

## Special Issue “Education in Emergency Situations: Prospects and Challenges” Case Study

# Students’ Misconceptions About Visual Arts and Technical in the Study of SSTVET in Bagabaga College of Education, Tamale

Mumuni Zakaria Fusheini<sup>\*ID</sup>, Adams Abudi

Vocational and Technical Education Department, Bagabaga College of Education, Box ER 35, Tamale, Ghana  
Email: [lunziegu@gmail.com](mailto:lunziegu@gmail.com)

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**Abstract:** This study examined misconceptions held by first-year students of Bagabaga College of Education regarding the Visual Arts and Technical Education components of the Foundations of Social Studies and Technical Vocational Education and Training (FFSSTVET) subject. An Action Research design was employed to gather data, which were analyzed using thematic and narrative analyses. A census sampling technique was used, including all 550 Level 100 students enrolled in the FFSSTVET course. Data were collected at three stages and analyzed thematically. At the pre-intervention stage (‘before lessons’), students demonstrated limited understanding of the nature of Visual Arts and Technical Education in colleges. During the intervention stage (‘during lessons’), students expressed interest in pursuing Visual Arts and Technical programs after learning about the subjects and associated career opportunities. At the post-intervention stage (‘after lessons’), many students without a Visual Arts and Technical background opted to change their programs from Maths, English, and Early Childhood Education to Visual Arts and Technical programs. The study concluded that inadequate orientation at basic and secondary school levels contributes to students’ misconceptions about Visual Arts and Technical Education. Therefore, it is recommended that Technical Vocational Education and Training (TVET) stakeholders implement regular outreach programs to educate students at the basic and secondary school levels about the benefits of TVET education in developing entrepreneurial skills and addressing unemployment in Ghana.

**Keywords:** technical, misconceptions, Visual Arts, FFSSTVET, foundational course, level 100 student teachers

## 1. Introduction

Public misconceptions about Technical Vocational Education and Training (TVET) have contributed a lot to most of the challenges facing TVET in Ghana (Aidoo, 2018; Anamuah-Mensah, 2004). As a result, there is the low enrolment of student teachers to study Visual Arts and Technical programs in TVET Colleges of Education (Fusheini, 2020; Kassah & Kemevor, 2016), from which Bagabaga College of Education is not exempted (Fusheini et al., 2021).

Similarly, other researchers have given more reasons for the low enrolment of students into TVET programs to including poor orientation given to students, the disparity in the grading system, primitive negative perceptions toward TVET, lack of educational infrastructures and facilities, lack of qualified teachers for TVET, government little attention paid to the empowerment of entrepreneurial courses over the years and some TVET teachers and instructors’ lazy

attitudes toward the teaching and learning of TVET in schools and institutions (UEW, 2018; Artwatch Ghana, 2017; Opoku-Asare et al., 2015a; Boateng, 2012; Anamuah-Mensah, 2004; Ross, 2004).

Consequently, the recent curriculum reforms for the Four Year Degree programs in Colleges of Education have implemented the FSSTVET subject with aspects in it to enable TVET tutors and students to identify misconceptions about TVET and use Action Research to solve the misconceptions (Collegedeskgh, 2022; UEW, 2018; T-TEL, 2020). The FSSTVET as a course of study in the first semester of the first year has a unit on misconceptions about TVET programs (UEW, 2018), where tutors discuss with learners to gather their views on the misconceptions they have and find solutions to them through Action Research.

In light of this, the study examines students' misconceptions about the study of Visual Arts and Technical Education during lessons in FSSTVET subject and finds appropriate solutions for them.

### **1.1 Statement of the problem**

Many studies have delved into Visual Arts and Technical Education on aspects of pedagogies and teacher competencies in order to improve the teaching and learning of these courses (Dasmani, 2011; Aidoo, 2018; Fusheini & Bukari, 2017, Opoku-Asare et al., 2015b). Also, there had been some studies on both students' and the public's misconceptions about Visual Arts and Technical Education, but most of these studies have rather concentrated more on students in the Senior High and Basic Schools (Fusheini et al., 2021; Fusheini, 2020; Opoku-Asare et al., 2015a).

Meanwhile, one of the major challenges facing Visual Arts and Technical programs in the colleges of education has to do with the misconceptions which beginning-teachers have about Visual Arts and Technical Education in the colleges of education running Visual Arts and Technical programs (Fusheini, 2020; Fusheini et al., 2021).

Fortunately, as part of efforts being made to identify and address these misconceptions, the subject FSSTVET has units in the module designated for examining the misconceptions of the students and the public and finding solutions to them through Action Research (Collegedeskgh, 2022; T-TEL, 2020). In light of this, the study examines students' misconceptions about the study of Visual Arts and Technical Education during lessons in FSSTVET subject and finds appropriate solutions for them.

### **1.2 Objectives of the study**

1. To find out students' misconceptions prior to Technical and Visual Arts lessons in the SSTVET subject.
2. To examine students' reactions during interventional lessons in Visual Art and Technical Education within the SSTVET subject.
3. To examine students' views about their misconceptions held in objective one before the interventional strategies.

### **1.3 Significance of the study**

The study seeks to establish the misconceptions that students have about Visual Arts and Technical Education and try to teach effectively in order to help the students do away with their misconceptions about these two great subjects embedded in the SSTVET course. Results gathered on the misconceptions students have will provide adequate information for tutors to devise appropriate means of teaching to improve and sustain students' interest in the study of Visual Arts and Technical. Likewise, due to some of the misconceptions society has about Visual Arts and Technical, there has been a low student intake to offer these courses at Bagabaga College of Education. Hence, the findings of the study will inform all stakeholders in education on how to join hands with Visual Arts and Technical practitioners to sensitise the general public and students on the importance of TVET for self-employment opportunities in the country.

## **2. Related literature review**

### **2.1 Nature of SSTVET course**

Several researchers have indicated that the Visual Arts curriculum has globally been given attention to empowering the entrepreneurial skills necessary to provide jobs for people (NaCCA, 2019b; Fleming, 2010; Watts, 2005; Alter et al.,

2009). Ghana, as a developing country, has seen recently there is the need to project the Arts (Visual and Performing Arts) on the national curriculum as one of the vital areas of study that bring about the creation of self-employable jobs. As a result, the new Standards-Based curriculum sees the need of integrating the Arts and other subjects to showcase the interrelationships between the Arts and other subjects (NaCCA, 2020). In effect, the course, Foundation in Social Studies and TVET has been mounted at the Universities and Colleges of Education to train students on how to identify and appreciate the interrelatedness of Social Studies and TVET.

However, SSTVET is just a curriculum showcasing the importance of TVET and the Social Sciences, but in reality, the interrelatedness of TVET cuts across all subject areas (Fusheini, 2020). The course on Foundations of Social Studies and Technical Vocational Education and Training (SSTVET, but with Agric inclusive as SSGTVET) is a two-faceted course that on one hand, seeks to project Social Studies as a course that addresses the multicultural setting in Ghana (UEW, 2018). On the other hand, the course seeks to project TVET as a course focusing on the development of skills that gives individuals the ability to contribute to their own well-being and the community. Therefore, there are two strands, namely Social Studies and TVET, which are designed for students to study in order to develop the social skills necessary to relate to entrepreneurial skills gained from TVET for their personal development and the community. More so, UEW (2018) and NaCCA (2017) indicate that the essence of the SSGTVET subject is to create awareness among students about the issues of identity and the interconnections that create an individual's uniqueness and how individuals link up to the community, occupations and skills, core values and other competencies that enable the individual to be a functional and participatory asset in the community.

Likewise, SSGTVET is structured to address the various components of subjects constituting the program and assist students to iron out their misconceptions about the Technical and Visual Arts, which have been seriously neglected in schools (Fusheini et al., 2021; Fusheini, 2020). This is intended to further encourage and sensitise students on the importance of TVET courses as a set of skills for entrepreneurship and community development (UEW, 2018; Ansah & Kissi, 2013). The course also aims at generating avenues that will grow new insights into the interconnectedness of social development and TVET. Consequently, learners will acquire some basic knowledge that will help them to disabuse their minds of the negative perceptions and misconceptions about TVET.

## ***2.2 Misconceptions about TVET education***

The misconceptions surrounding TVET Education are more negative than positive (Fusheini et al., 2021, Fusheini, 2020). One such great negative perception has to do with the association of lackadaisical people with TVET. Though the majority of the people who hold this belief are the non-educated general public (Fusheini, 2020), Boateng (2012) is of the view that even some educated Ghanaians think that TVET programs are for low-class students. This is why Fusheini (2020) found out that some educated parents do ask their wards to pursue science courses instead of TVET courses in their attempt to believe that TVET is a vocation that should be learnt by people who did not find fortunes in academia (Evans-Solomon & Opoku-Asare, 2011).

Despite the fact that TVET in recent times is given attention to growth (Dasmani, 2011), some researchers still believe that TVET is continually mocked by people who only attach achieving glory from 'blue collar' jobs (Atchoarena & Esquieu, 2002; Aidoo, 2018; Fusheini, 2020). Society sees Europe as a prepared ground for Africans to grow without attaching value to TVET Education which can improve the socio-economic fortunes of societies. This is evidenced in Anamuah-Mensah's (2004) findings that the great countries like China, Japan, Britain and among others, have grown wealthier through Vocational and Technical Education and not through the mere reliance on dollars and pounds. Consequently, the contention by many Africans that dollarization may be the right medicine for wealth creation is not true, instead, the Vocationalization of Ghana's education will put money into people's pockets (Anamuah-Mensah, 2004). In other words, Vocational and Technical Education and Training needs to be strengthened in the country for skill formation for the enhancement of productivity and global economic sustainability (Bhuwanee et al., 2006; UNESCO, 2004).

## ***2.3 Factors affecting the teaching and learning of TVET courses***

Though Technical and Vocational Education and Training (TVET) is receiving gross transformation in Ghana (Boateng, 2012; Bhuwanee, 2006), it has a lot of challenges with regard to infrastructure and the exhibition of teaching

and learning (Aheto-Tsegah, 2011; African Union, 2007). There are few schools for TVET Education in Ghana as compared to public Senior Secondary Schools in Ghana (Anamuah-Mensah, 2004). The government of Ghana has, over the years not paid the needed attention to TVET institutions and this led to the education on TVET being very poor and not patronizable. The few technical and vocational institutions existing even lack the requisite tools and materials to function well, and instructors always faced the challenge of teaching practical works using appropriate resources (Dasmani, 2011).

This notwithstanding, scholarship packages to both students and instructors of TEVET programs have over the past years not been initiated for TVET Education as incentives to boost the sector for the vibrant self-employable skills it offers to people. Unlike science, maths and other programs of study where much attention is paid by the Ghana Education Service, TVET Education seems unimportant due to the level of support GES pays to it in Ghana. It is quite overwhelming that in the past, a developing country like Ghana has paid little attention to grooming graduates and other citizens in skills training to sustain the rampant unemployment issues in the country. Similarly, Anamuah-Mensah (2004) critically observed that Ghana needs to grow through TVET Education by empowering TVET Education to grow both students and the general public in entrepreneurial skills for self-employment than producing graduates for white collar jobs.

In tertiary institutions such as Technical Universities, the teaching and learning of technical and vocational subjects are worried about a lack of tools, equipment and technicians to exhibit expertise in both the content and pedagogy aspects of the TVET. As a result, there is low patronage of TVET programs in Technical Universities, and a majority of students are rather admitted to Business and Arts programs (Aidoo, 2018). Similarly, the Colleges of Education lack appropriate and sufficient resources to train students to acquire the necessary skills for job opportunities (Fusheini et al., 2021; Fusheini, 2020). This has consequently affected students' desire to gain admission into Colleges of Education to study Technical and Visual Arts programs (Fusheini et al., 2021). In a research conducted by Fusheini et al., it was found that the Universities have more intake of students for Technical and Visual Arts than Technical Universities. Apparently, the Technical Universities also have more intake of students than the Colleges of Education and this was ascribed to students' awareness of the fact that the resources available to train them in the Technical and Visual Arts domains are sufficient at Universities than the latter two institutions.

In the past, the curricula for Technical and Visual Arts programs in some institutions were not practically empowered (Kassah & Kemevor, 2016) and a typical one was the Colleges of Education curricular (Fusheini & Bukari, 2017; Opoku-Asare et al., 2015a). In the era of the Certificate 'A' and Diploma programs, Colleges of Education had an expanded form of the theoretical components of the courses and trainees graduated with little practicum experience in Technical and Visual Arts courses. This led to a situation where the Visual Arts and Technical syllabus of Colleges of Education had some mismatch in content with that of the Basic Schools' Creative Arts and Basic Design and Technology syllabuses (Fusheini & Bukari, 2017; Anamuah-Mensah, 2004, p. 14)).

Similarly, the Standards-Based Curriculum for the B. Ed Technical and Visual Arts program run in the Colleges of Education today is also defective in the number of practical activities students are assessed on. This is affected by time, availability of resources and facilities and expertise on the part of teachers. Subject-based workshops are normally organised for Subject-Leads and neglect all other tutors who handle TVET courses. In effect, tutors who teach TVET courses do not possess the proper updates on the newly created subjects for the B. Ed programs. As a result, Boateng (2012, p. 110) expects teacher training to equip TVET tutors with the necessary pedagogies to teach effectively and proposes that institutions should greatly improve capacity building for TVET programs.

## **2.4 Theoretical literature**

Two theories underpinned this study. There are the Theory of Integration and the Theory of Constructivism.

### **2.4.1 Integration theory of learning**

Learning becomes more useful when students are able to connect many experiences in life to a whole. Students need to make connections in their learning and according to Dean (2012, p. 50), the interconnectedness in learning is across courses, among diverse perspectives, and between in-class and out-class experiences. Dean further elaborates that Integrated Learning happens between new knowledge and students' relevant previous knowledge. Similarly, the

FSSTVET course seeks to make the students appreciate the interconnectedness of these subjects and then develop the necessary knowledge, understanding, skills, values and competencies through the combination of social constructivism and social realism (UEW, 2018, p. 41).

Today, the call for curriculum integration becomes necessary for the 21<sup>st</sup>-Century requirements (NaCCA, 2019a; Baxter & King, 2004; Newell, 2006). The 21<sup>st</sup>-Century education needs graduates with problem-solving skills to solve the multifaceted problems that emerge now and then (National Teacher Education Curriculum Framework (NTECF), 2019). Integration finds one of the solutions by enabling graduates to acquire multifaceted skills in diverse courses that make them fit to solve emerging problems in the 21<sup>st</sup>-century communities (NaCCA, 2019a; T-TEL, 2019; NTECF, 2019; Bok, 2006).

The Social Studies, Geography, History and TVET curriculum is intended to enable student-teachers to appreciate the interconnectedness of these subjects and develop knowledge, understanding, skills and competencies through a combination of social constructivism and social realism.

An integrated curriculum allows students to undertake their learning tasks in a holistic way (Wrenn & Wrenn, 2009). In other words, integration enables the students to learn without restrictions that are often imposed by subject boundaries. Similarly, the students in Colleges of Education study various subjects under the SSGTVET without considering students' backgrounds with respect to the programs studied at second-cycle schools. Therefore, the SSGTVET builds the students' ability to apply knowledge through multidisciplinary courses so that they can be versatile in solving different problems in society (UEW, 2018).

In the view of Jensen (1996, as cited in Common Understanding, 2022);

The brain learns best in real-life, immersion-style multi-path learning...fragmented, piecemeal presenting can forever kill the joy and love of learning". The more connections made by the brain, the greater the opportunity for making high-level inferences (p. 553).

According to the International Council for Higher Education (2005), the need for Integrated Learning in schools is very important globally, and all the efforts needed to promote Integrated Learning must be masterminded. Integrated learning is very relevant in situations where we need to train people for various forms of jobs and services. Integrated learning is highly influenced by the environment in which context learning takes place. Therefore, environmental factors should be considered when practicing integrated learning. In a decisive discussion on how to implement an integration curriculum successfully, the International Council for Higher Education (2005) laid down some of the following considerations.

1. Most of the traditional cultures were originally built on the integration of life and that modern education disintegrated much of the cultural knowledge into specializations. Therefore, integrated learning will remain very conducive for such contexts.

2. It also emphasized that implementers of integrated learning should strike a balance between formal, non-formal and informal modes of education. This will help to provide multiple tools for learning.

3. Institutions to implement integrated learning must recognize the fact that integration is not a product packaged for use but it is a process that needs to be developed so that students are helped to see the value of integrated learning.

4. Integrated learning seeks to create flexible skills in students across multifaceted subjects, hence integrated curriculum should be geared toward one that is in tune with real-life situations and a manifest for solving real-life problems.

5. That integrated education must not downplay specialisation because integration and specialisation are two elements on either side of the coin of education. Integration requires core knowledge of various specializations around which integration must take place.

#### ***2.4.2 The theory of constructivism***

Constructivism, as an important theory of learning, is based on the idea that people actively construct or make their own knowledge by their experiences (Western Governors University (WGU), 2020). Learning is related to students' experiences and the experiences of individual learners differ from one another. This makes it prudent that constructivists allow learning to go on based on how individual students construct knowledge against their experiences. Basically, learners use their assumed knowledge as a foundation and further build on it with new ideas that they learn (Bada, 2015). In this way, teachers and instructors with the constructivist philosophy understand how students learn through

their past and present experiences and guide them to bring their experiences into classroom activities.

In the views of some researchers, constructivism is an approach to teaching and learning on the bases that cognition (learning) is the result of 'mental construction'. This could also be explained as students' ability to learn by putting together what they already know with the current knowledge they are seeking for (McLeod, 2019; Bada, 2015; Gunduz & Hursen, 2015; Elliot et al., 2000). In education, teachers need to understand and apply the principles of the Constructivism Theory to create a holistic and enable learning environment for students to learn (WGU, 2020). This is why WGU and McLeod (2019) stressed that constructivist classrooms place the teacher in the role of creating a collaborative environment where opportunities are created for students to actively get involved in their own learning. In other words, constructivist classrooms fashion the teachers to be facilitators of learning than instructors. Likewise, in the SSGTVET classrooms, the various teachers stand the chance to organise students' memories of Social Studies in relation to Visual Arts, Technical, Home Economics and Agricultural Science (UEW, 2018). In this regard, the various teachers act as facilitators in their classrooms so that students discuss and make shower thoughts and presentations on their knowledge of the interrelatedness of Social Studies with TVET courses including Agricultural Science.

In a more elaborate view, WGU (2020) outlined some key principles of constructivism in a constructivist classroom as follows:

1. Knowledge is constructed. This is the fundamental principle of constructivism which explicitly denotes that students build knowledge upon knowledge. That is students learn by fitting the new knowledge into their previously acquired knowledge and vice versa (McLeod, 2019).

2. People learn to learn, as they learn. In this principle, the constructivists believe that there is no one thing embedded in any learning process, hence students acknowledge other knowledge and skills in their attempt to learn an idea. In the instances of learning Visual Arts in SSGTVET class, students finally learn ideas in other subject areas in their attempt to connect and apply what is learnt in Visual Arts with the other subjects (UEW, 2018).

3. Learning is an active process. For instance, the teaching and learning of SSGTVET courses need all students to take active participation in class for them to collaborate in discussions on concepts and ideas, so it is a strong contention among constructivist teachers that learning cannot be passive (WGU, 2020) but need to be participatory.

4. Learning is a social activity hence it is connected with the lives of people. Learning, therefore, does not happen without relating classroom activities to the common practices of the people's culture (NaCCA, 2017).

5. Similarly, learning is contextual. This means that learning must be found within the students' environment for them to actualise ideas and concepts in life.

6. Knowledge is personal. In effect, every learner who learns in SSGTVET is expected to air their views or understandings with regard to concepts and ideas. Learning in this way is dependent on the individual student's construction of knowledge (UEW, 2018).

7. Learning exists in the mind. Hands-on experiences and physical actions are necessary for learning. Similarly, the learning of TVET involves practical exposure of students to ideas and concepts for mental cognition (Fusheini et al., 2021).

8. Motivation is key to learning. Teachers need to encourage and sustain the interest of learners through incentives and the exhibition of good and effective teaching.

### 3. Method

The study adopted Action Research of the qualitative domain because it gives the researchers the chance to gather information about students' misconceptions about Visual Arts and Technical Education during lessons in the FSSTVET course. Data gathered using panel interviews and observation were analysed using thematic and narrative analyses of the qualitative domain.

The target population for the study is made of all Level 100 students offering the SSTVET course in the first semester of the first year. Hence, the total number of Level 400 students is 550. In order to have interactions with the whole Level 100 students on their misconceptions about Visual Arts and Technical, the census sampling approach was used. Interviews and observation were used in taking students' misconceptions as well as taking note of their reactions during lessons. Panel interviews were conducted among four different groups (classes) where each group had about 137 student teachers with the exception of Group 4 which had 139 student teachers. In the panel discussion, the researchers

interviewed students about their misconceptions and recorded all responses coming from each group at a time. In some cases, students' views were written down. Structured and unstructured interview questions were asked alternatively. This is because some misconceptions were common among students from previous studies conducted in 2020 and 2021 on SHS and JHS students' perceptions and misconceptions. Hence, the researchers asked these questions to compare their commonality with the misconceptions student teachers also have. Likewise, the researchers asked to follow-up questions on responses that were much revealing and needed further interrogations to tap more information from the respondents.

During both theoretical and practical lessons, the researchers acted as participant observers and noted down students' reactions. The attitudes of both female and male students during practical activities were observed so that the researchers could confirm the validity of some of the misconceptions raised with respect to gender, drawing and the handling of tools and equipment.

### 3.1 Data source

Primary data was gathered from the use of Interview and Observation instruments. During pre-intervention, the researcher employed panel interviews to gather data on students' misconceptions about Visual Art and Technical Education. Each panel discussion consisted of 137 and 139 student teachers for four different groupings. Participant observers, the researchers also gathered data on students' attitudes and behaviours toward Visual Art and Technical during lessons at the pre-intervention stage. Data were collected in the form of words to support activities that were observed. Primary data for this study, therefore, was purely words and pictures.

## 4. Results and discussions

Results and discussions are presented and discussed based on the objectives of the study.

### 4.1 Objective 1: To find out students' misconceptions about Technical and Visual Arts before lessons in the FSSTVET course

**Table 1.** Major misconceptions expressed by students

| Misconceptions   |
|--|
| Visual Art and Technical courses are characterised by drawing which is difficult |
| Visual Arts and Technical courses are meant for low class students               |
| Visual Arts and Technical courses are not meant for girls                        |
| Girls fear working with tools and equipment                                      |
| Visual Arts and technical programs are costly                                    |

#### 4.1.1 Drawing is difficult

The misconception that Visual Arts or Technical is a course characterised by drawing is an old misconception among students which still finds its way into the minds of the 21<sup>st</sup> Century students. In a similar view, Opoku-Asare et al. (2015b) and Fusheini and Bukari (2017) attribute the misconception that drawing is difficult to some generalist teachers' incompetencies in teaching other practical activities like printing, dyeing, weaving, etc with students and traditionally sticking to what used to be called 'draw yourself' concept (Fusheini, 2020).

#### 4.1.2 Visual Arts and Technical are meant for low-class students

The students expressed that most of their colleagues who obtained poor BECE results were spotted in the Visual Arts and Technical classes in the Senior High Schools, hence the programs are not meant for excellent students. This view of the students is supported by Aidoo (2018) and Osei-Opoku and Okrah's (2017) findings that some Senior High School heads push only those who did not gain good BCE results into Visual Arts class, for the contention that these students cannot offer more difficult subjects like Science (Opoku-Asare et al., 2015b; Evans-Solomon, 2004).

Likewise, Aidoo (2018) added that some teachers and heads of Senior High Schools discourage brilliant students from choosing the Visual Arts program with the common notion that Science courses are economically better. On the contrary, Anamuah-Mensah (2004) provides the right medicine to all who have this unfortunate misconception and sickness by emphasising in his report that teachers, heads and other stakeholders must realise that the growth of a country or nation highly depends on the Vocational and Technical programs.

#### 4.1.3 Visual Arts and Technical courses are femininely gendered

The students during the interview opined that Visual Arts and Technical courses are not meant for girls. Most of these students reasoned that girls do not find it appropriate to study Visual Arts and Technical because of the characteristic nature of using tools and equipment in the programs. One of the female students who was interviewed declared:

*“Visual Arts and Technical courses are drawing courses. We the girls sometimes are not comfortable with painting and carpentry. That is why you even find it difficult to see women being carpenters, artists, masons, and shoemakers. I see that when you even work as a carpenter, society will mock you thinking that you are violating some traditional beliefs. Some men may even find it difficult to marry you if you are working in areas like carpentry, shoemaking and among others (A. Amida, personal communication, April 11, 2022)”*

Similarly, a male student who did Visual Arts at the Senior High School narrated as below:

*“We were 30 students in our class with only two girls. At one point, the girls wanted to leave for Home Economics class because they found sculpture very manly. It was the intervention of the Form Master who counselled them seriously and they finally remained till we all wrote the final exams. One of the girls who passed the WACE exams is now in the School of Hygiene in Tamale. I remember when the Form Master was talking to all of us in the class, the same girls reiterated that though Home Economics is also a practical subject, it is something that they have previous knowledge of, such as cooking and home management”*

This indicates that the misconceptions about Visual Arts and Technical education being associated with the masculine gender are a view among girls themselves. However, according to Kwakudua and Dzandzo (2021), they prefer studying Home Economics to Visual Arts and Technical which is also a practical subject. This is why Seery (2009) sees this to be tied to students' previous knowledge in a subject that influences what they choose to learn in the future. This is because Home Economics is more related to kitchen work in our tradition.

Another contrary view shared by Wikberg (2013) in her study conducted in Sweden shows that Art in particular is femininely gendered while most people relate Physical Education, Mathematics and Physics to boys. From the views of the authors, it can be clearly deduced that misconceptions about Visual Arts and Technical are relative to geographical locations.

#### 4.1.4 Visual Arts and Technical are costly

It was found out that students placed Visual Arts and Technical to be courses that demand tools, materials and equipment acquisition when pursuing them. According to the students, parents find it difficult to purchase tools, materials and equipment for them to offer these courses. This misconception has denied many students from offering Visual Arts and Technical. However, the truth is that the courses also make room for conventional materials which can be prepared locally from the environment (Fusheini & Bukari, 2017) without the use of money to purchase them from

the market. Typical examples are leather, clay, wood, plant dyes, and among others.

However, it was sad to hear one of the students revealed:

*“I was good at craft works such as weaving, leather preparation and stitching when I was in Junior High School. I wanted to pursue Technical at the Senior High School but with my knowledge of a former senior colleague who abandoned the Technical program because he could not afford to purchase the basic tools for the course. I am also not from a well-endowed family and think that I can fall into the same situation as my senior if I decide to study Technical in the college.”*

Contrary to this view of the student is Anamuah-Mensah’s (2004) reiteration that society and the government negligence to foresee that the only way the country can survive from the devastating unemployment issues is to pay gargantuan attention to TVET Education. As a result, Fusheini et al. (2021) emphasized in their study that the government should empower TVET institutions with the requisite resources to train individuals and students for entrepreneurship skills that prepare them for self-dependency in the future.

## ***4.2 Objective 2: To examine students’ reactions during interventional lessons in Visual Art and Technical.***

### ***4.2.1 Asking more questions on the nature of Visual arts and Technical***

It was observed during lessons that student teachers asked more questions about the nature of Visual Arts and Technical courses offered in the College. This clearly shows that students in the second cycle of schools and institutions are not being given proper orientation about the nature of Visual Arts and Technical offered in the colleges. In view of this, Fusheini et al. (2021) found out in their study that TVET tutors in the colleges have played little effort to sell TVET programs run in their colleges to the basic schools and second cycle schools and institutions. Likewise, poor teaching strategies adopted by teachers in teaching Art and Technical courses at the basic schools are a major contributing factor to students’ little knowledge about the nature of the subjects (Opoku-Asare et al., 2015a).

### ***4.2.2 Students actively involved in plenary discussions on job opportunities in Visual Arts and Technical***

Students were massively involved in plenary discussions on job opportunities as it remained one of the topical misconceptions raised at the pre-intervention stage. This also agrees with Wikberg’s (2013) finding that the various job opportunities in Visual Arts are little known by students and in some cases relate skilled work to gender.

## ***4.3 Objective 3: To examine students’ views about their misconceptions held in objective one before the interventional strategies***

### ***4.3.1 Both high- and low-class students can offer Visual Arts and Technical programs in the college***

During lessons, all students demonstrated knowledge, understanding and skills in the theories and practical aspects of topics treated irrespective of their levels of learning. Also, in formative assessments during every lesson, the tutors realised that all students in the class learned at par based on how each student answered questions during reflection sections. This also boils down to the effectiveness of using appropriate teaching methods. This confirms Ryan’s (2022) indication that the teacher’s ability to demonstrate concepts practically with learners makes learners learn by doing; and Wanzare (2002) added that the learners also learn according to their learning modes when lessons are practicalised in class.

### ***4.3.2 Visual Art and Technical are gender-friendly courses***

Both females and males were actively involved in practical activities. However, the female students were more involved in dyeing than their male counterparts. This is related to Asinyo, Frimpong and Amankwah’s (2019) view that Textiles had traditionally been dominated by females in the past than Technical works in Ghana, hence there were more females partaking in dyeing than constructing technical works. However, this stereotyping needs to be broken in the era

of technology as we have female students and lecturers doing well in the engineering industries in Ghana (Maria, 2002; Sarkar et al., 2018).

The majority of the female students were able to fold, tie and dye materials perfectly and needed little guidance during practical activities. This enticed the students to ask for more practical sessions before the end of the semester. It is, however, noted that when the demonstrative and experiential teaching pedagogies are employed for teaching practical courses, learners become motivated and retention of knowledge is also guaranteed (T-TEL, 2020; Bada, 2015).

#### ***4.3.3 Though Visual Art and Technical involve cost, their job careers are also wealthier***

Even though the students contributed monies to buy colours, chemicals and dyes for their own demonstrations for practical activities, they indicated that Visual Art and Technical career jobs careers are also wealthier. This implies that students need guidance and counselling to understand that any entrepreneurship training for lifelong educational requirements goes with the cost of tools and materials. Similarly, when students participate in practical lessons which enable them to design and produce artefacts, they become motivated and organising their own resources to learn become something joyful (Fusheini et al., 2021).

#### ***4.3.4 Visual Arts and Technical programs offer entrepreneurial skills that equip students with independent skills for survival***

In a documentary presentation on careers of Visual Arts and Technical in class, students saw the various fields of work where students with Visual Arts and Technical backgrounds can work. The students appreciated the importance of having a skill and how people with practical skills can leave independently. Likewise, Ansah and Kissi (2013) buttress that when students are fed with practical knowledge and the skills of producing artefacts for life, they are equally trained as life-long learners and will have no or little dependency on others.

## **5. Conclusions and recommendations**

The study drew a major conclusion that lack of orientation for students at the basic and second cycle schools compounds their negative misconceptions about the choice and study of Visual Arts and Technical programs in Bagabaga College of Education, Tamale. The study, therefore, recommends that TVET stakeholders in general should design consistent outreach programs to educate students at the Basic and Second Cycle Schools on the need to opt for TVET Education for the creation of entrepreneurial skills to solve the devastating unemployment problems in Ghana.

The misconception of mapping Visual Arts and Technical to students with poor grades and in low classes has led many brilliant students even in the 21<sup>st</sup> Century to still thinking that their pedigrees are above pursuing Visual Arts and Technical programs. This results in the low patronage of Visual Arts and Technical at the Colleges of Education offering Elective Courses of the JHS programs. The study, therefore, recommends that the Commission for Technical Vocational Education and Training (CTVET) empower Visual Arts and Technical teachers to carry out sensitisation programs for school Heads and other non-TVET teachers on the importance of Visual Arts and Technical Education.

Students' massive involvement in plenary discussions on the job opportunities in Visual Arts and Technical was a result of their quest to find solutions to the misconception that these programs do not have adequate job opportunities. Therefore, the study recommends all TVET teachers and associations in the country encourage the practical aspects of the courses and also provide guidance and counselling for students on the job prospects in Visual Arts and Technical.

The involvement of female students in practical activities created the impression that Visual Arts and Technical programs are gender friendly. Consequently, the students realised that the handling of tools and equipment during practical activities by female students was a sign of no stereotyping in Visual Arts and Technical programs. As a result, the study recommends that the government design special packages for people in society who have succeeded despite stereotyping in the pursuit of their educational careers. A typical example is to offer special packages for girls who are carpenters, art teachers, engineers and among others.

The current grading system affects Visual Arts and Technical students to gain admission to colleges, hence all stakeholders should support the ongoing Competence-Based Training program in the country that seeks to provide an

alternative grading system or policy of ‘achieve’ or ‘not achieve’ in the TVET grading systems.

## Conflict of interest

The authors declare no competing financial interest.

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