Unconventional Material practice in Art education at Kyambogo University:

Encouraging Student teachers to embrace innovative approaches towards Studio practice

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Master's thesis

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Cover page illustration

The photograph and the Art-work used in the book cover design, were taken by me as a researcher during studio experimentation in this study; The picture on the middle left side, is taken from an artwork produced after using Soot from Tadooba flames and the middle right image on the cover page is taken from a tool used to produce the art work. Both soot as a material and Tadooba as a tool are significant in this study.

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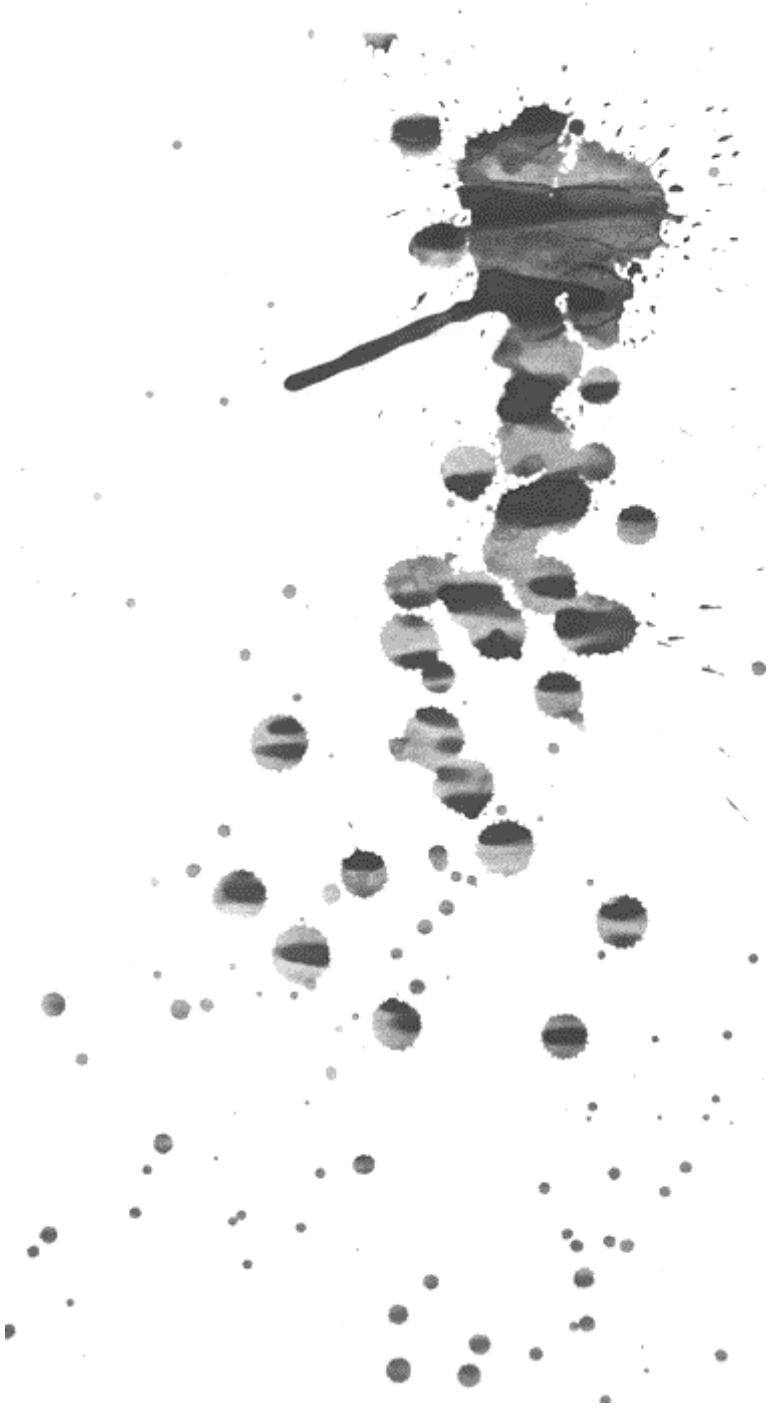

Declaration

I, **MAYANJA Richard Weazher** hereby declare that this is my original work and it has never been submitted to any institution for the award of a Master's Degree.

Signed:.....

MAYANJA Richard Weazher

Date:.....

Approval

I submit this thesis to the Board of examiners with my approval as University supervisor.

Signed:.....

Professor. Jan Stålhane

Date:.....

Dedication

To student teachers in first year, pursuing a Bachelor of Vocational Art and Design with Education (BVAD), academic year 2015-2016- Department of Art and Industrial Design Kyambogo University. Every nation has an identity ours is defined by you, your contributions and the name of your actions give to our country. If you work hard for your selves, your families and country you will have fulfilled your responsibilities as Ugandans. Liberation is from our mind, Let's all work with determination to build our education system and the nation at large.

Acknowledgment

I thank my creator for the gift of life; I am alive to write all this. In a special way, I acknowledge the following people for the academic advice and moral support extended to the progress of this research project:

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My fellow candidates; Arakit Alice, Ruganzu Bruno, Kaweesi Emmanuel, Nassaza Jalia , Kalule ivan and Mukiibi Ssemakula David.

List of Abbreviation

BVAD	Bachelor of Vocational Art and Design with Education
BVAD I	Bachelor of Vocational Art and Design with Education year one
DAID	Department of Art and Industrial Design
DES	Diploma in Education Secondary
HIOA	Oslo and Akershus University College of Applied Science
KYU	Kyambogo University
VOC	Vocational Education
VAD	Vocational Art and Design
UACE	Uganda Advanced Certificate of Education

Abstract

The study was carried out under a purpose; ***to carry out studio experimentation with selected unconventional media from environment to create designs and positively empower learners towards innovative studio practice.*** It was sought to inspire student teachers into appreciation and use unconventional materials which are cheap, unique in their studio practice under Art education to solve problem of insufficient materials for studio practice as a component of Art education.

The study was guided by three objectives which were derived from the study purpose; (**a)** to identify different unconventional materials that have been used in studio practice to create art works, (**b)** to establish attributes of Art education that can guide student teachers while exploring with unconventional materials in studio practice and (**c)** to experiment with selected unconventional materials to produce art works in Studio practice**.** I used mixed methods approaches that is to say participatory action research and experimentation to cater for the collaborative Studio practice.

Following the study objectives both indigenous, modern and contemporary knowledge was considered in concept development. I worked with student teachers pursuing Bachelor of Vocational studies in Art and Design with Education (BVAD) year one in the Department of Art and Industrial Design Kyambogo University. Other interested parties that is to say lecturers, technicians and commercial artists also participated in this study as advisers and informants due to their experience.

Key attributes of Art education used in studio practice such as principles and elements of design in consideration of aesthetics and ergonomics where discussed and employed in the studio experimentation process. The findings proved unconventional materials as potential substitutes for conventional materials and an approach that can be considered to experiment with new unconventional media was suggested and proved positive. Students' attitude towards unconventional materials also changed according to their willingness to proceed with the practice of working with unconventional materials in their academic studio practice.

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1. Introduction

1.1 Over view

In this research study, I worked with Student teacher pursuing a Bachelor of Vocational studies in Art and Design with Education (BVAD) in first year Department of Art and Industrial Design Kyambogo University. Learners were facing a problem of insufficient materials for studio practice as a component of Art education. They couldn't execute practical assignments and self-study inspired by Art and Design lessons. Therefore, this study sought to work with learners and investigate the appropriate possibilities of using unconventional materials as a substitute of conventional materials in studio practice to create designs. The study was derived after discussions between Department stakeholders and me as a researcher. This chapter presents the foundation of the study.

1.2 My Brief profile; reflections and prior competencies in line with this study

Since Dewey's time many writers in the field have emphasized the importance of reflection (Boud & Walker, 1998, p. 1). Reflective approaches to learning focus on the process of self-discovery and questioning that leads managers to develop a comprehensive View… (Kayes, 2002, p. 138). In the same perspective, I had to first reflect back in my experiences in line with theme of the study for greater inspirations.

My mastery approach and creativity in Drawing, Painting, Sculpture and Music emanates from a humble beginning. I was born in 1986 in Kampala district of Uganda in Buganda region. I started practicing art as my passion, at the early age of 6 years by playing with clay and colures; making humanistic figures, imitating images from my mother´s paintings, illustrations from the bible, movies and the environment. The skills kept on advancing throughout my elementary, High school and university echelons.

After my Diploma in Music, I joined Michelangelo School of Creative Arts where I was awarded a Diploma in Art and Design by Kyambogo University. What I can't forget as a learner in this small Art school, is the learning environment with well facilitated Art studios, motivating teachers, learning in groups and self-study sessions. As a student, I got exposed to a variety of tools, materials and specimens that were in line with the industrial technology in the field of practice. Consequently, I grew in Art knowledge, skills and attitude.

After my Diploma, I set up my first Art studio in Kisenyi-Mengo, a slum in Kampala central division. In this small studio, I managed to cause change in many street children´s lives.

As apprentices, we shared Knowledge and skills in crafts making, painting, sculpture, music and drawing in return which become a source of income to many of them- keeping them busy and away from committing crimes in the community. This was my initiation into teaching as a practice, in line with Zeuli (1994, p. 6) declare that; Teachers, of course, learn about teaching from sources unconnected to educational research most notably their own teaching experiences.

As I continued carrying on my daily studio activities, I joined Kyambogo University for a Bachelor's Degree in Art and Industrial Design. While at Kyambogo University, I excelled in material culture for; Drawing, Portraiture, Sculpture, Painting. The same courses I teach today in the Department of Art and Industrial Design, Kyambogo University.

With enthusiasm to serve and longing to see positive changes manifested and consolidated, I discovered gaps in my methods of sharing knowledge were not delivering effective teaching and learning sessions. Consequently, I pursued a Postgraduate Diploma in Education (PGDE) Kyambogo University; which I completed in 2013. This provided me an exposure to general work ethics, education administration, teachers' code of conduct, components of the curriculum and the education system as a whole

After qualifying as a professional teacher, I participated in the reformatting of national non-formal curriculum accredited by Ministry of Education-Uganda. I also gained more experience working with different Non-Government Organizations (NGOs) for vulnerable children and Secondary schools in Uganda as Art instructor for Performing and Visual arts. In addition to that, I held several excursions in art schools in Uganda and other countries such as Norway, Denmark, Belgium and Germany inclusive. Where I learnt different cultures and art methods.

However, In order to identify the problem the teacher should be sensitive towards job activities and curious enough to isolate it from the broad field (Pathak, 2008, p. 11). With the improvement of my knowledge, skills and attitude in content delivery as a professional teacher, I identified other challenges concerning the learning environment and facilities in Department of Art and industrial design (DAID)- Kyambogo University.

In collaboration, with colleagues and learners we tried to find out ways to improve our teaching and learning methods in the study environment with inadequate facilities however the attained solutions were not permanent. Zeuli (1994, p. 6) affirms that reading research is closely interwoven with teachers' and prospective teachers' learning about teaching. I got access to

several articles drawn on successful stories about Vocational Education in Norway, Germany and Finland. Thus, I was inspired me to apply for a full time Master's Degree in Vocational Pedagogy to become a change agent in the university and in the entire education system of Uganda- that I currently pursue at Oslo and Akershus University College of Applied Science (HIOA).

While at HIOA, I participated in two group and one solo research projects, which was a springboard into this research project. In the first group project, we focused on factors affecting the implementation of vocational education in Uganda and a number of challenges were established and some of them were related to learning environment and poor facilities, insufficient materials, tools, specimens and equipment which constitutes education technology.

In the second project, we researched on learner's attitude towards vocational education in Norway and the findings proved, a positive attitude learners had towards Vocational Education (VOC) with minor challenges. However, the study ended with recommendations and no practical solution implemented. Implementation of research findings into practice is a complex undertaking that has often fallen short of expectations. In part, this is due to the current lack of substantive knowledge regarding both individual implementation interventions and the interrelationship of multiple interventions used in many studies (Stetler et al., 2006). Consequently, I opted for experimental practical based research the is ends in actions of problem solving.

In the third project, which was a solo under participatory action research approach. I worked with learners of Diploma in Education Secondary (DES) to utilize Sculpture learning actions that drawn from the curriculum to improve on the environment at Kyambogo University-Uganda. The project helped the learners, lectures and I, to participate in the face-lifting process of the Art and Industrial Design departmental learning environment.

The project was inspirational, thus leading me to this study; It motivated me as a teacher who is gaining experience in working with others in manifesting a positive change in Art education through available possible ways.

1.3 Brief background about Kyambogo University

Kyambogo University (KYU) where the study was carried out is relatively a new academic institution. It was founded with the aim of promoting & advancing knowledge and development of skills in Science, Technology and other Education fields; having regards for quality, equity, progress and transformation of society.[1]

The University is one of eight Diploma and Degree awarding institutions in the country, at undergraduate and postgraduate levels. Established in 2003, under the Universities and other tertiary institutions Act 2001of the Uganda constitution by merging three (3) institutions; Uganda Polytechnic Kyambogo (UPK), The Institution of Teacher Education Kyambogo (ITEK) and the Uganda National Institute of Special Education (UNISE)[2].

The University vision has a Vision; Be a Centre of Academic and Professional Excellence, to be a Leading provider of research, information in education, science, technology and humanities. KYU focuses on vocationalizing and universalizing education at all levels. Its mission is to advance and promote knowledge and the development of skills in science, technology and education, and in such other fields having regard for quality, equity and the progress of society.[3]

Binns and Otto (2006) suggests…mission can be related in a tangible positive way to the educational wellbeing of society at large or some particular community. With the cause to realize KYU´s mission and vision, the management had established six (6) Faculties and one School and these include Faculty of Arts and Social Sciences, Faculty of Education, Faculty of Engineering, Faculty of Science, Faculty of Special Needs and Rehabilitation, Faculty of Vocational Studies and the School of Management and Entrepreneurship.[4] Each faculty was subdivided into departments for specific trends.

Art education is offered is under Department of Art and Industrial Design (DAID), Faculty of Vocational Studies. The department teaches art at Diploma and Bachelors' degree level; Diploma in Education Secondary, Bachelors of Secondary Education and Bachelor of Vocational Art and Design with Education (BVAD). The graduates teach Art and Design in

[1] http://www.kyu.ac.ug/index.php/contact-us/logo/about-you
[2] http://kyu.ac.ug/index.php/contact-us/logo/history this is the official Kyambogo University website
[3] http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.180.7520&rep=rep1&type=pdf

[4] http://kyu.ac.ug/index.php/administration/faculties

secondary school and vocational institutes. However, DAID also runs programs under Industrial Arts.

1.4 Background of Art Education

Since advent of man, arts have existed, artists, performers, audience members have been educated for their roles. Every culture has devised ways to select and prepare individuals to engage in these roles. (Efland, 1990, p. 1). This was the practice of learning art in the world from the early Mesolithic period of stone age.

Before the introduction of Art education by Europeans, Different communities in Uganda and Africa at large were passing on indigenous knowledge about art from one generation to another through oral tradition as communication system and apprenticeship which emphasised learning by doing. The practice emphasised hands on where learners had to interact and feel materials and connect them with different components for a functional production this included but not limited to basketry, wood curving, architecture, sand painting, weaving and blacksmith. Indigenous teaching and learning, today is categorised under informal education and it is still embraced by communities in Uganda; where western modern oriented system of structured education has not yet been manifest and consolidated by the Government.

According to Macdonald (2004) The concept of Art education as distinct from craft training was realised in Italy in the sixteenth century due to recognition of art as a product of the intellect rather than the skilful hand… This was a sense of elitism adhered the teaching of the visual arts, setting the genesis of scientific investigation of principles and element of design as a natural phenomenon. However, Efland (1990, p. 8) contends by affirming that; Western culture dawned in Greece and her great philosophers, Plato and Aristotle, wrote on only education but also about the place of arts with in it; thus the story of art education begins hear.

In Uganda, Art education was first introduced at elementary level by the missionaries as pioneers of education where art was a component. Ssekamwa (2000) narrates

> "…a new situation arose in Uganda by 1875. It was partly responsible for making Kabaka Muteesa I, to invite European teachers to come to Uganda. He wanted them to teach Ugandans new knowledge and new skills which would help them and himself cope with that new situation."

With the above narration, the missionaries are believed to have started schools to teach religious education, reading, writing and technical skills among which art was part since it was pro Christianity and the church could provide tools and materials in the practice.

Makerere University School of Art was the first fully fledged school of art in Uganda initiated by Margaret Trowel in1937. According to Court (1985) she played a unique role in the development of formal Art education in East Africa. During her nearly thirty years of residence in Kenya and Uganda, she worked restlessly as a teacher researcher author and organiser and administrator to create a distinctively African Art School.[5] The school became a hub of Art education in east and central African region.

Powerful elements in each society determined the purpose to be served by the arts and created appropriate institutions (Efland, 1990). Thus, Art education has since been developed through different formal academic structures with designed curriculums from secondary to tertiary institutions of higher learning. Being formalized section of Vocational Education in Uganda, visual arts have been embraced by the Ugandan government and various educational institutions such as Kyambogo University, Makerere University, Nkumba University, Michelangelo College of Creative Arts. It is widely believed that levels of educational attainment and human capital are an important ingredient to overall economic growth (Deininger, 2003, p. 291). Learners from secondary schools enroll to tertiary institutions to pursue Art education programs with theory and practical component under studio practice.

1.4.1 Studio practice

Art education in KYU, is about teaching and practicing of visual arts; concentrating on the extracting of Knowledge, skills and attitude using different information sources. Studio practice is a vital attribute in Art education in the University curriculum; an approach where to practical learning can replace the standard lecture approach. It reechoes on sound pedagogical principles, very flexible, popular with students, and leads to superior learning in most instances.[6] It allow student teachers to concentrate on developing methods that teach children and adolescents to think visually and to create art that has personal meaning. According to Freedman and Stuhr (2004, p. 825) Studio practices include conceptualizing viewing, analysing, judging, designing, constructing and marketing visual forms. Consequently graduates become a cohesive community of Art educators and studio practitioners.[7]

[5] The Makerere university school of art, started by Mrs Margret trowel in 1937. And her range of publications about the pedagogy and practice of African arts and crafts are outstanding examples of her achievement. Her impact also extends to an intellectual and spiritual influence continues to find expression in the work of successive generations of students

[6] http://serc.carleton.edu/introgeo/studio/what.html

[7] University of Boston https://www.bu.edu/academics/cfa/programs/studio-teaching/

Learners as practitioners, are allowed to pursue general study in the visual arts or to create their own curriculum, combining studies in visual arts with other fields through exploration and experimentation. Conceptually grounded production processes cross over traditional boundaries of form, breaking down old borders of media-driven curriculum. They turn curriculum upside down, so that the development of ideas are given attention first and the techniques and processes emerge as the expression of those ideas (Freedman & Stuhr, 2004). Therefore, materials, techniques and styles are related to enhance the making of meaning and esthetical values.

The essential studio work is intended to deepen students' awareness about visual art forms and introduced a variety of technical processes and theoretical approaches (Little & Cardenas, 2001). This empower learners to explore their interests and refine their skills in art appreciation and broad understanding of the field of contemporary art and experience while pursuing their program in a liberalized setting.

Studio based approach in learning, has been practiced many years ago in different art movements. Taking Renaissance period as an example, from the European art history learners received training through apprenticeship in the master's studio where they were practicing progressively with tools, materials and general studio technology in real setting …apprentices copied a clay, wax, or plaster sculptural model, based on classical examples and kept in the studio for the purpose of instruction… (Bambach, Stern, & Manges, 2003).

Leonardo studied with the Florentine sculptor Andrea del Verrocchio and remained in his workshop after his apprenticeship for several more years. Learner grasp knowledge faster through demonstration and experimentation. This instills in them independent thinking and judgement as Phillips and Priwer (2006, p. 2) reveals that; Later Leonardo apprenticeship in Andrea Verrocchio's workshop had an enormous impact on his artistic and scientific works. Once he graduated to doing his own projects he started to incorporate many of the rapidly evoking themes of the renaissance its self.[8] Studio practice has a great impact on nurturing Leonardo as an innovative learner so it should be the same with student teachers in Uganda if well-equipped and facilitated.

[8]Giorgio Vasari writes that Leonardo specifically copied from Verrocchio "heads of women, beautiful in expression and in the adornment of the hair." In addition, Leonardo absorbed from the older artist a number of distinct drawing skills. During the 1470s, Leonardo learned from Verrocchio to make drapery studies on fine linen in brush and ink and gouache in order to reproduce the appearance of different materials and their fall and flow around the human body. History of Drawing Thomas Buser. History of Drawing is a textbook and reference book available free to anyone who loves drawings.

The responsibility of educating youth depends mainly on the educational institutions and the teachers who are directly concerned with the teaching and learning process (Pathak, 2008, p. 10). The biggest number of population being the youths, Ugandan Universities like KYU in line with modernized technology, embraced studio practice in teaching &learning activities and learners' self-study. Curriculums are designed to offer practical programs under Art education with identified materials, tools, techniques of specific design trends.

The intention behind knowledge and skills development in general was to expose them advanced studio technology as vocational teachers in making. It also aims to enhance students' understanding of the conceptual concerns that underpin contemporary art making practices in the field of teaching and learning.[9] Studio practice therefore comprises a critical coalition that involves an ongoing dialog between, within and around the artist, artwork and context where each has a role to play in the creation of meaning (Sullivan, 2004, p. 811).

DAID is still wedged with several challenges; it has a population of learners approximately between 400 and 500 offering different Vocational programs in Art and Design. As result of growing numbers every year in the small learning space, the department had to group programs into two (2) sessions that is to say day and evening programs. This was to ease access learning facilities, available space and other related resources. However, the establishment of day and evening programs did not mitigate challenges that emanate from inadequate equipment, tools and materials in studio practice.

Despite the management's exertion to facilitate art studios at DAID, with learning facilities to ensure competence based learning. The minimal conventional materials distributed by departmental-technicians can only be used as demonstrational materials for only lecturers. Learners remain with almost nothing to use in the executions of set projects, assignments, tests and self-study. In an interview with Mr. Tigatege, J., he elaborates

> …Majority of learners find expensive to afford personal conventional materials from art shops and they have no interest and structured ideas to utilize cheap and found un-conventional materials from the environment. Sometimes they also face a challenge of miss match between their need to acquire recommendable materials for a specific task as guided by the curriculum. The ability of traders to provide. This is because some materials scarce in the trading circulation from the manufacturers….[10]

[9] https://www.ru.ac.za/fineart/studiopractice/

[10] Tigatege John is a practicing artist and a chief technician in the Department of Art and Industrial Design in charge of materials, tool and equipment. He is also the head of technicians in the faculty of vocational studies

In such a situation, learners challenged with no choice to escape poor performance in studio based course units as (Ssekamwa, 1997) puts it that; the lack of vocational training materials and infrastructure to a large extent derails its implementation. Kyambogo university's situation is exceptional from Ssekamwa's assentation, learners are not able to practice, execute and submit given assignments in time. Inadequate conventional materials limit student teachers from practicing and relating of all studio technology component of art education in a practical sense.

Student teachers of vocational art and design with education, need enough time and resources to challenge their abilities for better transformation. Because they are meant to pass on practical knowledge in school where they are going to teach. Therefore, studio should be well-established and facilitated in line with the curriculum objectives. However, with hindrances about materials such an idea can't flourish. Learners can't get good foundation in a practical based areas of studio technology before going into complex levels of innovations and teaching. The good foundation can be a springboard into testing their minds with trick assignments that requires them to create solutions to the available needs.

Studio technology as an aspect of studio practice incorporates all art constituencies which materials are a party. However unconventional materials have not been emphasised and Learners in KYU look at material as a stumbling block in their studio practice. Unconventional materials with all possibilities explored can be used suitable substitutes to conventional materials- which are expensive and with unstable circulation. Studio practice needs to be seen as a valuable site for raising theoretically profound questions and exploring them using robust visual methods that have the potential to yield critically grounded and individually transforming outcomes (Sullivan, 2004, p. 811).

1.4.2 Selecting the art and design area of operation

Critique of given conditions in educational work can be seen as an essential starting point in teacher research (Hiim, 2011, p. 26). In her consideration, Hiim (2015) suggests that; The teachers themselves, together with colleagues, pupils and other participants in the educational context, should identify actual challenges and find new possibilities for development action.

Kyambogo University. He has back ground in art and design with a Diploma in textiles, a Bachelors and a Masters degree in information technology

In this study context, DAID stake holders like Lecturers, Technicians, Administrators and I held discussion with the intention of establishing the actual problem from studio practice to be handled. Desanctis and Gallupe (1987, p. 590) confirms, In most instances the group has been delegated responsibility for matters considered to be too significant for any single individual.

In the first meeting, we identified and contemplated on different challenges we face as a class in studio practice process in self-study, teaching and learning sessions of practical course units. Several challenges which were raised by members writing on VIPP where related with lecturer-student ratio, luck of enough equipment, learning space, hygiene in learning environment and materials.

Kirumira (2008) asserts that African visual artist need new knowledge and competencies to combat challenges such as collating artistic knowledge and skills and accessing exposure during practice. As a group visual artists working together, we had to discuss identified challenges with in our learning environment and select one; that could solve in our abilities, considering the course curriculum and the semester period. The majority were in favor of finding ways of acquiring materials with low or no costs for studio practice. In the arts it is plain that in order for a work to be created we must think within the constraints and affordances of the medium we elect to use (Eisner, 2002).

Hiim (2011, p. 21) argues; the purpose of the research is to develop the quality of education, teaching and learning and to document new knowledge on these processes". In the same perspective with Hiim, learners and I chose to work with unconventional materials through studio experimentation to drive on new knowledge pertaining potential of unconventional materials; to create artworks in studio practice under art education. However, the group and I further considered the application of new knowledge as possible alternatives to scarce and expensive conventional materials. Two dimensional (2D) art was selected as sampling area of Visual design to be handled because it was the easiest student teachers were well conversant with while experimenting with new materials. I also agreed, 2D art is more relevant in their daily studio practice since it trains them how to draw which is a compulsory aspect in studio practice. Therefore, they could find it easier to handle the area which they are more conversant with while exploring new materials and this led up to the statement of the problem.

1.5 Statement of the problem

How can learners use unconventional materials to create Artworks?

1.5.1 Description of the statement

Whereas Kyambogo University management has tried to equip art studios with learning facilities in the Department of Art and Industrial Design, there is still lack of adequate materials to guarantee smooth running of teaching and learning sessions in studio practice.

The minimal conventional materials provided by departmental technicians, can only cater for the demonstrational processes by the lecturer. Student teachers remain with nearly no materials to execute set practical projects; assignments, tests and self-study.

They find it expensive to acquire conventional materials from art shops and lack structured methods to utilize available cheap unconventional materials from the environment.

In such a situation, student teachers find it challenging to carry out studio practice as a core value in their program to improve their competences; skills, knowledge, and attitude in Art education hence affecting the quality of graduates. Others fail to complete the program. Therefore, there, is a need to work with student teachers' and explore possibilities of using un-conventional materials to produce art works.

1.6 Purpose of the study

The purpose of this study was to; carry out studio experimentation with selected unconventional materials from environment to create designs and positively empower student learners towards innovative studio practice.

1.6.1 Objectives of the study

The study was guided by the following objectives, which were set in fulfilment of the study purpose:

a) To identify the different unconventional materials that have been used in studio practice to create art works. To fulfill this objective, I worked with student teachers in establishing different materials and techniques, that have been experimented with by different artist from the different parts of the world; irrespective of being indigenous, academic or commercial in purpose. Though the study focused on drawings in studio experimentations- in fulfillment of objective **c**, relevant information to the study from

other areas of Art and Design such as Sculpture, Painting, Printmaking and Installation-art was consulted. Related literature under this objective is presented in chapter three respectively. The findings as par this objective, was discussed with the participants considering Art education principles for a greater insight during studio working process to stimulate their creativity.

b) To establish attributes of Art education that can guide learners while exploring with unconventional materials in studio practice. Under this objective, participants and I focused on establishing different constituencies of Vocational Art and Design (VAD) as they apply in Art education. Through discussions, we considered how they can be related to each other in studio practice to form a complete artwork. The approach of handling the study in this objective **b**, was intended to establish what participants may consider in selection, experimentation and appreciation of unconventional materials in studio practice. This objective is catered for in chapter two and three of this study respectively. Selected theories of learning more so those in line with Art education were criticized to take informed decisions during studio practice for innovative teaching and learning.

c) To experiment with the selected unconventional materials to produce art works in Studio practice. Under this objective. I focused on working with BVAD I student teachers through studio experimentation as a hands on method with selected unconventional materials to produce artworks. This is the in agreement with (Eisner, 2004) who ratify that

> What I think many of us want is not only a form of educational practice whose features, so to speak, "design us," but a form of educational practice that enables students to learn how to design themselves. Thus it might be said that at its best education is a process of learning how to become the architect of our own education. It is a process that does not terminate until we do.

Therefore, it was prudent to involve student teacher and lectures in the study to take part in crafting solutions for the stated problem to become captain of their own ship.

The knowledge and skills acquired under objective **a** and **b** were inspirational in the experimentation process. It was considered in creating a systematic working processes that gives an insight on how selected unconventional materials can be experimented with in studio practice under Art education.

1.6.2 Studio guiding questions

From study objectives above the following studio guiding questions were set:

a) What are the different unconventional materials that have been used in studio practice to create art works? This was answered by reviewing related literature, appreciating works of acclaimed artists, carrying out interviews and observations.

b) What are the attributes of Art education that can guide learners while exploring with unconventional materials in studio practice? This was answered by reviewing related literature, appreciating works of acclaimed through observations artists and carrying out interviews.

c) How can unconventional materials be experimented with to produce art works in Art education? This was answered through studio experiments together with the learners as participants in the study.

1.7 Study scope

The study had the following boundaries:

Historical scope; even though this study focused on working with BVAD I student teachers with a modern curriculum, it also drew examples from art works dating back from the pre historic period to date and indigenous Knowledge. This was intended to consider remarkable literature citations from rich sources of Art education and to equip student teachers with a rich background on materials.

Material scope of the study; Whereas there are various types of unconventional materials that are tested in the world over by different commercial artists and art educators, this study focused on unconventional materials that were free within the learning environment at DAID. This is being a step in solving the economical aspect in the identified problem and developing a positive attitude with in student teachers, in regard with appreciating the environment as a starting spring board to solve academic problems. The selection and experimentation of materials is detailed in the materials section of studio experimentation chapter four (4) respectively.

Time scope; the study was carried out in twelve (11) months which was equivalent to two (2) semesters and recess period of Kyambogo University where the study was held.

1.8 Significance of the Study

In the present situation, education is being increasingly linked to national development (Pathak, 2008, p. 7), because cause it includes searching and manifestation of new knowledge to community needs. In art education, it is maintained by (Eisner, 2004) who declared that the distinctive forms of thinking needed to create artistically crafted work are relevant not only to what students do, they are relevant to virtually all aspects of what we do… In the context of the study it is curriculum, practice of teaching and studio technology in vocational art education is a whole in national development. Therefore, findings are expected to benefit the following categories of people in the nation and the world over:

First to me as a researcher the study will improve on my knowledge, attitude and skills towards handling student teachers and other kind of learners in group working method and exposing them to different studio learning actions.

Researchers and other scholars more so those in the areas of Art education and Industrial arts, might use the findings, reflections and recommendations from the study as a foundation or inspiration from which to launch further studies in drawing and other visual art disciplines by reflecting on the subject undertaken.

Student teachers are to benefit from the study through getting exposure to the unconventional materials and studio technology in the study; materials exploration and experimentation. This is to improve on their knowledge, skills, creativity and attitude toward unconventional materials and its contribution to the development of the environment. Hence relating them to the world of work in a broader spectrum.

Art instructors of fine arts and other visual art disciplines such as product design and architecture will benefit from the study through employing the techniques and knowledge discovered in studio practice in their classroom. Setting particularly in different, concepts related to material and the use of art to document information about any given topic.

Finally, this study is expected to inform the commercial art industry in Uganda, Africa and the world over; training and informing artists on the technological development in the art materials to solve social issues in their societies.

1.9 Definition of operational terms

The following terms are defined basing on the meaning the portray in the study.

Articulate; to express or explain thoughts or feelings about a certain issue clearly in words or images.

Studio; a place where production of an artwork in done.

Attribute; these are different characteristics that forms the totality of a complete learning environment.

Design; it is an outcome attained after composing elements under the guiding principles of design irrespective of material used.

Conventional material; any common material or surface that has been used frequently through different art movements to artworks.

Unconventional material; any media or surface that is non-conformist or out of the ordinary.

Environment; the geographical location in the scope of Kyambogo University boundaries ordinary.

1.10 Building up of the thesis

The project content is distributed in the following six (6) chapters as described below:

In Chapter one, I give a general background of the study. Started with description of personal experiences in line with the study, to seek for the window of opportunity in finding out unanswered questions in my professional. I expounded on related literature and analyzed the situation at DAID, to establish a problem statement. The chapter spells out clearly the purpose of the study, objectives under which the study is guided and studio guiding questions the study is meant to answer. In this chapter I also clearly state the scopes of key components in the study, relevance of the study to different categories of people and the operational terms are clearly elucidated.

In chapter two, I focused on didactical relations model and theories in line with Art education; component of vocational education such as learning condition, learning process, learning goals, assessment, content, and how they apply in this study.

In chapter three; presentation and discussion of different Artworks made by different acclaimed artists and scholars in studio practice. I identify unconventional materials that have been used to create designs by different acclaimed artists and art educators. I also establish different attributes of art education that can aid learners while experimenting with new materials.

In Chapter four, I stipulate the strategic approach through which this study was carried out. In details, I explain the design, population, methods and their tools used in data collection, the studio experimentation process, ethical issues, validity & reliability and data management and presentation for the whole study.

In Chapter five, I present and interpret studio findings from the study. Data is presented both in pictorial and text forms. The chapter entirely based on the participants' experiences from studio experimentation to fulfill objective **c.**

In Chapter six I discuss the study findings and draw conclusions, reflections and recommendations of the study following the study objectives.

2. Conceptual framework

2.1 Overview

Studio practice is not an autonomous realm learning from Vocational Art education, it is influenced by aspects of social context in learning. In this chapter, I explain the didactics and illustrate epistemic perspective of this study. Didactics regarded as a practical – theoretical process, where student teachers and teachers develop concepts of teaching and learning through systematically practicing and critically reflecting on educational work (Hiim, 2011, p. 20). Consequently, I present the didactical relations model in line with the prevailing situation in the study- focusing on BVAD I as my sample class at DAID Kyambogo University.

2.2 Didactical relations model and Studio practice

BVAD like any other program under Vocational Education in Art and Design trends, learners are meant to spend some credit hours in studio practice to explore, experiment and produce art works. Studio practice is rigorous section of art education designed to foster critical thinking, self-awareness and ambitious artistic production. In KYU it exists under guided Teaching and learning sessions, self-study sessions and set assignments. All sessions contribute to the expected volume of work a student has to produce for final assessment on semester basis. With the above sessions as highlighted respectively, this study considered the use of didactical relations model with the intention of analyzing the prevailing situation at DAID.

This study primarily focused Vocational Art and Design with education and the model is used as a supportive conceptual framework in didactic action research conducted by the vocational teachers. (Hiim & Stålhane, 2016). The didactics in this study are considered as the science or art of practical application of teaching and learning consist of general range of education attributes; Learning conditions, Settings, Learning goals, Content, Learning process, Assessment. A didactic structure means that there is an explicit focus on the categories contained in the model (Hiim, 2011, p. 21). Please refer to **Figure i** below.

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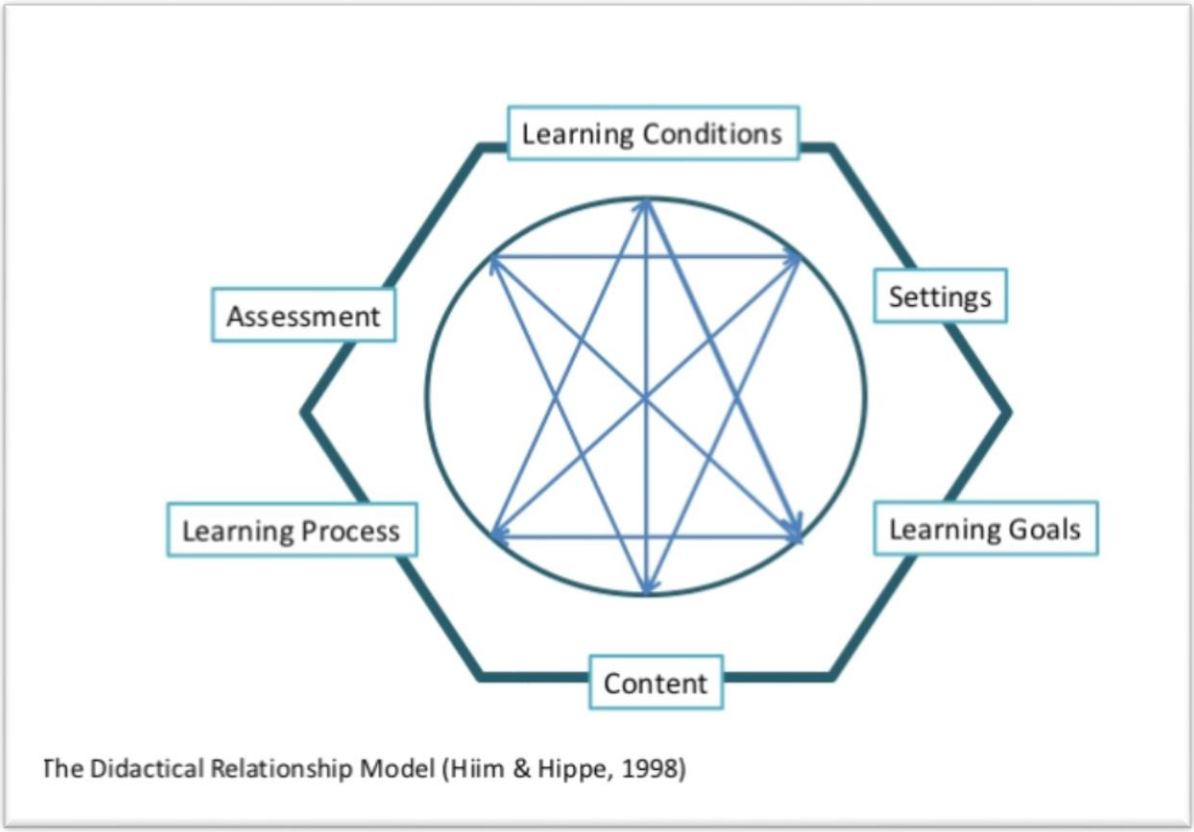

Figure i: Didactical relations model (Hiim and Hippe, 1998)

Source[11]

In **Figure i** above, Hiim and Hippe presents visual impression didactical constituencies. The different constituencies in teaching and learning are presented in reflective sense to each other. A didactic model, meant to help teachers analyse, improve and eventually do research on didactic relations in their practice, is essential (Hiim, 2011, p. 20). I agree with Hiim because Art educationist as party of vocational education should try to draw more attention on prevailing factors in the teaching practice; to understand factors impacting on the on the progress teaching and learning in order to create a positive change. Georgsen (2016, p. 3) reveals that; reflective use of a model offers great potential for pedagogical innovation. It provides critical understanding of the state of the learning institution, facilities, people, cultures and needs. The fact that the model presents all factors relevant to the planning process leads the teacher or developer into considering all of them and thus provokes pedagogical reflection (Georgsen, 2016, p. 3). Therefore, in this study didactical relations are explained below as they applied to the context under Art education.

[11] http://www.slideshare.net/e_zazani/the-didacticrelationmodeldiscussion Didactical relations model, Hiim and Hippe, 1998

2.2.1 Learning conditions

Studio practice learning in Art education does not occur in a vacuum. The context in which learning may happen is crucial. Learning is a social process which will influence the degree of 'agency' experienced by the learner Brockbank and McGill (2007, p. 14). The environment where one is trained from contribute on the nurturing his or her competencies because the context of learning and what the learner perceives consciously contribute on his or her transformation. Therefore, it's prudent to consider and prevailing conditions in learning.

Under Art education, KYU runs a number of programs in Art Education and Industrial Art trends. BVAD my selected case in this study shares departmental resources with other programs such as Bachelor of Art and Industrial Design, Diploma in Education Secondary, Diploma in Textiles and Fabric Decoration, Diploma in Ceramics, Diploma in Interior Design, Masters Degree in Art and Industrial Design and Masters in Vocational Pedagogy. Lectures are conducted in the same studio space and learners shares the minimum available tools, materials and equipment in studio practice- a component in studio practice.

BVAD I as a class had a population of seventy (70) learners out of one hundred and two 102 who were admitted in the University in 2015/2016 academic year.[12] The class had two main categories of learners who joined the program through; direct entry scheme and diploma scheme students. Direct entry consisted of those who enrolled into the program after passing their Uganda Advanced Certificate of Education (UACE) and these contributed to 85% of total population and diploma scheme consisted of learners who enrolled into the program after graduating from different diploma awarding institutions; Diploma in Art and Design (DAD) and Diploma in Education Secondary (DES).

Berger, Luckmann, and Zifonun (2002) inholding that we are deeply influenced by our life experience… Leaners had competences the had acquired through their past experiences from living communities; indigenous communities, modern communities and academic circles. Their experiences, were relevant in studio practice activities in this study. DESECO (2002) as cited in Guasch, Alvarez, and Espasa (2010, p. 4), essentially define a competency as a system of complex actions including the knowledge, abilities and attitudes required for the successful completion of tasks. Guasch et al. (2010, p. 3)adds that; …competencies required to successfully perform in specific professional contexts. Some Student teachers had back ground knowledge about indigenous knowledge about some materials, other had speaking and writing

[12]ttp://kyu.ac.ug/downloads/LIST%20OF%20ADMITTED%20%20STUDENTS%20DIRECT%20ENTRY%202015-2016.pdf

skills of English language as a medium of communication, basic skills in art and design, computer knowledge in art related programs and basic rudimentary studio technology.

However, learners who joined this program through Diploma scheme had higher exposure in materials and other studio related knowledge. This would make them special student compared to the rest since part of the content taught in the first academic year of the program was covered in their diploma program. This would makes feel bored and inactive during studio practice sessions. Consequently, they required special attention to make them interact with others who joined the program through high school scheme. This was done to regain class control as a teacher and the researcher at the same time.

Unlike the UACE graduates, Diploma scheme entrants had two years of practicing experience with different materials during their studio practice higher institutions of learning. They were more knowledgeable in Art criticism and craftsmanship compared to their fellow learners in the same class, who joined through high school scheme. As their lecturer and the same time a researcher, I had to put this into consideration before splitting them into different working groups.

University fees is also another factor that divides the BVAD population, that is to say some student teachers were on government sponsorship while the majority on private sponsorship. It is hard for them to raise money to meet both University fees, functional fees, hostel fees and expensive materials for studio. This has led to several cases of dropouts with no hope of getting support from any source to rejoin the program.

Therefore, I had to put the class dynamism into consideration while carrying out this study. This is could help the participants and me in setting standards that are within our reach.

2.2.2 Settings

The Bachelor of Vocational Studies with Art and Design (BVAD) is a day program of three years' duration (six semesters) in KYU. By the end of the program, one teaches Art and Craft to learners in both levels; secondary schools and vocational institutions. The curriculum of BVAD is reviewed every after five years to include new relevant content the world of work expects from program graduates. As De Haan (2006, p. 19) asserts that A syllabus should only include knowledge that has existed in the world for at least twenty years.

BVAD like any other courses of Art Education in DAID, its curriculum focuses on theoretical and practical training course units; theoretical course units such as Psychology,

Curriculum studies, Communication skills, Comparative Education, Research Methods, Art Education (principles and methods of teaching art), History and Appreciation of Art, Sociology of Education, Marketing Management, History of education, Philosophy of education, Counseling and guidance, Entrepreneurship skills and among others.[13] These are courses that don't require studio based practice but require time for learners for lecturers, research and course work assignments. The courses are intended to equip learners with knowledge on teachers' code of conduct in the process of disseminating knowledge to High School learners and also to relate well with the community they are working in.

The practical fraction of curriculum being referred to as studio practice in this study, it is a central focus in which this study that lies between Experimental approach and Participatory Action Research was stemmed. It consists of all the Studio based disciplines which are categorized in two (2) sections; two dimensional (2 D) and three dimensional (3 D). 2D course units include Drawing, Painting, Print making, Graphic design and Fabric decoration. The 3D includes course units such as Sculpture, Weaving, Ceramics, Community based needs study and Multimedia crafts.[14] These courses requires availability of tools, materials, well established learning space, learning aids and qualified human resource. Practical courses cover seventy percent (70%) of the total credit units of the entire program. The graduates are expected to teach knowledge and skills they have attained from studio practice to their learners in during their practice of teaching. Therefore, practical course units are meant contribute to the nurturing a competent Art and Design teacher in studio technology; Knowledge, skills and attitude in Art and Design. Competences are attained after student's ability to comprehend knowledge skill as they apply in the field in the field of work through studio practice.

In the Department of Art and Industrial Design has a time table for all teaching and learning activities. Practical course units are allocated time to spend in studio space. Each course unit among the above mentioned practical fraction of the curriculum, has fives lecture hours and two hours for self-study which seven in total. Therefore, this study had to occupy time of one drawing course unit for the entire semester on the time table.

[13] Programmes book; Department of Art and Industrial Design, Kyambogo University. Curriculum for Bachelor of Vocational studies in Art and Design with Educations

[14] Programmes book; Department of Art and Industrial Design, Kyambogo University

Since learner centered approach in experimental activities was, I had to minimize the time I consume as a teacher and give them enough time to implement their planned programs in line with the study.

2.2.3 Learning goals

represent the performance standards or targets toward which individuals strive(Miller, Greene, Montalvo, Ravindran, & Nichols, 1996, p. 388). learning goals of this for this study were drawn from the programme curriculum- drawing course outline in particular. They were categorised under knowledge, skills and attitude. I based on the course objectives to draw guiding objective of this study as stated in chapter on of this study respectively.

Therefore, by the end of this this study a student had to be able to:

Select, prepare and apply unconventional materials to his or her disposal and create preferred designs.

Apply the principles and elements of design in experimentation process of unconventional materials in consideration of Aesthetics and Ergonomics.

Identify new approaches in studio technology can be utilised in experimenting with new un conventional materials.

2.2.4 Content

In the identified practical course units as elaborated in **2.3.2** above respectively drawing was selected. Drawing is a fundamental requirement for effectiveness in Idea and Design generation. Ssenyondwa (2009), highlights that drawing in its widest sense; is used to develop an exciting and personal visual vocabulary. The importance of practicing drawing to develop mark-making skills, encourage selectivity, closer observation and create compositions are some of the points made by artists from a variety of disciplines. by the learner this is supported Henry Lumu who was quoted asserts that; …the younger generations should be taught first to draw, to measure their universe carefully. After that intimate contact has been established, and then they can run off into the wild with their imaginations.[15] Great philosopher like Aristotle,

[15] Henry Lutalo Lumu (1939-1989) is credited by many of Uganda's artists as being one of the country's brightest and most widely influential talents of modern Ugandan art from as early as the 1950s until his death in 1989. Studying under Margaret Trowell at Makerere University, Lumu became adept at drawing at an early age. While also beginning to work with semi-abstract forms, still felt his art was strongly anchored within the precise drawing of form. http://africanpainters.blogspot.no/2006/09/henry-lumu-ugandan-contemporary-art.html

considered drawing as an extra subject that pupils took in addition to the normal curriculum of other arts (Efland, 1990, p. 12).

In agreement with above scholar, I look at drawing as the genesis of every art work in studio practice under art education; in every design there is a drawing. This is in the same faith with Edvard munch who confessed that; by painting colors and lines and forms seen in quickened mood I was seeking to make this mood vibrate as a phonograph does. This was the origin of the paintings in The Frieze of Life.[16] Both acclaimed icons in Art education lived in quite different periods and different continents but still they had the same belief about drawing's great influence in all other aspects of design and studio practice because in every design there is a drawing lies in it.

According to BVAD program's curriculum drawing is a core course, one has to offer throughout the entire duration of studying. Content and objectives differ from one semester to another. However, one of the general controlling aspect to all drawing course outline is materials. This is because in every practical assignment student has to register designs on surfaces irrespective of purpose. According to Tomlinson (2012, p. 144)

> It was not until the mid-1990s that materials development began to be treated seriously by academics as a field in its own right. Before then it tended to be considered as something that practitioners did or as a sub-section of methodology, in which materials were usually presented as examples of methods in action rather than as examples of the principles and procedures of materials development.

Curriculum activities can be designed that call attention to such matters, activities that refine perception in each of the fields we teach. This will require activities that slow down perception rather than speed it up (Eisner, 2004, p. 5). In this study, I focused on working with learners in acquiring knowledge, skills and attitudes pertaining experimenting with unconventional materials in studio practice to create designs; considering of how achieving other constituencies of design imbedded in Art education that is to say Aesthetics, meaning and ergonomics. Both dry and liquid materials, borrowed from indigenous communities and modern were tested to establish potentials of unconventional materials in imitating nature of selected sources of inspiration.

[16] http://www.inspirationalstories.com/quotes/t/edvard-munch/

The study had both practice led and practice based fractions of research in art education; under practice led, the participants and I focused on discussing and learning from artworks and studio working methods of acclaimed commercial artists and art educators.

While under practice based, learners had to carry out studio experimentations on unconventional materials to produce drawing. This was the next stage after being inspired by art works and information from acclaimed artists under practice led learning. Theories developed during the process of experiment are humble not merely in the sense that they are concerned with domain-specific learning processes, but also because they are accountable to the activity of design. (Cobb, Confrey, Lehrer, & Schauble, 2003, p. 10).

2.2.5 Learning process

According to Brockbank and McGill (2007, p. 14), learning process is the context and conditions in which learning takes place. Process is about how intentional learning situations are created and undertaken. If learning embraces and integrates, knowledge, self and action, then the means require their inclusion and integration as well.

Learning is a process of acquiring knowledge, skills and attitudes through being taught or experience. Learning as "the process whereby knowledge is created through the transformation of experience (Kayes, 2002, p. 138). Thus, learning is not a spectator sport. Students do not learn much just by sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, apply it to their daily lives. (Chickering & Gamson, 1987, p. 4).

In Art education, learning processes yield results due to teacher's preparation and conduction of the teaching process. Bothe requires good preparation. Starting from understanding the group you are to teach, organising content, methods and tools in dissemination of content to evaluation. Therefore, I had to design a process that could lead to better results in the learning process.

Vygotsky in Gross and Gross (2016, p. 36) inspires me when he argues that what students are capable of learning, their Zone of Proximal Development (ZPD), expands "in collaboration with more capable peers". I used groups in teaching and learning by dividing learners into small groups and we set goals to be fulfilled in by the end of the experimentation process. I also inspired by blooms taxonomy of learning domains in the process teaching.

Krathwohl (2002, p. 1) refers to them as a framework for classifying statements of what we expect or intend learners to learn as a result of instruction. Bloom's Taxonomy is a multi-tiered model of classifying thinking according to six cognitive levels of complexity. Forehand (2010, p. 2). I did not consider Bloom's taxonomy in setting learning objectives or outcomes as Krathwohl suggest but I used it to set approaches that would make stages in the experimentation process.

Remembering; Dewey 1933 in (Boud & Walker, 1998, p. 1) expressed an early view that 'while we cannot learn or be taught to think, we do have to learn how to think well, especially acquire the general habit of reflecting'. Therefore, learners in their respective groups had to retrieve, recognize and share their past experiences and knowledge from indigenous, modern and academic art critiques where they have been exposed to in life.

Understanding; One of the key ideas and features of all aspects of learning from experience is that of reflection (Boud & Walker, 1998, p. 1). Learners Developed meaning from shared oral, written and artistic information from each other. This was done by typifying, categorizing, deducing and illuminating in line with conventional and unconventional materials.

Applying; learners engaged in the procedure through practicing and executing art works using Art education knowledge they have acquired in practical sense in line with unconventional materials. They must make what they learn part of themselves. (Chickering & Gamson, 1987, p. 4).

Analyzing; Fragmenting successful artworks and determine how different constituent of Art and Design relate to each other and materials as a whole. Therefore, works of acclaimed artists in both unconventional and conventional materials were critiqued.

Evaluating; Making judgments based how material react in accordance to aesthetics and ergonomics and standards through testing and critiquing.

Creating; the learner should embrace freedom as putting elements together, experimenting with materials and reorganizing them into a new pattern. Within expectations, Leonardo was free to grow his intellect because he was not obligated to follow a specific predefined role he was able to explore and develop his own personal talents without anyone pushing him to be something he dint want to be (Phillips & Priwer, 2006, p. 7).

Berger et al. (2002) declares that …knowledge is socially constructed and that when learners enter and experience…. and Vygotsky's cited in Gross and Gross (2016, p. 36) recognizes that social interactions are critical and knowledge is constructed between two or more people. Albert Eistem (Robinson, 2011) asserts that; education is not the learning of facts but training a mind to think. Therefore, in this study Bloom's taxonomy was manifested with collaboration, communications, critical thinking and creativity amongst working groups which propelled reasoning and good results- having a solution to the material challenge. Learners where learning from one another and they could join efforts toward achieving set objectives to every level of studio experimentation.

2.2.6Assessment

One of the outstanding features of studies of assessment in recent years has been the shift in the focus of attention, towards greater interest in the interactions between assessment and classroom learning…(Black & Wiliam, 1998, p. 7). Huba and Freed (2000) explains assessment as a process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what learners know, understand, and can do with their knowledge as a result of their educational experiences. Assessment of students' learning is an essential part of education…Harlen (2007, p. 1). it creates feedback which is used to improve students' performance in the students' in summative self-study, assignments and examinations.

Assessment in this study was done following KYU guidelines on the assessment sheet for DAID practical work. It focuses on; production, presentation, creativity and craftsmanship and they are described below:

Preparation; learners had to consider sketch books, scrap books, models where necessary and preliminary studies a group had to go through in the first stage of their production.

Production; this was considered in accordance with the use of materials, craftsmanship, and completion of the set and project volume of work.

Creativity; this was considered basing on originality, innovativeness, interpretation of the material, style and sensitivity in the composition.

Presentation; this involved framing, mounting of work, matting folio, display and use of exhibition materials.

The role of learners in assessment is an important aspect, hidden because it is taken for granted in some reports, but explicit in others, particularly where self and peer assessments by and between learners are an important feature (Black & Wiliam, 1998, p. 17). Therefore, in agreement with suggestion above I employed formative assessment because I was interested in the impact based learning and learners' involvement in the assessment process. I considered their learning groups in the assessment under formative approach. Each group was critiquing another group's work in consideration of the set goals and guidelines on the assessment sheet.

Formative assessment is an appropriate an effective theory of assessment, one effective way to develop self-regulation in learners is to provide them with opportunities to practice regulating aspects of their own learning and to reflect on that practice (Nicol & Macfarlane-Dick, 2006). Learners are empowered to engage in monitoring the gaps between their set goals and the outcomes thy might achieve during studio practice. Feedback is a canon that should be considered this is done in terms how successful the outcome is. Sadler (1989, p. 119) declares that The focus is on judgments about the quality of student work: who makes the judgments, how they are made, how they may be refined, and how they may be put to use in bringing about improvement. Therefore, formative assessment can lead to significant learning gains (Black & Wiliam, 1998).

Learners where first given descriptive information about the assessment sheet with what comprised in each section of the assessment sheet; they researched and presented their findings in groups. My position in the particular exercise was to preside over the meeting, participate in the final evaluation process and also to give my professional technical advice where needed and only when I am requested. This was intended to avoid biasing the study and let learners exercise their responsible in decision making.

2.3 Summary of the chapter

In this chapter, I have presented different didactics and how they relate to each other in this study. Fundamental components of in teaching and learning process which applies to Vocational art education such as learning conditions, settings, learning goals, content, learning process and assessment were considered in structuring the study activities in line with the situation at KYU. In the following chapter, I will I identify different Unconventional materials that have been used by acclaimed artist and also present the different attributes of art education that can participant the studio experimentation process.

3. Studio practice and Unconventional materials

3.1 Overview

In this chapter, I focused on reviewing related literature to Studio practice under Vocational Art education to establish constructive informed decisions in studio experimentation under this study. Aristides (2011) affirm that by looking back at the art that was created during previous era we can connect with past masters, learn from their accomplishments and create an new art for our times without re-inventing the proverbial wheel. Eisner (2004) maintains that learning to pay attention to the way in which form is configured is a mode of thought that can be applied to all things made, theoretical or practical. Both scholars declare the relevance of referring to previous works of artists and scholars. Thus, relevant data from various sources were gathered and this included but not limited to; printed and digital media, artefacts and information from interviews with acclaimed Art educators and commercial artists.

The chapter has three sections that is to say; section 3.2 focused on learning about unconventional materials as used by acclaimed artist. Section 3.3 focused on the components of Art and Design that can guide learners while experimenting with un conventional materials in studio practice. Section 3.4 of this chapter I give a summery about my findings in this chapter and give a brief insight about the following chapter. This chapter is guided by study objectives **a** and **b** as presented in chapter. It stimulates creativity, independence and judgement in studio experimentation to fulfil objective **c** of this study.

3.2 Unconventional materials in art and design

Arts have been in existence for as long as human civilization. As a way of human knowing and action, they play a central role in the identities and cultural practices of all indigenous peoples (Ewing, 2011, p. 1). In art education today, Art refers to the different ways through which one can express himself. Visual arts are generally categorised under two types; two-dimensional (2D) and three dimensional art (3D) (Aigrain, Zhang, & Petkovic, 1996). In 2D Art, learners in studio practice focus on dealing with processes of registering deigns on selected surfaces to create Design that are categorised as Painting, Drawing, Graphics, Printmaking and Fabric decoration. The 3D Art in contrast focus is on creating round Designs categorised as Sculptures, Ceramics, Weaving and Crafts.

In learning arts in particular, we can release our imaginations to open up new perspectives, identify alternatives. The vistas that might open, the connections that might be made, are experiential phenomena; our encounters with the world become newly informed. (Greene, 1995). This is derived on through articulated messages using different art forms.

Production of tangible artworks in studio practice, depends material as one of the major attribute one has to consider before starting the design process. Materials are substances used in the process of producing an and art work and they remain part of the product. In Art education, materials are categorised into two main fractions; media and surface. Media is what can be applied in space to register a design irrespective of the dimension and surfaces are the 2d space where media is applied to register a design and they remain part of an art work. The artist's task is to exploit the possibilities of the medium in order to realize aims he or she values. Each material imposes its own distinctive demands and to use it well we have to learn to think within it. (Eisner, 2002).

Materials in studio practice are used in the creation of art works, as well as any production or manufacturing techniques, processes, or methods incorporated in its fabrication.[17] Materials brings our thought to life. They give the physical value or functionality of the artwork and contribute to its esthetical value. However, in this section of the chapter I am looking at the different artworks produced using unconventional materials.

Oftentimes in order to advance one must look back, like technology art is built up on what happened before and influenced by what happened around the time of creation. (Aristides, 2011). Many Artists from indigenous communities, contemporary art market and in academic field of Art education have endeavoured to look at different substances around their environment and use them as art materials in the process of expressing their feelings. Their studious approaches might not be similar but the bigger point in their experimentations to this study is; they use what is to their disposal, in order to counteract the prevailing economic challenges to their practice to fulfil their intentions.

Unconventional materials are used in both contemporary and indigenous societies, through different techniques and styles. Therefore, this chapter includes a description of both the materials used to create the artwork and the way they are in the artistic sense. The Knowledge, skills behind this information was discussed with learners to create a proper insight

[17] http://besser.tsoa.nyu.edu/impact/f95/Cdwa/MATERIAL.HTML

on the relationship between unconventional materials and studio practice in art education. This is in line with Gross and Gross (2016, p. 39) Once students, understand the basic properties, they expand it by exploring ideas…

Designs in Art range from objective to subjective but what they have in common is being manifested in sight through material. They create the world that does not just represent who we are but outstanding for us to dwell on. Please refer to **Plate i** below.

Plate i: The hut

Artist: Unknown

Material: Earthen ware

Source[18]

[18] https://za.pinterest.com/pin/449023025321338766/

Plate i above, presents one of the indigenous African architectural figure decorated with different geometrical shapes in read, brown and white earthenware. Joak (2012) points out the careful consideration of indigenous knowledge of local people and respect for their cultural is very important for the researcher.

Indigenous Knowledge can be a starting point in encouraging leaners in Art education to draw inspirations. I can easily relate well with what takes place in studio practice. It is inter-generational knowledge passed on by community elders; *empirical knowledge*, which is based on careful observations of the surrounding environments (nature, culture and society); and lastly *revealed knowledge*, which is provided through dreams, visions and intuition (Dei, 2000). The art of sand painting in the Plate above, is a common practice in several indigenous communities of Africa particularly in Uganda

The practice of decorating using earthen wares in, is also traced way back into the Stone age period when people were still drawing on the rocks. please refer to **Plate xx**, In this chapter respectively.

Another example that can inform learners in Art education about indigenous material is use of white chalk. White chalk as material is known widely in the communities for being used in body art and architectural decoration. Several people still view their bodies as living canvasses and paint intricate patterns on themselves from childhood using contrasting powder materials.

The Mursi tribe people from Ethiopia and the Gisu from the eastern part of Uganda are some of the living examples of communities that practice body art. The Mursi men and women paint their bodies with white chalk during dances and the Gisu use maize and millet flour during circumcision ceremonies. Fingers are used as brushes; men paint intricate patterns on their bodies with thin layers of clay from the riverbank..[19] Please refer to **Plate ii** below respectively.

[19] https://tatring.com/piercing-types/Have-Mursi-on-the-Lip-Plate Besides adorning themselves with these enormous lip plates, the Mursi women wear white body and face paint. They are also fond of wearing earrings made of fruit on their stretched and cut earlobes

Plate ii: Mursi woman

Artist: Unknown

Material: White chalk

Source[20]

Referring to the above **Plate ii**, the image show patterns on the Mursi woman body created using chalk and the curved lines rhyme well the body anatomy. This style of art is not practiced in the in academic studio practice yet it cost friendly. Human bodies where designs rest are available and chalk is extremely a cheap material, which makes the technique cheap. It is still not embraced by art institutions of higher learning. In KYU's curriculums Art education that require studio practice – indigenous Knowledge is ignored. Indigenous communities in Uganda have a variety of materials; they utilise to create artefacts for different functional crafts produced that would be useful to Art education. For example, in production process, selection

[20]A woman from Mursi tribe from Mago National Park, South Omo Ethiopia. They practice body painting as part of their culture. http://dietmartemps.com/galleryImage/b-w_524/2628/28/

to application of materials are emphatic on how comfortable the user will be with the product which is quite similar in modern day today learning.

Indigenous knowledges are experientially based and depend on subjective experiences and the inner workings of the self to generate social interpretations, meanings and explanations (Dei, 2000, p. 114). The process of passing on this knowledge to the trainee, bases on the nature of materials and functions of the artwork in making. Demonstration, imitation and oral tradition are the methods used in passing on this knowledge; in communities and lower primary schools where they practice. This is not reliable enough because most times people pass on with their knowledge. This knowledge can help in inspiring and advancing knowledge in Art education, when potential synergy between indigenous and formal learning process is established in the University curriculum. The concept which called `Indigenous informed epistemology' worldview that shapes the community's relationships with surrounding environments. (Dei, 2000)

Bjørnskau (2012) commends that Artists should look for waste materials in their immediate surroundings, take advantage of the built-in shapes, colors and textures of ordinary rubbish, and treat the piles of litter as a main source of inspiration. Leaners in Art education are directly beneficiaries of this advice, more so in times when materials are expensive and scarce. For example, today in the contemporary setting, some artists have decided to be more creative in attacking the limitations of accessing materials to express their feelings. Romex as quoted in Bjørnskau (2012) confirms "I prefer mixing the materials together, combining scrap metal with fiberglass, with backcloth, with anything that excites me. I always experiment and ask myself: What if I did this?"

Many materials like organic wastes, discarded metals, discarded plastics, papers and among others have come to the art scene and artist have come up with different ways of using them to create artworks. These ideas are worth to critique in the academic sense to inform of studio practice with the prevailing knowledge about unconventional materials. Please refer to Plate **iii** and **iv** below.

Plate iii: Untitled

Artist: Unknown

Material: Eggshells

Source

Plate iv: Wreath, 2010

Artist: Paul Villinski

Material: Tank driver's helmet, aluminum (found cans), Flashe, wire

Source:[21]

In **plate iv** above, Villinski is one of the visual artists that use discarded materials such as like beer cans to create art works in meaning and dramatic way. He collects them, with their industrial in nature and utilise the guiding principles of design to give them a breath of life in studio practice as artworks. The artist cuts beer can into preferred forms and join them with wires and glue to create one composition. This method inspires the practice of mapping materials in studio experimentation. However, there are other methods artist discarded metals can metal and found unconventional material can inspire learners into creating pleasing designs

[21] http://www.paulvillinski.com/work/work.html

with high level of finishing that is to say welding, open casting, assembling please refer to **Plate v** bellow, respectively.

Plate v: Nirvana (2013)

Artist: Seo Young Deok

Material: Iron chains

Source[22]

In **plates v,** above, Deok presents to us a kneeling woman made out iron chains from the bicycle. Despite the hardness of the material, the artist exhibits patience and tenderness in

[22] http://youngdeok.com/nirvana-5-iron-chain-60x55x100cm-2013/#prettyPhoto

fabricating the material. Chain units joined, using strong adhesives building the forms using the mould. Other artists like Stitzlein and El Anatsui creates art from found materials such as piano keys, broken china, bottle tops and other recycled items in **Plate vi** and **vii** below.

Plate vi: Untitled

Artist: Michelle Stitzlein

Material: Mixed Media

Source[23]

[23] http://www.webdesignerdepot.com/2009/12/non-trashy-recycled-and-trash-art/

Plate vii: Untitled

Artist: El Anatsui

Material: Bottle tops

Source;[24]

Referring to Plate **vii** above, artists use materials collected from the environment. They weave them together following the colour and shape element of design, to create meaningful messages to their audience. The materials used in both plates are cost free; artists do not have to spend on accessing them. If learners are exposed to the different ways of how to use found materials in their environment, this can reduce on the scourge of lacking enough materials for studio practice purposes.

Disposed plastics is another category of unconventional materials that artists have exploited. Artists like Erika Iris Simmons and Tom Deininger have proved with different methods of using recycled plastics in studio practice to create artworks. Pleases refer to Plates **viii** and **ix** below respectively.

[24] http://www.octobergallery.co.uk/artists/anatsui/ El Anatsui is a Ghanaian sculptor active for much of his career in Nigeria. He has drawn particular international attention for his iconic "bottle-top installations", distinctive large-scale assemblages.

Plate viii: Untitled

Artist: Erika Iris Simmons

Material: Cassete tapes

Source:[25]

In Plate **viii** above, Simmons uses old cassette tapes with glue to create popular celebrity portraits. She is a great inspiration to academic studio practice. The material seems to be user friendly given its flexibility. Erika challenges the academic art when she goes ahead to preserve old technologies such as cassette tapes that are no longer used. With the tapes, she recreates portraits of celebrities such as John Lennon and Marilyn Monroe.

However, as we grow and developed as artists, the materials and tools that we chose became more important. The connection between the quality of art materials and quality artwork becomes noticeable along the way and it is no wonder that emerging artists desire to have the very best materials possible in studio practice. If you are starting to get serious about your artwork, no matter what age, you may also be starting to get serious about the materials that you use.[26]

[25] http://www.hongkiat.com/blog/unconventional-art/
[26] http://thevirtualinstructor.com/blog/10-essential-drawing-materials-and-tools-for-beginners

Observing Plate **ix** below, Tom Deininger used plastics in upcycled junk approach to create fine arts installations. The artist arranges different forms with different size follow colours, proportion and position them to extract the intended forms in the composition. (Fussell, 2014).

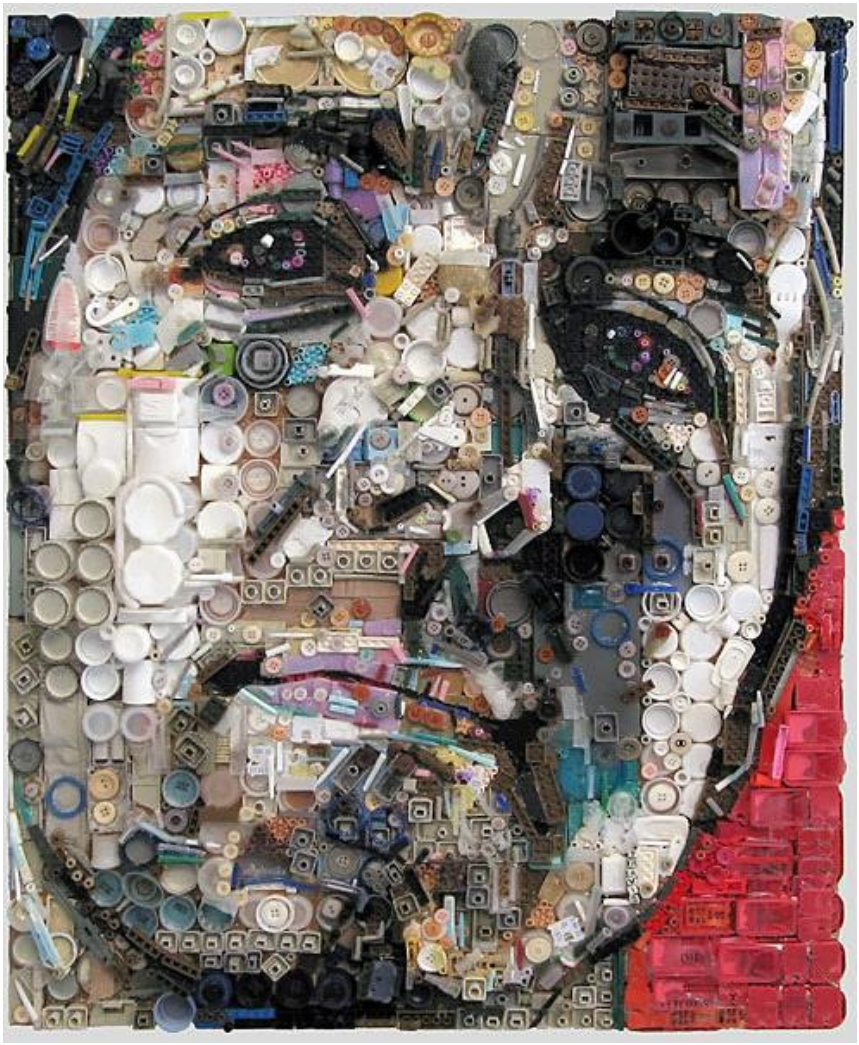

Plate ix: Self Portrait

Artist: Tom Deininger

Material: Plastics

Source[27]

Soot is another material that has come to the scene of art by Weazher Mayanja. Since it is a soft material, the artist can apply it on different surfaces such as paper, wood, boards, glasses, canvas and among others. Different audiences in art exhibitions due to its visual effects it portrays have approved it. The technology behind this advancement in art materials can also

[27] http://www.tomdeiningerart.com/bio.html

be employed in art education to eradicate material related challenge. Learners do not need to spend in accessing it because it can be got from any fire flames please refer Plate **x** below respectively.

Plate x Self appreciation

Artist: Weazher Mayanja

Material: Soot on canvas

Source: Author refer to some media articals about soot

Painting with watercolor makes certain visual qualities possible that cannot be created with oil paint (Eisner, 2002). Mayanja uses soot in its smoke form from a Tadooba flame. He applied it on canvas painted in horizontal-vertical approach. He drugged the flame on the surface to create marks and the image was registered. After he used an eraser to map out forms as he continued adding other layers. This technique is risky it requires maximum supervision

during studio practice learning process with the learners because fire can easily escalate cause an accident.

Artists have tried out old paper in their studio production. Papers are softer materials that can be manipulate in many different ways. Sometimes they smash it and mix it with liquids like water mixed with wood glue to make papier-mâché in sculpture, for example Anastassia Elias uses toilet paper roles to make miniature scenes of life. She cuts out the scene from the paper and places it inside the roll creating a silhouette.[28] Others like Benon Lutaya use old newspapers and magazines to makes collage works. Please refer to Plate **xi** below respectively.

Plate xi:

Artist: Benon Lutaya

Material: Papers

Source[29]

[28] http://www.hongkiat.com/blog/creative-toilet-paper-rolls/
[29] http://www.benonlutaaya.com/gallery

Ssatisfaction is related to the challenge that the work presents; materials resist the maker, they have to be crafted and this requires an intense focus on the modulation of forms as they emerge in a material being processed (Eisner, 2002). Art educators should embark on considering processes imbedded in material preparation in studio assignments to stimulate learners' creativity. Like Lutaya in plate **xi** above, tired papers into small pieces with different shapes and sizes. He organises the paper pieces in a mosaic form following their colours and size to create growth and forms with a fragmented texture.

The substances or materials used in the creation of a work of art, as well as any production or manufacturing techniques, processes, or methods incorporated in its fabrication. This is what art educators have to take note of; each new technical discovery and stylistic invention paves the way for the next generation either an affirmation of what has come before or a creation against it (Aristides, 2011). They should provide learners led into innovative thinking, while conducting learning sessions to have extensive experiments. Beyond curriculum parameters, learners extract knowledge from both indigenous sources and modern sources for problem solving innovations in studio practice.[30]

3.3 Attributes of art and design that can guide learners while exploring with unconventional materials in studio practice

Design refers to the outcome attained after composing visual elements under the guidance of Art principles. Gude (2007, p. 7) Art educators whose research involves contemporary art, critical theory, or youth empowerment do not consider modernist elements and principles to be uniquely foundational to quality art curriculum or to making or understanding art. Though this study is not exceptional from the realm of contemporary art education, I considered principles and element of art and design because they diagnose the visual language can help us to easily describe our understanding and judgement of an art concept. KYU curriculum considers them as conduits through which art concepts can be simplified to learners.

Principle and elements can easily manifest the aesthetical aspect of the work of art thus ascribing intrinsic value on it. This is in agreement with Tractinsky (1997) who suggests that

[30] http://besser.tsoa.nyu.edu/impact/f95/Cdwa/MATERIAL.HTML

the beauty of design would positively affect perceived usability. Aesthetics creates the hullo effect for the artwork to be appealing the audience.

Other scholarly work considers the term aesthetics as the user's response to the appearance of the product (Crilly, Moultrie, & Clarkson, 2004, p. 1). Like ergonomics as referred to in this chapter, aesthetics is a fundamental value in Art education a student has to put in consideration while creating any art work whether functional or decorative. Aesthetics is realised after organization of the visual elements according principles of art. Therefore, the designer may choose to make the artwork look bad or good depending on the intentions[31].

Elements of design are building blocks that can be composed together to create a design, irrespective of the aesthetical values it ponders to the audience- pleasing or displeasing. They include but not limited to light, line, shape, space, colure, texture, form and Volume. According to Roueche and Shirley (2010, p. 1) Throughout history artisans and designers have utilized the elements of design in a variety of ways to create a certain aesthetic. The elements of design serve as a foundation for the development and creation of all textiles. Therefore, it's prudent to introduce learners in studio practice under Art education to the science visual elements. This prepares them before exploring their world of design creation.[32]

Principles these are rules that guides learners while compose visual elements to create a design. Hale and Shirley (2000, p. 1) declares that the principles of design are essential to the development and production of clothing used by individuals and families around the world. Each principle has a specific role in creating an aesthetically pleasing ensemble. Design principles include but not limited to movement, balance, dominancy, proportionality, unity, rhythm and proximity. Learners can hardly attain a good design while experimenting with a new material without considering, understanding, interpreting and describing the principles and elements of design. Therefore, principles and elements are key aspects in developing learner's ability in creation and appreciation of an artwork- they create the visual language in studio practice as the fraction of art education.

MacLean, Young, Bellotti, and Moran (1991, p. 203) Design rationale is important because an artefact needs to be understood by a wide variety of people who have to deal with

[31] This was an interview with Hon. WATHUM Edwin lecturer of Kyambogo University, Department of Art and Industrial Design. He lectures History of art, Sculpture and painting

[32] In an interview with Mr. KAVUMA William, Senior lecturer at Kyambogo University, Department of Art and Industrial Design

it. With the purpose of communicating, preserving, ornamenting, innovating and expressing one's self-inner feelings many designs are produced by artists in different materials.

These qualities are both the elements of the visual world and the language of artistic communication, and attention should be drawn to them informally and in context of studio practice throughout art education. Therefore, consideration of principles can lead to better visual creations while experimenting with unconventional material. This will stimulate Students' expressive qualities in determining possible moods and ideas to communicate through design elements in their works of art. It also emphasize the organization of the work of art through the use of the elements and principles of art (Mittler, 1980, p. 19).

Light is the genesis of all design all other design element; with light all other elements in the design comes to life. Without light, we can see nothing. In the same way as you, close your eyes no image you can see that relates with your environment. In studio practice, artists regulate light with a variety of tones; dark to light sometimes refer to it as value. Bartel (2016) explains:

> Value as the amount darkness or lightness of the colour that is to say shades of red can be maroon and the red of tint can be pink. is the degree of light and dark in a design. It is the contrast between black and white and all the tones in between. Value can be used with color as well as black and white. Contrast is the extreme changes between values.

Light creates contrast so that our eyes can feel the sense of difference in the registered forms in 2D or 3D space. This is illustrated in Plate **xii** below respectively.

Plate xii: Untitled

Artist: Stan Bossard

Material: Pencil on paper

Source[33]

In reference to the above Plate **xii**, Bossard presented mastery approach in use of light in the composition he used a single medium to create high and law key areas on the fingers and the eye in the socket. We feel the fingers in the fantasised state; gently find their way out of the eyeball. Both areas and in dark and light are drawn to our attention through application of different values of lead material. The artist skilfully used light to create the illusion of depth hence conceding the illusion of three dimensionalities on the surface. Therefore, in the same way learners have embrace power of light in their compositions, while manipulating new materials into their studio experiences to create successful designs. Light helps depicting the different layers in the composition.

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[33] http://illusion.scene360.com/art/74108/pencil-hyperrealist-artists/ He achieves a high level of contrast and beautiful levels of shading in his work.

Light commands a student in the beginning of his journey of creating marks to register a design in 2D or create one in 3D. After attaining it in relation to the subject matter or specimen, he or she is to portray. He can now use the selected materials to make lines and build other elements to make a complete work of art.

Wolfe in Roueche and Shirley (2010, p. 1) describes line as a distinct, elongated mark as if drawn by a pencil or pen. However, in my studio experience, line can be an extended mark created by a moving dot or a path left by a moving object. It is a form with width and length, but no depth. Artists use lines to create edges, the outlines of objects ("Design Elements and Principles,") While experimenting with new materials, through different approaches learners can create different lines such as thick, thine, big, small, straight, diagonals, curved, short and choppy lines. Putting together of lines of different characters lead to the complete formation. In designing, lines give an impression of with direction; movement and emphasis in the composition please refer to the Plate xiii below.

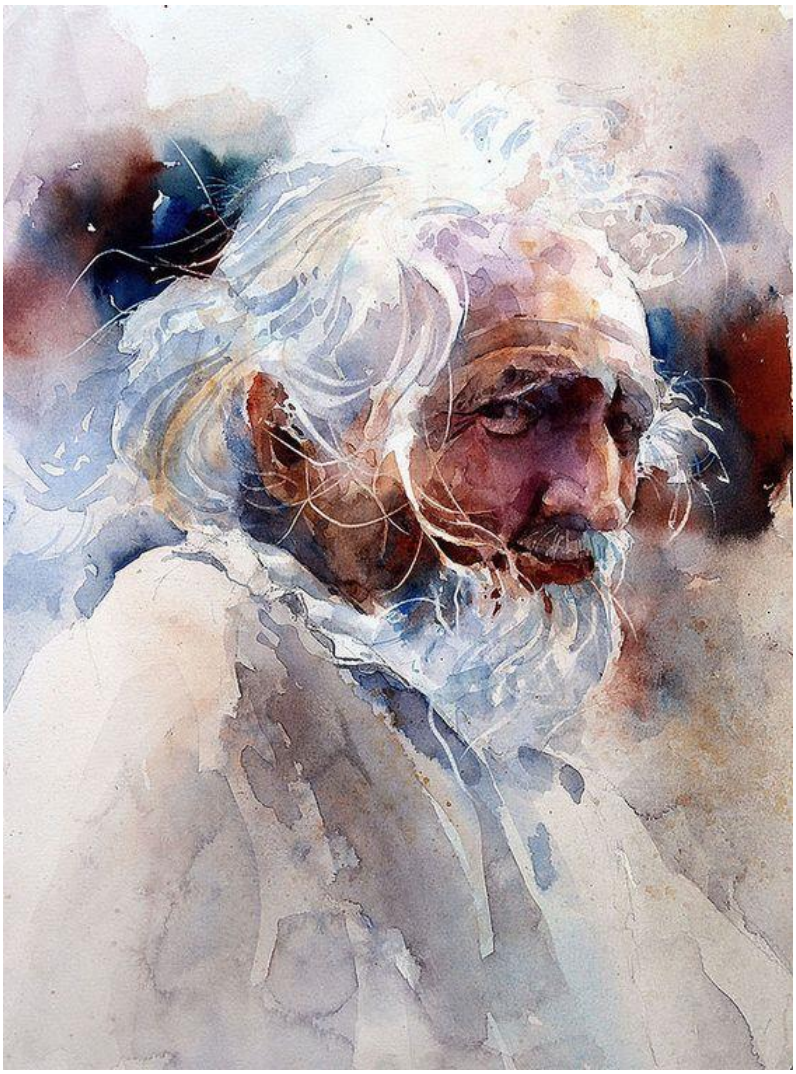


Plate xiii: The twinkle

Artist: Carl Purcell

Material: Water colour

Source[34]

Referring to Plate **xiii** above, Purcell used water colures and the brash to create lines to express his interpretation about the seater in the composition. Lines vividly applied in the whole composition in curves and fragments. The viewer's mind has to follow direction of lines penetrate presented and create a complete story. Basing on the above example, Learners in studio practice have to be mindful with the character the material under exploration with the intention of knowing which lines needed and the tools to use in manipulating the materials to curve out their intentions.

[34] https://www.pinterest.com/pin/481814860116688201/

Designers use lines to create shapes in the process of designing. Shapes these are enclosed spaces. According to Aigrain et al. (1996) shape similarity calls for the distinction between shape similarity in images (similarity between actual geometrical shapes appearing in the images) and shape similarity between the objects depicted by the images. They can be either regular or irregular organic or inorganic. They can be used in of forms and give a complete feel of the three dimensionality and the illusion of depth without of emphasizing different light tonations in the composition please refer to Plate **xiv** blow.

Plate xiv: Wine

Artist: Giulia Bernardelli

Materials: Coffee on paper

Source [35]

Bernardelli in Plate **xiv** above, used coffee to create an impression by composing flat shapes and structures of different forms we are familiar with in our environment. The illusion

[35] https://www.pinterest.com/pin/255860822558926815/

of depth attained by giving the different sizes, arranging them on different levels in the composition to show distance. Learners while experimenting with new materials they can utilise the approach of flat figures with well-defined boundaries before going into complex ideas. This can also be a good starting point into mastering the potentials of new unconventional materials to their disposal.

Further more like Bernardelli, learners technically can play with negative and positive space in the composition. This can also be a good idea that can help in proper use of space in registering an idea on the surface or in 3D space. Space create gaps between elements in the composition with the intention of creating breathing space among forms.

Texture is also another element of art and design. Different artists, in creation designs while exploring materials, expound it on. Texture, is regarded to be the surface quality. Its degree of roughness and smoothness. Texture can either be visual of tactile.

Visual texture is what we see by using our eyes and tactile texture is what we can feel while touching the surfaces. Some surfaces can be rough visually but smooth when you felt physically and vice vasa or the surface can be both please refer to Plate **xv** below.

Plate xv: Bukeedo Basket

Artist:Unknown

Materials: *Bukeedo and Njuru*

source[36]

In reference to Plate **xv** above, the artefact has a combination of visual and tactile texture complimenting each other. The visual texture is organised in form of making some motifs repetitive to create a pattern and the tactile texture manifested a bumpy indigenous technique of weaving the basket. Therefore, when experimenting with the new materials both textures should be well though about drawing on the nature of the material. Texture in tactile form should be respected in line with craftsmanship that is ergonomics and visual texture can be useful in building the aesthetic aspect of the product. Some materials can be good at both that is available in different colours with different concentrations.

According to Mayanja (2015, p. 32) Colour refers to the Chroma brought about by the influence of an eye through the interference of light. Colour has three properties that needs to be taken care of in studious teaching and learning process; hue, intensity and value. Hue is the name of a colour by its self and there are hues these include blue, yellow and red. Intensity

[36] https://www.pinterest.com/pin/145522631679773849/

describes the brightness or dullness of a colour (Roueche & Shirley, 2010, p. 4). The property of intensity refers to the amount of hue in a given colour for example the mixture of blue into yellow can give us a range of green from blue green to yellow-green.

Colour provides individuals the opportunity to express feelings, create illusions in appearance, and can bring overall excitement to a personal wardrobe (Hemphill, 1996). Colours can symbolize different moods, feelings, cultural practices, or as a communication tool (Mahnke, Color, & Response, 1996). Learners have to be vigilant while selecting and mixing colours in the process material experimentation. The three hues help us to understand colour as an element of art to take note-of while experimenting in studio practice. However, other approaches can guide us in the selection, mixing and application of coloured materials these are colour harmonies. They include monochromatic, complementary, triadic and analogous. Colours harmonies are useful in appreciation and creation of unity among the selected hues and intensities in the creation of artworks please refer to Plate **xvi** below.

Plate xvi; Unknown

Artist: George Kyeyune

Materials: Oil on canvas

source[37]

[37] George Kyeyune is a professor at Makerere University, he is a painter, sculptor and art historian https://www.pinterest.com/pin/145522631679773849/

In Plate **xvi** above, Kyeyune demonstrates his mastery in using the three hues in one composition. The composition depicts a group of people, men women and children seated on one motorcycle locally known as Boda-boda; a public transport mean in Uganda. The artist directly applied strong hues to describe forms in the fore ground and he continuously lead us into the background of the composition where three colours mixed into different intensities with slight tracing of the original colours in the fore ground of the composition. The capacity to manipulate such mental images and other forms of symbolic knowledge arises at the beginning of the school years…(Gardner, 2008). Therefore, the same approach can be utilised in studious experimentation process while working with unconventional materials that have the attribute of colours to create forms.

If learners in studio practice employ elements of Art and Design- thereby put together with the intention of recreating a form irrespective of preferred dimension type selected, form will be the result. Form in design explains the character of source of inspiration depicted; structure is well portrayed, dimension is well illustrated, texture and the movement of light according to environment where the inspirational object is placed can also be well pronounced. Please refer to Plate **xvii** below.

Plate xvii: Male nude seen from the back with a flagstaff, ca 1504

Artist: Michelangelo Buonarroti

Materials: charcoal and chalk on paper

Source[38]

In Plate **xvii** above, Michelangelo articulated musculature of the man in the composition. without utilisation of line, structure, light and mild colours we would see nothing registered on the two dimensional paper.

The process of composing visual elements of art does not only necessarily require the learners to know the types of elements and how to use the materials, it also has guiding principles, one has to follow in the creation process. The principles of design are the recipe for a good work of art. The principles combine the elements to create an aesthetic placement of things that will produce a good design.[39] Therefore understanding of perceptual principles can eliminate confusion in the realm of aesthetics (Lombardi, 1973, p. 358).

Movement is one of the profound principles of art education, learners need to consider while composing element of design to attain aesthetic value in the composition. It directs the

[38] http://ihavelivedformyart.tumblr.com/post/133460912259/romandesotomayor-male-nude-seen-from-the-back
[39] See more at: http://www.incredibleart.org/files/elements2.htm#sthash.nlDJ6gFr.dpuf

eye through the composition. Movement in the composition ignites feelings and dramatic motions. Please refer to Plate **xviii** below.

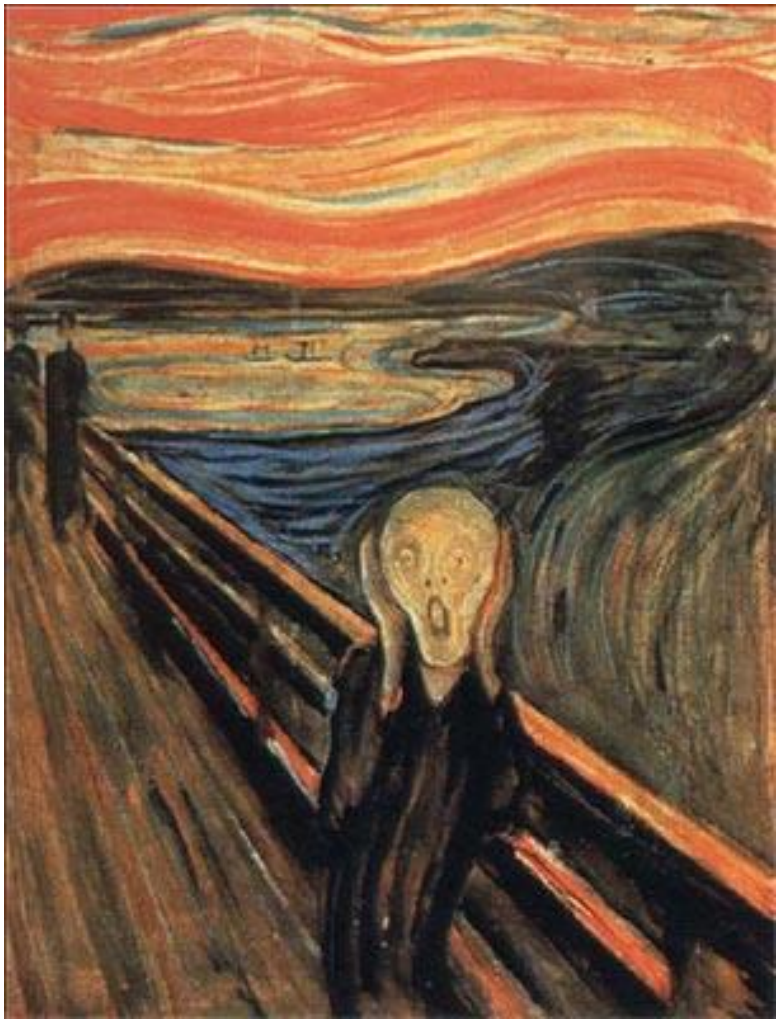


Plate xviii: The scream

Artist: Edvard Munch

Materials: charcoal and chalk on paper

source[40]

In Plate **xviii**, Munch attained movement is through organising elements in diagonal and curve format. Diagonals and curves connects well to each other. This makes the composition to depict an environment with loud sounding moment. The sound waves starts from the central figure in the composition to the middle ground and then into the far ground.

[40] http://www.theartstory.org/artist-munch-edvard.htm

With movement learners can be able create emphasis in the on the focal point all elements lead to the centre of interest this is achieved through using contour, psychic line and implied lines in the composition to compose forms. The learners just need to discover special abilities of the new material to his or her disposal and position it well to attain motion in the composition….

Balance is another attribute one needs to consider while producing a pleasing composition visually. This refers to the distribution of art elements in a composition. There are three types learners can use under this principle; symmetrical, asymmetrical and radial balance. Under symmetrical balance, elements are distributed equally in composition space- when you divide the composition into two equal parts you get two similar compositions.

In asymmetrical balance there is unequal distribution of design elements and this is the exact opposite of symmetrical balance. You cannot divide the composition into two and get similar elements in both parts. Under radial balance, elements grow from the centre of the composition space out ward please refer to Plate **xix** below.

Plate xix: Nyero rock painting

Artist: Stone age human

Materials: Earthen ware on rock

source[41]

[41] http://africanrockart.org/rock-art-gallery/uganda/

In Plate **xix** above, concentric circles are used in a radial balance format. Arranged from the centre beginning with the smallest to the biggest. Learners can borrow the same arrangement, irrespective of the number of forms used in the single composition.

Dominancy in composition making one has to select which element should supersede others this might be achieved in terms of form sizes in comparison to the other, colour strength in comparison to other colours, number times a given form appears in the composition. This can help the learner to speak clearer while using unconventional material in articulation the message in the produced design. Pleases refer to Plate **xx** below.

Plate xx: The Ratler

Artist: Weazher Mayanja

Materials: Soot on Canvas

Source[42]

Observing Plate **xx** above, Mayanja used a foot to appear more important than other forms in the composition, by putting much weight on it in terms of size, details and tone. This creates emphasis in the composition. The viewer transcribes the message into the mind by identifying the foot while other forms in the composition are buttressing the process. Therefore,

[42] http://www.hioa.no/Hva-skjer/Tadooba-Flames-African-stories-in-Norway

learners in studio practice can consider this principle while experiment with new materials to their disposal in order to make their articulations clearer.

Proportionality as a principle in is concerned with size of elements. Roueche and Shirley (2010, p. 2) describes it as the spatial, or size relationship of all parts of a design to each other and the whole garment or ensemble. With use of scale, the student teacher while experimenting in studio practice has to relate the size of the whole object in relation with another object as a whole or the relationship between the size of one part on the form to the rest of other parts of the same form as a whole. Relating the head of the person to the length of the limbs and the wideness of the chest can lead to the right scale of the complete human body please refer to the Plate **xxi** below.

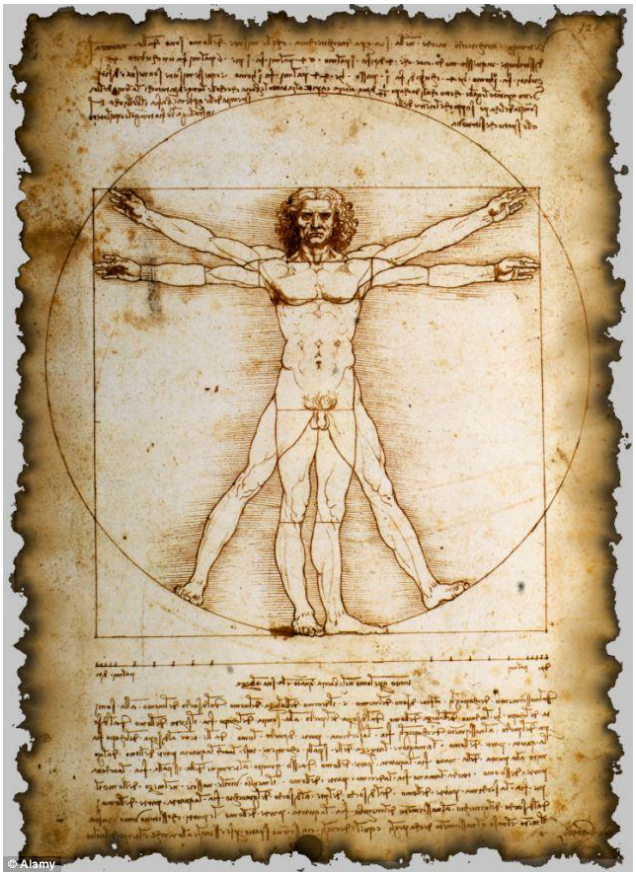


Plate xxi: Vitruvian Man

Artist: Leonardo Da Vinci

Materials: Unknown

Source[43]

[43] http://www.dailymail.co.uk/news/article-2094647/Leonardo-da-Vincis-Vitruvian-Man-copied-Giacomo-Andrea-da-Ferrara.html

Referring to Plate **xxi** above, Da Vinci in his Vitruvian man demonstrates the approach of using ratios to relating parts of the human figure. In the composition development while experimenting with the unconventional materials, learners have to think of the anatomy of what they trying to portray in the compositions. Some unconventional materials such as discarded metals and plastics have solids that can match with different units, if cut in shapes that rhyme structure inspirational objects in the composition. Different shape sizes can create growth.

Rhythm is the repetition or alternation of design elements most times with defined intervals. Artists use rhythm to create flowing patterns out of the different forms in the composition. The rhythmical flow of forms in the composition can also lead to manifestation of movement in the composition; the eye can easily connect one form to another please refer to Plate xxii below.

Plate xxii:

Artist: Rose Kirumira

Materials: Mixed media

Source[44]

Referring to Plate **xxii** above, Kirumira used circular and rectangular shapes in the composition in the repetitive approach to attain rhythm and movement s. Bartel (2016) describes Rythym as a movement in which some elements recurs regularly. Like a dance it will have a flow of objects that will seem to be like the beat of music. The flow makes all element comfortable and function together with the sense on oneness in the single design, considered as proximity and unity; all shapes have worked together to articulate meaning. Lombardi (1973,

[44]https://makerereartgallery.wordpress.com/2014/04/03/coming-up-kirumira-namubiru-rose-archives/ Rose Kirumira is an internationally renowned sculptor and a Senior lecturer at Margaret Trowel School of Industrial and Fine Arts, Makerere University.

p. 359) affirms that the prime requisite of composition is unit. Unity means the oneness. Unity is the ordering of parts of the composition to give the individual total effect of the whole.

3.4 summary of the chapter

In this chapter, I analysed different artworks from different acclaimed artists and art educators as well as considering other scholar who have experiences and whose written works fall in the same line with study objectives **a** and **b**. the information was further shared with the participants. This was done to borrow ideas from the available experimented unconventional materials. Considering the photographic and written information in this chapter from different scholars in art education. In this entire process, I recognised that:

Any artist in academic studio practice, has to concede to two main fractions that is to say ergonomics and aesthetics. They are pertinent to working and learning processes in Art education. Therefore, it was prudent to discuss this information first with the student teachers and other participants because they were directly involved in the experimentations in fulfilment of objective **c** which was largely practical oriented. This could help us in taking informed decisions while experiment with materials.

Aesthetic and Ergonomics in Art and design are not just about design for pleasure; it is about displeasing situations as well. (Liu, 2003, p. 1275). While experimenting with materials, student teachers should be obliged to utilise elements and principles as canons of design in consideration of their set goals regarding what they want the audience to perceive in their artworks.

Designers use their skill, training and experience to produce products that induce a positive aesthetic impression (Simonson & Schmitt, 1997). In Art education, Aesthetics is subjective; its value depends on the individualistic feelings and materials buttresses the visual power. However, principles and elements of art education should be considered in accordance with the student teacher's purpose while shaping unconventional materials into new creations. This manifests freedom with control in learning because they do what they want- following their inspirations without dropping required academic standards.

I also considered that; Designers' tacit understanding of perception and visual composition often guide their intuitive judgements (Liu, 2003). Student teachers in experimenting with their selected unconventional materials in studio practice should be

empowered to carry on reflective experimentations to attain mastery beyond the curriculum by creating new knowledge.

While aesthetics and appearance have always played a role in product and system design, this role will dramatically increase in the 21st century (Liu, 2003, p. 1274). I forestall that; It is not only the mix of visual cultural forms that will shape art education in the new century, but the inter graphical connections between them.(Freedman, 2000) Therefore, it is prudent for art educators and student teachers to focus on discovering new knowledge that is line with new modern studio developments- which unconventional material is part. Student teachers should also be provided enough exposure facilities that forms a realm of studio technology in art education relating it to the world of work.

The chapter also focuses on the different components of art used in Art education where studio practice is a fraction. The data presented in this chapter, was useful in enlightenment the participants before carrying out studio experimentations on selected unconventional materials. In the following chapter I stipulate different processes and methods that I used strategically to fulfil the objective of this study.

4. Methodology

4.1 Overview

This chapter stipulates the overall strategy on how the study was carried out. I present selected methods that were used in the study to gather both primary and secondary data. It contains the research design, area of study, population sample, sampling strategy, methods and tools of data collection, sampling techniques, studio experiment, ethical considerations and, validity and reliability.

4.2 Research design

Research design is an action plan for getting from here to there. He further explains it as a blueprint of the research (Yin, 1994). It deals with four problems that is to say; what question to study, what data is relevant, what data to collect and how to analyze the results. Research design gave parameters that we paramount in the prevention of collecting data that was not relevant to the questions and pave way for further proper processes of analyzing and interpreting findings.

The study lies between participatory action research (PAR) and experimental research. The process by which practitioners attempt to study their problems scientifically in order to guide, correct and evaluate their decisions and actions(Pathak, 2008, p. 11). It is used by teachers, supervisors, administrators to improve the quality of their decisions and action. (Pathak, 2008)

I combined components of two different approaches to come up with a proper blue print that could enable me to get valid results from this research project. The study required working with people in the academic setting of Vocational Art education with the intention of learning and creation of new practical knowledge to solve the existing problem in learning. The process was largely qualitative with a collaborative, experimental and participatory nature Therefore, exploratory, experimentation, library and archival surveys were considered suitable in fulfilment of the study objectives.

4.3 Population and sample

A population is a collection of people, items, or events about which you want to make inferences.[45]However in this study, people as a fraction of population are referred to as participants this is acclaimed by Govil (2013, p. 17) who asserts that "Participants" in educational research mean all those people who are involved in the process of research directly and indirectly.

Stakeholders of DAID and art practitioners from the world of work were directly involved as participants from problem identification to studio experimentation processes, thus creating both experiences and tangible results. Breda (2014) approves that Participants hold knowledge and are able to lend important advice and guidance to the learners. In this study learners are referred to as BVD I student teachers in the experimentation process. The collaborative approach, therefore democratized the research process and radically changed the nature of the relationship between me, colleagues and the students.

In this study, I had various population categories as participants but all providing information that was relevant to study objectives and they are described as follows:

a) Commercial artists were selected because they have studious experiences in experimenting with unconventional materials. This is maintained by Lemov (2010, p. 10) who ascertain that; Top teachers also know they need to constantly check for understanding. This can be done through sharing the with the matter under investigation with other experts. According to Uganda Visual Artists and Designers' association (UVAADA) Kampala district has five one hundred (100) registered members with the association and seventy (70) are in active art practice.[46] Their mastery knowledge and skills about manipulation materials in studio practice range from indigenous to conventional and unconventional. The data from this category was relevant in informing the study with new trendy techniques in the art market which institutions of learning like KYU provide graduates to serve.

This category was represented by sample of twenty (20) practicing artists who manage personal established visual art studios with in Kampala-the location where Kyambogo University is found. I organized excursions with learners, to visit selected artists during

[45] http://support.minitab.com/en-us/minitab/17/topic-library/basic-statistics-and-graphs/introductory-concepts/basic-concepts/sample-and-population/

[46] UVADA is fully fledged association of artists and designers. Its head offices are at the national art gallery (NOMMO Gallery)

their working sessions. Artists demonstrated to give us the visual impressions and insights into their explanations which made their content easier to digest. I and learners asked preferred questions and the data extracted from the artists' responses was recorded logos for further discussions and references during studio experimentations.

Objectives **a** and **b**, were considered in order to guide the study in while gathering information in excursions.

b) Art teachers in KYU have many personal stories about their passions, experiences, careers and various professional backgrounds; teaching and experimentation research in studio which were relevant to the study. Therefore, I selected them as another category of participants because they are involved in the daily teaching and learning activities in Art education at the Department where BVAD I is trained from.

The DAID consist of forty 40 lecturers four 4 technicians. Twenty (20) members were selected represent the total population in this category. These consisted of sixteen 16 lecturers and the four 4 technicians. They were directly involved in the interview sessions, experimentation and in the discussion processes on the practical progress of the study. Lecturers and technicians were selected because they are at the pivotal point of administering teaching-learning sessions, research and publication in the University.

This category of population, provided data pertaining their experiences in teaching and learning towards studio innovations. Their experiences were inspirational to studio experimentations while working with learners in category **d** of the population.

The data from category **b** of the population using the interview guide was utilized in fulfilment of objective **a** and **b** which are answered in chapter three of this study respectively.

c) Eisner (2004, p. 5) suggests that, we need to help students learn to ask not only what someone is *saying*, but how someone has *constructed* an argument, a visual image. For inspirational purposes on unconventional materials, establishment and understanding of Art and Design attributes in art education, artefacts were selected and criticized to give visual insight. Thus, students are initiated into critical and constructive action, learning to exercise judgment (Goldblatt, 2006).

Works from national and international acclaimed artists were presented and discussed together with category (d) Participants. Fifty (50) artworks were collected from different

sources and Twenty-four (24) were the selected sample. The sampling exercise considered the required components of Art education and how they apply to selection, mixing and application while experimenting with unconventional materials in studio practice.

Artefacts were observed and critiqued with students; data was extracted following the observation guide as explained in **4.6.2 in this chapter. T**he exercise was guided by objective **a** and **b** as identified in chapter one. More ideas were borrowed from the artefacts helped me and leaners to take informed decisions, while investigating selected unconventional materials.

d) Category **d** consisted of BVAD I student teacher s as participants. This is in line with Bergold and Thomas (2012) who asserts that; Participatory research methods are geared towards planning and conducting the research process with those people whose life-world and meaningful actions are under study. Research subjects are called "participants" in PAR because they are included as members of the team in every phase of the research process (Krueger & Casey, 2014). This study was sought out improve learner's knowledge, skills and attitude towards possibilities of using unconventional materials in studio practice as a fraction under Art education. Therefore, it was prudent for this population category to participate in the study.

4.4 Sampling techniques

Choosing a study sample is an important step in any research project since it is rarely practical, efficient or ethical to study whole populations Marshall (1996). Therefore, in this study I had to select some smaller manageable participants and use their thoughts to represent the bigger numbers because the facilities and time were not that much enough to cater for bigger numbers. I had to utilise selected sampling techniques in getting samples out of the lager population in different categories as elaborated below.

4.4.1 Purposive sampling

Louis Cohen, Manion, and Morrison (2011) explains this purposive technique as where; …researchers hand pick the cases to be included in the sample on the basis of their judgement of their typicality or possessions of the particular characteristics being sought. In this way they build up sample that is satisfactory to their specific needs. In this study, the technique was used to select participants from population category **a**, **b and c**. Purposive sampling is a technique

that entails selecting respondents in a strategic way, so that those sampled are relevant to the research questions that are being posed; participants who have specific characteristics or feature (Higginbottom, 2004, p. 15) lecturers and artists were selected basing on the experience in art material innovations and the period of experience in studio practice. Lecturers with profound background in studio related discipline of drawing in Art education were considered. Artists were selected considering their work records and established studios experimenting with different unconventional materials.

The selection artefacts were intended for inspirational purpose, I and other participants agreed to identify artworks that had unique aspects basing on esthetics, ergonomics and materials as major values of Art education.

4.5 Method of data collection

It is difficult to overstate the importance of methods in visual language acquisition research. Simply put, they are the means by which empirical evidence is gathered to advance knowledge our understanding of language acquisition is only as strong as the methods we employ (Plonsky, Gurzynski, and Fäcke., (2014, p. 31). In the same context I selected methods that would be useful in gathering data best suit the study. Multiple methods where used in conduction and collection of data and the logical connection was maintained through objectives and questions where meant to be asked as par the study design. Potter and Desai (2011, p. 4) reveals that research design usually forges logical connections between complementary data collection methods.

Despite the fact that as a researcher I was in charge of the whole study process, some methods were suggested by students; as a participant, I was working with in terms that could lead achieving of study. I accepted the two new methods to make the study highly democratic and more interactive; since I was using learner cantered approach I had to make them be to feel ownership and the sense of belonging in the study.

In this educational study, studio Experimentation was crosscutting feature that was highly interventionist nature of the methodology. Starting from appreciating arts works of other artists to production of tangible data. In Art education Design studies are typically test-beds for innovation. The intent is to investigate the possibilities for educational improvement by bringing about new forms of learning in order to study them (Cobb et al., 2003, p. 10). As this study, was concerned with solving an existing problem of insufficient materials for studio practice. Thus, selection of the following methods of data collection and their tools.

- Interview
- Library and archival survey
- Observation
- Photography
- Studio Experimentation
- Discussion and dialogue

4.5.1 Interview

I selected Interview as one of the methods of gathering relevant primary data from willing respondents following the study objectives. interview attempts to understand the world from the subjects' points of view to unfold the meaning of their experiences, to uncover their lived world prior to scientific explanations(Kvale & Brinkmann, 2008). Though based on daily life conversation, it is professional in that it is systematic with a view of constructing knowledge through the interaction between interviewer and interviewee (Kabanze, 2012, p. 13). The un structured interviews were cried out on individual basis as investigator. It is highlighted that;

> Individual interviews, which can include key informant interviews, are useful for exploring an individual's beliefs, values, understandings, feelings, experiences and perspectives of an issue. Individual interviews also allow the researcher to ask into a complex issue, learning more about the contextual factors that govern individual experiences Taylor (2005).

I agree with the above statement because Vocational art education being subjective entity for artists and art educators but with personal experiences. However similar their experiences might be, they can't express them in the same way. Therefore, I chose individual interview approach to enable effective process of collecting data. I could pursue in-depth information around the topic. Interviews are useful as follow-up to certain respondents to questionnaires, e.g., to further investigate responses (McNamara, 1999).

The interview guide is a tool I used under interview as a method of collecting data. The guide was designed and utilized to ensure proper collection of relevant data during the interview sessions. I considered the study objectives **a** and **b,** in chapter one to develop questions for the interview guide please refer to appendix 1 and 2 respectively. The questions were unstructured in nature to reduce on the elimination of relevant information during the interviewing process. This also gave me an opportunity as the interviewer to lead the interview session in more other identified areas while dialoguing with the interviewees….

I made appointments with various identified respondents to be interviewed. Through writing to them officially, I requested for their willingness to contribute to the study and the letter was delivered in person, please refer to appendix 5 respectively. However, though the response was positive and dates for our meetings were set, there arose the unpredicted a situation of institution. Works' went on strike. This hindered my work plan and the overall working strategy because some of the respondents were also part of the workers in the institution. This called for a change in appointments; time of meeting and venues since it was not safe anymore for us to meet in the institution grounds.

The data from the interview sessions were recorded using digital camera, audio recorders and logo books depending on how much time the respondent was willing to offer. However, some respondent where phobic of being captured video set due to personal privacy values and principles. Others were free to all these three tools. As a researcher this set a challenge for me during data sorting process because of difference in media used during interview sessions however with the use of a well-structured logo book the sorting exercise was successfully done to my satisfaction. The data gathered from the interview sessions was used to enrich the literature review chapter two and three of the study; acting as a spring-board to venture into deeper studio experimentations under Art education.

4.5.2 Library and archival survey

This method was useful in collecting secondary data; reviewing related literature to the study. McNiff and Whitehead (2009) suggested that; the researcher should engage critically in the relationship between what is known and the idea under investigation. This can be achieved through correlations with other measures of the issue or by rooting my construction in a wide literature search which teases out the meaning of a particular construct (i.e. a theory of what that construct is) and its constituent elements Louis Cohen et al. (2011). In the same line Kerlinger (1979) declares that; he who studies the literature, scans his own experience and the experience of others. In regard with the above statements, I studied scholarly works different concepts in line with Vocational art education. Digital and printed forms from the globally and local perspectives were reviewed to borrow ideas and avoiding re-inventing the wheel. I accessed libraries HiOA, Kyambogo University and Makerere University for printed materials. I also used Internet databases like ODA, Oria and Google scholar for online published books, articles, journals. This method was utilized to attain information pertaining objective **a** and **b** of the study. The data collected was recorded and analyzed using logbooks and later discussed

with other participants before studio experiment process in objective **c.** please refer to appendix 9 for a logbook copy.

4.5.3 Observation

The distinctive feature of observation as a research process is that it offers an investigator the opportunity to other 'live' data from naturally occurring social situations. As a method it has two formats; structurer and unstructured.

While collecting data from Artefacts that form category **d** population for study objectives **a** and **b** and art works from studio experimentation under objective **c** in this study, I used structured observation since art works only communicates in visual and tactile format. This is in agreement.

Structured observation guide was employed in the process of gathering data as described in the tools section in chapter three of this book respectively.

During the interview sessions and excursions to different art studios, unstructured observation applied to double check the information given to us by commercial artists in category **a** of the study participants as supported by Mulhall (2003) who states that; in unstructured observation the researcher may adopt a number of roles from complete participant to complete observer. Robson (2002) adds that, what people do may differ from what they say they do, and observation provides a reality check… In the same judgement, I have to employ this method in order to see beyond what is just said and also to reduce on the information gap between what participants say and what they do.

Observation guide as a tool under the method of observation was employed to collect data from the artefacts under category **c** of population in this chapter; it was developed focusing on objective **a** and **b** of the study. I and the learners selected areas of focus to act as guidelines during observation exercise. This was intended to investigate the building blocks different artworks were composed of and the production process. The data collected under this tool was documented using logbooks and later referred to during production and discussion of outcomes from studio experimentation under objective **c**. Observation guide in this study is appended as appendix 8

4.5.4 Photography

Research lies on collecting, recording and analyzing information. Photography is a technique for recording visual content and experience. Photographs and images alike are powerful tools that can describe actions, emotions, and moods in humans and animals (Watt Boolsen, 2007), it is easier to think in pictures than in words (Erdner & Magnusson, 2011). Thus, in this study photography as a method of data collection was employed. Despite the many various approaches of using photographic method, in this study two approaches namely hermeneutic photography and photo voice as elaborated below respectively.

Photo-voice is a participatory action research method in which individuals photograph their everyday health and work realities (Baker & Wang, 2006). Here photography was employed in studio experimentation while fulfilling objective **c** of this study; to keep track of records on the student's activities and progress experiments on unconventional materials. The photo graphic data under this approach was used chapter four to fulfil objective **c** on this study.

Hermeneutic photography is an innovative esthetic technique that can apply in design related action research because it facilitates a discussion of the familiar or un-known aspects life and experiences. This is in agreement with Hagedorn (1994, p. 44) who confirms that photograph provide visual images of experience that challenges researchers to search for language to describe them. In this study different artworks were captured using a camera and others were browed from internet. They were discussed with the participants as study aid. Photographs provide visual insights into knowledge (Hagedorn, 1994). The photographic data was compiled and discussed under chapter three to fulfil objective **a** and **b** of this study.

Under the method of photography, I used a digital camera as tool to implement the method. The camera was used to take photographs and they were stored in digital form because they were easier to be projected for every participant to see during discussions. Some the photo graphic data gathered is presented described in this study as par the objectives.

4.5.6 Discussion and dialogue

This method could allow different groups and individualistic views to be expressed in verbal and symbolic forms in studio practice process; enabling the participants and me to share and critique the working process and the outcomes in regard with the expected outcomes. We tried to make discussion sessions highly democratic. We embraced equity and voting on intricate arguments in the experimentation process as a better approach to collective learning.

We shared oral, photographic, videos and illustrated ideas during concept development and implementation. Everybody had to contribute to the project through discussing his or her ideas with the rest of class members through the respective selected groups or as an individual.

Like excursion, Discussion is a method I employed in this study basing on my experience as a teacher. It's one of the methods I have ever used in my teaching practices. It makes learning interactive because everybody contributes to teaching-learning process thus applying learner centered approach which was necessary in this study.

The method positioned me well in the study as a participant observer; researching with people not on people, finding a problem in the environment with people not imposing the problem on them and conceptualizing possible solutions with them. The method was employed in generating findings for objective **a**, **b** and **c** of the study.

4.5.5 Studio Experimentation

Studio experimentation is a method which was employed in the fulfillment of objective **c** of the study. The experimentation process stemmed on selection, preparation and application of selected unconventional materials under investigation; through Art education components drawn from the program curriculum of BVAD I, working with student teachers collaboratively. Other participants that is to say lecturer and other commercial artist joined us during critiquing sessions.

4.7 Studio experimentation process

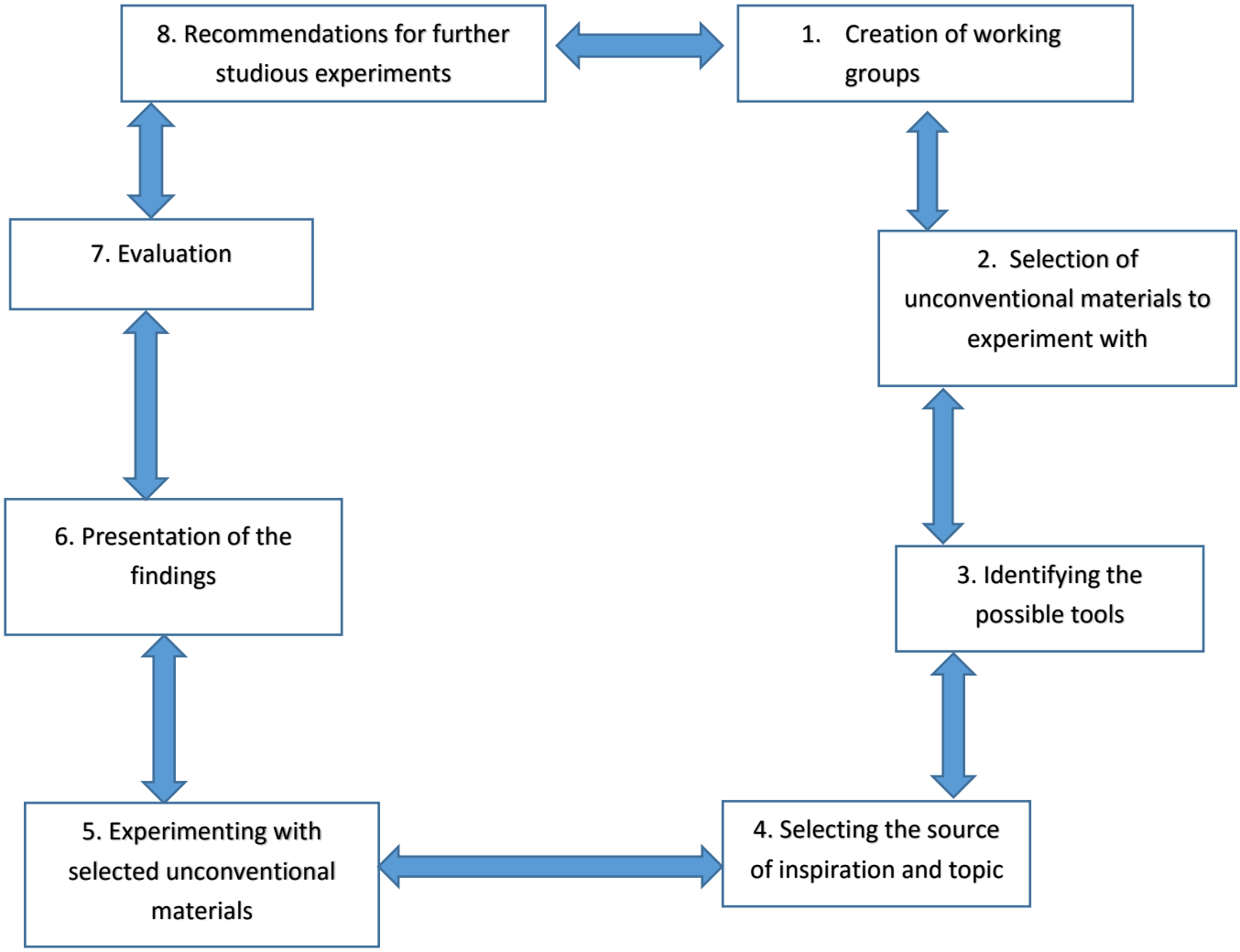
Siemens (2014, p. 4) asserts that; Experience has long been considered the best teacher of knowledge. Student teachers as participants in this project, had to get involved in selection, mixing and application of the selected unconventional materials to establish new technology in their way of working. The studio process was further seeking to empower our abilities in synthesizing, observing, analyzing, describing and comprehending the outcomes from the experimentation process in the learning perspectives with the learners under the guidance of the course outline from the programs curriculum.

Art classrooms that rely on students "playing" with materials and discussing findings to create understandings, rather than teacher led discussions and demonstrations, can act as a starting place for design thinking (Gross & Gross, 2016, p. 38). In vocational art education learners have to touch, look and feel the materials for progressive understanding and

manipulation of design components through experiments. Thus, I worked with student teachers in studio practice learning sessions as an observer and a mentor. This is in line with (Hiim, 2015) who asserts that teachers themselves, in collaboration with their pupils and colleagues, develop their educational practice related to the essential challenges in their works.

The creation of work is student-led, with students moving between areas as necessary, and teachers acting as a resource for students (Gross & Gross, 2016, p. 37). The process chronologically started with; creation of working groups, selection of unconventional materials to experiment with, background information about the materials, identifying possible tools, selecting the source of inspiration, experimenting with selected materials, presentation, evaluation and recommendations for further studio experimentation of the findings. Please refer to the visual impression in **figure ii** below.

Figure ii The schemer below expresses the visual impression of studio working process with BVAD learners



4.7.1 Creation of working groups

Group work approach was selected in this project context because student would be provided with the opportunity to learn by watching others. Groups empowered discovery, integration, sharing and effective application of Knowledge. Technical coordination also prevailed in the experimentation process participants could sit and ask what can we do whenever they had practical challenge. For it is widely accepted that much learning takes place

through a process of imitation. A student watches the way one of her peers is starting to make a bird-box or paint a picture and tries to do it similarly.[47]

Groups develop trust and a good learning atmosphere, and maintain standards, thereby strengthen the learning process. In relatively well-researched domains, the team can draw on the literature to develop conjectures…interpretations and understandings (Cobb et al., 2003, p. 11).

After sharing information about components of Art education under objective **a** and **b**, I divided student teachers into smaller groups before being assigned the unconventional materials to investigate. Each group consisted of ten (10) students; this resulted into seven (7) groups. I tagged the group the using letters from A to G in order to be able to separate one from the other during data studio practice, data collection and presentation. The numbers in groups was small enough to manage and learners to interact easily with one another in the learning process. This is in line with Leung and McGrath (2010) who asserts that;…learners can help learners learn together and as part of the process of preparing for a classroom design experiment, the research team also specifies its assumptions about the intellectual and social starting points for the envisioned forms of learning. Cobb et al. (2003, p. 11).

Participants are selected because they have certain characteristics in common that relates to the topic of the focus group (Krueger & Casey, 2014). All learners as participants in their respective groups were bachelor's degree candidates offering the same program under a curriculum with common assessment criteria relevant to this study. However other two main aspects were put into consideration; gender and students' prior competencies as explained under didactical model under 2.2.1 In chapter two.

Gender was considered to ensure that male and female are distributed well, regarding the number groups. Every group had male and female participants. Prior competencies were considered to ensure that one group don't be dominated by learners with common skills. I had to ensure that every group had a student who joined the program through diploma scheme as

[47] http://www.winchester.ac.uk/aboutus/lifelonglearning/CentreforRealWorldLearning/Documents/Claxton,%20Lucas%20and%20Spencer%20(2012)%20Making%20It%20-%20Studio%20teaching%20and%20its%20impact%20on%20teachers%20and%20learners%20(Esmee%20Fairbairn).pdf

describe under learning conditions in 2.3.1, chapter two of this thesis respectively. Thus creating an interactive learning groups with various abilities and knowledge background.

Participants in each group had to select their leaders who would preside over the group activities with trust and integrity. This helped them to have organized group discussions and presentations of their studio findings from the experimentation activities internally in their groups as members and to the whole class after.

Brockbank and McGill (2007) looks at relationship as one where learners and teacher engage and work together so that they jointly, construct meaning and knowledge with the material. As mentor in this research project, I had to create permissive environment that encourage participants to share perceptions and points of view without pressuring participants to vote or reach consensus. This is in line with Krueger and Casey (2014) Who asserts that; work when participants feel comfortable, respected and free to give their opinions without being judged. Members' contributions were delivered from opened discussions and dialogue sessions. Every student had to discuss present his or her experiments at group level and the final group decisions; each group presented in the entire class forum for critical discussions.

4.7.2 Selection of unconventional materials to experiment with

In line with the purpose of this study; carry out experimentation with selected unconventional media from environment to create designs and change learners' attitude towards innovative studio practice.

There are two categories of materials; media and surfaces. Media include all substances that are applied on the surface to register a design whether dry or wet whereas surfaces these two dimensional spaces where media can be applied to register a design (Mayanja, 2015, p. 30). The two subsections of materials are very important in studio practice because they complement each other in the working process. However, according to the discussion we had I had with participants we agreed that; both fractions of materials were too wide compared to the semester period we had to carry out our experimentations. We agreed to concentrate on the media fraction of materials.

We also agreed that; Unconventional materials were to be selected from the environment to avoid economic constrains as it is with the conventional ones. Therefore, a list of proposed materials bot indigenous or natural and synthetic or modern was made and these included materials such as Jik & ink, paste, leaves, charcoal, soil, cow-dung, polyene bags. All materials

were discussed by individuals in different groups after prior discovery about their natural background. Therefore, by the end of group discussions each group had selected a material to investigate under studio experimentations.

Since the identified possible media were many. We agreed to start with a single medium for sampling model of experimentation. Therefore, soil was selected to serve as a model medium used to develop a common approach in experimenting with other media to create designs. Soil was selected because its cheap, accessible, rich in colors and flexibility; it can be used as a dry media or as a wet medium irrespective of the design the designer intend to produce. Some learners were in support of it because they have experienced as a medium in sand painting one of the popular activity done in indigenous communities. Therefore, this could help them in making learning easier that is to say from known to unknown, from simpler to complex.

4.7.3 Identifying the possible tools

Mayanja (2015) define Tools as implements used to produce a design but they don't remain part the art work. Tools are a big fraction in studio practice under Art education. They are used in the mixing and application of materials. In studio practice, tools are selected according to the nature of material the art work is to be made of. However, I and other participants agreed to let and tools section flexible and open without restriction. This was intended to maintain freedom in the experimentation process to encourage creativity. However, there are some tools that appeared to be basic irrespective of materials selected by any group.

a) **Drawing board**; this was used to as support of surfaces learners used during studio experimentation while registering designs on surfaces using selected unconventional media.
b) **Painting easel;** this was a support stand used to hold drawing boards while working.
c) **Donkeys;** these are special furniture used in studio practice learners sit on while drawing.
d) **Sketch books and scrap books;** these were used by learners in recording their personal ideas in both pictorial and text formats-they felt worth to be blown up into bigger designs for the study.
e) **Painting brushes;** these are used in mixing and application of liquid media on the surface.

4.7.4 Selecting the source of inspirational objects and topic

It is frequently stated that a person learns by merely having the qualities of things impressed upon his mind through the gate way of the senses.(Freedman, 2000, p. 316). I encouraged participants to select objects that were not out of their reach. They consider of the accessibility and flexibility in movement so that they can use them at anytime and anywhere in the studio. This would support their analytical observational in design processes.

Nature alone can lead to the understanding of art. Just as art brings us back to nature. With greater awareness. It is the source of all beauty, since it i.e. the source of life (Aristides, 2011). Participants in their respective Groups selected different specimens as their sources of inspiration from natural forms, architectural figures to still life objects. The selected inspirational forms were from within DAID environment and the designs produced in this study were inspired by selected forms in this section.

4.7.5 Experimenting with selected unconventional materials

After collecting and identifying materials, groups had to start their experimentation process beginning with soil as a model sample. The process in this faze focused on testing the potentials of materials in creating different tones. Please refer to Plate xxiii below respectively.

Plate xxiii: Tonal scales

Group: D

Material: Soil

Tool: Painting brushes

Source: Author

From plate xxiii above we see tonal scale. The results confirm that soil can easily be manipulated in creating designs. The idea was later transferred into imitation of inspirational forms with the illusion of three dimensionality using brushes on paper as a surface, please refer to plate **xxiv** below.

Plate xxiv: Forms in soil

Group: C

Material: Soil

Source: Author

The approach was borrowed and used in manipulation all other selected media. This was done to taste potentiality of selected unconventional materials in providing different. Tones were identified to be relevant building up of forms in designs and illusions of depth as required in the course curriculum.

4.7.6 Presentation of the findings

Presentations where done on the regular basis, as highlighted in the study work plan developed following the university semester program and the curriculum. Participants in their respective groups discussed their studio experiences with the rest of the class members in both verbal and pictorial forms. Please refer to plate xxv and xxvi below.

Plate xxv: Participant from group c displaying works

Group: C

Source: Author

Plate xxvi: Presentation and discussion sessions

Source: Author

In learning the combination of visuals and audio complements each other in teaching and learning process to cater for visual learners and audio learners.

> Visual learners remember best what they see: pictures, diagrams, flow charts, time lines, films, demonstrations. If something is simply said to them they will probably forget it. Auditory learners remember much of what they hear and more of what they hear and then say. They get a lot out of discussion, prefer verbal explanation to visual demonstration, and learn effectively by explaining things to others .(Felder & Silverman, 1988).

Therefore, in agreement with Felder, the critiquing sessions of studio findings had to incorporate data in exhibited pictorial, in text and oral forms. The audience thereby comprised of other BVADI student teachers who were not presenting, invited lecturers and commercial artists could critique the work and make suggestions to the presenters.

4.7.7 Evaluation

Evaluation was a continuous practice from the beginning of the study to the end. It was done following set goals as laid in the work plan extracted from the course outline. At every

after of the presentation session we used to compare our achievements with the expected outcomes. Assessment as an aspect under evaluation and motivation was done by awarding points to a sessional activity a group had presentenced. Please refer to **2.3.6** Assessment in chapter two of this study for the assessment criteria.

4.7.8 Recommendations for further studious experiments

All sessions were ending with suggested corrections which we could first discuss and agree on as a whole group. This was intended to pave way of improvement experimentations sessions. However, challenges whose solutions were not achieved in this study due to limitation in time or materials were presented as recommendations.

4.8 Reliability and Validity

Reliability and validity are important issues in assessing quality of research; as they indicate the extent to which study findings reflect the world that they are seeking to explore (Kabanze, 2012).

To guarantee reliability, I had to select reliable sources of data. In this case, selected participants were stake holders of VOC as a discipline. Participants played an important role in identifying the problem to be solve in teaching a learning at DAID, basing on their experience. They, provided the study with fundamental information regarding state of studio practice the study sought to positively improve.

Lecturers and technicians who participated in this study as category **b** where selected and cross checked from the department time table to find out their areas of specialty and only lecturers with a general background in art education were considered because the research project was inclined towards studio practice as a component of Art education which has both theory and studio practice. Thus they could provide reliable knowledge in relation to the study objectives both theory and practical.

Student teachers as participants had to register their names and registration numbers which I had to cross check with the list of attendance provided to me from the Head of department's office. This process confirmed that all student teachers who participated in this study as category **d** population were students admitted and registered to take on the course by KYU. All data in this study from idea generation was from students and staffs which was relied on to make decisions in the working process.

I consulted KYU's programs book to stream line the established research objectives with the curriculum which is developed according to the KYU's vision and mission. However, the curriculum structure as illustrated in the programs book of the was not provided in this book except being illustrated in the narrative form this might put reliability at question

…if a researcher working in the field of education does not do his work honestly, the sufferer is the whole community or rather the generations to come (Govil, 2013, p. 1). Validity is an important key to effective research if the piece of research is invalid then it is (Louis Cohen et al., 2011, p. 179) (Bryman, 2004, p. 72) refers to validity as "the issue of whether an indicator (or set of indicators) that is devised to gauge a concept really measures that concept" more recent validity has taken many forms. For example, in qualitative data validity might be addressed through honesty, depth, richness and scope of the data achieve, the participants approached the extent of triangulation and the disinterestedness or objectivity of the researcher (Winter, 2000).

To ensure the validity of the study, I worked with Students teachers, lecturers and technicians of DAID to establish the problem and the objective of the study; since they were involved in the daily teaching and learning process in studio practice regularly. Therefore, it was from their forwarded experiences a problem statement was developed and as immediate beneficiaries participated in process of generating solutions. The experimentation process of finding possibilities of using un conventional materials in art education was in line with the daily ideal practice as extracted from the curriculum, hence helped in validating data.

The BVAD curriculum of KYU was always referred to as different study activities where being carried out. It was consulted to for quality control purposes by me and other lecturers who had to take part in presentations as advisers and at the same time as participants. The findings were also evaluated by the external examiner who still had to consult the University curriculum make sure that the study was still in line with the university interests as part of the university regulations. However, to a smaller extent it restricted creativity since the curriculum always had to take us back to the conventional principles and elements of design.

All learning actions were carried collaboration with other participants, under group discussions and studio oriented explorations and experimentation. Established Artists from the field of work and artwork from acclaimed artists were considered as inspirational sources in manipulating attributes of Art education. Therefore, this partly contributed to validation of data.

Triangulation together with mixed methods increases validity (Røed, 2009). as “the use of two or more methods for data collection in the aspect of human behavior” (Louise Cohen, Manion, & Morrison, 2007)) (p. 141). I considered to establish the relationship between data that was collected from different sources using different methods. I compare the data collected from artworks of other artists using observation with findings from interviews on selected lectures and literature from other scholars in regard to study objectives and the data was data was quite similar.

4.9 Ethical consideration

Basically, the term „ethics“ refers to moral principles of guiding conduct, which are held by a group or even by a professional” (Govil, 2013, p. 17). To fulfil the fundamental purpose of study, I involved use artworks from artists and stake holders of DAID, and artists from different incorporated art studios. Therefore, was obliged to consider a number of ethical issues to avoid harm in the process of currying pout the study- since ethics lie at the core of educational research. Therefore, I had to make sure that participants’ rights are protected during and after the study process considering privacy, anonymity, confidentially and harm, betrayal or deception (Govil, 2013, p. 1).

Informed consent it is an aspect that could not be ignored or denied to the individuals and organizations as participants to enhance the quality of this study. Couchman and Dawson in Behi and Nolan (1995) declare that; Informed consent is a right to every individual when participating in research.

Respondents cannot be coerced into completing a questionnaire. They might be strongly encouraged but the decision whether to become involved and when to withdraw from the research is entirely theirs (Louis Cohen, Manion, & Morrison, 2013). I gave prospective selected participants true and sufficient information to help them decide whether to participate in the study or not.

Despite the fact that I was an employee lecturing in the same department but this time coming back a researcher and a change agent, I had not to take institutional rules and regulations for granted. There for i had to seek consent from the Head of DAID at KYU who is entrusted with all powers on behalf of the university. I got an introductory letter from the Head of NOMA at KYU; introducing me as a research student on behalf of HiOA, I attached a second letter describing my academic background and research intentions. please refer to appendices 3and 4. The letter was replied in writing and permission was granted to work with the population at the department as my request was stipulating.

I had to brief BVAD student teachers in year one, who were entrusted to me by the Head of Department (HOD) and were meeting me for the first time though they had seen my name before on their course time tables. To certain extent, I was an outsider among them. I had to present a consent agreement before with an intention of proving formal consent with an informed mind. The agreement had a provision of signature from whoever was willing to participate in the research project and had right to withdraw their consent any time. Please refer to appendix 5

Being a researcher and presenting myself lecturer at the same time would lead to conflict of interests; some learners would have accepted accept to join the project because I was a lecturer with influence in their course work and examinations assessment. Thereby, expecting me to be so lenient while assessing which would jeopardize research results and my second responsibility as a lecturer. While other students expected listen stories about education system and way of life in first world country Norway. Therefore, I introduced myself as their mentor in the research process to reduce lecturer- student power gap and ensure that we become studio partners learning from one another as I lead. On the same issue of power, I employed learner centered approach to ensure freedom while sharing in the research process

Consent letters and agreements were provided to cater for the participants in category **a** and **b** of population in this study who got involved in the interview sessions.

Documentation of data did not include the names of participants or registration numbers for the hereby referring to students, in order to keep respondents anonymous and responses confidential. Therefore, I had to introduce letters and numbers that I would use in tracing the sources during data compilation.

Furthermore, I used artworks in the process of fulfilling objective **a** and **b**. being a professional renowned artist in the nation and other countries this would confuse readers of the research thesis thereby may consider it as plagiarism under art and academic canons. Therefore, I had to ensure a disclaimer on every artwork of another used in this study by revealing the source and the artists where provided.

4.9 Summery of the chapter

In this chapter, I explained the methodological approach used in generating data. Methods, tools and population are described in accordance to their contribution towards solving the stated problem in this study through objectives **a**, **b** and **c** as explained. In the following chapter I present and interpret studio findings that resulted from studio experimentation.

5. Presentation and Interpretation of Studio findings

5.1 Overview

In this chapter, I present and interpret studio findings in considerign the study purporse which was to; carry out studio experimentation with student teacher selected unconventional materials to create designs and positively boast learners' attitude towards innovative studio practice in art education.

This chapter is largely guided by objective **c** of the study; to experiment with the potentials of selected un-conventional media to produce designs. Consequently, findings are based on studio pratice outcomes in **PlatesPlate xxvii and Plate li:** below respectively and participants' expiriences while experimenting with posibilities of using unconventional materials to create designs in the studious learning process.

The findings under this chapter are presented both in visual and text formats under the established learning groups **A** to **G** in chapter four of this study. The visual findings presented in pictorial format rabled as plate,s describes the potentials of differents selected un conventional materials and the the data in text form hight light participnats's experiences during the experimentation process under the guidance of attribute of art education; focusing on the impact of the study on participants' knowledge and attitude towards using unconventional materials in studio practice.

5.2 Visual findings from studio experimentation.

Participants used un conventional materials to produce create artworks both in objective and subjective approaches under the guidance of attributes art and design in art education, to create expressive and impressive designs in the experimentation. Art works presented in this chapter, with brief description appended to each plate exhibit results attained from studio exploration with selected un conventional materials.

5.2.1 Soot (Group A)

Soot a carbon material in this study is a result attained from of different burning discarded materials. Participants started with Tadooba lanterns, borrowing ideas from Mayanja's artworks please refer to plate **Plate x Self appreciation** and **Plate xx: The Ratlerxxvii** in chapter three of the study respectively plate. The lantern was held in a vertical form beneath the paper while the surface was held in the horizontal setting. Learners' started dragging fire flames on the surface as soot was registering intended designs. After darkening

the paper they had to get tools like sticks, quills, fingers and erasers to make marks on the surfaces- while registering intended designs. When designs were registered, fixatives sprayed on to prevent them from smudging. The results are visible in **Plate xxvii**: The Butterfly.

And Plate xxviii: lauder.

Plate xxvii: The Butterfly

Group: A

Material: Soot on canvas

Tools: sticks, brushes and fingers

Size: A4

Source: Author

Plate xxviii: lauder

Group: A

Material: Soot on bond paper

Tools: sticks, brushes and fingers

Size: A2

Source: Author

However, participants revealed that the available conventional fixatives could not fix soot instead it was reducing on the darkness of tones in the composition. Therefore, we realised a need to investigate ways of preserving soot designs.

5.2.2 Jik and Ink Group B

Jik is bleaching agent, commonly known detergent used by household to remove stains from white clothes and to purify water whereas Ink known for writing and printing documents. The experiment was a combination of two liquid materials, which are not related. Ink accessed from discarded computer cartridges, picked from dustbin in the Department of Art and Industrial Design KYU. The studio technician provided Jik. participants applied Ink on bond paper first and then later Jik on top to create marks. Every part of the paper that was in contact with Jik bleached. Please refer to **Plate xxix** below.

Plate xxix: ***Ewaffe***

Group: B

Material: Jik and Ink on Bond paper

Tools: sticks, brushes and fingers

Source: Author

Size: A3

Referring to **Plate xxix** above, it was also realised that using the approach of diluting the concertation of Jik by adding in water could help the in getting better results that is to say; the more the participants added water in Jik the more they attained different tonal grades. This gives an illusion of three dimensionalities because with variation of tones in the composition they managed to attain depth; foreshortening, perspective and growth These materials can be best used in negative drawing. Thereby, the participants had to scratch the surface to create marks in order to reveal the design.

5.2.3 Soil Group C

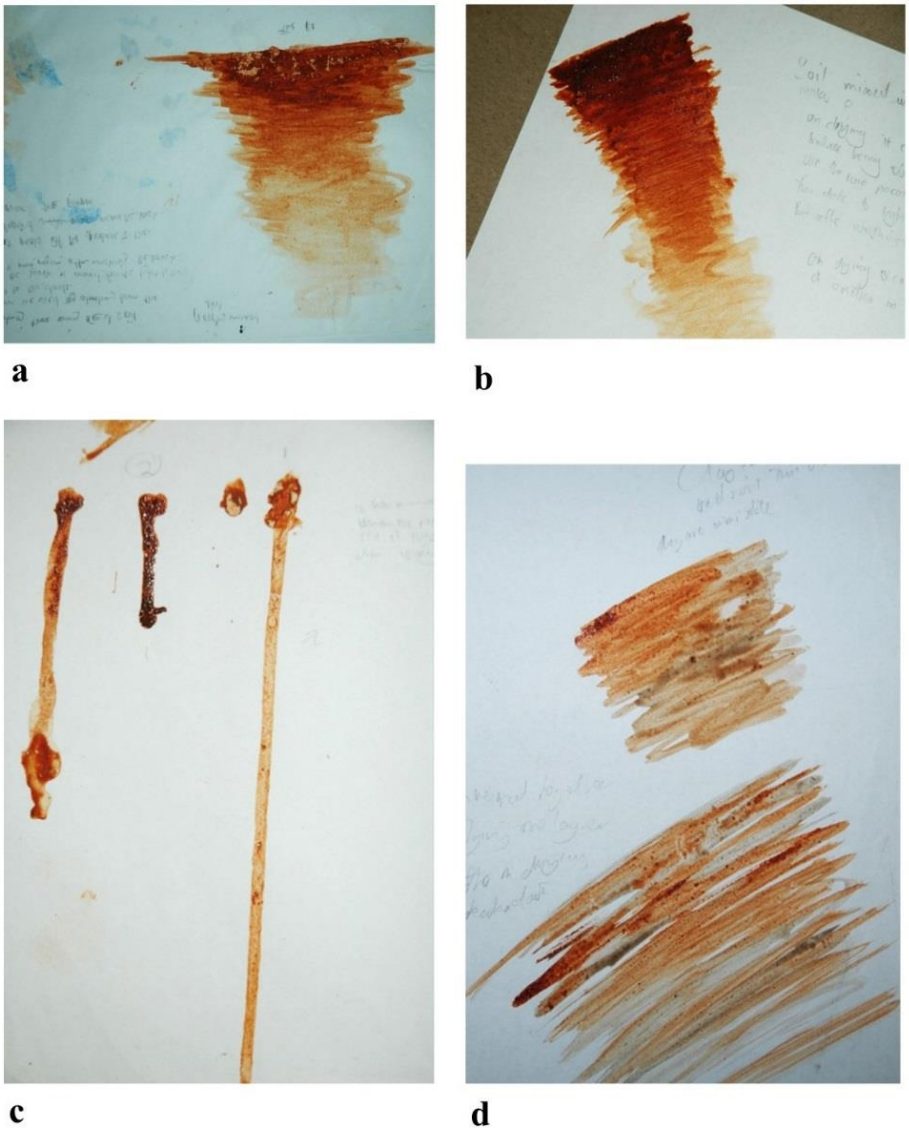


Plate xxx: Flexibility of soil in liquid form

Group: C

Material: Soil on bond paper

Tools: Fingers and brushes

Size: A5 for **a** and **b**, A4 for **c** and **d**

Source: Author

Plate xxx above presents the different samples tried in the mixing and application of soil as a material. In image **a** and **b** participants in group C, mixed soil with water. They tried to apply it on the paper. The reactions from both images were different; if you look closely sample **a** was solution mixed with smaller quantities of water which made it highly concentrated

and couldn't easily stick well on the paper as their selected, in **b** the they added much water than before and the brush could easily register different tones. In sample **a** the medium started peeling off the paper after drying unlike in sample **b**.

In sample **c** and **d** are a results after participants realising that if soil is mixed together with sugar it can be easier to apply on the surface and it can stick well on the surface. In their statements as delivered by a representative of group **C** said; " after seeing un successful results we got from previous sample, we had to find a better way of fixing our drawings. Therefore, we applied the idea of mixing soil with sugar, which was borrowed from our past experience in mixing powder colours with sugar in painting classes. The results were positive due to our expectations because sugar became fixative."

a **b**

Plate xxxi: The feast

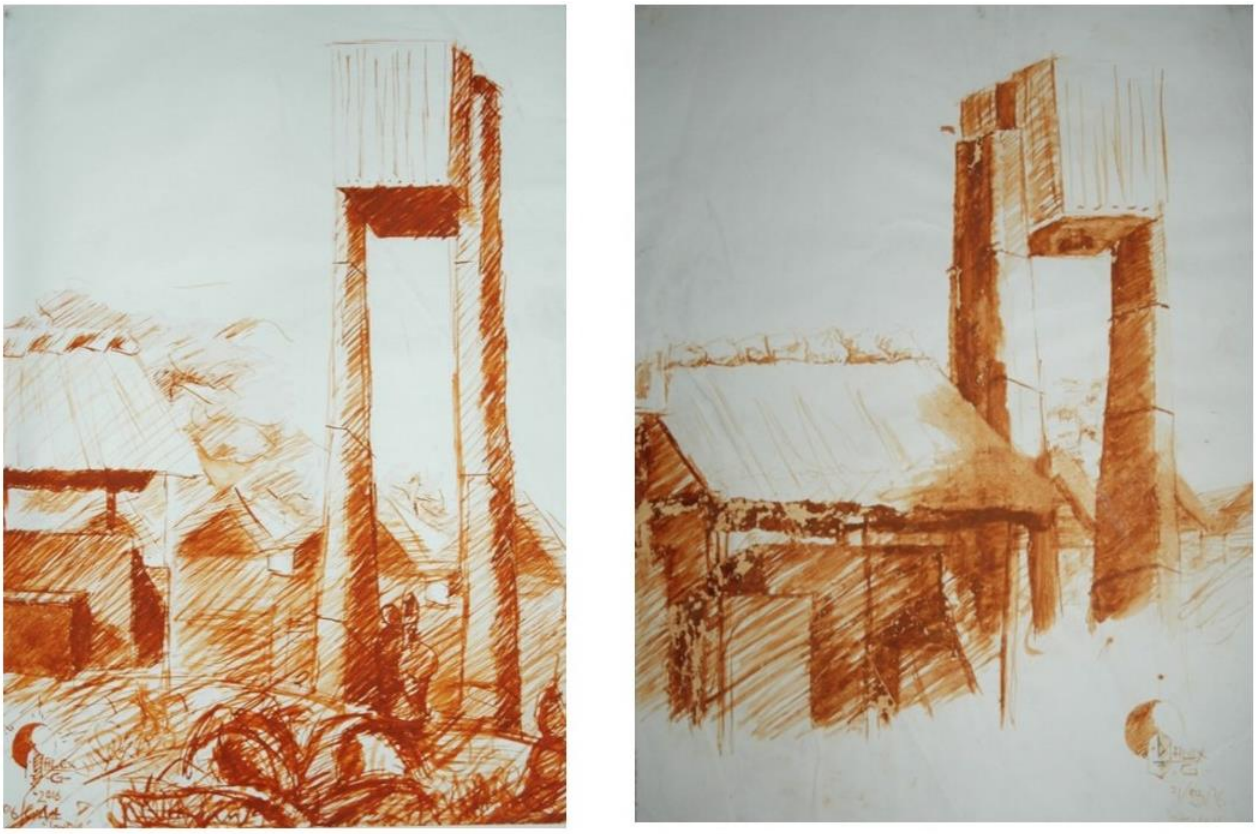
Group: C

Material: (**a**) Soil on bond paper and (**b**) Soil and sugar on bond paper

Tools: Brushes and fingers

Size: A4

Source: Author



a b

Plate xxxii: Art Department

Group: C

Material: Soil on Bond paper

Tools: Brushes and fingers

Size: A4

Source: Author

Plate xxxii: Art Department above exhibitis visual impression participants attainde after applying soil on the surface using haching style. Aesthetic values of the design proved its character as a material is not limited. Participants reveals that; " soil as a material is soft, it friendly with different surfaces. It can be subject to change if needed in the design process. We just use water."

Plate xxxiii: Still life

Group: C

Material: Soil on bond paper

Tool: Brushes

Size: A4

Source: Author

Plate xxxiv: Subconscious

Group: C

Material: Soil on Bond paper

Tools: Brushes

Size: A4

Source: Author

Referring to **Plate xxxiv** a brush was used in a scribbling style. Soil was mixed in different quantities of water and later applied the washes on the surface which is a paper in stages, starting with light solutions to dark solutions.

Plate xxxv: Reflection

Group: C

Material: Soil and pen ink on Bond paper

Tools: Brushes and Pen

Size: A4

Source: Author

Observing **Plate xxxvi: Reflection above,** participants applied different washes of soil to create marbled effect then later developed and forms following the mappings and inspirations to develop form to enhance the design.

Plate xxxvi: Joel

Group: C

Material: Clay bodies on bond paper

Tools: fingers

Size: A4

Source: Author

In **Plate xxxvi: Joel,** participants applied soil washes using fingers as a tool. This is different from all other drawing made using soil. According to their logbook records say they used clay

soil which they picked from wasted sculpture from the studio and decided to use fingers because wanted to have some new effects.

5.2.3 Cow-dung (Group D)

Cow dung is discharge from the cow's stomach after digestion, this can be regarded as faeces. It was collected from the compound of DAID. It was still wet in solid form and then mixed with water to liquefy it. Participants used different ratios of Cow dung to Water, in different containers. When the solutions were applied on bond paper as a surface a variation of tones was registered. Please refer to **Plate xxxvii** below.

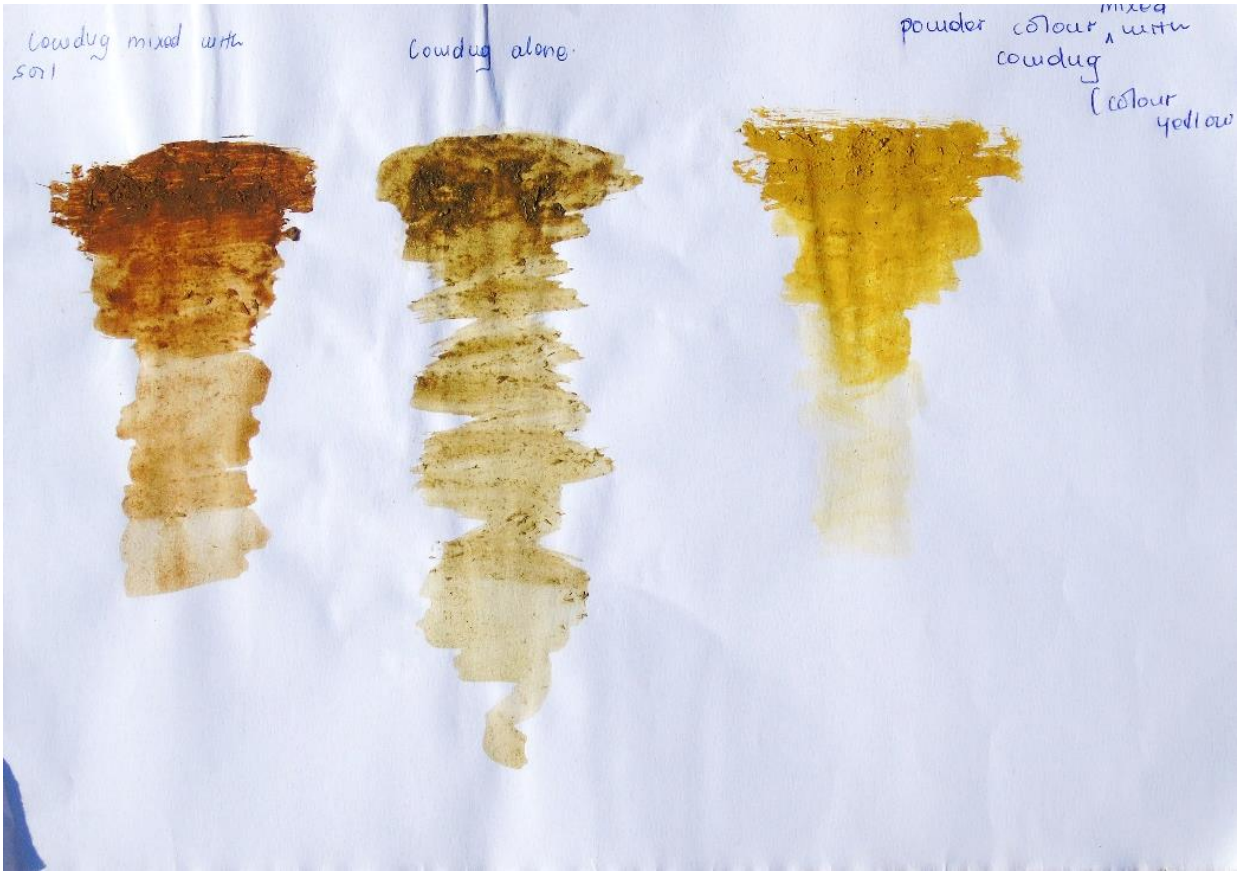


Plate xxxvii: ***Cow-dung***

Group: D

Material: Cow-dung on paper

Tools: Brushes and fingers

Size: A4

Source: Author

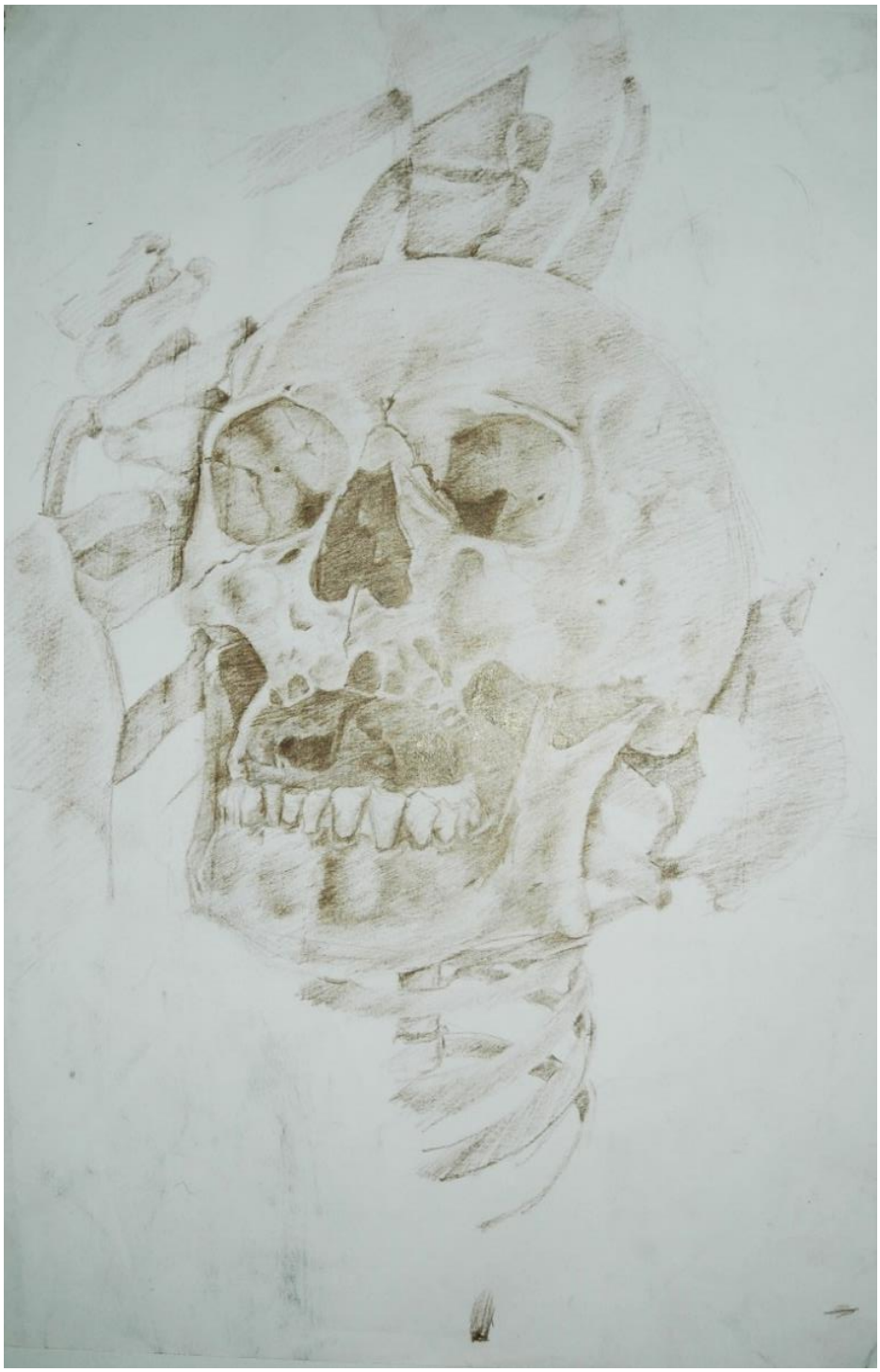


Plate xxxviii: *Walumbe ii*

Group: D

Material: Cow-dung on paper

Tools: Brushes and fingers

Size: A4

Source: Author

Plate xxxix: *Musisi* (Earth quake)

Group: D

Material: Cow-dung on paper

Tools: Brushes and fingers

Size: A4

Source: Author

Analysing **Plate xli: Walumbe ii, and Plate xli: Musisi (Earth quake)** above in comperision to **Plate xlii: Cow-dung.** Like leaves, cow dung designs participnats and I oberved the changing in visual quality as material was setting. Stronger intensities of green started to

fade out, until the artwork dried completely. The number of significant tonal grades in the composition reduced from six (6) to four (4) which was a big change. We realised a need to carry on futher experiments to discover a good fixertive that can keep the intensities permanent. Howere we were limited by time.

5.2.4 Leaves (Group E)

Leaves were plucked from the pumpkin plant in the Art department environment. They were squeezed using hands to get the green Chlorophyll. The dark green liquid was divided into four portions. Mixed with water of different ratios that is to say 1:0, 1:1, 1: 2, 1:3, 1:4, and 1:5. These ratios were intended to create solutions that could give different tones to create light in he registration process on the surface. The solutions were applied on the surfaces by using a brush and the results were positive please refer to **Plate xl** below respectively.

Plate xl: Liquid from leaves

Group: E

Material: Chlorophyll on bond paper

Tools: Fingers

Size: A4

Source: Author

After, the material was tried out to create geometrical forms before being used used in complex compositions please refer to Plate xli below.

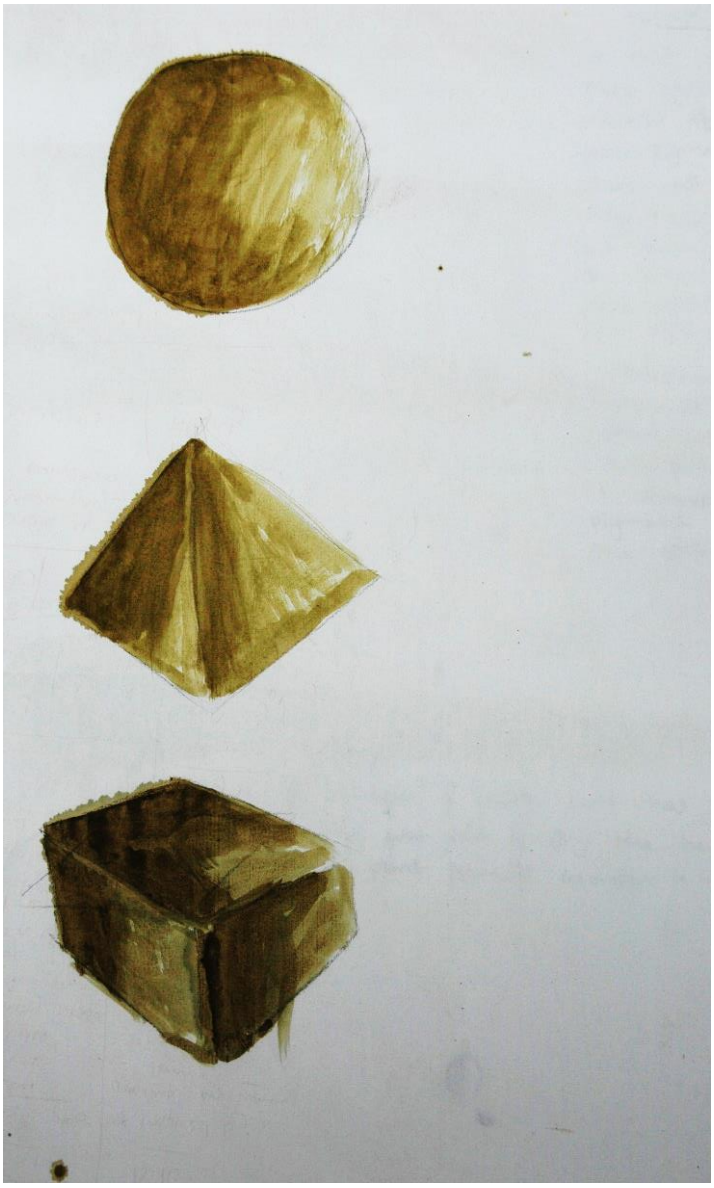


Plate xli: Geometrical shapes

Group: E

Material: Chlorophyll on bond paper

Tools: Brushes

Size: A4

Source: Author

Participnats noticed that; fresh Chlorophyll had high concetration with thick green in the appearance. After applying it on the surface using brushes and fingers to create marks, designs appeared to be with a full scale of tones. However, when the artworks dried up the visual quality of the material values started change and designs becomes hazy slightly. This

compromised design quality in terms of aesthetics please observe to plates **xli** and **xlii** below. Therefore a better fixative has to be discovered to sustain the visual quality of the material.

Plate xlii: *Wakovu* (The snail)

Group: E

Material: Liquid from leaves

Tools: Brushes, fingers and pen

Size: A4

Source: Author

5.2.5 Charcoal (group F)

Charcoal from burnt wood was collected from a Kiln powered with firewood, in the Department of art and design. The charcoal tablets were crushed into powder form because it was not sizable enough to be used in drawing practice with ease and the powder was used in two techniques; as powder material and as a liquid material as desctibed below.

Charcoal in powder form was smeared on the surface using fingers while imitating the desired the likeness of a selected insperational object and then later erasers were dragged on top of the surfe covered with charcoal to create marks for designing purpose. After successful intended design in the experimentation process, fixative was sprayed on to make the design permanent please refer to **plates xliii, xliv** and **xlv,** balow respectively.

Plate xliii: ***Bukadde magezi***

Group: F

Material: Charcoal in powder form on paper

Tools: Erasers, Rags and Fingers

Size: A4

Source: Author

Plate xliv: After meal

Group: F

Material: Charcoal in powder form on paper

Tools: Erasers, Rags and Fingers

Size: A4

Source: Author

Plate xlv: *Ssebo- aseka* (July)

Group: F

Material: Charcoal in powder form on paper

Tools: Erasers, Rags and Fingers

Size: A4

Source: Author

Wet charcoal was created by mixing charcoal powder and water in six different ratios; 1:0.5, 1:1, 1:1.5, 1:2, 1:2.5 and 1:3. The quantities of charcoal remained the same but water quantities kept on increasing depending of how may lighter tones in gradation each participant wanted in their compositions. The solutions were applied applied on different surfaces using different tools depending on the artists' creativity please refer to Plate **xlvi** below.

Plate xlvi: Contemplation

Group: F

Material: Charcoal in liquid form on Bond paper

Tools: Brushes and fingers

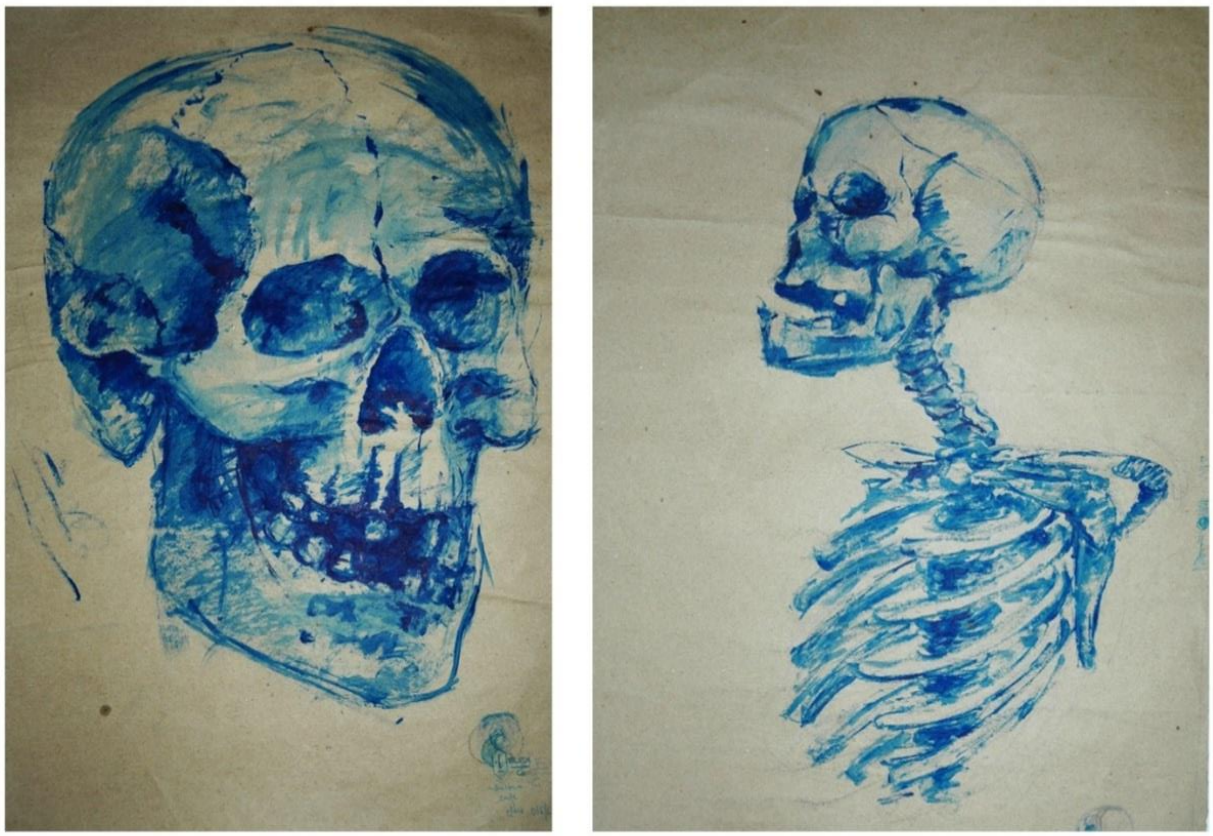
Size: A4

Source: Author

5.2.6 Paste (Group G)

Printing Paste is a material used to decorate fabrics with prints. Many remnants of the material are dropped by learnerswhile printing in studio. Learnerstook it as an advantage to find ways of using the useless remaining paste to make drawings and paintings.

The material was contraled by diluting it with water in oder to get lighter tones in the wash style please refer to plates **xlvii, xlviii,xlix and l,** below correspondingly.



a b

Plate xlvii: Walumbe (Death)

Group: G

Material: Paste on Craft paper

Tools: Fingers and Brushes

Size: A4 for each artwork

Source: Author

Plate xlviii: Late date

Group: G

Material: Paste on Bond paper

Tools: Fingers and Brushes

Size: A4

Source: Author

Plate: Late date above, Participants produced it using fingers in the beginning to create under painting layers of washes with different tones. After when the first layers of paste had set, they used a brush to create some few details with dark lines- in the design.

Plate xlix: Freedom

Group: G

Material: Paste on Bond paper

Tools: sticks, brushes and fingers

Size: A3

Source: Author

In **Plate** above, participants used a mixt of styles in applying paste to register a design. They cut a motif on the potato, creating the negatives and positives and later immersed in paste to pick the substance. Later they stamped it on the surface following the highlighted image. After creating a pattern from, they stamped motifs and poured water on the surface. They lifted the art work to let the liquid flow in a single direction. Participants declared that the stamping techniques made the drawing process easier because the material was flexible and positive in creation both tactile and visual texture.

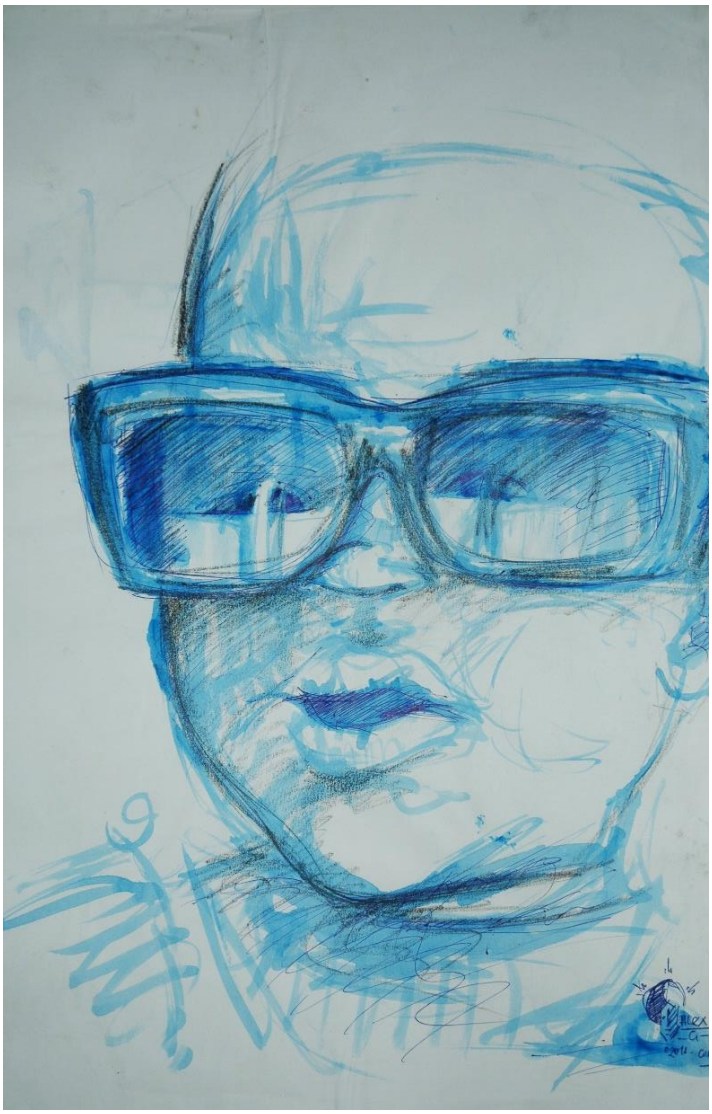


Plate l: Portrait 1

Group: G

Material: Paste on Bond paper

Tools: Brushes and pen

Size: A3

Source: Author

Plate li: The breakfast

Group: G

Material: Paste on Bond paper

Tools: sponge, fingers and brushes

Size: A3

Source: Author

Referring **Plate l: Portrait 1** and **Plate li: The breakfast** above, participants applied paste in the different style for example in the former it was applied using brush in the scribbling style and in the latter the brush was used to create hatches to enhance the design.

Participants further revealed that the use of paste in studio practice was a great opportunity which opened up their mind to start seeing some materials differently. “all along we could not think that paste can also be used in other discipline of art other than printing fabrics”.

5.3 Participants’ experience after studio practice

After the final presentation of studio findings in the exhibition, I interviewed participants about their experiences in the whole studio practice process in order to establish the intrinsic impact the study contributed to their attitude toward the use of unconventional materials in art education and the following where their generalised submissions in response to the questions asked during the interview.

5.3.1 Have you ever used any unconventional material in art education before this studio experimentation process?

These are the most common answers participants gave in regard with the question;

I have never practiced with any unconventional material, because at our high school were provided with every necessary material needed in our art rooms.

No, because were not tusked to do that in our assignments therefore so I could not find out about then.

Since my child hood, I have been exposed to only shopped materials in my studio practice

This was new idea to me I have never seen it anywhere.

Therefore, the above answers confirm that the participants in the studio experimentation had no background knowledge and skills about unconventional materials in their learning and art.

5.3.2 What have you archived or learnt out this experimentation process

Participants gave the following answers about the question.

This experimentation process has provided me with an opportunity to acquire freedom to pour out my world of thinking to the public. The studio experimentation session has exposed me to different free materials that I can use without having to foot bills.

I have been having boring studio practice because I was experimenting with the same materials since I started art in high school. Participating in the experimental studio practice has rejuvenated my passion and attention for studious learning sessions. With a variety of materials, I am exposed to, I have learnt how to mix and apply wet unconventional materials and create different tones.

All along in my entire studio practice I have been working alone and struggling too much in finding solutions for my set challenges. However, working together with my classmates has helped me to experience the power behind working together as groups towards solving the existing challenge more so which are material related.

Studying works of other artists gave me an insight on how to approach materials before starting to experiment with our materials in groups. However, the studio experienced provided me a plat form to prove my anticipations that I gained from analysing and discussing artworks of other artists.

The experimental studio practice has helped me to expand in the knowledge and skills of appreciating artworks, learning from other artists and application principles and element in production process of an artwork.

The above statements from the participants to the question proves that, the experimentation process was useful to their educational career as teachers more so in studio technology. The responses exhibit positive attitude towards, selection and application of unconventional materials.

5.3.3 What is do you think about unconventional materials in comparison to conventional materials

Some challenges appear to be big before sharing them together as stakeholders. I have realised after sharing our studious challenges solutions are generated collectively. I feel material is no longer my challenge now I can turn everything into material and I express myself as I wish, in regard of what I am articulating. I no longer need conventional materials to do my assignments in disciplines like drawing painting and sculpture.

I have learnt to focus on aesthetics and ergonomics whenever I am making any production during studio practice. I fell this has improved my craftsmanship while dealing with different materials.

I am so proud to get exposure to these new materials in my art career. Because I have now found new free materials like soot, soil, and chlorophyll which I can work with in my daily practice without spending. I do not need conventional materials to do my class assignments because unconventional materials have reach characters, which I can manipulate to my advantage during studio practice.

I am so fascinated with the accidental effects; I saw a pool of creativity in using the materials from the surroundings that is waiting for further ventures. My drawings have changed which I dint experience while using conventional materials. Unconventional materials ignited on aesthetical aspect of drawings and made them unique from other artistic works. This is a value, which I do not get from conventional materials.

I enjoyed the experimentation process because I never had studio learning sessions that could empower me in utilizing my environment to the maximum in studio practice. I wish to proceed with personal set challenges in using unconventional materials and I think I have a free better substitute to conventional materials.

The comments above from the respondents about the question implies that participants prefer to continue using unconventional materials to conventional materials in studio practice. Given that, they are easier to access, cheap and unique.

5.3.4 What do you think about you using unconventional materials in your studio practice?

I feel my challenges of affording conventional materials to execute my course work assignments in painting, printing and drawing lecture are solved. I am to carry on the knowledge forward even in my studio technology while teaching my learners in high schools.

The use of soil in our experiments has inspired me into relating my studio practice to the indigenous knowledge in our village communities. Soil and cow dung we use it in my home village in Karamoja; Cow dung to finish the interior flows and soil colours to decorate the exterior of our houses. However, I am so impressed to see that they can be used to decorative artworks and to execute my course assignments. I am to carry on the knowledge into my studio practice and find more unconventional materials in my environment.

Some of these materials like the cow dung; I never expected them to be useful in the artistic academic sense. I have been spending much of my pocked money of imported colour from abroad but now my mind has been inspired to start experimenting with every matter around me as a potential material.

I have learnt how to use different materials both wet and dry media. However, in our group we realised the conventional fixatives cannot easily fix some unconventional materials. Therefore, I feel challenged to find better fixatives for my favourite materials soot and powdered charcoal. That is my next project.

Responses from the above implies that participants were motivated to continue using unconventional materials in their production processes. They acquired knowledge, skill and positive attitude form the experimentation and they were willing continue carrying on their studio practice with unconventional materials because they are unique, cheap and easy to access.

5.4 Summary of the chapter

In this chapter, I presented studio findings from experimenting with selected unconventional materials. Data in both photographic and text formats have been interpreted in line with the purpose of the study, in consideration of the objectives. In the flowing chapter I discuss, make conclusions and recommendations basing on the study findings and literature.

6. Discussion, Conclusion, Reflections and Recommendation

6.1 Overview

In this chapter, I discuss the study findings; make conclusion, reflections and recommendations. The study purpose derived from the statement of the problem was to; carry out studio experimentation with selected unconventional materials from environment to create designs and positively empower student teachers towards innovative studio practice in art education. Thus, the discussion from which conclusion, reflections and recommendations is guided by objectives drawn from the purpose bellow:

a) To identify different unconventional materials that have been used in studio practice to create art works.
b) To establish attributes of Art education that can guide student teachers while exploring with unconventional materials in studio practice.
c) To experiment with the selected unconventional materials to produce art works in Studio practice.

6.2 Discussion

Study findings are in text and pictorial formats; therefore, citations or plate numbers might be presented r referential purposes whenever required in the discussion. Study findings are discussed below following the study objective:

6.2.1 Unconventional materials that have been used in studio practice to create art works.

Unconventional materials were identified during studio experimentation as a result of group reflections, excursions, critiquing and reviewing related literature to the study as methods of learning under Art education as recognized by Vygotsky's in Gross and Gross (2016, p. 36). This provided participant's broader understanding about identification, collection and preparation of materials in studio practice as suggested by to by scholars such as Boud & Walker (1998, p. 1), Eisner (2004) and Chickering & Gamson (1987).

Different scholars and artists in chapter three from Plate **i** to Plate **xi**, demonstrate a number of unconventional materials used by different acclaimed artists and art educators in studio practice to produce art works. Some materials have been used to create three dimensional (3D) and two dimensional arts (2D). They were inspirational to participants more so student teacher. However, in studio experimentation, participants identified a number of unconventional materials which were not part of what acclaimed artists had experimented with before; These includes soil, cow dung, leaves, Jik and Ink, please refer to plates from Plate **xxvii** to **li** in chapter five.

Soot as unconventional material in experimented with in this study, had been used by other artists like Weazher Mayanja before in Plates **x** and **xx** in chapter two. However, it was selected by participants and I because of its special accidental effects and low costs one has to incur in acquiring it compared to conventional materials. Therefore, study provides Art educators and student teachers with a variety of materials one can select depending on the tusk to be accomplished in studio practice.

Media as materials in Art education are classified under two categories wet and dry mediaMayanja (2015, p. 30). During studio experimentation we grouped them under tow categories which considered the makeup aspect of materials, that is to say natural and synthetic materials. Latter categorizing was highlights the source and the nature of the materials we were to experiment with. Which prepares the learners' understanding with the idea how to get access them. This was also economic oriented to impact on the learners' attitude towards their learning environment in art education as supported by artists in Bjørnskau (2012).

Natural unconventional materials consisted of all unconventional materials that were not hybridized with industrious chemicals by the time of collection from the source- purely organic and indigenous. They were echo friendly. The identified and collected for use were soil, cow danger, charcoal, and leaves (chlorophyll). Under natural materials the study was inspired by artworks in Plate **ii** and **iii** from unknown artists, in chapter three this study.

Synthetic unconventional materials these were all unconventional materials experimented with in studio practice under this study are manufactured under industrial process; mixed chemicals and any form of modern technology. Among these materials were soot, paste and a combination of Jik &Ink please refer to Plate **xxvii (The Butterfly)**, Plate **xxix (Ewaffe)** and Plate **li** (**The breakfast)**. The study drew inspirations from artist's works presented in chapter three of this study please refer to Weazher Mayanja **Plate x**, Seo Young Deok **Plate v**: Nirvana and El Anatsui **Plate vii.** All materials in this study can be acquired from learning environment at no

monetary costs incurred. Therefore, the entire studio experimentation process in Art education can economically friendly, only learner's creativity can be limited.

The selected unconventional materials were new to majority learners; they had never thought of exploring their potential in registering artistic designs; participants in group C *chapter five revealed that Since childhood, they have been exposed to only shopped materials in studio practice and participant* and participants in group B added that *This was new idea to them they have never seen it anywhere*. This implies that most of the participants in the studio experimentation had little background knowledge and skills about unconventional materials in their learning Studio practice in art education is meant to inspire learners into thinking out of the box and create new knowledge not to recycle knowledge. this is confirmed by Albert Eistem in (Robinson, 2011)

However, some few participants had basic knowledge about some unconventional materials like Soil, Charcoal and Cow dung- used in indigenous communities to decorate on the architectural figures this is evident in Plate **i**, **ii** and **iii** in chapter three. Some of the participants in group C confirms that; *"The use of Soil in our experiments has inspired me into relating my studio practice to the indigenous knowledge in our village communities..."" ...Soil and cow dung we use it in our home village in Karamoja; Cow dung to finish the interior flows and soil colours to decorate the exterior of our houses. However, I am so impressed to see that they can be used to decorative."* This implies that, learners are surrounded with variety potential unconventional materials to select from without facing tuff financial challenges associated with conventional materials Bjørnskau (2012). However, the curriculum and teachers in studio practice are silent about the need to investigate technology behind creation artworks using free unconventional materials to make learning cheaper for student teachers which opposite to what Freedman and Stuhr (2004, p. 825) and De Haan (2006, p. 19) suggests.

Some of the identified unconventional materials used by different acclaimed artists are borrowed from indigenous knowledge like Soil in **Plate i** and *Obukeedo*in in **Plate xv** Basket in terms of appropriation. These were great inspirations to participants in identification and section of Unconventional materials in studio practice. In this exercise, attribute of learning in art education like remembering, understanding, analyzing, evaluating and creating as extracted from Bloom's taxonomy in Krathwohl (2002, p. 1) and Forehand (2010, p. 2) were instrumental in guiding the study.

6.2.2 Attributes of Art education that can guide student teachers while exploring with unconventional materials in studio practice.

The study established a number of Art and design attributes in Art education that participants could base on while experimenting with un conventional materials in studio practice.

Elements of design referred to in chapter three by Roueche and Shirley (2010, p. 1) are among attributes that guided participants while appreciating works of acclaimed artists and experimenting with unconventional materials in studio practice. Like Stan Bossard in **Plate xii: Untitled** and Bartel (2016); learners used light as a major element to produce other element s on the two dimensional surfaces. For example, participant G1 narrates that. *"Beginning with depiction of light on tonal scale made the whole process of drawing easier for us; to direct our media tones in the registering of forms on their paper."* Participant's argument comes to life by referring to studio findings that is to say **Plate xxx**: Flexibility of soil in liquid form, **Plate xxxvii:** Cow-dung **Plate xxiii**: Tonal scales in clay and **Plate xli**: Geometrical shapes. The findings infer that light as an element was used a starting point into establishment of lines, shapes and textures to develop an understanding of materials under investigation.

Principles of Art and design such as movement, balance, dominancy, rhythm, proportionality, harmony and proximity as defined by Hale and Shirley (2000, p. 1) Where utilized in the process of composing elements while experimenting with selected materials in studio practice for example participant B2 confirmed that; *movement and balance help me attaining proper distribution of materials and materials while considering their properties such as intensity and values*. Referring to designs in **Plate xxvii: Ewaffe, Plate xxxii: Art Department** and **Plate: Still life**; exhibits participants' ability to manipulate materials to attain aesthetics in their compositions.

I further recognised use of inspirational objects as suggested by Freedman (2000, p. 316). Natural objects can be easily manipulated to articulate different themes considered by learners as the intrinsic realm of design in Art education. For example, group D in their **Plate: *Walumbe* (Death),** *Walumbe* literally means Death. participants expressed their feelings about life after death. The use of inspirational objects is supported by (Aristides, 2011)who referred to nature It is the source of all beauty.

6.2.3 Experiment with the selected unconventional materials to produce art works in Studio practice

Under this objective, I discuss the findings in consideration of participant's experience and the practical results attaining from studio experiments after experimenting with selected unconventional materials.

The process of studio experimentation on unconventional materials was carried out using group work and project working approaches. These yielded positive results by the end of the study as discussed below.

The participants were successful producing art works in naturalistic, abstract and semi abstract to create impressive and expressive designs for this study please refer to **Plate xxvii and Plate li: The breakfast.** However, the designing process did not completely depend on the use of elements and principles of design and other attributes of design or disregard them; instead they were only used to add emphasis so as to bring simplicity to ease dissemination of content and attach aesthetic and ergonomic values on the art works in line with art education.

The drawn design presented in this research where produced using two methods of drawing that is to say negative drawing and positive approaches of drawing. Negative drawing was employed while experimenting with Charcoal in powder form **Plate xliii: Bukadde magezi,** Jick and Ink **Plate: *Ewaffe,*** And Soot **Plate xxvii, Plate xxviii**. Participants had to fill the surfaces with selected media to investigate and later dragged tools to create marks on the surfaces. This approach of drawing was new to most learners for example participant A1,2, 5 and declared that; *We couldn't expect to get anything pleasing out our experiments because we had never used negative drawing before, but our studio results where surprising.* The method can be borrowed while experimenting with other new unconventional materials in studio practices.

Other materials like soil, cow dung, and paste proved to give better results if used in positive drawing approach. Like in plate **Plate xxxi: The feast, Plate xlvii: *Walumbe* (Death), Plate xlii: *Wakovu* (The snail) and Plate l: Portrait 1,** participants started with light washes and keep on adding dark tones to build up tones in red soil.

The participants and I also found out that tools and materials as attribute of Art education in studio practice, do not have a permanent relationship. They are mariable for example creating artwork in **Plate xxxvi: Joel**, participants used a brush which was also while under the same medium fingers where used in making different effects please refer to **Plate: The feast and**

Plate: Subconscious. This implies that unconventional materials have no limitations to tools hence broader possibilities creating designs.

Participants and I encountered an aspect of accidental effects with some materials like Soot **Plate xxvii and Plate xxviii** as compared to **Plate xliv: After meal.** some effects in the composition where not intended but participants had to use them to their advantage. Therefore, student teachers have to be vigilant on the reactions of materials while applying them on different surfaces.

The experimentation process granted participants an opportunity of testing their developed epistemic and ontological perspectives. To some participants the findings were new knowledge that they have never been exposed to; *we have never practiced with any unconventional material, because at our high school were provided with every necessary material needed in our art rooms." and participants in group B on the same question answered "No, because were not tusked to do that in our assignments therefore so I could not find out about then".* The statement from the former implies that the attitude was not negative but they found no need to experiment with free materials like unconventional materials even though they were facing a challenge of insufficient materials in studio practice. Both the former and the latter buttresses the need to promote the inclusion of unconventional materials studio practice to improve on art education.

6. 3 Conclusion

The purpose of this study as re highlighted in the overview of this chapter was to carry out studio experimentation with selected unconventional materials from environment to create designs and positively empower student teachers towards innovative studio practice in art education. From the study purpose objectives were drawn and thus the conclusion is structured basing on study objectives.

6.3.1 To identify the different unconventional media that has been used in studio practice to create designs.

Various unconventional materials were identified as potential materials that can be used in studio practice under art education and artists like Paul Villinski, Seo Young Deok, El Anatsui, Erika Iris Simmons, Weazher Mayanja, Benon Lutaya and Giulia Bernardelli set an example for this study; their works were considered by participants and I as inspirational aids. The study also identified other unconventional materials that have not been common in art

education such as leaves, soil, cow dung, soot, Jik and ink they were test with the guidance of attributes of art education and proved to be materials of high potential for studio practice. Therefore, student teachers can utilize them in executing academic assignments and self-study.

6.3.2 To establish attributes of Art education that can guide student teachers while exploring with un-conventional materials in the studio practice

A number of attributes of Art education were established and guided participants and me in the experimentation processes of working with unconventional materials in studio practice. These included principle of design, elements of design, techniques, styles, message, inspirational objects, tools, surfaces. The established attributes have been used by different artists around the world to create compositions, to gauge the successfulness of a design in terms of aesthetics and ergonomics in Art education. Art educators have used them to critique art works irrespective of materials, purpose or dimension. Therefore, I identified them as benchmarks student teachers can consider the to determine the application of unconventional material was in creation of art designs in studio practice.

6.3.3 To experiment with the potentials of selected un-conventional media and produce designs in Studio practice.

The study also contributed on changing participants' attitude here bay referring to student teachers and lecturers' attitude towards; possibilities of using unconventional materials both from indigenous communities and synthetic contemporary substances in accomplishing academic tasks.

The participants and I successfully experimented with different selected un conventional materials in studio practice. The experimentation considered mostly use of principle and elements of design to create aesthetical artworks. The experimentation further revealed the potentiality of unconventional materials to visualize designs and therefore can be used to as substitutes to expensive conventional materials in studio practice with the essence of executing academic of self-study assignments under art education.

There the study is a commendable guide concerning experimenting with new un conventional media in studio practice under following attributes of Art education.

6.4 Reflections and Recommendation

Considering the study findings in line with set objectives and conclusion in this chapter, I make reflections and draw recommendations, which can be put into consideration in further studies that might be initiated by me or other scholars.

Drawing is a foundational conduit of understanding materials and other attributes of art education. In studio practice. Therefore, it should be considered first by art educators while introducing new complex concepts for knowledge dissemination or problem solving.

I recommend that, further investigations should be made on unconventional materials more so those which were not included in the study scope to expand the realm of materials culture in art education; The participants and I in this study, focused on the media fraction of unconventional materials and less attention was put on finding out potentials of unconventional surfaces that can be used in studio practice. Surfaces are influential fraction of materials in studio practice; if considered in other studies might lead better innovations in studio practice for Vocational Art education.

Further investigations on unconventional media that were not included in this study may also be also considered by other scholars in their studies who wish to expand the realm of unconventional materials for studio practice in Art education.

Unconventional materials should become a fully-fledged area of study in University curriculums of art education. This might encourage student teachers to be more innovative while executing tusks in studio practice during their period of learning. After graduating, discovered innovative ideas can be extended to High school level when they start teaching. Consequently, it will contribute to discovery of new materials which are cheaper, easy access with unique visual effects compared to conventional materials- making learning art education cheaper.

Learners should always be involved in research projects that are intended to improve on their earning conditions. This can inspire them into embracing new practical knowledge to their practice. This might contribute to the improvement of their competencies in the field of their profession. Therefore, I recommend that collaborative research between learners and their mentors should be encouraged in by academic institutions.

Some unconventional materials in this study like Jik and soot produces bad order in the experimentation process which might not be health friendly for the participants and others are

no friendly to fabrics- they can create permanent stains. Therefore, I recommend that protective gears should be used to cover the most sensitive parts of the body before starting the experimentation process in studio practice.

Principles and elements of art and design as great components of art education were proved by participants; they are excellent starting points into dipper understanding and experimenting with unconventional materials to create artworks in Vocational art education. Thus, I recommend that art educators always its prudent consider principles and elements of design into discovering and disseminating of new academic practical knowledge in studio practice.

There is a need to carry out a studious investigation into the right fixatives that can work well with some materials participants experimented with in this study. The available conventional fixatives are too expensive and they can hardly prevent materials like soot and powdered charcoal from smudging. Unfixed materials put durability of artworks at stake. Therefore, I recommend that participants or other scholars may choose to venture into various fixatives that can be used fix specific unconventional materials.

Group work as a method of teaching and learning while experimenting with a variety of unconventional materials, leads to highly productive processes. Studio findings could be received in time and recorded in different logo books of respective groups. This provides safe custody of generated data during the study. The method was useful in instilling iteration and networking amongst student teachers, other participants and me. Big numbers of participants were could be easily monitored in line with study objectives. Therefore, I recommend use of group work method in other research projects which have subjects as participants in the experimentation process. This would guarantee collective working in finding new knowledge and also to promote learning among student teachers or learners.

Student teachers need to be encouraged to use Indigenous Knowledge as a source of inspiration or point of reference in modern Vocational art education. This will help in attitude change in learners towards appreciating their prior experiences from their indigenous communities which sometimes may provide solutions when there is a need.

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Appendices

Appendix 1: Interview guide studio participants

Unconventional Material practice in Art education at Kyambogo University: Encouraging student teachers to embrace innovative approaches towards Studio practice

1. Name
2. Registration number
3. Group
4. Materials experimented with
5. Have you ever used any unconventional material in art education before this studio xperimentation process?
6. What have you archived or learnt out this experimentation process?
7. What is do you think about unconventional materials in comparison to conventional materials?
8. What do you think about you using unconventional materials in your studio practice?

The end

Appendix 2: Interview guide lecturers and commercial artists

I am by names MAYANJA Richard Weazher, pursuing a Master's Degree in Vocational Pedagogy in Oslo and Akershus University College of Applied Science. I'm carrying out a study; **Unconventional Material practice in Art education at Kyambogo University: Encouraging student teachers to embrace innovative approaches towards Studio practice**. The interview session will involve audio and video recording as approaches in gathering data. The information provided here will be used for only academic purposes and will be confidential. This is therefore, to request you provide me with the appropriate information. Thank you in advance.

1. Name of interviewee

2. Profession?

3. What is your level of education in Art?

4. In your own perspective, how do you understand Drawing?

5. For how long have you been practicing Drawing?

6. How do you use Drawing in your studio practice

7. Besides drawing, do you have other areas of specialization in Art?

8. What are some of the conventional media you have used in your Drawing practice?

9. Have you ever explored un-conventional media?

10. What aspects in drawing that guide you while experimenting with a new media?

11. What gaps have you identified in using un-conventional media in studio practice?

12. What is your take on unconventional media in comparison with conventional media?

13. Do you have any student or students under your mentorship in Art?

14. What is his or their attitude towards experimenting with un-conventional media during studio practice?

Thank you

Appendix 3: Letter to the Head DAID

KYAMBOGO UNIVERSITY

P. O. Box 1 Kyambogo, Phone: 041-285001/2 Fax: 041-220464

www.kyambogo.ac.ug

FACULTY OF VOCATIONAL STUDIES

DEPARTMENT OF ART & INDUSTRIAL DESIGN

15th March 2016

Head of Department

Art and Industrial Design

Kyambogo University

Dear Sir,

REQUESTING FOR PERMISSION TO CARRY OUT RESEARCH FROM THE DEPARTMENT

I am MAYANJA Richard Weazher, a lecturer in the above mentioned Department and a student pursuing a Master's degree in Vocational Pedagogy at Oslo and Akershus University College of Applied Science do write to you in request for permission to carry out my study.

The study entitled; Unconventional Material practice in Art education at Kyambogo University: Encouraging student teachers to embrace innovative approaches towards studio practice. It will be carried out using participatory action research method whereby it will involve Students, Lecturers Administrators and Technicians in the Department.

It seeks information about experiences in working with un-conventional materials to produce artworks more so Drawings in studio practice, teaching and learning process; approaches in extending knowledge about experimenting with un-conventional media in teaching and changing learner's attitude to stimulate innovativeness. All collected data will be kept confidential and be used for academic purposes.

I will be grateful if my request meets your consideration.

Yours faithfully

MAYANJA Richard Weazher

Lecturer/ Researcher

Appendix 4: Introductory letter

KYAMBOGO UNIVERSITY
P. O. Box 1 Kyambogo, Phone: 041-285001/2 Fax: 041-220464
www.kyambogo.ac.ug
FACULTY OF VOCATIONAL STUDIES
DEPARTMENT OF ART & INDUSTRIAL DESIGN
MASTERS IN VOCATIONAL PEDAGOGY PROGRAMME

14th August 2015

The Head of Department,
Art and Industrial Design.

Dear Sir,

RE: REQUEST FOR OUR MASTERS IN VOCATIONAL PEDAGOGY STUDENT TO UNDERTAKE A RESEARCH EXCURSION IN YOUR INSTITUTION/ORGANIZATION

Mayanja Richard Weazher of student No. s239218 is our student. we request you allow him together with his mentor carry out a baseline discussion to ascertain competency related needs, in doing this include "Future workshop" and "Analysis of work processes" in the different Department/Section in your Institution/Organization.

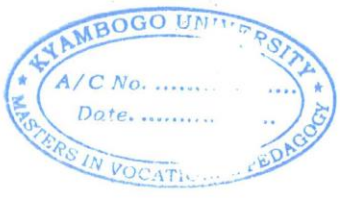
The Masters in Vocational Pedagogy is offered by Kyambogo University in collaboration with Oslo and Akershus University College in Norway and University of Western Cape in South Africa. It aims at developing capacity in terms of human resource that is urgently needed in the area of vocational and practical skills for both vocational schools and workplaces training.

As part of the study programme, the Master student in this programme undertakes Action Research Expedition both in Industry and Vocational Training Institutes/schools through which prevailing competency related needs are identified and an attempt to solve them is done.

Your positive response will be of great benefit to the nation in the area of Vocational Education and Training.

Thank you,

Serwaniko Chris
Coordinator, Masters in Vocational Pedagogy
NORHED MVP Project



Appendix 5: consent agreement

Date:

Consent Agreement

I am MAYANJA Richard Weazher, pursuing a Master's Degree in Vocational Pedagogy in Oslo and Akershus University College of Applied Science. I'm carrying out a study; **Unconventional Material practice in Art education at Kyambogo University: Encouraging student teachers to embrace innovative approaches towards studio practice.** In this interview, I seek information about your experience in working with un-conventional materials to produce artworks in studio, teaching and learning process; your approaches in extending knowledge about experimenting with un-conventional media in teaching and changing learner's attitude to stimulate innovativeness. This is therefore, to request you provide me with the appropriate information.

The interview session will involve audio and video recording as approaches in gathering data. This is for accurate documenting of information and time saving. The data can also be referred to at any time, report writing process in the process of writing. The information provided here, will be used for only academic purposes and confidential. However, if you feel your information might be misused in any way you are free to withdraw your consent. Thank you in advance.

Respondent's Name:.....

Signature:.....

Date……

Appendix 6: News article

arts

ART | BOOKS | SOCIETY | TRAVEL | CULTURE

Exciting look into the tadooba flames

By Dominic Muwanguzi

The tadooba, a tin wick lamp is a familiar object in many rural homesteads across Uganda. Even in urban areas, it is commonly used to light some roadside businesses that operate after nightfall.

In the case of the capital city, Kampala, food and fruit vendors, and street hawkers use them in suburbs like Nateete, Nakulabye, Bwaise, Kabalangala, Bweyongere, and Kalerwe.

Symbolically, the tadooba illuminates the difference in social and economic status between urbanites and the rural folk and even among the urbanites themselves. That illumination is the subject of an ongoing exhibition titled 'Tadooba Flames' at the Nommo Gallery in Kampala.

In some of the works on display, the artist; Richard Weazher Mayanja, juxtaposes the dark floating flames with abstract human figures and music objects on canvas to reveal the social context of the exhibit.

Literally these paintings offer a feel good appreciation of art because of their dreamy and decorative style. On the other hand, these abstract paintings are a figurative depiction of the human condition and behavior. Like the tadooba flame, the human condition is not static it can be luminous like the light of the Tadooba or it can be melancholy like the dark flames that choke you once you inhale them. Some of the painting are

fesses that his music has a direct influence on his art; sometimes he paints as a result of his music compositions. A validation to this inspiration is the dominant use of music instruments in his paintings and the feeling

of serenity that runs through the exhibit. The artist's tough childhood too is manifest in this show. The choice of subject matter, 'tadooba flames', is a metaphor of his personal struggles as a child.

When looked at this way, the 'Tadooba Flames' exhibit moves beyond sparking dialogue on social aspects of life to stimulating discussion of the notion of artists as subjects in their paintings.

The latter is essential in strengthening the artistic narrative of the artworks on display and cementing the

Appendix 7: Map of Uganda

Appendix 8: Observation guide

Unconventional Material practice in Art education at Kyambogo University: Encouraging student teachers to embrace innovative approaches towards studio practice.

The observation process in gathering literature was guided by the following objectives of the study:

a) To examine how acclaimed visual artists utilize media to create drawing.

b) To establish attributes of drawing that can guide learners while exploring with un-conventional media in the studio process.

Artist

Size

Title

Material/s

Tools

Process of production

Source of inspiration

Content

Contrast

Installation space

Environment

The End

Appendix 9: Logbook sample

Date:…….

Done	Learnt	Smart to do

Notes:……

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