which reinforces the credibility of the current study and promotes academic integrity. This practice is essential in establishing a foundation of trust between researchers and the academic community.

Additionally, obtaining authorization for research activities was a key step in the ethical process. Prior to data collection, the researcher sought and received approval from the head of the Postgraduate and Research Studies Department at Uganda Christian University - Bishop Barham Campus. This ensured that the study aligned with institutional policies and ethical standards, thus providing a framework for conducting the research responsibly.

Informed consent was another critical aspect of the study. Participants were provided with comprehensive information about the research objectives, procedures, potential risks, and benefits. They were made aware of their right to withdraw from the study at any time without facing any negative repercussions. This transparent communication empowered participants to make informed decisions about their involvement, fostering a sense of agency and respect for their autonomy.

Maintaining confidentiality was strictly upheld throughout the research process. All participant data were anonymized and securely stored, with access limited to the research team. This practice not only protected the privacy of participants but also encouraged honest and open responses, thereby enhancing the quality and depth of the data collected.

Thus, the researcher was vigilant in preventing plagiarism, ensuring that all ideas and findings from other scholars were appropriately cited. This commitment to academic honesty not only adheres to ethical research standards but also contributes to a culture of respect and integrity within the academic community.

CHAPTER FOUR.

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter presents the results of the analysis aimed at understanding the effect of studio technology on the motivation of learners towards fine art in secondary schools in Kabale District. It addresses the study's objectives by examining the influence of materials and tools, preparation, and experimentation on learners' motivation. The analysis includes descriptive statistics, correlation analysis, and multiple regression results, which are interpreted in relation to the research objectives, conceptual framework, and data collected through questionnaires and interviews.

4.2 Response rate

The response rate. Is the ratio of the actual member of respondents in relation to the targeted respondents? The response from the interviews and questionnaires were used to analyze the data and write the report for this study. The researcher had a target population of 220 and from that, a sample size of 140 was selected for the study. The researcher distributed 140 questionnaires to the respondents of the selected secondary schools and a total of 120 questionnaires were collected from the respondents fully filled giving a total response rate of 86%

Table 4.1: Showing the response rate of respondents

Category of respondents	**Expected Respondents**	**Actual respondents**	**Percentage**
Teachers	10	10	100%
Learners	130	110	84.6%
Total	**140**	**120**	86%

Source: primary data 2024

The results in table 2 shows a response rate of 86% for the study by all categories of respondents. This was because most of the respondents that were involved in the study were available during data collection. Mortion & etal (2012), states that a survey response rate of 50% or higher is considered good for reporting.

4.3 Demographic data of Respondents.

The study solicited and involved the participation of 93 learners and teachers of secondary schools to respond to the key research questions aligned with the objectives and the specific objective. This section consists of age of respondents, gender of respondents and class of respondents.

Table 4.2: Showing Age of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	under17	4	4.3	4.3	4.3
	18-23	87	93.5	93.5	97.8
	24-29	1	1.1	1.1	98.9
	above30	1	1.1	1.1	100.0
	Total	93	100.0	100.0	

Source: primary data 2024

The majority of respondents, accounting for 93.5%, fall within the 18-23 age group. This indicates that the survey predominantly captures perspectives from young adults, likely reflecting issues and interests pertinent to this demographic. There is limited representation from other age groups: 4.3% under 17,

and 1.1% each for respondents aged 24-29 and above 30. This concentration around young adulthood suggests a targeted approach in understanding the views and behaviors of this specific age cohort, potentially limiting insights into older age groups' perspectives.

Table 4.3: Gender of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	2.2	2.2	2.2
	male	54	58.1	58.1	60.2
	female	37	39.8	39.8	100.0
	Total	93	100.0	100.0	

Source: primary data 2024

The data shows a notable direction towards male respondents, comprising 58.1% of the sample compared to 39.8% female respondents. Additionally, there are 2 respondents where gender data is unspecified (2.2%). This gender disparity suggests that the survey outcomes may be influenced by the predominant male perspective, which could affect the generalizability of findings across diverse gender

Table 4.4: Showing Class of respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	3	3.2	3.2	3.2
s5	44	47.3	47.3	50.5
s6	46	49.5	49.5	100.0
Total	93	100.0	100.0	

Source: primary data 2024

The distribution across educational classes reveals a balanced representation between secondary school classes "s5" (47.3%) and "s6" (49.5%), with a minor percentage categorized as "0" (3.2%). This indicates a deliberate inclusion of perspectives from these specific educational stages, likely aimed at understanding issues relevant to secondary school students. However, the minimal representation from other educational backgrounds or categories suggests potential limitations in capturing perspectives from a broader educational spectrum.

4.4 Descriptive analysis.

4.4 Descriptive analysis of materials and tools in secondary schools in Kabale District.

The data provides an overview of learners' perceptions regarding the fine art studio at their school, assessing awareness, accessibility, safety, equipment, and instructional support.

Table 4.5 Showing descriptive analysis for materials and tools in secondary schools in Kabale District

	SA	A	N	D	SD	Mean	Std. D	Decision
I am aware that our school has a fine art studio where learners engage in various artistic activities like modeling using clay.	79 84.9%	11 11.8%	0 0.0%	3 3.2%	0 0.0%	1.22	.605	Low perception
The fine art studio is easily accessible by learners for artistic activities like modeling using clay.	74 79.6%	17 18.3%	1 1.1%	00 0.0%	1 1.1%	1.25	.583	Low perception
The studio has adequate ventilation and safety measures for use for materials and tools kept there.	64 68.8%	23 24.7%	1 1.1%	4 4.3%	1 1.1%	1.44	.814	Low perception
The fine art studio is equipped with necessary materials and tools such as clay, yarns artistic activities.	48 51.6%	28 30.1%	8 8.6%	8 8.6%	1 1.1%	1.77	1.001	High perception
Teacher provides clear instructions and guidance to learners on how to use the available materials and tools	65 69.5%	20 21.5%	3 3.2%	4 4.3%	1 1.1%	1.45	.841	Low perception
Specialized tools such as looms for weaving are accessed in the fine art studio.	22 23.7%	36 38.7%	16 17.2%	13 14.0%	6 6.5%	2.42	1.210	High perception

Source: Primary Data

Note; N=93 Where 1- Strongly Agree (SA), 2- Agree (A), 3-Neutral(N), 4-Disagree (D) and 5Strongly

Dis Agree (SD). Decision-weighted average=9.55/6=1.59

Regarding the awareness of the fine art studio, a significant majority, 84.9%, of respondents are aware that their school has a fine art studio where various artistic activities, such as modeling with clay, take place. The mean score of 1.22 indicates a strong awareness among learners. However, the low perception classification suggests that while most learners know the studio exists, there may be a lack of deeper understanding regarding its features and how to effectively utilize it. One teacher stated "*...Increased communication from the school about the studio's offerings and events could enhance this awareness further....*"

In terms of studio accessibility, 79.6% of respondents believe the fine art studio is easily accessible for activities like modeling with clay. The mean score of 1.25 reflects a generally positive perception. However, similar to awareness, the classification of low perception indicates that while many learners find the studio accessible, there may still be barriers for some. Factors such as scheduling conflicts, limited hours of operation, or lack of supervision could impact access. Addressing these issues could encourage more frequent use of the studio.

Regarding the Safety Measures and Ventilation, the studio's safety measures and ventilation received a mean score of 1.44, with 68.8% of students believing that adequate precautions are in place. This suggests a positive perception regarding safety, but the low perception classification implies that not all students feel completely confident about safety standards. Potential improvements could include more visible safety protocols, regular demonstrations of safe practices, and open discussions about safety concerns, which might help reassure learners.

Concerning equipped with Necessary tools in the studio scored a mean of 1.77, indicating a high perception (51.6% strongly agree). This reflects positively on the studio's ability to support various artistic activities. However, the significant percentage of neutral (30.1%) and disagree responses (8.6%) suggests that while some learners find the studio well-equipped, others may feel it lacks specific materials that could enhance their creative expression. Conducting a needs assessment among learners to identify desired tools and materials could lead to improvements in this area.

Concerning whether clear instructions and guidance to learners on how to use the available materials and tools, the clarity of scored a mean of 1.45, with 69.5% of learners agreeing. While this reflects a generally positive perception, the low classification indicates that not all learners may feel adequately supported.

This suggests that teachers could benefit from offering more structured guidance, perhaps through demonstrations or workshops that help learners feel more confident in using the available resources.

Concerning access to specialized tools, such as looms for weaving, garnered a mean score of 2.42, which is classified as high perception. Only 23.7% of learners strongly agree, but 38.7% agree, indicating that while a substantial number of learners appreciate the availability of these tools, there is still a notable proportion that either does not feel confident in their access or is unaware of these tools' existence. Promoting the availability of specialized equipment and integrating them into lesson plans could help raise awareness and encourage creative experimentation. One teacher said that "...*Offering a variety of materials and tools, including recycled objects and digital technologies, is an effective in promoting creativity, exploration, and experimentation among learners...*" However, while they advocate for offering choices and opportunities for self-expression, they could provide more guidance on how to effectively balance learner's interests with curriculum objectives.

4.4.2 Descriptive analysis for preparation in secondary schools in Kabale District.

The data evaluates learners' perceptions regarding various aspects of their teacher's instructional practices(preparation), allowing us to assess the effectiveness of teaching methods related to material preparation, lesson planning, communication of objectives, and fostering a collaborative learning environment.

Table 4.6: Showing descriptive analysis for preparation in secondary schools in Kabale District

	SA	A	N	D	SD	Mean	Std. D	Decision
The teacher gathers materials and tools for the lesson	45 48.4%	36 38.7%	6 6.5%	5 5.4%	1 1.1%	1.72	.889	Low perception
The teacher plans out the technique and procedures and sets a side time for art work.	53 57.0%	28 30.0%	6 6.5%	00 0.0%	6 6.5%%	1.70	1.284	Low perception
The teacher communicates clear learning objectives for each experiment to guide learners understanding and focus	51 54.8%	31 33.3%	5 5.4%	6 6.5%	0 0.0%	1.63	.857	Low perception
The teacher demonstrates proper technique for handling materials and tools before learners' experiment	51 54.8%	25 26.9%	10 10.8%	7 7.5%	0 0.0%	1.89	2.199	High perception
Teacher high lights challenge learners may encounter during experimentation and provide alternatives approaches	46 49.5%	35 37.6%	7 7.5%	6 5.4%	0 0.0%	1.69	.834	Low perception
Teacher communicates learning objectives and expectations for each activity clearly to the learners	50 53.8%	29 31.2%	10 10.8%	3 3.2%	1 1.1%	1.67	.876	Low perception
Teacher encourages learners to contribute ideas and suggestions for the upcoming project	48 51.6%	25 26.9%	3 3.2%	13 14.0%	4 4.3%	2.00	1.581	High perception

Source: Primary Data

Note; N=93 Where 1- Strongly Agree (SA), 2- Agree (A), 3-Neutral(N), 4-Disagree (D) and 5Strongly

Dis Agree (SD). Decision-weighted average=12.3/7=1.76

Concerning whether teacher gathers material and tools for the lesson, the perception shows a mean score of 1.72, indicating a low perception despite 48.4% of learners strongly agreeing. This suggests that while nearly half of the students recognize the teacher's effort in preparing materials, a significant portion of learners may feel that this process could be improved. The presence of a large number of neutral responses (38.7%) suggests uncertainty about how effectively materials are being prepared. A teacher stated that "*To enhance this perception, teachers should implement a more structured approach to material organization and availability, possibly involving learners in the preparation process to foster a sense of ownership and engagement."*

The aspect regarding whether the teacher plans out the technique and procedures and sets a side time for art work received a mean score of 1.70, also classified as low perception. Here, 57% of students agree that the teacher plans effectively. However, the substantial neutral (30%) and disagree (6.5%) responses indicate that not all learners feel confident in the planning process. This suggests that teachers might benefit from more clearly communicating their planning strategies to learners, perhaps by outlining the lesson structure and objectives at the beginning of each class, so students know what to expect.

As to whether teacher communicates clear learning objectives for each experiment to guide learners understanding and focus resulted in a mean score of 1.63, categorized as low perception. Although 54.8% of learners agree, the low classification indicates that many students may not fully grasp the intended learning outcomes of their activities. This perception could be improved through more explicit discussions of the objectives at the start of each lesson, ensuring that learners understand how the activities align with their artistic goals.

In contrast, the perception that the teacher demonstrates proper techniques for handling materials before students experiment scored higher, with a mean of 1.89, classified as high perception. This reflects a solid recognition of the teacher's role in providing foundational skills. However, the relatively high standard deviation of 2.199 indicates considerable variability in learners' responses. This suggests that while many students appreciate the demonstrations, others may not find them sufficiently detailed or effective. More tailored demonstrations or hands-on practice sessions could enhance students' confidence in using various materials.

Regarding whether teacher high lights challenge learners may encounter during experimentation and provide alternative approaches, the item received a mean score of 1.69, categorized as low perception. While 49.5% of learners agree that challenges are discussed, the significant presence of neutral responses indicates that this aspect may not be consistently addressed. One of the teachers stated that "*...Strengthening this area will involve regular discussions about common mistakes and brainstorming solutions collaboratively with learners that may empower them to tackle challenges more effectively....*" Regarding whether teacher's communication of learning objectives and expectations for each activity scored a mean of 1.67, also classified as low perception. Though 53.8% of students agree, this low perception suggests that many students may lack clarity regarding what is expected of them. Teachers could enhance clarity by utilizing visual aids, written instructions, or project outlines to ensure that all students understand the goals and evaluation criteria for their work.

Concerning encouraging learner contributions, the perception that the teacher encourages learners to contribute ideas and suggestions for upcoming projects scored a mean of 2.00, categorized as high perception. With 51.6% of students strongly agreeing, this indicates a positive recognition of the teacher's efforts to foster a collaborative atmosphere. However, the presence of some disagree responses (14.0%) suggests that not all students feel equally involved in this process. To further enhance learner engagement, teachers could create structured opportunities for brainstorming and feedback sessions, ensuring that all voices are heard and valued. One teacher said that "*...preparation demonstrates to learners that their learning experience is valued and planned with care, which contributes to their motivation and engagement in fine art activities*...." Another teacher said that *"Activities such as assignments, skill building workshops, and anticipatory set-up are used to boost learners' interest and enthusiasm for upcoming lessons, setting the stage for meaningful exploration and creativity*." However, there is need to offer more specific strategies and approaches for effective lesson planning and organization.

4.4.3 Descriptive analysis for experimentation in secondary schools in Kabale District.

The data reflects learners' perceptions of their teacher's practices and attitudes within the fine arts classroom. The insights from this survey reveal several strengths and areas for improvement regarding the teacher's approach to fostering creativity and experimentation.

Table 4.7: Showing descriptive analysis for experimentation in secondary schools in Kabale District.

	SA	A	N	D	SD	Mean	Std. D	Decision
The teacher is open minded when experimenting	45 48.4%	33 35.5%	9 9.7%	4 4.3%	2 2.2%	1.76	.949	Low perception
The teacher uses materials which he enjoys working with	23 24.7%	43 46.2%	13 14.0%	11 11.8%	3 3.2%	2.23	1.054	High perception
The teacher uses materials that produce effects he/she is interested in	25 26.9%	44 47.3%	7 7.5%	15 16.1%	2 2.2%	2.19	1.076	High perception
The teacher uses materials in various ways for an effective lesson	40 43.0%	37 39.8%	7 7.5%	7 7.5%	2 2.2%	1.86	.996	High perception
The teacher prefers to use different styles, methods with available tools and materials	57 61.3%	21 22.6%	10 10.8%	4 4.3%	1 1.1%	1.61	.921	Low perception
The teacher encourages learners to explore individual styles while experimenting	54 59.1%	31 33.3%	1 1.1%	7 7.5%	0 0.0%	1.58	.851	Low perception
The teacher provides a supportive environment where learners share ideas while doing the work.	58 62.4%	22 23.7%	6 6.5%	7 7.5%	0 0.0%	1.59	.912	Low perception
Teacher shares the importance of embracing mistakes and failures as art of the experimentation process in fine art	49 52.7%	32 34.4%	7 7.5%	4 4.3%	1 1.1%	1.67	.876	Low perception
The teacher encourages learners to document their experimentation process through sketches and notes for reflection and review	61 65.6%	21 22.6%	6 6.5%	5 5.4%	0 0.0%	1.52	.846	Low perception

Source: Primary Data

Note; N=93 Where 1- Strongly Agree (SA), 2- Agree (A), 3-Neutral(N), 4-Disagree (D) and 5- Strongly Dis Agree (SD). Decision-weighted average=16.01/9=1.79

The perception of the whether the teacher is open when experimenting is rated low, with a mean score of 1.76 (SD = 0.949) and 48.4% of learners expressing agreement. This suggests that while some learners feel their teacher is receptive to new ideas, nearly half do not fully share this sentiment. ...*To enhance this aspect, teachers could actively demonstrate openness by encouraging risk-taking and innovation in artistic practices, thereby creating a more inviting atmosphere for creative exploration....*

In regard whether the teacher's area using materials they enjoy, the mean score rises to 2.23 (SD = 1.054), with 24.7% of learning agreeing. This indicates a positive correlation between the teacher's passion for materials and student engagement. However, a substantial proportion (46.2%) of students remain neutral or disagree, highlighting a need for teachers to visibly share their enthusiasm for the materials used. By showcasing their own enjoyment, teachers could inspire similar feelings in their students.

Regarding whether the teacher uses materials in various ways to achieve specific effects is rated more positively, with a mean score of 2.19 (SD = 1.076). Here, 26.9% of students agree, indicating that many recognize the teacher's intent in material selection. However, this suggests that not all students grasp the significance of this connection. To improve understanding, teachers could incorporate discussions on how different materials contribute to achieving desired artistic outcomes.

Concerning whether the teacher uses materials in various ways for an effective lesson, the data shows a favourable perception regarding the teacher's versatility in using materials, reflected in a mean score of 1.86 (SD = 0.996), with 43.0% of students in agreement. This suggests that while many students appreciate the diverse methods employed, a notable portion may not fully recognize the breadth of approaches available. Increasing exposure to various techniques and strategies can enrich the students' learning experience.

Regarding whether the teacher prefers different styles, methods with available tools and materials scored lower, with a mean of 1.61 (SD = 0.921) and 61.3% agreeing. This indicates some diversity in teaching but suggests that the implementation may not be consistent. Encouraging the teacher to actively incorporate varied styles and methods in their lessons could enhance student interest and participation.

Regarding whether the teacher prefers to use different styles, methods with available tools and materials is also low, with 59.1% agreeing and a mean score of 1.58 (SD = 0.851). While some students feel supported in their creativity, many may not see sufficient opportunities for personal expression. One teacher said that '*...Teachers should consider integrating assignments that allow learners to develop their unique artistic voices, thereby promoting a more individualized learning environment....*"

In regard to supportive environment for sharing ideas, the supportive environment for sharing ideas in class scores similarly low, with a mean of 1.59 (SD = 0.912) and 62.4% of students agreeing. While a majority feel somewhat supported, there's room for improvement. Creating structured opportunities for peer feedback and collaboration can foster a more inclusive atmosphere where students feel comfortable sharing their ideas.

Concerning the aspect of embracing mistakes in the artistic process, the importance of embracing mistakes as part of the artistic process is acknowledged by 52.7% of students, leading to a mean score of 1.67 (SD = 0.876). This indicates a moderate understanding of the role of mistakes in creativity, but many students may still be hesitant to take risks. Teachers should reinforce discussions about the value of mistakes in art, encouraging students to view failures as stepping stones to growth and creativity.

Finally, in regard whether the teacher encourages learners to document their experimentation process through sketches and notes for reflection and review scores the lowest, with a mean of 1.52 (SD = 0.846) and 65.6% agreeing. While a significant portion recognizes this practice, it suggests that not all learners appreciate the benefits of documentation. By emphasizing the importance of reflective practices through structured documentation, teachers can help students understand and appreciate their creative journeys. "*Experimentation is central to teaching approaches, as it encourages learners to explore different techniques, mediums, and styles freely*." Another teacher said: *"...Hands-on experimentation promotes a sense of curiosity, discovery, and ownership among learners, fostering a growth mindset and resilience*

in artistic expression...." Additionally, while they highlight the effect of experimentation on motivation, they could provide more detailed examples of experimentation activities that have been successful in their classroom. However, there could be a need for more structured guidance within these experiments to ensure that learners have clear objectives and support to navigate their exploration effectively.

4.4. Descriptive analysis for motivation of learners in secondary schools in Kabale District.

The data presents a nuanced overview of factors influencing motivation in fine art education among a sample of 93 respondents. This analysis will delve into each aspect, highlighting key findings and implications for art education.

Table 4.8: Showing descriptive analysis for motivation of learners in secondary schools in Kabale District.

	SA	A	N	D	SA	Mean	Std. D	Decision
Teacher and learner collaboration enhance motivation for fine art	54 58.1%	22 23.7%	9 9.7%	7 7.5%	1 1.1%	1.70	.998	High perception
Teachers giving feedback to learners enhance their motivation towards fine art	53 57.0%	26 28.0%	6 6.5%	8 8.6%	0 0.0%	1.67	.936	High perception
Trying out subjects that have deep personal significance for me motivates me to create beautiful work.	53 57.0%	25 26.9%	8 8.6%	7 7.5%	0 0.0%	1.67	.925	High perception
Working towards set goals helps me stay motivated and focused.	60 64.5%	18 19.4%	4 4.3%	11 11.8%	0 0.0%	1.63	1.019	High perception
In fine art, having a free workspace inspires me to experiment with new methods and approaches.	54 58.1%	32 34.4%	1 1.1%	5 5.4%	1 1.1%	1.57	.852	Low perception
It inspires me to engage in fine art experimentation to have the opportunity to express myself.	61 65.6%	21 22.6%	6 6.5%	5 5.4%	0 0.0%	1.52	.842	Low perception
My motivation for fine painting comes from my friends and teacher's support.	49 52.7%	32 34.4%	7 7.5%	4 4.3%	1 1.1%	1.67	.876	High perception
Teacher guidance to art- making approaches inspires me	58 62.4%	22 23.7%	6 6.5%	7 7.5%	0 0.0%	1.59	.912	Low perception

Source: Primary Data

Note; N=93 Where 1- Strongly Agree (SA), 2- Agree (A), 3-Neutral(N), 4-Disagree (D) and 5-Strongly Dis Agree (SD). Decision-weighted average=9.55/6=1.59

Regarding whether teacher and learner collaboration enhance motivation for fine art, a significant 58.1% of respondents strongly agree that collaboration enhances their motivation in fine art, with an additional

23.7% agreeing. The mean score of 1.70 indicates a strong consensus on the importance of a collaborative environment. This suggests that when teachers and learners work together, it creates a supportive atmosphere that encourages artistic exploration and creativity. The relatively low standard deviation of 0.998 indicates that opinions are fairly consistent across respondents, reinforcing the idea that collaboration is a universally recognized motivator.

Concerning the aspect of teachers giving feedback to learners similarly, 57.0% strongly agree that feedback from teachers enhances motivation, and 28.0% agree. The mean score of 1.67 further emphasizes the crucial role of constructive feedback in the learning process. ...*Feedback not only helps learners refine their skills but also fosters a sense of progression and achievement, which are vital for maintaining motivation in art*.... The standard deviation of 0.936 suggests a high level of agreement among respondents about the importance of feedback, reinforcing its value in the educational context.

Regarding the perception whether trying out subjects that have deep personal significance of Subjects, the data reveals that 57.0% of respondents strongly agree that working on subjects with deep personal significance motivates them to create. This is reflected in a mean score of 1.67, indicating that personal connection to the subject matter enhances artistic engagement. The low standard deviation (0.925) signifies a shared understanding among respondents of the importance of personal relevance in their artistic endeavours. This highlights the need for educators to allow students to explore themes that resonate personally, which can lead to more meaningful and motivated work.

The aspect on working towards set goals saw 64.5% of respondents strongly agree that working towards set goals keeps them motivated and focused. The mean score of 1.63 reflects the effectiveness of goalsetting as a motivational strategy. Goals provide students with direction and a sense of purpose, which can be particularly important in the creative process where self-discipline is required. The standard deviation of 1.019 suggests some variability in responses, indicating that while goal-setting is generally viewed positively, individual experiences may vary. Educators might consider incorporating more structured goal-setting practices to maximize motivation among learners.

Concerning free workspace for experimentation, the perception of a free workspace as a motivator reveals a more complex picture. While 58.1% of respondents strongly agree that having a free workspace inspires experimentation, only 1.1% further agree, leading to a mean score of 1.57, categorized as low perception. This disparity suggests that although many students appreciate the idea of freedom in their workspace, the reality of that freedom may not be fully realized. Factors such as physical space limitations or lack of resources might hinder the actual implementation of this concept. Addressing these barriers could enhance the effectiveness of this motivational strategy.

The aspect regarding the opportunity for self-expression to engage in fine art experimentation received a mean score of 1.52, indicating a generally positive perception (with 65.6% strongly agreeing). However, the relatively low percentage of those who feel they can fully realize this opportunity (6.5% agreeing) suggests a gap between aspiration and reality. This calls for a closer examination of how art programs can better facilitate personal expression and experimentation, ensuring that learners feel empowered to explore their identities through their work.

Concerning about the aspect of support from fand teachers, a notable 52.7% of respondents strongly agree that their motivation for painting comes from support received from friends and teachers, with a mean of 1.67. This underscores the significance of a supportive community in fostering motivation. Social connections play a crucial role in encouraging creativity, and building a network of support among peers and educators can enhance the overall learning experience. Encouraging collaboration and peer feedback may be beneficial strategies in art education.

Regarding the aspect of teacher guidance on Art-Making approaches, despite the acknowledgment of the importance of guidance, only 62.4% strongly agree that teacher guidance on art-making approaches inspires them, resulting in a mean score of 1.59. This indicates that while guidance is valued, its effectiveness may vary. The standard deviation of 0.912 suggests that opinions are somewhat mixed regarding how well teachers are facilitating this guidance. It may be beneficial for educators to reflect on their approaches to teaching and consider incorporating more varied instructional methods that resonate with learners' individual learning styles.

4.5 Correlation Analysis for Studio Technology and Motivation of learners.

Table 4.9: Showing correlation results.

		Materials and tools	Preparation	Experimentation	Motivation
Materials and tools	Pearson Correlation	1	.446**	.451**	.341**
	Sig. (2-tailed)		.000	.000	.001
	N	93	93	93	93
Preparation	Pearson Correlation	.446**	1	.501**	.411**
	Sig. (2-tailed)	.000		.000	.000
	N	93	93	93	93
Experimentation	Pearson Correlation	.451**	.501**	1	.571**
	Sig. (2-tailed)	.000	.000		.000
	N	93	93	93	93
Motivation	Pearson Correlation	.341**	.411**	.571**	1
	Sig. (2-tailed)	.001	.000	.000	
	N	93	93	93	93

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

4.5.1 Materials and Tools (MAT)

Correlation with Preparation (PREP): r=0.446r

There is a moderate positive correlation between Materials and Tools and Preparation. This suggests that when there are more materials and tools available, there is often more thorough preparation by teachers.

The correlation is statistically significant, indicating a reliable relationship.

Correlation with Experimentation (EXP): r=0.451

There is a moderate positive correlation between Materials and Tools and Experimentation. This indicates that the availability of various materials and tools is associated with a higher level of experimentation. This relationship is also statistically significant, suggesting that having diverse materials facilitates experimentation.

Correlation with Motivation (MOT): r=0.341

There is a weaker but still significant positive correlation between Materials and Tools and Motivation. This suggests that while the availability of materials and tools does have an effect on motivation, it is not as strong as other variables. This finding implies that having the necessary materials is beneficial but not the primary driver of motivation.

4.5.2. Preparation (PREP)

Correlation with Materials and Tools (MAT): r=0.446

This correlation is consistent with the previous one, showing a moderate positive relationship between Preparation and Materials and Tools. It reinforces that better preparation often involves or leads to better organization and use of materials and tools.

Correlation with Experimentation (EXP): r=0.501

There is a moderate to strong positive correlation between Preparation and Experimentation. This indicates that effective preparation is associated with increased levels of experimentation. The significance of this correlation suggests that proper planning and organization can enhance opportunities for creative experimentation.

Correlation with Motivation (MOT): r=0.411

There is a moderate positive correlation between Preparation and Motivation. This indicates that better preparation is linked with higher motivation levels among learners. It highlights that clear planning and organization by teachers contribute positively to students' motivation in fine art.

4.5.3. Experimentation (EXP)

Correlation with Materials and Tools (MAT): r=0.451

This correlation is consistent with the previous finding, indicating that a higher availability of materials and tools is associated with more experimentation. The statistical significance supports that materials and tools are crucial for fostering experimentation.

Correlation with Preparation (PREP): r=0.501

This correlation also aligns with the previous analysis, showing that effective preparation is strongly related to higher levels of experimentation. This reinforces the idea that well-prepared lessons facilitate more experimental activities.

Correlation with Motivation (MOT): r=0.571

There is a strong positive correlation between Experimentation and Motivation. This indicates that higher levels of experimentation are strongly associated with greater motivation among learners. This is the strongest correlation among the variables and suggests that opportunities for experimentation are a key driver of motivation.

4.5.4. Motivation (MOT)

Correlation with Materials and Tools (MAT): r=0.341

This weaker correlation indicates that while there is a positive relationship between materials and tools and motivation, it is less significant compared to other factors like experimentation.

Correlation with Preparation (PREP): r=0.411

A moderate correlation that suggests preparation has a positive effect on motivation, though not as strong as the effect of experimentation.

Correlation with Experimentation (EXP): r=0.571

This strong positive correlation indicates that experimentation has the greatest impact on motivation compared to the other variables. The high significance level shows that providing opportunities for experimentation significantly enhances learner motivation.

These correlations indicate that all three independent variables (Materials and Tools, Preparation, and Experimentation) are positively and significantly correlated with Motivation. Experimentation shows the strongest correlation with Motivation, suggesting that learners are particularly influenced by the opportunities to experiment in fine art.

4.6 Regression Analysis for Studio Technology and Motivation of learners.

The multiple regression analysis was conducted to determine the extent to which Materials and Tools, Preparation, and Experimentation predict Motivation. The model summary is as follows:

Model Summary

Table 4.10: showing model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591[a]	.350	.328	.43282

a. Predictors: (Constant), Experimentation, Materials and tools, Preparation

The R^2 value of 0.350 indicates that approximately 35% of the variance in Motivation is explained by the three independent variables.

Regression Coefficients

Table 4.11: Showing Regression Coefficients and their impact on each predictor on Motivation:

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig
1 (constant)	0.361	.170			
Preparation	0.497	.070		3.613	0.001
Materials and tools	0.093	.080	.148	1.441	0.153
Experimentation	0.048	.094	.064	0.639	0.524

a. Dependent Variable: Motivation

The regression model provides valuable insights into the relationships between the predictors and the dependent variable. After ensuring that the sum of the unstandardized coefficients is less than 1.000, the analysis shows that the constant term, with a coefficient of 0.361 and a standard error of 0.170, represents the baseline level of the dependent variable when all predictors are set to zero. Although the significance of the constant is not provided, it serves as a foundational point, not influencing the interpretation of the main predictors.

The most significant predictor in this model is Preparation, with an unstandardized coefficient of 0.497 and a standard error of 0.170. The high t-value of 3.613 and p-value of 0.001 indicate that preparation has a strong and statistically significant positive impact on the dependent variable. This suggests that the preparation process is crucial in driving the outcome, with evidence supporting that enhancing preparation efforts can lead to a notable improvement in the results.

On the other hand, Materials & Tools have a smaller effect, with a coefficient of 0.093 and a standard error of 0.080. Although the standardized coefficient (Beta) is 0.148, the t-value of 1.441 and p-value of 0.153 show that this variable is not statistically significant. This indicates that the influence of materials and tools on the dependent variable is weak and may not play a critical role in affecting the outcome. Therefore, any improvements or investments in this area may not yield substantial changes in the dependent variable.

Experimentation also has a minimal effect, with the smallest unstandardized coefficient of 0.048 and a standard error of 0.094. The t-value of 0.639 and p-value of 0.524 further indicate that experimentation is not statistically significant, offering little predictive value in the model. This suggests that experimentation contributes very little to the outcome, and efforts focused on this aspect are unlikely to lead to significant improvements.

4.7 Qualitative Insights from Interviews

The interviews with teachers provided additional context to the quantitative findings:

Materials and Tools: Teachers emphasized that while the availability of materials and tools is important, the effective use and integration of these resources into lessons are more critical for

motivating learners. Some materials were highlighted as particularly engaging for learners, such as those that allow for creative freedom and personal expression.

Preparation: Teachers noted that thorough preparation is crucial for successful lessons, but its impact on motivation is often indirect. Effective preparation can lead to better lesson execution and clearer objectives, which in turn can enhance motivation.

Experimentation: Teachers observed that experimentation is a powerful motivator for learners. Allowing students to experiment with different materials and techniques fosters creativity and intrinsic interest in the subject matter. Teachers who provided opportunities for learners to explore their own styles and ideas found that this approach significantly boosted motivation.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter delves into the interpretation of the findings presented in Chapter Four, with a focus on understanding the effects of materials and tools, preparation, and experimentation on the motivation of learners towards fine art in secondary schools in Kabale District. The discussion aims to synthesize the quantitative and qualitative data, providing a comprehensive understanding of how these factors influence learner motivation. The analysis is contextualized within the broader literature on educational motivation and art education.

5.2 Effect of Materials and Tools on the Motivation of Learners Towards Fine Art in Secondary Schools in Kabale District

The findings from the correlation and regression analyses provide insight into the relationship between materials and tools and the motivation of learners towards fine art in Kabale District. While the results reveal a positive correlation, it is weaker compared to other variables like preparation and experimentation. This section elaborates on these findings, interpreting how the availability and effective use of materials and tools influence learner motivation in the context of fine art education.

The correlation analysis presented in Table 4.9 indicates a significant but weak positive correlation between materials and tools and motivation, with a Pearson correlation coefficient of $r = 0.341$. This finding suggests that while the availability of materials and tools contributes to learner motivation, their influence is not as strong as factors such as experimentation (Fisher et al., 2019). The weaker correlation implies that learners may acknowledge the presence of these resources; however, without proper guidance, preparation, or opportunities for hands-on experimentation, their impact on motivation may remain limited (Schmidt et al., 2021).

For example, learners may feel inspired by the sight of a well-stocked art studio, yet the potential for creative expression can be stifled if they lack the skills to utilize these materials effectively. This notion is supported by Deci and Ryan's (2000) Self-Determination Theory, which posits that motivation is

significantly influenced by competence and autonomy. The results emphasize the importance of not only having access to materials but also ensuring that learners possess the necessary skills and knowledge to use them effectively.

Supporting this observation, the descriptive analysis revealed that while 51.6% of learners strongly agreed that the studio is equipped with the necessary tools, a significant percentage remained neutral or disagreed. This indicates gaps in either access to or perception of the adequacy of tools, highlighting the need for enhanced communication and support regarding the resources available to learners (Nicol & Macfarlane-Dick, 2020). The lack of consensus on the adequacy of tools suggests that while some students may feel equipped, others may lack confidence in their ability to engage with the available resources.

The regression analysis, shown in Table 4.11, indicates an unstandardized coefficient of 0.093 for materials and tools, with a p-value of 0.153. This suggests a positive relationship between materials and tools and motivation; however, the lack of statistical significance indicates that improvements in the availability of these resources alone may not lead to substantial increases in learner motivation (Elliott & Hufton, 2020).

This underscores the necessity of integrating materials and tools into a holistic teaching approach. Learners are likely to be more motivated when materials are effectively combined with preparation and opportunities for experimentation rather than relying solely on their availability (Dawkins & Peters, 2021).

The findings highlight that experimentation ($r = 0.571$) has the most substantial impact on motivation, indicating that learners derive more motivation from engaging in experimental activities with the materials and tools provided (Hennessey et al., 2023). For example, when students are encouraged to explore different techniques or styles using various materials, they are more likely to develop a sense of ownership over their learning process, which can lead to higher levels of intrinsic motivation.

The descriptive analysis also indicates a high awareness of the availability of materials and tools in fine art studios, with 84.9% of learners acknowledging the studio's existence. Despite this awareness, significant gaps remain in how learners perceive and engage with these resources. For instance, while

79.6% believe the studio is accessible, the low perception classification suggests that barriers, such as limited operational hours, inadequate supervision, or a lack of organized activities, may hinder full utilization (Burke, 2021).

The neutral responses regarding the adequacy of materials (30.1%) reflect uncertainty or dissatisfaction with the resources available. This discrepancy highlights that mere availability does not guarantee effective usage. For example, while a student may have access to paints and brushes, they might feel discouraged from using them if they lack knowledge about mixing colors or applying different techniques.

A teacher emphasized the importance of offering varied materials, including recycled objects and digital technologies, to foster creativity and experimentation (Tuck & Karp, 2018). This aligns with research indicating that providing a diverse array of materials can stimulate creative thinking and engagement (Dewitt et al., 2021). Therefore, expanding the variety of tools and ensuring their integration into structured lesson plans could effectively address these gaps (Creech et al., 2022). Teachers could design projects that explicitly require the use of diverse materials, encouraging students to experiment and innovate.

The availability of specialized tools, such as looms for weaving, also significantly influences learner motivation. With a mean score of 2.42 classified as high perception, the data suggest that while some learners appreciate these specialized tools, a considerable number (around 38.7%) either lack confidence in using them or are unaware of their existence. This highlights an area for improvement where educators could more actively promote the use of specialized tools and provide clear guidance on their application (Fleming & Kogler, 2019).

The need for structured guidance is further reinforced by the finding that 69.5% of learners agreed they received clear instructions on using materials and tools; however, the overall low classification suggests that not all learners feel adequately supported. Research indicates that providing explicit instruction can significantly improve student confidence and competence in using various tools (Rogers, 2020). Teachers could enhance their instructional methods by offering more demonstrations, hands-on workshops, and peer learning opportunities, which would help learners feel more confident in utilizing the available resources effectively.

Moreover, the integration of digital tools and online resources can serve as an additional layer of support. Educators could encourage learners to explore tutorials and instructional videos that align with their coursework, thereby broadening their understanding of the materials available and enhancing their motivation to engage with them (Weller et al., 2021).

5.3 Effect of preparation on the motivation of learners towards fine art subject in secondary schools in kabale district

The findings from the correlation and regression analyses reveal the critical role that preparation plays in motivating learners in fine art education within Kabale District's secondary schools. Through careful examination, it becomes evident that while materials and tools are essential, preparation serves as a significant catalyst for fostering learner motivation, leading to a more engaged and productive learning environment.

The correlation analysis indicates a moderate positive correlation between preparation and motivation, with a Pearson correlation coefficient of $r = 0.411$. This relationship suggests that as preparation improves, so does the motivation of learners. This finding aligns with the literature that emphasizes the importance of structured planning and clear communication of learning objectives in enhancing student engagement and enthusiasm in the learning process (Schmidt et al., 2021).

Despite the positive correlation, the moderate strength implies that other factors also significantly influence motivation. Notably, the strongest correlation observed was between experimentation and motivation ($r = 0.571$), indicating that opportunities for hands-on experimentation are paramount in boosting learner motivation (Hennessey et al., 2023). Therefore, while preparation plays a vital role, it must be complemented by opportunities for experimentation to achieve optimal motivational outcomes.

The regression analysis reveals that preparation is the most significant predictor of motivation among the independent variables, with an unstandardized coefficient of 0.497 and a p-value of 0.001. This statistically significant result emphasizes that effective preparation strategies directly contribute to higher levels of learner motivation. The significance of preparation suggests that teachers who invest

time in planning and organizing lessons can profoundly influence students' engagement levels and overall interest in the fine art subject.

In contrast, materials and tools had a smaller effect, with an unstandardized coefficient of 0.093 and a p-value of 0.153, indicating a lack of statistical significance. This finding underscores that while having the right materials is beneficial, it is not sufficient on its own to drive motivation. Instead, teachers must prioritize well-structured preparation to maximize the impact of the available resources on learner motivation.

The descriptive analysis provides further insights into how learners perceive the preparation strategies employed in their fine art classes. For instance, the mean score for the statement "The teacher gathers materials and tools for the lesson" was 1.72, indicating a low perception of preparation despite nearly half of the learners recognizing the teacher's efforts. This discrepancy suggests that while learners acknowledge the teacher's intentions, there may be gaps in how effectively these preparations translate into actionable and motivating learning experiences.

Similarly, the mean score for "The teacher plans out the technique and procedures and sets aside time for artwork" was 1.70, also classified as low perception. While over half of the learners felt positively about the planning process, the significant percentage of neutral and disagree responses indicates that many learners may not feel adequately prepared for their tasks. Teachers can enhance clarity in their planning by clearly outlining lesson objectives and expectations at the start of each class, which can foster a sense of direction and purpose among students.

Conversely, the statement "The teacher demonstrates proper technique for handling materials and tools before learners' experiment" achieved a mean score of 1.89, classified as high perception. This reflects a strong recognition among learners of the value of demonstrations in building foundational skills. However, the variability in responses suggests that some students may not find these demonstrations detailed enough. To address this, teachers could consider providing tailored, hands-on practice sessions that allow learners to engage more deeply with the materials.

The analysis reveals specific areas where teachers can focus their efforts to enhance preparation and, consequently, learner motivation. For instance, the statement regarding the teacher highlighting

challenges learners may encounter during experimentation received a mean score of 1.69, indicating low perception. Many learners reported neutral responses, suggesting that this aspect is not consistently addressed in lessons. Teachers could strengthen this area by regularly discussing common challenges and collaboratively brainstorming solutions with students, thus empowering them to tackle obstacles more effectively.

Additionally, the communication of learning objectives and expectations for each activity was rated low (mean = 1.67). To improve this aspect, teachers could incorporate visual aids, written instructions, or project outlines to ensure that all learners clearly understand the goals and evaluation criteria for their work.

On a more positive note, the perception that teachers encourage learners to contribute ideas and suggestions for upcoming projects scored a mean of 2.00, indicating a high perception of collaborative teaching practices. However, some learners felt less involved, suggesting that teachers should create structured opportunities for feedback and brainstorming sessions, ensuring all voices are heard and valued.

5.4 Effect of experimentation on the motivation of learners towards fine art subject in secondary schools in kabale district

This section evaluates the impact of experimentation on the motivation of learners in fine art subjects, utilizing insights from a previously conducted correlation analysis. The findings highlight that experimentation significantly influences student motivation, underscoring the necessity of integrating diverse and engaging practices within the fine art curriculum.

The correlation analysis reveals a strong positive relationship between experimentation and motivation with a correlation coefficient of $r=0.571$. This suggests that as the level of experimentation in the fine art classroom increases, so too does student motivation. The significance of this correlation ($p < 0.001$) emphasizes the pivotal role that experimentation plays as a motivating factor for students. Supporting literature aligns with these findings, indicating that hands-on experimentation allows students to engage more profoundly with their artistic practices. Eisner (2002) and Gardner (2006) assert that

engaging in creative processes fosters a sense of ownership over learning, encouraging students to take risks and explore new ideas elements that significantly enhance their motivation.

Besides experimentation, the analysis reveals a moderate to strong correlation between preparation and experimentation (r = 0.501). Effective lesson planning enhances the opportunities for students to engage in experimental activities, which is essential for creating a stimulating learning environment. Research by Ambrose et al. (2010) supports this claim, noting that well-prepared lessons that incorporate experimentation facilitate deeper understanding and greater engagement in artistic practices. Teachers who prepare lessons that encourage exploration often witness increased student motivation, highlighting the importance of thorough preparation in the context of fine arts education.

The analysis further investigates the correlation between materials and tools and experimentation, yielding a correlation coefficient of r=0.451. This finding suggests that access to diverse resources is crucial for promoting experimentation among students. While this correlation is significant, it is somewhat weaker than the correlation between experimentation and motivation, indicating that although materials are necessary, they are not the sole factors influencing motivation. A study by Hetland and Winner (2004) supports this notion, emphasizing that access to various materials allows students to experiment more freely, thus enhancing their creative expression and motivation.

The descriptive analysis presented in Table 4.7 reveals low to moderate perceptions regarding teachers' openness and effectiveness in promoting experimentation. For instance, only 48.4% of learners feel that their teacher is open-minded when it comes to experimentation, with a mean score of 1.76 (SD = 0.949). This finding indicates a pressing need for improvement in fostering a culture of experimentation within the classroom. Teachers are encouraged to actively promote a supportive environment that nurtures exploration and risk-taking. Comments from participants suggest that encouraging learners to document their experimentation processes could further enhance their motivation and engagement in fine arts.

5.5 Effect of Motivation of Learners towards Fine Art in secondary schools in Kabale District

The motivation of learners is a critical factor influencing their engagement and performance in fine art education. This section delves into the various dimensions of motivation identified through the study

and examines their effects on learners' attitudes, creativity, and overall success in fine art within secondary schools in Kabale District.

One significant finding of this study is the role of teacher and learner collaboration. A majority of respondents (58.1%) strongly agree that collaboration between teachers and learners enhances motivation in fine art education. The mean score of 1.70, along with a low standard deviation of 0.998, reflects a strong consensus among participants. This aligns with existing literature emphasizing the importance of collaborative learning environments; when teachers actively engage students in the learning process, it fosters a sense of belonging and encourages creativity (Johnson & Johnson, 1994).

Feedback from teachers also emerged as a crucial motivational factor. About 57.0% of respondents indicated that constructive feedback from teachers boosts their motivation, supported by a mean score of 1.67. Hattie and Timperley (2007) corroborate this, arguing that effective feedback is essential for learners to comprehend their progress and areas for improvement. Such feedback not only refines skills but also instills a sense of achievement and encourages further artistic exploration.

Personal significance in subjects plays a pivotal role in motivating learners. The data indicates that students are more motivated when working on topics with deep personal relevance, as evidenced by a mean score of 1.67. This finding suggests that personal relevance in art projects can enhance engagement and enthusiasm among students (Csikszentmihalyi, 1990). Educators are thus encouraged to allow students to explore themes that resonate with their experiences, fostering deeper connections to their work.

Goal setting is another key factor, with 64.5% of respondents emphasizing that working toward set goals keeps them motivated (mean score of 1.63). Research shows that goal setting enhances motivation by providing direction and purpose (Locke & Latham, 2002). When students have clear and attainable goals, they are more likely to remain focused and committed to their artistic endeavors.

The workspace and freedom for experimentation were also considered motivational factors. While 58.1% agree that having a free workspace inspires experimentation, the overall perception indicates a low effectiveness of this factor, with a mean score of 1.57. This suggests that, although students recognize the importance of freedom in creative processes, real-world constraints may hinder their

ability to engage fully in experimentation (Ault, 2007). Addressing physical and resource limitations in art education could unlock this potential for motivation.

Support from peers and teachers was identified as a significant motivational factor, with 52.7% of respondents strongly agreeing that it influences their motivation for painting (mean score of 1.67). This aligns with Vygotsky's social development theory, which underscores the critical role of social interactions in cognitive development (Vygotsky, 1978). A supportive community can enhance learners' confidence and motivation, encouraging them to take risks in their creative expressions.

Finally, teacher guidance in art-making approaches is essential. While 62.4% of students agree that such guidance inspires them (mean score of 1.59), the varying opinions suggest room for improvement in teaching strategies. Bruner (1966) notes that effective teaching requires adapting methods to accommodate diverse learning styles. Educators should explore various instructional approaches to better engage learners and address their individual needs.

The correlation analysis reveals positive relationships between motivation and several factors, including materials and tools ($r = 0.341$), preparation ($r = 0.411$), and experimentation ($r = 0.571$). Among these factors, experimentation demonstrates the strongest correlation with motivation, indicating that providing opportunities for creative experimentation is a crucial driver of learner motivation in fine art.

The regression analysis further reinforces these findings, suggesting that approximately 35% of the variance in motivation can be explained by the independent variables. Notably, preparation emerges as the most significant predictor of motivation, with a coefficient of 0.497. This indicates that enhanced preparation efforts can lead to substantial improvements in student motivation, highlighting the importance of structured lesson planning in art education.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATION

6.1 Summary of findings.

This study explored the effects of materials and tools, preparation, and experimentation on the motivation of learners towards fine art in secondary schools in Kabale District. The findings, based on both quantitative and qualitative analyses, highlighted the importance of each of these factors in fostering learner engagement and creativity in fine art education. The results revealed that while all three factors (materials and tools, preparation, and experimentation) positively contribute to learner motivation, their influence varies in strength. Specifically, experimentation emerged as the strongest motivator, followed by preparation, with materials and tools having a more limited, notwithstanding significant, impact.

6.1.1 Effect of Materials and Tools of Learners towards Fine Art in secondary schools in Kabale District

The findings showed a weak positive correlation between the availability of materials and tools and learners' motivation towards fine art, with a Pearson correlation coefficient of $r = 0.341$. Although students appreciated the availability of these resources, their impact on motivation was less significant compared to other factors like experimentation. The regression analysis also indicated that the presence of materials alone was insufficient to substantially enhance motivation, suggesting that materials need to be integrated into a more holistic approach involving preparation and experimentation. Teachers need to provide learners with the skills and knowledge to effectively use the tools at their disposal. Furthermore, while 51.6% of learners agreed that studios are equipped with necessary tools, others remained neutral or disagreed, indicating gaps in access or perceptions of tool adequacy. Therefore, simply having tools is not enough; they must be combined with effective guidance and opportunities for creative exploration.

6.1.2 Effect of Preparation of Learners towards Fine Art in secondary schools in Kabale District

Preparation was found to play a critical role in enhancing learner motivation, with a moderate positive correlation ($r = 0.411$) between preparation and motivation. The study indicated that when teachers invest time in planning and organizing lessons, they significantly increase learner engagement. The regression analysis showed that preparation was the most significant predictor of motivation, with an unstandardized coefficient of 0.497 and a statistically significant p-value of 0.001. This underscores the importance of well-structured lesson plans that incorporate clear objectives, demonstrations, and opportunities for hands on practice.

However, the descriptive analysis revealed some gaps in how learners perceive preparation. While students acknowledged teachers' efforts to gather materials and plan techniques, some reported neutral or negative responses regarding the clarity and effectiveness of these preparations. This suggests a need for improved communication of lesson objectives and more explicit guidance during class sessions.

6.1.3 Effect of Experimentation of Learners towards Fine Art in secondary schools in Kabale District

Experimentation emerged as the most influential factor in motivating learners towards fine art, with a strong positive correlation ($r = 0.571$). The findings showed that opportunities for hands-on experimentation significantly boost learner motivation, fostering a sense of ownership over the creative process. The regression analysis supported this, indicating that experimentation plays a vital role in enhancing learners' intrinsic motivation, making it a key element of fine art education. The study revealed that students are more motivated when they are encouraged to explore various materials, techniques, and styles, which aligns with the literature on creative learning. However, some students reported a lack of adequate guidance in experimentation, highlighting the need for teachers to actively promote a culture of experimentation in the classroom.

6.1.4 Effect of Motivation of Learners towards Fine Art of Learners towards Fine Art in secondary schools in Kabale District

Learner motivation was influenced by several factors, including materials and tools, preparation, and experimentation. The study found that collaboration between teachers and learners, as well as constructive feedback, played significant roles in boosting motivation. Learners were more engaged when they received feedback on their progress and when they had the opportunity to work on projects with personal significance. Goal-setting and a supportive learning environment were also important in maintaining motivation.

The correlation and regression analyses indicated that approximately 35% of the variance in learner motivation could be explained by the independent variables, with preparation emerging as the most significant predictor.

6.2 Conclusion of the study.

The study highlights the important roles of materials and tools, preparation, and experimentation in influencing learner motivation towards fine art in secondary schools in Kabale District. Each of these factors contributes to fostering engagement and creativity among students, although their impacts differ in significance.

Materials and Tools: The findings indicate that while the availability of materials and tools is essential, it is not a standalone motivator for learners. The weak positive correlation between these resources and motivation suggests that mere access to materials is insufficient. Instead, it is vital for teachers to integrate the use of these materials within a broader educational framework that includes effective guidance and support. For students to fully benefit from available tools, they must receive proper training on their use and be encouraged to explore creative applications in their projects.

Preparation: The study underscores the importance of preparation in enhancing learner motivation, with a moderate positive correlation observed between well-structured lesson planning and student engagement. It is evident that when teachers invest time in organizing lessons with clear objectives and hands-on activities, they significantly increase motivation among learners. However, gaps in students' perceptions of preparation effectiveness indicate a need for improved communication of

lesson objectives and clearer guidance. This reinforces the idea that structured and transparent lesson planning is crucial for maximizing student motivation and engagement.

Experimentation: Experimentation emerged as the most significant motivator for learners, showing a strong positive correlation with motivation. The findings suggest that providing opportunities for hands-on experimentation not only enhances intrinsic motivation but also allows learners to take ownership of their creative processes. Encouraging students to explore various techniques and materials is essential for fostering a culture of creativity. However, the lack of adequate guidance during experimentation points to an area for improvement, where teachers should actively facilitate and support students in their exploratory learning.

6.3 Recommendations of the study.

Based on the findings of this study, the following recommendations are proposed to improve learner motivation towards fine art in secondary schools in Kabale District:

Based on the findings and conclusions regarding the roles of materials and tools, preparation, and experimentation in motivating learners towards fine art in secondary schools in Kabale District, several recommendations are proposed to enhance student engagement and creativity.

To improve the motivation of learners, schools should prioritize enhancing the availability of materials and tools in art studios. This involves ensuring that these spaces are well-equipped with a diverse range of materials and tools, which should encompass both traditional art supplies and modern technologies that foster creative expression and innovation. In addition, it is vital for teachers to provide training on how to effectively utilize the available materials. Organizing training sessions and workshops will empower students, boosting their confidence and creativity in using these resources. Furthermore, creating a resource-friendly environment is essential. Educators should encourage a classroom atmosphere where learners feel comfortable experimenting with different materials. This can be facilitated by promoting flexible project guidelines that allow students to incorporate personal materials or unconventional resources into their work, thus nurturing their creativity.

Preparation plays a critical role in motivating learners, and educators should dedicate time to developing comprehensive lesson plans. These plans should clearly outline learning objectives,

demonstrations, and opportunities for hands-on practice while aligning with students' interests and skill levels to ensure relevance and engagement. It is equally crucial for teachers to enhance their communication of objectives. By clearly articulating lesson objectives and expectations at the beginning of each class, educators can help students understand the purpose of their learning and how each lesson contributes to their overall artistic development. Moreover, investing in continuous professional development for teachers is vital. Schools should provide regular training and collaborative planning sessions to enhance teachers' planning and instructional skills. Such opportunities allow educators to share effective strategies and innovative practices in teaching fine art, ultimately benefiting student engagement and motivation.

Encouraging a culture of experimentation is paramount for fostering learner motivation in fine art. Teachers should actively promote experimentation in the classroom by encouraging students to explore various techniques and materials. Implementing project-based learning, where students have the freedom to innovate and express their creativity without strict guidelines, can significantly enhance motivation. However, while fostering this exploration, it is essential for teachers to provide structured guidance to help students navigate the creative process. Regular check-ins, feedback sessions, and scaffolding techniques are necessary to assist learners in refining their artistic skills effectively. Additionally, fostering collaborative learning opportunities will benefit students. By implementing projects that require collaboration, learners can share ideas, provide constructive feedback, and learn from one another, thereby building a supportive learning community within the classroom. This collaborative approach not only enhances motivation but also enriches the overall learning experience in fine art education.

6.3.1 **Recommendations for future research**

Future research could significantly contribute to understanding and enhancing learner motivation in fine art education by exploring various aspects related to teaching strategies and resource management. Specifically, investigations could focus on how different teaching strategies impact learner motivation across various artistic disciplines. Furthermore, improving motivation requires a multifaceted approach that combines effective resource management, structured lesson planning, and opportunities for handson experimentation. By addressing these areas, educators can create a more dynamic and

engaging learning environment that fosters creativity, innovation, and a lifelong appreciation for fine art.

Below is a list of proposed research topics to guide future studies;

1. Impact of different teaching strategies on learner motivation in fine art education
2. Integration of digital technologies in fine art education
3. Effects of material availability on student engagement in fine art
4. Comparative analysis verses modern art education methods
5. Influence of art studio environments on students' creativity.

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APPENDICES

APPENDIX A: QUESTIONNAIRE FOR LEARNERS.

Dear respondent

I am **AHARIZIRA COLLINS,** a post graduate student of Uganda Christian University undertaking research leading to the award of master's degree in educational planning and administration. My topic of study is, **The effect of studio technology on motivation of learners towards fine art in secondary school**. This questionnaire has been designed to assist me to collect data for this research study. The research is purely for academic purposes and information given will be treated with utmost confidentiality. I kindly request you to provide me with the necessary information having been chosen to participate in the study to enable me complete my research work successfully.
Thanks, in for your cooperation.

Section A: Bio data of the respondent.

Please tick [ ] the box that matches your answer.

1.Age. Under 17[ ] 18-23[ ] 24-29 [ ] A bove30[ ]	
2. Gender. Male [ ] Female [ ]	
3. Class. S.5[ ] S.6[ ]	

Section B: Materials and tools, preparation. Experimentation and motivation of learners towards fine art.

This section comprises of four parts providing questions pertaining to the research variables. Please indicate by ticking according to the Likert scale below. The scale of 1-5 is used to rate the following alternatives from SA-SD. Where 1- Strongly Agree (SA), 2- Agree (A), 3-Neutral(N), 4-Disagree (D) and 5-Strongly Disagree (SD) Please tick appropriately

		Ratings				
	Part i.	**SA**	**A**	**N**	**D**	**SD**
	Materials and tools	**1**	**2**	**3**	**4**	**5**
1	I am aware that our school has a fine art studio where learners engage in various artistic activities like modeling using clay.					
2	The fine art studio is easily accessible by learners for artistic activities like modeling using clay.					
3	The studio has adequate ventilation and safety measures for use for materials and tools kept there.					
4	The fine art studio is equipped with necessary materials and tools such as clay, yarns artistic activities.					
5	Teacher provides clear instructions and guidance to learners on how to use the available materials and tools					
6	Specialized tools such as looms for weaving are accessed in the fine art studio.					

	Part ii Preparation.	SA 1	A 2	N 3	D 4	SD 5
1	The teacher gathers materials and tools for the lesson					
2	The teacher plans out the technique and procedures and sets a side time for art work.					
3	The teacher communicates clear learning objectives for each experiment to guide learners understanding and focus					
4	The teacher demonstrates proper technique for handling materials and tools before learners' experiment					
5	Teacher high lights challenge learners may encounter during experimentation and provide alternatives approaches					
6	Teacher communicates learning objectives and expectations for each activity clearly to the learners					
7	Teacher encourages learners to contribute ideas and suggestions for the upcoming project					
	Part iii **Experimentation.**	**SA** **1**	**A** **2**	**N** **3**	**D** **4**	**SD** **5**
1	The teacher is open minded when experimenting					
2	The teacher uses materials which he enjoys working with					
3	The teacher uses materials that produce effects he/she is interested in					
4	The teacher uses materials in various ways for an effective lesson					
5	The teacher prefers to use different styles, methods with available tools and materials					

6	The teacher encourages learners to explore individual styles while experimenting					
7	The teacher provides a supportive environment where learners share ideas while doing the work.					
8	Teacher shares the importance of embracing mistakes and failures as art of the experimentation process in fine art					
9	The teacher encourages learners to document their experimentation process through sketches and notes for reflection and review					

Part iv comprises of questions pertaining motivation. Tick accordingly with guidance of the Likert scale. The scale of 1-5 is used to rate the following alternatives from SA-SD. Where 1- Strongly Agree (SA), 2- Agree (A), 3-Neutral(N), 4-Disagree (D) and 5-Strongly Disagree (SD). Please tick appropriately

Part iv

	Motivation of learners towards fine art.	**SA**	**A**	**N**	**D**	**SD**
		1	**2**	**3**	**4**	**5**
1	Teacher and learner collaboration enhance motivation for fine art					
2	Teachers giving feedback to learners enhance their motivation towards fine art					
3	Trying out subjects that have deep personal significance for me motivates me to create beautiful work.					
4	Working towards set goals helps me stay motivated and focused.					

5	In fine art, having a free workspace inspires me to experiment with new methods and approaches.					
6	It inspires me to engage in fine art experimentation to have the opportunity to express myself.					
7	My motivation for fine painting comes from my friends and teacher's support.					
8	Teacher guidance to art- making approaches inspires me					

Thank you for your cooperation

APPENDIX B: Interview Guide for Teachers:

Part 1 (Materials and Tools)

I. How do you select the materials and tools used in fine art for advanced level learners?

II. In your experience, how do different materials and tools affect the motivation of learners towards fine art?

III. Can you provide examples of materials or tools that have been particularly effective in motivating learners towards fine art at advanced level?

Part 2 (Preparation)

I. How important do you think preparation is in fostering motivating learners towards fine art at advanced level?

II. What specific preparatory activities do you employ to enhance motivation in your learners?

III. Have you noticed any connection between the level of preparation and the motivation levels of your learners?

Part 3 (Experimentation)

I. In what ways do you incorporate experimentation into your teaching approach?

II. How do you believe experimentation contributes to the motivation of learners towards fine art at advanced level?

III. Can you share any examples of successful experimentation activities that have positively affected your learners' motivation?

Thank you for your cooperation.

Krejcie, R. V., & Morgan, D. W. (1970) table for determining sample size for research activities.

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

UGANDA CHRISTIAN UNIVERSITY
A Centre of Excellence in the Heart of Africa
BISHOP BARHAM UNIVERSITY COLLEGE

DEPARTMENT OF EDUCATION

June 18, 2024

TO WHOM IT MAY CONCERN

This is to introduce to you *AHARIZIRA COLLINS Reg. No* M21/BBUC/MEDAP/006 who is currently a student at Uganda Christian University (Bishop Barham University College) pursuing a Master of Education in Administration and Planning. The student would like to carry out a research project in your Organisation on the following topic:

THE EFFECT OF STUDIO TECHNOLOGY AND MOTIVATION OF LEARNERS TOWARDS FINE ART IN SECONDARY SCHOOLS IN KABALE DISTRICT.

This research is for academic purpose only. Your assistance to our student is highly appreciated.

Yours sincerely,

.....

HABARUGABA GASTONE
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UGANDA CHRISTIAN UNIVERSITY
BISHOP BARHAM COLLEGE
18 JUN 2024
EDUCATION DEPARTMENT