

THE RELEVANCE OF THE VISUAL ARTS CURRICULUM IN THE PREPARATION OF PRE-SERVICE VISUAL ARTS TEACHERS IN UGANDA

Julius Ssegantebuka
Ndejje University, Uganda
E-mail: segajulius@gmail.com

Abstract

The research examined the relevance of the visual arts curriculum content with the view of assessing the extent to which it equips pre-service visual arts teachers with the knowledge and skills required for effective teaching. The study adopted a descriptive case study design. Data were collected from three purposively selected National Teacher Colleges (NTCs), six tutors and 90 final year pre-service visual arts teachers participated in this study. The research findings showed that teacher education institutions are inadequately preparing pre-service visual arts teachers because of the gaps in the Visual Arts Curriculum (VAC) used in NTCs. Some of these gaps are attributed to the structure of the visual arts curriculum tutors use in NTCs. The visual arts curriculum lacks explicit visual arts assessment strategies; it has wide and combined visual arts content to be covered within a short period of two years and the limited knowledge of the available art materials, tools and equipment. The research recommended the restructuring of the VAC to accommodate more practical; and the introduction of specialized knowledge in the visual arts education (VAE) to enable tutors decipher practical knowledge from the theory studied so as to adopt an integrated approach in VAE curriculum.

Keywords: case study, pre-service teachers, relevant visual arts curriculum.

Introduction

The nature and quality of the visual arts curriculum (VAC), determines its relevance in the pre-service teacher preparation. A relevant VAC explicitly outlines the content knowledge pre-service visual arts teachers are expected to acquire during their preparation (Curriculum Development Council-CDC, 2007). It also equips learners with content and pedagogical knowledge, the use of appropriate teaching methods, and demands reflection on values and beliefs about teaching; aligns curriculum content with objectives; and considers the learner and teaching and learning context in teacher colleges and schools (Feuer, Floden, Chudowsky, & Ahn, 2013; Marphatia, Legault, Edge, & Archer, 2010). A relevant VAC is designed to develop the unique cognitive capabilities that foster flexible, divergent, original, fluent, and imaginative thinking, by making art-students ponder multiple solutions based on information coupled with individual judgment (The Ontario Curriculum, Grades 1-8: the Arts, 2009). Studies in the visual arts (VA) enable students to experience distinct ways of thinking, communicating, reasoning and investigating. Learning in these modes increases students' abilities to develop life skills, use varied approaches to problem solving, collaborate with others and synthesize ideas (ACARA, 2011; The Ontario Curriculum, Grades 1-8: the Arts, 2009). Koopman (2005) claims that individual forms of art education develop specific skills, for example, visual arts and music improve reading skills; music enhances mathematical insights and spatial-temporal reasoning and drama is said to develop verbal skills, hence learning in and through VA positively impacts on pre-service visual arts teachers' learning. According to Sandell (2012) excellent VA teaching

engages all learners with art in a myriad of forms, ideas and purposes. It helps learners navigate through our visual world using two qualitative and interlinked experiential processes; these are creative expression and critical responses. In this case therefore; through the transformative process of creative expression, visual learners generate artistic ideas that can be elaborated, refined and finally shaped into meaningful visual images and structure. Through the informative process of critical response, visual learners perceive, interpret, and finally judge ideas connected to visual imagery and structures both past and present. However, it is possible to have a well-designed curriculum that clearly stipulates the content and pedagogy to be acquired without professionally trained tutors who can competently interact with it. Researches indicate that on top of tutors' ability to interact with the curriculum, availability of appropriate infrastructure and resources can have a great impact on the VAC's relevance. Besides, educational policies and administrative support can have an influence on tutors' practices and learners' acquisition of knowledge during the preparation of pre-service visual arts teachers.

Background to the Research

Uganda currently has five government aided national teacher colleges (NTCs) of which three are permitted to teach visual arts. These national teacher colleges provide training leading to an award of a diploma in secondary education (DSE), which is the minimum required qualification for teaching in secondary schools of Uganda. The NTCs use a visual arts curriculum, prepared by Kyambogo University which has the mandate for DSE training. Pre-service teachers are admitted to NTCs after completing a Uganda advanced certificate of education (UACE). It is a two year program and the pre-service visual arts teachers graduate with a DSE. In Uganda majority of the pre-service teachers seeking admission to NTCs are mainly those who fail to join universities and other tertiary institutions of learning because of their low scores or don't have tuition fees for the university education (Kagoda & Ezati, 2013).

During teacher preparation, pre-service visual arts teachers are exposed to a DSE curriculum which was centrally designed and is monitored by Kyambogo University. The DSE curriculum by policy was supposed to prepare pre-service visual arts teachers who only teach at ordinary level ("O" level; this is senior one to senior four). And its content and the mode of instruction were drawn from European model of which elevated and advocated for European views of representation of art. The architects of the new DSE curriculum therefore, disregarded and excluded the indigenous art forms and practices which were central in the old curriculum. To date, even after a period of four decades, the same policies are still evident in teacher preparation in Uganda. In this study the argument is that these policies have not only informed tutors' practices, but also hindered research in VAE which would have informed the subject, most especially about the relevance of the visual arts curriculum. Besides, the Eurocentric model of art instruction which has greatly influenced the teaching of art both in NTCs and Ugandan secondary schools since its inception, does not offer an explicit approach through which we can evaluate, understand and ensure quality preparation of Visual Arts teachers in Uganda.

The visual arts education (VAE) curriculum understudy includes disciplines like methods in teaching art, art history and art appreciation, two dimensional art (2D-art) (graphic design and studio technology, painting and studio technology, drawing and studio technology-still-life, nature study and figure drawing.), three dimensional arts (3D-art) (sculpture and studio technology, and pottery and studio technology) and multi-media crafts which belongs to the two categories (DSE, 2002). Besides, each course carries a phrase 'studio technology' which implies the science and skills of using materials, and handling tools and equipment particular to a given area of study (DSE, 2002). However the pre-service VA teachers have not been exposed to this knowledge of studio technology. Yet in the revised secondary school VAC, studio technology has been isolated and made an independent discipline. While there are new developments

in secondary school curriculum that are aimed at making it relevant, the pre-service teacher program has not been revised to incorporate the new developments which would ensure high quality teachers. The current VAC for NTCs outlines a few objectives, but it does not include teaching goals and teaching standards.

The preliminary studies by Ssegantebuka (2014) during the acquaintance visits to the teacher colleges indicated that even though teacher education programs use a similar visual arts curriculum, tutors from different NTCs exposed pre-service visual arts teachers to different content areas in which they are knowledgeable. This was also evident in the graduates of DSE programs from different NTCs who possessed and exhibited varying content and pedagogical skills in art areas from the different schools where they taught (Ssenyondwa, 2012). Breitenstein (2003) observes that if art education pre-service programs vary in content and pedagogical instruction, then graduates from these programs may vary in their knowledge and ability to teach art. It is also observed that some content in the VAC in NTCs does not clearly relate to the content in secondary schools. Visual Arts tutors concentrate more on 2D art and teach comparatively little of the 3D art. Moreover, the field of the 2D art which they teach is not adequately covered. Tutors expose pre-service visual arts teachers to drawing (still-life and nature), multimedia, graphic design, painting and textile decoration, and omit human figure drawing, printmaking, and weaving. The medium of expression in the areas of 2D art that the tutors teach is predominantly pencil, leaving out many important dry and wet media which would equip pre-service visual arts teachers with the knowledge of media. This is likely to deny pre-service visual arts teachers the opportunity to get exposed to appropriate content knowledge, techniques and media. Thus, the products of this kind of teacher preparation are limited in practical and in theoretical knowledge.

In light of the above, the purpose of the research was to examine the relevance of the visual arts curriculum content used in the preparation of pre-service visual arts teachers in NTCs. Of particular concern was the following research question: What is the visual arts curriculum used in the National Teacher Colleges in Uganda?

Literature Review

The inception of formal VAE is associated with Margaret Trowel. She introduced two curriculums: A curriculum for specialized artists namely; painting, drawing, sculpture, pottery, textile design, printmaking and history of art (Sanyal, 2000). The second curriculum was meant for use in training art teachers. The art education program for teachers included; modeling, basket making, design, material and picture-making (Sanyal, 2000). However, the coming of Cecil Todd after the retirement of Margaret Trowell in 1958 changed the direction of art education in Uganda. Cecil Todd was opposed to Margaret Trowell's model of art teaching which mainly focused on fostering African local traditions and instead preferred a European model of instruction, which he believed offered a body of knowledge that was relevant to anyone anywhere in the world seeking art training (Sanyal, 2000). Cecil Todd's European model of instruction elevated and advocated for European views and representation of art, it was based on the elements and principles of art which were basically Eurocentric. Cecil Todd's European model of instruction was later to inform a Bachelor of Education program with art (B.Ed) which was jointly offered by the faculty of education and the Art School at Makerere University. With the B.Ed program, students were supposed to spend one year at the Art School and the second year at the School of Education before graduating as Art teachers. However, due to staffing problems, inadequate coverage of content and the short period of training, the program could not produce teachers who would be rich in content and pedagogy (Mazinga-Kalyankolo, 1974). Therefore, the architects of the B.Ed program decided to make it a diploma rather than a degree program. Then it was later introduced in NTCs with Institute of Teacher Education Kyambogo (ITEK)

(now *Kyambogo University*) monitoring teacher preparation programs. It was then named diploma secondary education (DSE).

Pre-service teacher education programs aim at equipping pre-service visual arts teachers with both theoretical knowledge, and practical knowledge and skills for use in their future roles as professional teachers (Gudula, 2006). Perraton, Creed, & Robinson, (2002), state that the major aim of teacher education is to improve the general educational background of the trainee teachers and increase their knowledge and understanding of the subjects they are to teach. In Uganda, one of the main teacher education objectives is to broaden the student teachers' own academic knowledge and to deepen his/her knowledge of the teaching subjects (Government white paper on education-1992). Specifically, the aims of art education program in NTCs include training art education student teachers in subject matter knowledge (DSE, 2002). However, teacher education programs are putting emphasis on pre-service teachers' classroom practices, with little attention to the understanding the nature and quality of the curricula for teacher preparation. According to Shulman (1987), curricular knowledge is the particular knowledge of the materials and programs that serve as "tools of the trade" for teachers. Hegarty (2000) describes curricular knowledge as formalized programs of study and other published materials. This description of curricular knowledge implies a list of what to be learned and taught and the resources to use. Turner-Bisset (1999) claims that, curricular knowledge goes beyond materials and programs of study available for each subject. She adds by proposing that teachers' should acquire knowledge to be able to evaluate curricular materials critically. Chong and Cheah (2009) state that teachers are expected to have knowledge of curricular materials and resources at the same time use them for different levels and abilities. Chong and Cheah (2009) believe that teachers should also have knowledge of the syllabi; the central topics, development sequences and assessment modes of the disciplines they specialize in to make curriculum and assessment decisions to impact their students' achievements. Turner-Bisset (1999) and Chong and Cheah (2009) description of curricular knowledge focus on the importance of having a well-grounded teacher who can interpret, adopt, reflect and use curricular materials, assess and critically engage learners in productive learning.

Curriculum knowledge provides the teachers with the resources to teach a particular subject at a given level (Nguyen, 2011). Fradd & Lee (1998) in agreement state that "knowledge of pedagogy includes an understanding of curriculum at specific grade levels and particular subject areas". Curriculum knowledge includes the understanding of practices of particular subject area as stated in the aims, goals, and objectives. The teacher is said to possess this knowledge if he/she demonstrates the ability to align teaching goals, objectives and assessment with the teaching standards. Teachers should also have knowledge of curriculum materials that are responsive to students' interests, community values, and societal needs. However, the current Visual Arts Curriculum (VAC) for NTCs outlines a few objectives, but it does not include teaching goals and teaching standards. Yet sound knowledge of curriculum enables teachers to employ a prescribed curriculum and follow the set assessment procedures (Mergler & Spooner-Lane, 2012; Okanlawon & Akanni, 2009). In Visual Arts (VA), curriculum materials include; arts and crafts textbooks, teacher guides and technology based instructional materials (e.g. computers)... Learning and instructional materials such as poster paint, water color, local colors, dyes, crayons, pastel, brushes, paper, boards, bits and pieces of materials are very useful in art class. Fine art teachers are expected to accustom to using such materials to plan and structure student activities (Okanlawon & Akanni, 2009). It is therefore important to note that having desirable knowledge in curricular material (art media) is critical in implementing the art curriculum in teacher preparation in NTCs in Uganda.

Therefore, tutors' knowledge of the curriculum is synonymous with excellent or relevant visual arts curriculum. Sandell (2012) states that excellent VAE is inclusive of issues of equity, access, and understanding of students, work quality and well planned sequenced instruc-

tion. Therefore, excellent visual arts teaching considers a number of factors including teaching which focuses on Content and pedagogy; staffing based on recruiting highly qualified art educators; professional development aiming at investigation of effective practice, and examining student work; scheduling supports for quality student learning by providing sufficient time for instruction and creative and reflective think time; enrollment that supports a safe and effective working environment for students and teachers; and environment, supplies and equipment that ensure students' safety and the safety of their artworks (Sandell, 2012). Such a curriculum that embraces factors of excellence in learning of visual arts, can result into questioning own prior knowledge, a process that leads to acquisition of new knowledge and transformation of new understanding or "transforming habits of the mind" (Mezirow, 1991; 2000).

Transformation theory is partly a developmental process, but more as a learning process, which is using a prior interpretation to take on a new or revised interpretation of the meaning of one's experience in order to guide future action (Mezirow, 1996). Boyd (1989) defines transformation as a fundamental change in one's personality involving conjointly the resolution of a dilemma and expansion of consciousness resulting in greater personality integration.

The transformation theory is chosen by the researcher for it does not only explain *what* learners learn but it also describes *how* learners learn (Airasian & Walsh, 1997). The learning theory can also be used to measure tutor/learner levels of interaction for quality learning in a discipline basically referred to as practical and subjective in nature such as Visual Arts. The transformation theory emphasizes teaching using the learner's prior experience and at the same time encouraging learners' social interaction with the humans and environment and critical reflection which are crucial in visual arts learning. According to Mezirow (1991) critical reflection in the social context of learning can operate on three levels. These are content reflection, process reflection and premise reflection. According to Sim, (2001) our continued learning becomes dependent on reflective review of what we have learned (content), how we learned (the process), and whether our presuppositions (assumptions) are supported (our original premises). This process of reflecting on the learning process is typical of a relevant curriculum that is potentially equips learners with the desired knowledge and skills. The transformation theory can lead to "carefully planned, structured, directed activities, lead students to discover concepts and develop skills...that "abstract concepts become meaningful, transferable and retained because they are attached to performance of an activity" (Cooperstein & Kocevar-Weidinger, 2004).

Methodology of Research

General Background

The research was basically qualitative in nature. The qualitative approach was chosen because the study sought visual arts tutors and pre-service visual arts teachers' perceptions, feelings, attitudes and their personal interpretation of the relevance of VAC. A descriptive and evaluative case study was adopted as an appropriate research design for it provided the design through which the relevance of the VAC in visual arts pedagogy was examined.

Sample Selection

The research was carried out in three NTCs purposively selected from three regions in Uganda namely; Eastern, Central and South western Uganda. The participants were six tutors who were purposively selected and ninety randomly sampled pre-service visual arts teachers.

Instrument and Procedures

Data were collected using interviews, focus group discussion, observations and document analysis. Interviews were the main instruments used with tutors in selected NTCs to solicit their perspectives about the nature of visual arts curriculum, which influences their teaching and pre-service visual arts teachers' learning. During the focus group interviews, the researcher focused mainly on soliciting pre-service visual arts teachers' own perspectives about art content knowledge, art experiences and their perception of the teaching of visual arts in NTCs. Data collected using tutors' interviews were complemented with data from lecture observation, the analysis of curriculum, and tutors' preparation notes.

Data Analysis

Analysis of data started during the process of data collection and it was done iteratively. Interview recordings were transcribed during fieldwork to allow the researcher to revisit participants for further information and clarity. Data was generally organized in categories to reflect the research objective. Themes were developed by identifying ideas that continuously transpired across the data (Miles & Huberman, 1994). The themes were carefully examined to get the fine distinctions that explained the relevance of the visual arts curriculum and the teaching of visual arts in NTCs in Uganda in relation to the selected settings. The researcher would frequently re-examine and compare the notes from documents, interview transcripts, and observations to ascertain consistency in the data and to get acquainted with the emerging issues (Gray, 2009). To ensure reliability, the researcher shared the individual coding schemes with two different experts in the arts field with an intention of discovering a high similarity of coding schemes.

Results of Research

The research focused on the visual arts education curriculum, tutors use in the preparation of pre-service visual arts teachers in NTCs. The main findings of the study in this section, are presented, analyzed and interpreted according to the sub-headings derived from the research question.

As earlier mentioned, a relevant VAC is the one that explicitly outlines the content knowledge and skills that pre-service visual arts teachers are expected to acquire during their teacher preparation. It is also important for a relevant VAC to consider the integration of content and pedagogy as important knowledge for an expert teacher and also to include knowledge that is responsive to societal needs. Therefore, in order to establish the relevancy of the VAC currently in use in NTCs in Uganda, the researcher focused on the VAC structure, coherency, arts-based research, tutors VAC evaluations, VAC implementation and assessment in VAC.

a) The visual arts curriculum structure in NTCs

The structure of VAC for the preparation of pre-service visual arts teachers is presented in Table 1.1 below, showing the different course names and summarized content.

Table 1. Course names and summarized content which is used for two years of pre-service teacher preparation.

Course name	Summarized content description
TWO DIMENSIONAL ARTS (2D)	
Drawing and studio technology	Drawing and studio technology deals with art materials, tools and surfaces, still-life, nature study and landscape. In drawing students are introduced to Human figure and are expected to deal with form and drapery. In semester one year two students continue with still-life and nature study.
Painting and studio technology	The discipline of painting and studio technology requires that learners deal with colored materials mainly inks, powder color, color theory, oils paint and also carry out research in locally available resources to make paints. Student teachers have to learn color theory and also cover "isms".
Graphic design and studio technology	The discipline of graphic design and studio technology requires learners to deal with tools, materials and techniques, typefaces, bookmaking and album, illustration, book cover and labels. Graphic design includes printmaking. It covers block, lithography, intaglio, mono print, serigraphy and making of multiple pages.
Textile and studio technology	Textile and studio technology covers surface decoration and textile construction. Under surface decoration, tutors are supposed to deal with printing, dyeing, painting, motif development and, batik. It also looks at surface on surface techniques; for example, patch work and appliqué. For textile construction or weaving deals with loom construction, warp, weft and spinning. Students learn tapestry making, macramé and pile weaving. They are also required to carry out research into local dyeing materials.
THREE DIMENSIONAL ARTS (3D)	
Sculpture and studio technology	Sculpture and studio technology learners are introduced to materials, tools and techniques specific to sculpture making. Assign practical works in making masks, relief and round sculptures, and research into locally available materials. They are also have to venture into other materials that are not clay such as wood and stone carving, scrap metal, peppier maché, using wires and making monumental sculptures. And carry out research in kiln construction.
Pottery and studio technology	Pottery and studio technology covers clay preparation, formulation, hand forming methods of slab, coil and pinch, methods of clay preparation and storage. It makes use of other clay materials like feldspar, kaolin, sand and muscovite. It deals with decorative methods like graffito, slip trailing and glazing. Students are also introduced to potters' wheel, oxides, stains, and electric kiln.
BELONG TO THE TWO GROUPS (2D AND 3D)	
Multimedia crafts and studio technology	Projects that are done in multimedia crafts and studio technology include; macramé, jewelry, woodwork, leather work, mosaic, stained glass, research into Uganda's crafts and field visits to prominent craftsmen.
Interior design and studio technology	Students are introduced to different disciplines combining the aspect of interior design and studio technology using mixed media in drawing. They use color theory to assess how color works in relation to design. They are supposed to plan and draw rooms on scale. They are expected to create professional paint effects and give them an elementary understanding of interior design. In year two semester one students produce repeat pattern in fabric and wall paper using history of art and design for various purposes as research to combine both practical and theory. They paint effects such as fresco and decoupage techniques, participate in furniture renovation, cleaning, restoration and decoration as well as adding furniture to the interior.

REFERRED TO AS PURE THEORY	
History of Art and Art appreciation	History of art and art appreciation covers all the European history of art, Africa and East Africa. It starts with pre-historic art of Europe and east Africa. The ancient world covers from Stone Age through middle ages to gothic art. It continues from renaissance art through modern art of "isms" to contemporary art of Africa and East Africa in particular. Students are required to do research in art, design, and craft in relation to music, dance and drama.
Art education [principles of education]	Art education covers the meaning of art, child art and developmental stages in art. It introduces learners to secondary school syllabus and teacher resources; such as scheme of work, lesson plan. Students are expected to deal with evaluation and assessment and methods of teaching.
Market management	Market management deals with market and selling, market concepts and environment, market research, economies of marketing, market strategies, budgeting, profit and nonprofit marketing.

Source: Visual arts curriculum for national teacher college (2002)

The findings from the VAC showed that the disciplines pre-service visual arts teachers cover during the two years of preparation are grouped as follows; 2D arts, 3D arts and the theory group. However, multimedia crafts and interior design belong to the first two groupings. The general thinking is that history of art and art appreciation, art education-art methods, marketing management are disciplines referred to as theory. Yet 2D arts, 3D arts are referred to as pure practical disciplines. This has had a great influence on the teaching and learning of VAC. For instance, tutors observed that the art disciplines they categorize as practical, they do not teach the theory part of it, and the ones which they group as theory remain theoretical without their practical element. Such practices imply tutors' ambiguity that they have as far as the VAC is concerned. In this case, tutors' failure to teach theory for practical disciplines has denied pre-service visual arts teacher the opportunity to acquire the correct terminologies required of them in writing the examinations.

b) The structure and coherency of the visual arts content

Some of the visual arts content that is not related to the content in secondary schools, include; interior design, multimedia and market management. Secondly, there are some design issues related to how much content to learn, the content structure and content coherency. There is too much content which cannot be covered within the two years of study (refer to table 1). Disciplines with too much content; included; history of art and art appreciation, market management, pottery making, multimedia crafts and art education-principles and methods of teaching art. For example, the history of art and art appreciation content taught (see table 1) in year one, starts from pre-historic art; traditional art, design and craft; ancient world through middle ages to rococo and modern art of "isms". In this respect, tutors confessed; "There is a lot of content in history of art which we have to cover within a term, this is term one year one only... this is impossible. Note also a lot of history of art content we are supposed to cover, we did not ourselves cover it we do not know it, we do not have notes for it and there are no textbooks we would read from to the learners..."

Still the content of VA requires pre-service visual arts teachers to do research in art, design, and craft in relation to music, dance and drama. However, none of the tutors interviewed had sufficient knowledge of research in art, design and craft, as well as knowledge in music, dance and drama. In this regard, tutors reported that, "We have no lessons that take our art students to the department of music, dance and drama, neither do we have the background in music, dance and drama, it is funny what do they expect us to teach... during my training as a teacher I had no training in research, I remember writing a simple report on one of the works I produced.. Is that the research I need to teach...?" It is clear from the above quotes that due to

limited knowledge in research, tutors were not teaching these units to the pre-service visual arts teachers.

Art education or principles and methods of teaching art, is another broad area of study that covers the meaning of art, child growth and developmental stages in art. It introduces learners to secondary school syllabus and teacher resources; such as schemes of work, and lesson plans. Pre-service visual arts teachers are expected to deal with visual arts assessment and methods of teaching specific to the subject. However, due to limited time and the structure of the curriculum that makes principles and methods of teaching art appear once every academic year, tutors do not cover the content in-depth. This implies that tutors will not be able to model for their pre-service visual arts teachers the methods of teaching as well as assessment which are specific to art education.

The data from the review of VAC revealed that content structure is another area of concern. Some of the disciplines are combined with others. The disciplines under discussion include: textile decoration, graphic design and drawing (see table 1). Textile decoration is combined with weaving, graphic design is combined with printmaking and drawing is composed of still-life, nature and figure drawing. Where disciplines are combined, tutors tend to concentrate on one where they feel comfortable or have knowledge of. This is supported by tutors' comments, they explained; "In such circumstances there is a tendency of concentrating on the content of the mentioned discipline, in this case textile decoration and we teach little of the hidden discipline which is weaving. This is also true in the examinations; - the hidden disciplines are rarely examined that is why we teach little of the hidden discipline or omit them completely..."

The six tutors interviewed confirmed that they have limited knowledge of at least one of the two grouped disciplines. This is one of the reasons as to why tutors omit teaching some learning areas due to lack of confidence in handling those disciplines. Given such conditions pre-service visual arts teachers are denied the opportunity to acquire the required knowledge in the omitted disciplines which they are preparing to teach after graduation. Consequently pre-service visual arts teachers acquire little content than they are expected to know. This level of content knowledge does not appear to be adequate to enhance the pre-service visual arts teachers' engagement in quality learning.

c) Visual arts –based research in Art materials, tools and equipment

Tutors observed that the art materials, tools and equipment range from locally found/made to advanced or refined ones. Most of the art materials, tools and equipment cut across the art disciplines, but there are those that are specific to a particular discipline. For example, welding materials and tools are commonly known for sculpture making especially wire or metallic sculpture. Crucibles and foundry are used in casting metal sculptures. However, the VAC is silent about mentioning these pertinent materials. The VAC simply indicates that learners are expected to deal with art materials, tools and equipment. Thus, giving room for choosing those art materials that are easily available and where the tutor has confidence in using them. Some tutors mentioned that the art materials, tools and equipment used in NTCs depend firstly on the tutors' preference and secondly on availability. The tutors made the following remarks; - "For me I am after seeing a student teacher having something to use for self-expression. Another issue is that I myself I do not want to mention art materials and tools me myself I cannot use.....therefore, I will encourage my students to buy materials and tools which I can confidently use...." Given such circumstances pre-service visual arts teachers are denied the chance to experience a number of art materials, tools and equipment that would equip them with the required skills in VA. They will instead teach areas where they have had enough experience.

Further findings showed that each and every discipline includes research in art materials specific to that very discipline. It is this very research that is supposed to generate alternative art materials commonly referred to as improvised art materials, as well as reducing scarcity

and cost of the imported art materials, tools and equipment. According to tutors, this is one of the mostly neglected areas of study in VA during teacher preparation, despite its importance. Moreover, tutors indicated that the understanding of research in VA is limited to art materials -aiming at coming up with alternative art materials only. Thus, neglecting the opportunity of making own improvised tools and equipment also meant to be used as alternative. Tutors revealed that this is an area of study that is completely left out due to the lack of technical knowledge of carrying out this research in materials, tools and equipment. In this regard, one tutor made the following comments; “As tutors we know the importance of research in any VAC, but research should have guidelines. They guide me on how to teach research to my students. The fact is that I also did not go through research training during my teacher preparation... There are also no space and time to carry out this research”. This is why tutors with limited knowledge of discipline-based research techniques cannot help learners to acquire specific techniques of conducting research in improvised art material, tools and equipment and also and look for information in the very discipline of VA.

d) Tutors’ evaluation of the visual arts curriculum

Tutors’ evaluation of the VAC showed that it is not a popular document. For instance, tutors own copies of the VAC but they rarely consult them. One tutor explained that the curriculum is not descriptive enough to guide him on how to teach his pre-service visual arts teachers, a phenomena he envisions as affecting his competence in teaching and pre-service visual arts teachers’ learning. Another tutor reported that he rarely consults the VAC, instead he refers much more on his own *yellow* notes he got during teacher training. Moreover, the VAC is congested with content to be covered within a short period of time, and content that is no longer responsive to societal needs. Besides, tutors’ lack knowledge in some content. The VAC is inclusive of the content that is only taught once in two years. One of the tutors reported that the VAC does not include the computer studies knowledge. The VAC is silent about instructional materials and it lacks emphasis on interdisciplinarity. The VAC introduces students to all disciplines in year one and most of the theory is expected to have been written in this year regardless of the little time that there is. Instead of interacting with the VAC, tutors find it effortless to use their notes they acquired twenty to thirty years ago when they were still teacher trainees.

e) Implementation of the Visual arts Curriculum in NTC(s)

Analysis showed that visual arts education program is a two year program. It is designed by Kyambogo University based on a semester system but implemented in NTCs following the term system (see table 2). The researcher inserted a column showing how the term system is followed in the NTCs.

Table 2. Visual arts disciplines arranged in semester system, but implemented on a term system in national teacher college(s).

SEMESTER ONE			SEMESTER TWO			SEMESTER THREE			SEMESTER FOUR		
Term one	Term two	Term three	Term one	Term two	Term three	Term one	Term two	Term three	Term one	Term two	Term three
History of art	Art education		History of art	Art education		History of art	Art education		History of art	Art education	
Drawing	Drawing	For school practice and end of year exams	Drawing	Drawing		Drawing	Drawing		Drawing	Drawing	
Painting	Sculpture		Sculpture	Painting		Sculpture	Painting		Painting	Painting	
Graphic design	Pottery		Pottery	Graphic design		Pottery	Graphic design		Graphic design	Graphic design	
Textile decoration	Multimedia crafts		Multimedia crafts	Textile decoration		Multimedia crafts	Textile decoration		Textile decoration	Textile decoration	
	Interior design			Marketing			Marketing				

Source: Visual arts curriculum in national teacher colleges (2002)

An academic year in NTCs is divided into three terms. The first term begins in September and ends in December. The second term begins in February and ends in April. The third term, pre-service visual arts teachers spend it in schools having their school practice. Thus instead of the three terms of teaching and learning pre-service visual arts teachers are exposed to only two terms. Such teaching does not only affect pre-service visual arts teachers' understanding of the subject content knowledge and subject pedagogical knowledge but also their abilities to cover the required content knowledge supposed to be for three terms. Pre-service visual arts teachers reported having little time for revising in preparation for the end of year examinations (*July-August*) since they spend their third term on school practice where many of them are assigned other responsibilities on top of teaching. It was also noted that between end of school practice and beginning of end of year examinations there is a space of only two weeks which learners claim that it is not enough time to revise as well as preparing for end of year exhibition examinations. This means learners are inadequately prepared since they do not cover the required content due to little time allocated for the content. In this case, the system continuously graduates incompetent teachers, who lack knowledge and skills to enable them advance in the field of VA. This implies that there is a need to restructure the VAC to design a system that would be beneficial to pre-service visual arts teachers by allowing more time to cover considerable content during teacher preparation in NTCs.

The VAC in table 2 displays an incoherent content structure that seems to affect pre-service visual arts teachers' ability to grasp the required content in VAE. Disciplines like painting and studio technology, graphic design and studio technology, and textile decoration and studio technology, are structured in such a way that they are introduced in year one, semester one. After the end of year one semester one, it takes an entire year before they are timetabled again in semester four year two. These disciplines are re-introduced on the timetable towards the end of the second year of teacher preparation program. Tutors responded to this practice by stating that it has its own challenges on their side as well pre-service visual arts teachers. This situation time and again strains the pre-service visual arts teachers' efforts to link the knowledge acquired in semester one, year one with the knowledge in semester four, year two when the discipline is re-introduced. These points to the need to restructure the VAC and create coherency and connectedness in the disciplines flow, as well as emphasizing in-depth learning, while preparing pre-service visual arts teachers.

f) Assessment in visual arts curriculum

The examinations administered are in two main categories: the theory and practical examinations (table 3). The theory examination consists of art education, history of art and art appreciation, market management and studio technology. There are two theory examination papers code named Papers I and III. Paper I is History of art and art appreciation and market management. This examination paper has two sections namely; section "A" history of art and art appreciation and Section "B" is market management. Paper III which is art education and studio technology has four sections. The sections are as follows; section "A" is Principles of Art Education, section "B" is methods of teaching art, section "C" this is studio technology 2D and section "D" studio technology 3D. The practical examinations include: Paper II which is 2D art-exhibition/Display (*practical*). Pre-service visual art teachers exhibit practical artworks which include; graphic design, textile, printmaking, painting and drawing. Paper IV is 3D art-exhibition/Displays (*practical*). Pre-service visual arts teachers exhibit practical artworks which include; Pottery and sculpture and some of the artworks done under multimedia crafts. Although the exhibition of practical artworks of 2D and 3D referred to as examinations, it is composed of artworks done throughout the academic year some of which were once presented and marked as course work. In light of the above, the findings showed that the VAC focuses on summative assessment using only final examinations set by Kyambogo University. This again contradicts the practice in secondary schools where formative assessment is emphasized.

Table 3. Practical and theory examination papers done in national teachers colleges.

Paper I	History of art and art appreciation and Market management	Theory
Paper II	Two-dimensional art works (<i>practical</i>)	Exhibition
Paper III	Art education and studio technology	Theory
Paper IV	Three-dimensional art works (<i>practical</i>)	Exhibition

Source: National teacher college visual arts curriculum (2002)

Discussion

It is clear that the relevance of the VAC in the preparation of the visual arts teachers in NTCs is greatly affected by a number of issues such as congested curriculum, combined/grouped disciplines, lack of coherency in the distribution of disciplines and limited time for training among others. All these affect the relevance of the VAC used in the preparation of the pre-service visual arts teachers. Tutors and pre-service visual arts teachers who participated in this study agreed that there is need to increase the training duration from two years to three years for adequate pre-service visual arts teachers' preparation. Once the training period is not extended, it will continuously perpetuate inadequately prepared pre-service teachers. Since too much content in a short period of time, does not offer pre-service visual arts teachers the opportunity to engage with new knowledge more profoundly (Meleisea, 2005).

Besides, the findings from VAC review showed that interior design and studio technology and market management are disciplines taught to pre-service visual arts teachers in NTCs but do not relate to the content in secondary schools where these teachers will be employed to teach. The content lacks cross-disciplinary approach that would enable pre-service visual arts teachers to make connections and see the relationships between subject areas, which would lead to creative insights and original ideas (Meleisea, 2005). Further findings revealed that the content does not include computer studies that would introduce pre-service visual arts teachers to the use of technology, which would equip learners with knowledge of technology (Mishra & Koehler, 2006) for effective teaching and learning of visual arts.

The research revealed that the combined or grouped disciplines are inadequately handled. The combined or grouped disciplines include; textile decoration which is combined with weaving, graphic design is combined with printmaking and drawing is made of still-life, nature and human figure. The combined disciplines are equally wide areas that can result into marginalization of some content of one of the two combined disciplines. For instance, tutors concentrate on teaching surface decoration in textiles and very little of weaving. For graphic design tutors ignore printmaking. Tutors and pre-service visual arts teachers give priority to still-life and nature study at the expense of figure drawing as observed by Ssegantebuka, (2016). Of the six tutors interviewed none of them had sufficient knowledge of the grouped disciplines. The argument was how such tutors could have sufficient knowledge of the grouped disciplines when they are also graduates of the same program. Unless the combined study areas are separated and treated as independent disciplines and examined independently, NTCs will continuously graduate inadequately prepared pre-service visual arts teachers. This is why pre-service visual arts teachers graduating from these NTCs find it difficult to teach their students some of the disciplines they themselves did not study at college but find them in the secondary schools where they are employed to teach after graduation.

The research revealed that the *visual arts-based research* which is an important discipline in teacher preparation is completely left out meaning that pre-service visual arts teachers can graduate and leave NTCs without research knowledge and skills. VAE program requires

tutors to engage pre-service visual arts teachers to research in art, design, and craft in relation to music, dance and drama. However, data revealed that the six tutors interviewed all had limited knowledge of research in art, design and craft, which they are supposed to relate to music, dance and drama. Secondly, none of the tutors had prior knowledge in music, dance and drama; therefore, they were not teaching this unit to the pre-service visual arts teachers. This is supported by Hussain, (2004) who states that not all teachers are well equipped with quality research skills. According to Kagoda and Ezati, (2013) research is important in enabling tutors and pre-service visual arts teachers become lifelong learners and continuously adapt the course of their career to enable them support their students. Ssegantebuka (2016) argues that visual arts-based research is meant to reduce the scarcity and high cost of the imported art materials, tools and equipment since it avails the opportunity to make the alternative commonly referred to as improvised art materials. This is supported by Lindstrom (2009) who emphasizes the importance of discipline-based research in VA.

The VAE program does not give a list of the pertinent materials a pre-service visual arts teacher must experience during preparation. The VAC simply indicates that learners are expected to deal with art materials, tools and equipment (DSE, 2002). Thus, giving room for choosing those art materials which are available and where the tutor has confidence in using them. Given such circumstances learners are denied the chance to experience a number of art materials, tools and equipment that would equip them with the required skills in visual arts. That is why a number of pre-service visual arts teachers graduating from NTCs have limited knowledge of a number of art materials. Yet, researchers indicate that exposing learners to a variety of art materials, tools and equipment is beneficial. It should be noted that each medium has its own unique qualities that allow learners express their ideas and feelings differently as supported by Simpson (2000). Therefore, the VAC program that exposes learners to a variety of art materials, tools and equipment would be considered more effective if such an opportunity is availed. Besides, the study showed that tutors omit a number of disciplines during teacher preparation, due to limited knowledge of the discipline together with the lack of art materials, tools and equipment. This echoes Nbina, (2010) argument that when teachers lack knowledge of the subject the next thing to do is to omit the subject. This implies that tutors will not be able to model for their students the methods of teaching as well as assessment which are specific to art education, thus limited knowledge acquisition.

The VAE program concentrates on summative assessment at the expense of formative assessment. These practices of neglecting formative assessment are in conflict with Kalra and Baveja (2010) who emphasize the importance of using formative assessment in teaching and learning for effective teacher education. As earlier mentioned, the dependence on summative assessment does not offer opportunity to deal with errors pre-service visual arts teachers might be having before graduating. Such practices conflict with Swearingen (2002) ideas that explain the importance of having a well thought about assessment strategies that can improve teacher preparation. The practical examinations are constituted of practical artworks done throughout the academic year. It is majorly composed of artworks which were once presented and marked as course work. It was observed that pre-service visual arts teachers do not vigorously engage in the production of artworks for examinations, since they keep on presenting the same artwork up to the end of the academic year when it is exhibited as examinations. Yet effective learning in VAE emphasizes constant practice which as a result equips the learners with skills in using different art materials, tools, manipulative and practical skills (Simpson, 2000; Tebenkana, 2010). Given circumstances where pre-service visual arts teachers rarely engage in practical artworks, they cannot develop the required skills in VA. Therefore, the VA subject ends up having little influence on pre-service visual arts teachers' meaningful engagement with the required knowledge and skills.

Conclusions

The researcher has discussed the VAC with the aim of presenting the required content knowledge as it is stipulated in Uganda's pre-service visual arts program. The researcher has clearly indicated the nature of the VAC which renders it irrelevant. The VAC irrelevance is brought about by the four identified elements which include; structure and coherency of visual arts content; lack of a visual arts-based research in art materials, tools and equipment; implementation of the VAC and lack of a clear assessment strategy. They greatly affect the presentation and acquisition of the required knowledge, thus, affecting the extent at which learners engage in learning.

The VAC developers need to restructure the current VAC: in order to separate the elements of art and principles of design and studio technology from 2D and 3D where they are currently embedded. They should separate the discipline of art appreciation from history of art and also making human-figure drawing independent of drawing still-life and nature studies. It is therefore, recommended that disciplines be separated for equal attention and as a way of enforcing the teaching in these liberated disciplines; they should be examined as independent papers. It is believed that once the separation is done, pre-service visual arts teachers will experience in-depth teaching and learning of VA. The isolation of the above said disciplines, will avail opportunity to tutors to carry out research and acquire the necessary content knowledge of these study areas and adequately handle them to the benefit of pre-service visual arts teachers.

There is a need for VAC developers to increase the training duration from two years to three years. The increased duration for training would avail pre-service visual arts teachers quite good time for training, hence in-depth coverage of a number of disciplines leading to acquisition of required content knowledge. In the first year, pre-service visual arts teachers should be introduced to all the disciplines in the VAC. In their second year, they should be allowed to specialize by having drawing general and human figure as compulsory and any other three electives where one of which must be coming from 3D arts category. It is assumed that if pre-service visual arts teachers are made to specialize, they can be grounded in the disciplines of their choice, leading to in-depth acquisition of the desired content knowledge in the subject.

There is a need to reviewing the current VA program to make the visual arts content responsive to current societal needs, and make it interdisciplinary to enable pre-service visual arts teachers to make connections and see the relationships between other subject areas. In addition, adopting ICT in VAC would introduce pre-service visual arts teachers to the use of technology for information search and presentation for effective teaching and learning of VA.

Visual arts-based research should be introduced to VAE. Once introduced will equip tutors and pre-service visual arts teachers with the skills to investigate the relevancy of local art materials in VAE. For instance, an investigation on the availability of local raw art materials within the surrounding environment, its ability to lessen scarcity of imported art materials, its possibilities and limitations and the degree to which it can foster quality learning could provide the much needed information in improving VAE at all levels.

References

- Airasian, P. W., & Walsh, M. E. (1997). Constructivist cautions. *The Phi Delta Kappan*, 78 (6), 444-449.
- Australian curriculum, assessment and reporting authority (ACARA) (2011). The shape of the Australian curriculum: The arts. Available from <http://www.acara.edu.au>
- Boyd, R. D. (1989). Facilitating personal transformations in small groups: Part I. *Small Group Behavior*, 20 (4), 459-474.
- Breitenstein, G. (2002). *A comparison of Texas pre-service teacher education programs in art and the 1999 National Art Education Association's standards for art teacher preparation* (Doctoral dissertation). Texas: University of North Texas. Retrieved from <http://digital.library.unt.edu/ark:/67531/metadc3156/>.

- Chong, S. N. Y., & Cheah, H. M. (2009). A values, skills and knowledge framework for initial teacher preparation programs. *Australian Journal of Teacher Education*, 34 (3), 1-17.
- Cooperstein, S. E., & Kocevar-Weidinger, E. (2004). Beyond active learning: A constructivist approach to learning. *Reference Services Review*, 32 (2), 141-148. DOI 10.1108/00907320410537658.
- Curriculum Development Council (2007). *Arts education key learning area curriculum guide: Visual arts curriculum and assessment guide (secondary 4-6)*. Hong Kong: curriculum Development Council.
- Feuer, M. J., Floden, R. E., Chudowsky, N., & Ahn, J. (2013). *Evaluation of teacher preparation programs: Purposes, methods, and policy options*. Washington, DC: National Academy of Education.
- Fradd, S. H., & Lee, O. (1998). Development of a knowledge base for ESOL teacher education. *Teaching and Teacher Education*, 14 (7), 761-773.
- Gray, D. E. (2009). *Doing research in the real world* (2nd Ed.). London: Sage.
- Gudula, B. N. (2006). *Distance education and realistic teacher education pedagogy in Uganda: Impact of an ICT-supported learning environment* (Doctoral dissertation), Nkozi University, Kampala.
- Hegarty, S. (2000). Teaching as a knowledge-based activity. *Oxford Review of Education*, 26 (3-4), 451-465. <http://dx.doi.org/10.1080/713688541>
- Hussain, S. (2004). *Effectiveness of teacher training in developing professional attitude of prospective secondary school teachers* (Doctoral dissertation). University Institute of Education and Research, University of Arid Agriculture, Rawalpindi, Pakistan.
- Kagoda, A. M., & Ezati, B. A. (2013). Contribution of primary teacher education curriculum to quality primary education in Uganda. *Education*, 52, 35. Retrieved from http://www.scientiasocialis.lt/pec/files/pdf/vol52/35-47.Kagoda_Vol.52.pdf.
- Kalra, M. B., & Baveja, B. (2010). Student teachers' thinking about knowledge, learning and learners in India, University of Delhi. *Literacy Information and Computer Education Journal (LICEJ)*, 1 (1), 33-44. doi:10.20533/licej.2040.2589.2010.006.
- Koopman, C. (2005). Art as fulfillment: On the justification of education in the arts. *Journal of Philosophy of Education*, 39 (1), 85-97.
- Lindström, L. (Ed.). (2009). Issues in visual arts education. In L. Lindström, (Ed.), *Nordic visual arts education in transition. A research review*. Stockholm: Swedish Research Council.
- Marphatia, A. A., Legault, E., Edge, K., & Archer, D. (2010). The role of teachers in improving learning in Burundi, Malawi, Senegal and Uganda: Great expectations, little support.
- Mazinga-Kalyankolo (1974). *The development of art education in secondary schools in Uganda* (Unpublished master's thesis). Makerere University, Kampala-Uganda.
- Meleisea, E. (2005). *Educating for Creativity: Bringing the Arts and Culture into Asian Education. Report of the Asian Regional Symposia on Arts Education: Measuring the Impact of Arts in Education (Hong Kong SAR, China, January 9-11, 2004) and Transmissions and Transformations: Learning through the Arts in Asia (New Delhi, India, March 21-24, 2005)*. UNESCO Bangkok.
- Mergler, A. G., & Spooner-Lane, R. (2012). What pre-service teachers need to know to be effective at values-based education. *Australian Journal of Teacher Education*, 37 (8), 66-81. <http://dx.doi.org/10.14221/ajte.2012v37n8.5>.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey-Bass.
- Mezirow, J. (1996). Contemporary paradigms of learning. *Adult Education Quarterly*, 46 (3), 158-172.
- Mezirow, J., & Associates (2000). Learning to think like an adult: Core concepts of transformation theory. In Jack Mezirow and Associates, *Learning as transformation* (pp. 1-33). San Francisco: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. London: SAGE.
- Ministry of Education and Sports (MOES). (1992). *Government white paper on the report of the education policy review commission* (EPRC). Kampala: Government Printers.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108 (6), 1017-1054.
- Nbina, J. B. (2012). Teachers' competence and students' academic performance in senior secondary schools chemistry: Is there any relationship? *Global Journal of Educational Research*, 11 (1), 15-18. doi: <http://dx.doi.org/10.4314/gjedr.v11i1.3>.
- Nguyen, G. N. T. (2011). *Teacher knowledge of students and enactment of motivational strategies in teaching the concept of function* (Doctoral dissertation, The Florida State University).

- Okanlawon, A. K., & Akanni, D. O. (2009). Pedagogical content knowledge: A key factor in teaching painting. *African Research Review*, 3 (4), 153-163.
- Ontario Ministry of Education and Training. (2009). *The Ontario Curriculum, Grades 1-8: The Arts, 2009*. Toronto, Canada.
- Perraton, H., Creed, C., & Robinson, B. (2002). *Teacher education guidelines: Using open and distance learning. Technology, Curriculum, Cost, Evaluation*. Paris: UNESCO.
- Sandell, R. (2012). *What excellent visual arts teaching looks like: Balanced, interdisciplinary and meaningful (Advocacy White Papers for Art Education)*. Reston, VA: National Art Education Association. Retrieved from www.arteducators.org/advocacy/NAEA_WhitePapers_3.pdf
- Sanyal, S. K. R. (2000). *Imaging art, making history: Two generations of Makerere artists* (Doctoral dissertation). Emory University, Atlanta.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15 (2), 4-14.
- Sim, C. (2001). Transforming the subject: A case study of subject matter preparation in teacher education. *Queensland Journal of Educational Research*, 17 (1), 29-47. Retrieved from <http://education.curtin.edu.au/iier/qjer/qjer17/sim.html>.
- Simpson, I. (2000). *Drawing, seeing and observation*, (third edition). London, A & C Black Publishers Limited.
- Ssegantebuka, J. (2016). *Tutors' knowledge-base and the preparation of pre-service visual arts teachers in Uganda* (Unpublished doctoral dissertation). Makerere University-Kampala Uganda.
- Ssenyondwa, P. (2012). *Teaching sculpture in national teacher colleges in Uganda* (Unpublished master's thesis). Kyambogo University, Kampala-Uganda.
- Swearingen, M. M. (2014). *Four preservice teachers' use of mathematical knowledge during lesson planning and instruction in the field experience* (Doctoral dissertations). 108. University of San Francisco. Retrieved from <http://repository.usfca.edu/diss/108>.
- Tebenkana, T. (2010). *Efficacy of the distance education mode in the training of art and design teachers at Makerere University* (Unpublished doctoral dissertation). Makerere University-Kampala Uganda.
- Turner-Bisset, R. (1999). The knowledge bases of the expert teacher. *British Educational Research Journal*, 25 (1), 39-55.

Received: June 21, 2017

Accepted: August 25, 2017

Julius Ssegantebuka

MSc, Assistant Lecturer, Ndejje University, P. O. Box 7088 Kampala, Uganda.

E-mail: segajulius@gmail.com

Website: <http://www.ndejjeuniversity.ac.ug/>