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Student-Teachers' Prior Knowledge as a Predictor of End-of-Semester Exam Performance in Visual Arts Specialism at Bagabaga College of Education

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Abstract



The study aimed at correlating the pre-knowledge of student-teachers to their exam performance in Visual Arts Specialism at Bagabaga College of Education. The main purpose of the study was to use its findings to inform decisions that would guide subsequent admission criteria in admitting students to study the Visual Arts specialism in the College. Mixed Method approach in the form of survey, narrative and descriptive analyses were employed. Data was collected using online questionnaires and Documentary Analysis Guide. Findings of the study revealed that students' pre-knowledge of subjects did not match with their College exam grades and that the student-teachers' self-motivation and mindset were the main determinants of their success in the end of College semester exams. The study, therefore, recommended stakeholders of the College to ensure that students who have the zeal

to pursue the Visual Arts Specialism irrespective of their background knowledge should be offered admission into the programme.

Keywords: Pre-knowledge, Student-teachers, Visual Arts Specialism, Summative Assessment, End-of-Semester Exams

1. Introduction

Upgrading teacher training in Ghana from producing generalist teachers (Opoku-Asare & Siaw, 2016) to specialist teachers with first degree awards came to light in the 2018/2019 academic year (Newman, 2013; T-TEL, 2020). As a result, Bagabaga College of Education admits students from pre-tertiary schools and institutions to offer the Visual Arts specialism, as the College is one of the Technical Vocational Colleges in Ghana (T-TEL, 2019; UEW, 2018). According to Anane et al. (2020), the entry requirements for admitting students into most of the public tertiary institutions in Ghana today are based on the entry aggregate (cut-off aggregate). In most of the traditional universities such as in the technical universities, students are admitted into programmes with the requisite background grades with the hope of influencing effective training and graduation (Accra Technical University, 2022). However, the story in most of the Technical Vocational Colleges of Education is a bit different. The 2018/2019 academic year admissions in Bagabaga College of Education in particular saw students with different backgrounds of prior knowledge admitted to offer the Visual Arts specialism (Fusheini & Adams, 2021). The hope is to train all students equitably to offer them basic theoretical and practical knowledge of the subjects (T-TEL, 2019).

Again, the conception of most researchers is that students' background knowledge and the requisite entry requirements influence their academic performance positively (Adamu, 2016; Aidoo-Buameh & Ayagre, 2013; Sulphey et al., 2018). This is why Sulphey et al. (2018) simply concluded that students with pre-knowledge of the subjects they offer in institutions do better than students without pre-knowledge of the subjects. This notwithstanding, it is, therefore, necessary for this study to examine five end-of-semester exams performance of the 2018/2019 academic year student-teachers admitted to offer the Visual specialism in the College. The intention of this assessment of five end-of-semester exams performance of the student-teachers is to inform decisions with regard to the calibre of students to be considered for admission into the Visual Arts specialism

programme in Bagabaga College of Education, Tamale. Indeed, gender analysis in this regard is also critical to ensure that the educational needs of all students are met. If one gender consistently performs better or worse, investigating the reasons behind these trends could lead to more equitable educational outcomes by identifying and addressing potential biases or disparities in the learning process. In this regard, the study sought answer the following research questions – 1. What is the gender and prior-knowledge information of the 2018/2019 academic year student-teachers offering the Visual Arts Specialism? 2. What is the five end-of-semester exams performance of the 2018/2019 academic student-teachers offering the Visual Arts Specialism? It is envisaged that the outcome of this study plays a significant role in shaping student-teachers' academic success - Those with a stronger foundation in Visual Arts, whether through formal education, personal experiences, or practical exposure, are more likely to excel in their end-of-semester examinations.

2. Theoretical Underpinnings

2.1 Constructivism Theory of Learning

Constructivism is one of the learning theories propounded by Jean Piaget (Jayeeta, 2015) that indicates that learners actively construct or generate their own knowledge, and that reality is determined by experiences of the learners. In other words, constructivism theory of learning is a process in which the learner actively composes, organises or builds creative ideas from their current and past experiences (Drummond, 2009 as cited in Aidoo-Buameh & Ayagre, 2013). Similarly, student-teachers in Colleges of Education offering Visual Arts will build on their previous knowledge and current knowledge that they have acquired in Visual Arts courses of their academic progression (Aidoo-Buameh & Ayagre, 2013).

Furthermore, constructivists dictate that when learners come into contact with a new task, they have to reconcile it with their prior-knowledge, ideas and experiences (Jayeta, 2015) and this may allow them to either accept the new knowledge, or reject it or modify it. As a result, the Constructivism Learning Theory is inductive; as the action or activity in the learning environment initiates the concepts and not that the concepts lead to the activities (Adom, et al., 2016). According to constructivist theory, prior knowledge is critical in shaping how new information is processed and understood. This aligns with the research focus on how student-teachers'

prior knowledge predicts their end-of-semester performance. If students enter the Visual Arts specialisation with a strong foundation or understanding of key concepts, they are likely to make connections between what they already know and what they are learning, leading to better performance.

2.2 Cognitive Learning Theory

According to Valamis Group (2021), cognitive learning refers to an active manner of learning that places emphasis on helping one learn how to maximize the potentiality of one's brain. This makes it easier for a learner to connect new information with existing ideas (Swann, 2013) which results in helping to deepen the learner's memory and retention capacity. Also, to be able to grasp the concept of cognitive learning theory, we must understand the concept of metacognition. Metacognition is the awareness of the brain's thoughts and thought processes (Western Governors University, 2021). This concept of knowing how you think is the basis for cognitive learning theory. Cognitive Learning Theory greatly relies on the work of Jean Piaget (Erisen, et al., 2016), who debunked the notion that learners are passive and simply react to stimuli in the environment. Whilst constructivists study on observable behaviours, Cognitive theory of learning throws more light on how the mind works during the learning process (Denicia, 2020). Today, Cognitive Learning Theory is dominant in psychology, and has been basically broken into two categories, namely Social Cognitive Theory and Behavioural Cognitive Theory.

Social cognitive theory is the contention that learning takes place in a social context and it is impacted by the person, environment and behaviour (Valamis Group, 2021; West Governors University, 2020). The Social Cognitive theory helps us to comprehend how learners are influenced and their influence on the environment. However Behavioural Cognitive Theory is the idea of the interconnectedness of how learners think, how they feel and how they behave (Western Governors University, 2021). In other words, Cognitive Behavioural Theory emphasises the importance of mental processes such as attention, memory, and information processing. In the context of this study, student-teachers' prior knowledge directly influences how they process new information in Visual Arts. The theory suggests that students with stronger prior knowledge will be able to cognitively process and store new information more efficiently, which enhances their exam performance. Those with weaker prior knowledge might struggle to make sense of new material, affecting their outcomes.

2.3 Experiential Learning Theory

Experiential Learning Theory “provides a holistic model of the learning process and a multi-linear model of adult development” (Baker et al., 2002, as cited in Molly & David, 2021, p.52). In other words, Experiential Learning Theory is a dynamic ideal of learning centered on a learning circle powered by the resolution of the dual interactions or reflections of action/reflection and experience/abstraction (Angela & David, 2020). In effect, Barker et al. (2002) expound further that there are two basic distinct ways of transforming experience so that learning becomes achievable, and these are by reflective observation (intension) and active experimentation (extension). As the result, Kolb (1998), as cited in Angela and David (2011) organised some major characteristics of experiential learning theory which are itemized below:

1. Learning is conceived as a process and not in terms of outcomes. This means an outcome does become the conclusive part of learning or what is reflected in performance. Rather, learning results from a course connected experiences where there is knowledge modification and re-formation.
2. Learning is re-learning. This means that learning is best facilitated by a process that draws out the learners’ beliefs and ideas about a topic so that they can be examined, tested and integrated with new, more refined ideas.
3. Learning requires the resolution of conflicts among dialectically opposed modes of adaptation to the world. This means the learning process involves conflicts, differences and disagreements which are conspicuously noted to be drivers of a learning process, and the learners weave themselves through them by actions, reflections and thinking.
4. Learning is a holistic process of adaptation and this means that learning is not only cognition but involves the use of the mind (thinking), hand or body (psychomotor skills) and feelings (affective skills). The focus of this theory is experience, which serves as the main driving force in learning, as knowledge is constructed through the transformative reflection on one’s experience (Baker, et al, 2002).

5. Learning results from synergetic transactions between the person and the environment. That is, learning is influenced by the learning space and the characteristics of the learner.
6. Learning is the process of creating knowledge.

3. Theoretical Framework

Figure 1 is the theoretical framework explaining the relationships between the selected theories of learning and two categories of student-teachers in the Visual Arts programme at Bagabaga College of Education. After the administration of questionnaires, the manner in which the student-teachers (those with prior-knowledge and those without prior knowledge of Visual Arts) learn demonstrated the reflection of the applications of the constructive, cognitive and experiential theories of learning. Therefore, the academic success in summative assessments (mainly end-of-semester exams) is greatly influenced by their manner of learning than their prior knowledge in Visual Arts. It is also shown in Figure 1 that the three theories of learning selected lend themselves into one another, hence no any single theory is independent of the other.

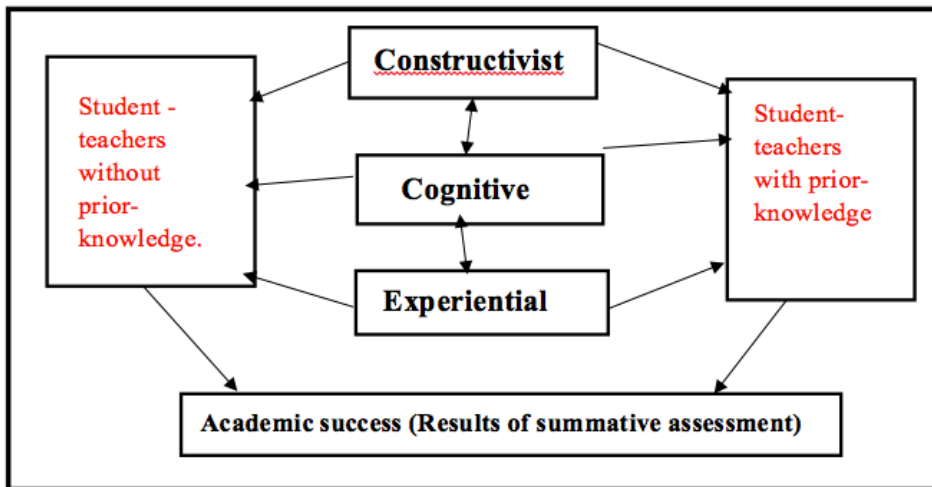


Figure 1: Theoretical Framework
Source: Designed by researcher (2022)

The integrating of constructivism, experiential learning, and behavioural cognitive theory that form the theoretical framework for the study provides

a holistic approach to examining how student-teachers' prior knowledge predicts their end-of-semester exam performance. The framework accounts for the cognitive, practical, and behavioural dimensions of learning, offering a comprehensive understanding of the factors that contribute to student success in Visual Arts Specialism at Bagabaga College of Education. Gender differences and their impact on these dimensions also dovetail into this framework.

4. Review of Related Literature

4.1 Assessment

It is known in the colleges that assessment should be both formative (comprising both assessment for learning and assessment as learning) and summative assessment which is described as assessment of learning (Kennedy et al., 2008; T-TEL, 2017; Tomas, 2020). Standard tests are usually conducted for student-teachers because, test items are not categorised by the ability levels of student-teachers offering any programme. This demands that all student-teachers are tested equally with uniform test items, and scoring as rightly posited by Kang (2021) as well as Clay and Root (2001). End-of-semester exams in particular are standardised across all colleges in Ghana but, internal assessment test items and projects differ from college to college.

Student-teachers are assessed both internally and externally by the Colleges of Education and the mentor Universities respectively (Bekoe et al., 2013). Student-teachers are assessed formatively by their tutors in the college coupled with external quizzes organised by the mentor universities. With the University of Cape Coast, this constitutes 40% of 100 marks for each subject area. Formative Assessment is meant to assess student-teachers' progress in their subject areas, and it takes the form of quizzes, written and practical assignments, field research report, seminar presentations and jury (Introduction to Textile Design, 2021; NTS, 2017) whilst Summative Assessment comes at the end of each semester. The Summative Assessment on the other hand takes the form of written examinations, project works, write-ups (evidence of study), and aesthetic appreciation.

Similarly, in the Visual Arts courses, the assessment criteria are both formative and summative. However, there are external projects given by

the Institute of Education, University of Cape Coast for student-teachers to execute at the college level (Introduction to Textiles Design, 2021). These projects are sometimes marked by various tutors and scores submitted to the Institute. In other cases too, coordinators of the Institute will visit all Colleges to assess the practical works and moderate the marks given by the tutors. Artists' statement is a major component of project works which is a write-up describing the art piece produced by the student-teachers.

4.2 Prior Knowledge vs Academic Performance

The influence of prior knowledge on learning and academic performance is a major concern for educators. Many researchers have deduced that students' prior knowledge greatly influences how they learn, and this consequently shapes the success of their academic achievements (Adamu, 2016; Adjei, 2007; Binder et al., 2019; Seery, 2009). As a result, research in Cognitive Psychology postulates that students with pre-existing knowledge about a course or programme stand a better chance to understand and remember more than students with little or no pre-existing knowledge. They further elaborate that it is even more evidenced in practical courses or programmes where due to students' previous practical knowledge and skills, they do have upper hand over their counterparts who have no prior practical skills for the new programme.

Contrary to the finding that students with pre-existing knowledge perform better than students without pre-existing knowledge, Better Policies for Better Lives (n.d) and Abd Rahman et al., (2010) indicate that the teacher's pedagogical knowledge level in delivering lessons for diverse of students with different ability levels can make all students learn equally and equitably. It is further argued that when prior knowledge is defective or inaccurate, students tend to suffer thereby making them become freshers altogether in the class and will need to start afresh. In other instances, these students may tend to be defensive for their inaccurate prior knowledge in teachers' attempts to offer them accurate information in their new environment (Seery, 2009). Better still, Dochy et al.(1999) as cited in Seery, 2009) arguably stressed that students with defective prior knowledge still stand in better position of learning effectively than students without prior knowledge as the latter has no relevant previous knowledge frameworks upon which to scrutinise new information for use.

5. Methodology

The study used mixed method approach. A mixed-methods approach is ideal for this study because it provides a comprehensive framework to explore both the predictive relationships between prior knowledge and exam performance and the experiential, behavioural, and contextual factors that influence those relationships (Leech et al., 2010). It allows for a richer, more nuanced understanding of how prior knowledge (in its various forms) and gender interact to shape student-teachers' success in Visual Arts at Bagabaga College of Education. This method ensures that the study captures both measurable outcomes and the deeper, qualitative insights that can inform more effective teaching and learning strategies. Thus, the descriptive research design (Aquino et al., 2018), content analysis and documentary guide analysis were used for the study. The study population consisted 36 student-teachers offering the Visual Arts specialism from which males were 26 and females were 10. The population also consisted 19 student-teachers who had no prior knowledge in Visual Arts and 17 student-teachers with prior knowledge in Visual Arts. As the population was smaller, the Census Approach sampling technique was adopted in an attempt of using all the members present in the population as the sample of the study. Hence, 34 student-teachers were used as the sample of the study after a simple random sampling was used to strike out 2 extra student-teachers in the group of the students who had no prior-knowledge in Visual Arts. The 2 student-teachers were removed purposively to make the number of student-teachers with prior knowledge in Visual Arts equal to those without prior knowledge in Visual Arts. Therefore, each category of students was 17 respectively making the total sample of the study to be 34. All the 34 student-teachers were given online google forms to fill and submit. Due to the observation of COVID-19 protocols as at 2019 when the researcher was gathering the information on the respondents' demographics, the online survey forms were deemed very appropriate for promoting good COVID-19 practices with the sample of the study. The use of the online survey forms was also necessitated by the fact that student-teachers were frequently vacated for the practice of distance learning at home than in school. Therefore, the researcher could easily reach out to the student-teachers through online survey forms.

The questionnaires were designed under themes to answer the research questions, and student-teachers were asked to answer all the sections if

applicable. A time frame of one month was stipulated for answering online google questionnaires and the design was made flexible for student-teachers to edit their responses before submission. At the end, 30 student-teachers answered the online questionnaires and the remaining 4 student-teachers could not answer because they did not have smart phones to access the internet. However, as it was key to identify the number of student-teachers' pre-tertiary educational backgrounds, hard copies of the questionnaires were printed for the 4 student-teachers to answer. Their responses were coded and the statistics calculated and added to those who answered through online.

Documentary analysis was also done to acquire data on student-teachers' end-of-semester grades. Hard and soft copies of semester exam results were looked at and data were taken on their grades from both soft and hard copies of broadsheets containing end-of-semester results. The results for both student-teachers with and without prior knowledge in Visual Arts from their pre-tertiary schools and institutions were recorded and analysed.

6. Presentation of Results and Discussion of Findings

6.1 Research Question (RQ): What is the gender and prior-knowledge information of the 2018/2019 academic year student-teachers offering the Visual Arts Specialism?

6.1.1 Gender and Prior-Knowledge Information of Respondents

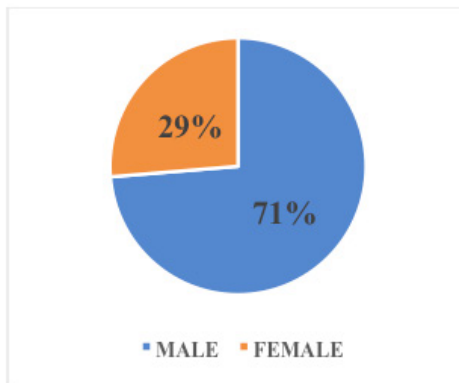


Figure 1: Gender of respondents

Source: Fieldwork, (2022)

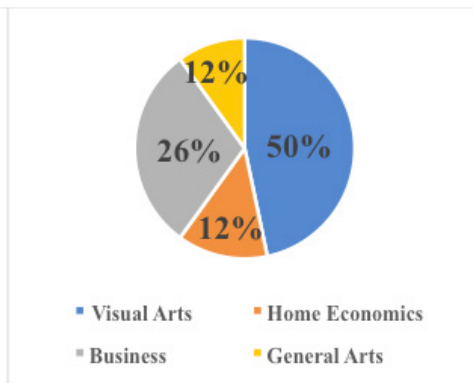


Figure 2: Courses offered at pre-tertiary schools

In Figure 1, it shows that 70% were males, forming the majority of student-teachers offering Visual Arts in the College. In most Visual Arts programmes, boys are mostly more than girls (Nimoh, 2019) and Fusheini (2020) attribute this to societal perceptions that the subject is difficult and involves physicality which normally attract males to patronise the subject than females. In the contrary, Stina (2003) and Aidoo (2018) indicate in their studies conducted in the Western world that there are more females in Art schools than females because of the increase of Science, Technology, Engineering, and Mathematics (STEM) education where the boys feel stronger and steadfast in pursuing Science and Maths education. However, one challenging factor identified to have brought the inequality of gender in Art programmes is the generalist teachers' incompetency in handling Art subjects at the basic schools as indicated by Opoku-Asare and Siaw (2016). They further expounded that achieving effective teaching and learning is far-fetched so long as the generalist teachers have little or no content and pedagogical knowledge of the subjects.

Despite the fact that female students have low patronage of Visual Arts courses, 26.7% of the students were females offering the Visual Arts in the college. This implies that there is more room for encouraging female students into Visual Arts courses if Art teachers exhibit good and effective teaching in the colleges. In support to this, Fusheini and Adams (2021) emphasised that the ability of teachers to diagnose learners' abilities and needs is to equip teachers to understand their learners and use differentiation methods to make all learners learn effectively.

6.2. Research Question Two: What is the five end-of-semester exams performance of the 2018/2019 academic student-teachers offering the Visual Arts Specialism?

6.2.1 Student-teachers' Overall Performance in Five End-of-Semester Exams

Table 1: Student-teachers' exam performance among the 12 subjects studied within five semesters.

<i>Interpretation</i>	Student-teachers with prior-knowledge in Visual Arts		Student-teachers without prior-knowledge in Visual Arts	
	<i>Grade</i>	<i>Percentage</i>	<i>Grade</i>	<i>Percentage</i>
Excellent (A)	74	51	70	49
Very good (B+)	57	43	75	57
Good (B)	25	40	38	60
Satisfactory (C+)	13	33	27	67
Satisfactory (C)	-	-	-	-
Pass (D+)			1	100
Pass (D)			1	100
Fail	-	-	-	-

Table 2: Summarised results of student-teachers in all the 4 content subjects studied within five semesters.

<i>Interpretation</i>	Student-teachers with prior-knowledge in Visual Arts		Student-teachers without prior-knowledge in Visual Arts	
	<i>Grade</i>	<i>Percentage</i>	<i>Grade</i>	<i>Percentage</i>
Excellent (A)	26	51	25	49
Very good (B+)	17	41	24	59
Good (B)	8	36	14	64
Satisfactory (C+ and C)	7	50	7	50
Pass (D+ and D)	3	60	2	40
Fail (E)	-		-	
Excellent to Satisfactory	(A-C)	45	(A-C)	55
	58		70	

6.2.3 Student-Teachers' Semester Performance in eight (8) Methodological Subjects Studied within Five Semesters.

These subjects are those which are practical-based and sometimes referred to as studio-research subjects. Table 3 presents the summarised grades and interpretations of student-teachers with and without prior-knowledge in Visual Arts respectively.

Table 3: Summarised grades of student-teachers in eight (8) methodological subjects studied within five semesters

<i>Interpretation</i>	Student-teachers with prior-knowledge in Visual Arts		Student-teachers without prior-knowledge in Visual Arts	
	<i>Grade</i>	<i>Percentage</i>	<i>Grade</i>	<i>Percentage</i>
Excellent (A)	58	54	50	46
Very good (B+)	38	49	39	51
Good (B)	12	35	22	65
Satisfactory (C+ and C)	4	17	19	83
Pass (D+ and D)	-	-	-	-
Fail (E)	-	-	-	-
Excellent to Satisfactory	(A-C)	46	(A-C)	54
	112		130	

Table 4: Pass, fail and absence remarks of student-teachers within five semesters

<i>Interpretation</i>	Student-teachers with prior-knowledge in Visual Arts		Student-teachers without prior-knowledge in Visual Arts	
	<i>Grade</i>	<i>Percentage</i>	<i>Grade</i>	<i>Percentage</i>
Pass (D+ and D)	3	60	2	40
Fail (E)	-	-	-	-
Absent (ABS)	5	83	1	17

6.2.4 Student-teacher Previous Knowledge

The background knowledge or previous knowledge of the respondents in Visual Arts before acquiring admission into the Visual Arts specialism in the college indicates that student-teachers have variety of background knowledge in other subject areas besides Visual Arts. The inclusion of students with diversified subject backgrounds other than Visual Arts into the Visual Arts specialism in the college shows that there is laxity for

any student to be admitted into Visual Arts programmes irrespective of their previous knowledge. It also boils down to the fact that educational programmes offered in the Colleges of Education is flexible for any type of student to be trained to acquire the teaching profession in the specialism he or she has applied for. Similarly, universities in Ghana also admit students with qualified results to study certain programmes irrespective of their backgrounds, and graduate them in the programmes they have studied in the Universities. However, Lydia and Emeka (n.d) holds a divergent view that the background knowledge of students plays a very crucial roles in achieving good academic performance when they continue in their areas of specialities than in analogous programmes in subsequent institutions.

In Figure 2, 53.3% of student-teachers form the majority who did not offer Visual Arts at their previous schools before they were admitted into the Visual Arts specialism in the College. It is a clear indication that these student-teachers chose the Visual Arts for reasons of being entrepreneurs in Visual Arts domains so that they can be creative and innovative in society for better living conditions. This view is further supported by Christina's (2012) argument that Vocational Education should be given much more attention in this era of technology and industrialisation so that students will grow up to be productive in the societies than remaining unemployed after graduating from universities. In a similar view, Anamuah-Mensah (2004) purports that Technical and Vocational Education has remained a catalyst of wealth creation for countries in the world, and there is therefore the need to foster TVET programmes in Ghanaian institutions.

6.2.5 Students' Performance in Content Subjects

The end-of-semester examinations during five semester duration remains a key contest between student-teachers with and without prior-knowledge in Visual Arts in the content subjects as seen in Table 1. However, the student-teachers without prior-knowledge in Visual Arts have performed marvellously above their counterparts as they obtained 70 grades in Excellence to Satisfactory as against 58 grades for the student-teachers with prior-knowledge in Visual Arts. This clearly indicates that the student-teachers without prior-knowledge in Visual Arts took lessons in the content subjects more seriously than their counterparts, for the fact that they needed to lay good foundations to match up with their counterparts who were already having foundational knowledge in Visual Arts subjects (Nyaaba M., personal communication, June 11, 2022). This is one of the reasons

why Fusheini (2020) ascribes fresh-students' performance in examination to be influenced by factors such as the quest to lay good foundations, and laziness on the part of students who claim to have previous knowledge in the courses they are pursuing.

On the other hand, Acheta et al. (2021) and Fadelelmoula (2018) associate students' excellent grades in exams to class attendance and teachers' mode of delivering lessons as well as the teachers' competent level. Contrary, Kim (2005) view students' participation in class to be more pertinent for achieving excellent academic performance than mere class attendance. In another contrary view, Fusheini and Musah (2017) claim that students who are punctual to class and do not take what the teacher teaches seriously will not perform well in assessments in spite of the fact that the teacher had done good and effective teaching. Also, the perception of some Ghanaian caretakers that education is about earning salaries has pushed some students to manoeuvre their ways of attaining good grades than skills for creativity and problem solving in society (McCoy et al., 2014). As a result, Adjei (2007), mentioned that the syndrome of 'chew and pour' is fuelled in Ghanaian schools by the intention of students to pass for jobs than to gain competent professional skills and as problem solvers. Findings of the study also support Kara's view that students' level of attention in class helps them to achieve well, as it is found that both student-teachers with and without prior-knowledge in Visual Arts did not record 'IC' meaning incomplete marks which was due to absenteeism in taking part in class exercises and quizzes or in the external exams.

Another contention is that the good performance of student-teachers without prior-knowledge in Visual Arts in the content subjects is attributed to the fact that these subjects are foundational subjects hence, they are basic and not practically comprehensive. This is supported by the view that the first year courses are for beginning teachers which are to provide solid foundations for the transition from pre-tertiary schools to College and recognises that the student-teachers have come from different schools with different background knowledge, values and attitudes (UEW, 2018). Therefore, the student-teachers are only introduced to key principles and practices of subjects and learning areas as well as engaging them in supported teaching in schools within the wider curriculum so that at the end, each student-teacher can locate their specialism.

However, the impression that the beginning teachers are only taught in foundational subjects does not merit the argument that the academic performance of students are influenced by the basic nature of the subjects learnt in first year. On the contrary, Kara (2009) argues that though students' previous knowledge in a subject area as well as the nature of course could contribute positively to their performance, lack of self-motivation and poor attitude toward learning can turn the tables round for even students with sound pre-knowledge in subjects to achieve bad results.

6.2.6 Students' Performance in Methodology (Practical-based) Subjects

In the 8 subjects of methodology as seen in Tables 3 where students have done practical projects, the number of student-teachers without prior-knowledge in Visual Arts who obtained 'excellence' are 50 as against 58 for the student-teachers with prior-knowledge in Visual Arts. There is however a very marginal gap of 'excellence' between former and the later and the credit goes to the student-teachers without prior-knowledge in Visual Arts for such a great contest. In the view of Binder et al. (2019), students' previous knowledge in a subject area contributes to their positive performance and Ozaydin et al., (2017) see special needs students like the student-teachers without prior-knowledge to depict that there is equity and inclusiveness in the teachers' modes of delivery their lessons. Olivia et al, (2009) also rest all students' academic success in class on effective teachers' ability to use diverse resources to plan and structure engaging learning opportunities for all learners in the class.

As a result, the student-teachers without prior-knowledge have achieved better grades from satisfactory to very good than those with prior-knowledge in Visual Arts as seen in Table 3. The study found that teachers' knowledge of inclusive lesson delivery has contributed to the achievement of the student-teachers without prior-knowledge in studio activities. This is evidenced in Fusheini and Adam's (2021) prior studies conducted on face-to-face and online teaching strategies to be adopted in teaching to ensure inclusiveness and equity among Visual Arts tutors in the department.

Also, students who are pursuing Vocational programmes need to be motivated with the constant exposure to hands-on activities. Through this, all calibre of students in the class learn equitably together to achieve their aspirations, and it remains one of the strongest antidote to students'

laziness and absenteeism in class. According to Fusheini and Adams (2021), exposing students to work-based learning strategies make students compete very effectively in achieving their educational goals. Likewise, Lydia and Emeka (n.d) expounds that involving learners on hands-on learning activities create the opportunity for learners to take active participation in class and also perform well at the end of learning.

On the other hand, McCoy et al., 2014) see students' mindset to be a great influence over their academic achievements regardless of the teacher's effort to do good and effective teaching. When students have individual goals to achieve for pursuing a programme other than the goals of the programme, their minds are twisted to the direction of their whims and caprices and this has effect on their future careers. In this regard, some researchers debunk the claim by some students that their previous knowledge in a subject will impact positively for achieving excellent grades. The researchers rather stressed that students' achievement in subjects that they have no or little prior knowledge is a matter of self-motivation (Atkinson, 2009; Kara, 2009; McCoy et al., 2014).

Likewise, the student-teachers without prior-knowledge in the Visual Arts courses have obtained less grades as 'pass' in the content subjects than those with prior-knowledge in Visual Arts as seen in Table 4. Despite the fact that student-teachers with prior-knowledge in Visual Arts seemed to have upper hand over those without prior-knowledge, the story rather reflected negative results against the former. This is an indication that students' exam performance is not only based on their prior knowledge in the subjects being assessed but also rely on individual student's zeal and self-motivation in a programme of pursuit (Cohn & Johnson, 2006; Kara, 2009; Marburger, 2001;). More so, both student-teachers with and without prior-knowledge in Visual Arts did not fail any subject in the 5 semesters' exams and this can be concluded that there was a keen contest between both students but the student-teachers without prior-knowledge in Visual Arts students still stood tall in matters of congratulations. This is because, they had no prior knowledge to all subjects studied in the Visual Arts Bachelor of Education (B.Ed.) programme, yet they have not recorded any fail. In a similar applauds and appreciation, Fusheini (2020) attaches students' summative assessment achievement to self-motivation, effective teaching and good parental guidance.

7. Conclusions

Gender disparity in admission of students into vocational programmes at the College is still a major challenge. The findings indicated that there were more males than females in the 2018/2019 academic batch of student-teachers offering the Visual Arts specialism. This is due to poor interest of girls in offering Visual Arts as a programme in particular as well as lack of career guidance in the educational system within the region. The study has confirmed that both students with and without prior-knowledge in Visual Arts were admitted into the Visual Arts specialism in Bagabaga College of Education. Both students took end-of-semester same exams in both the content and methodology and their results were very competitive. This is because, both category of students competed for pass marks without recording failures. In the content subjects, the student-teachers without prior-knowledge in Visual Arts performed better than their counterparts as the results of self-motivation syndrome in the students. Also, the content subjects were noted to be all foundational courses which paved ways for both category of students to excel based on their self-motivation levels. Besides, the student-teachers without prior-knowledge performed well in the content subjects as the result of their conscious efforts to lay good foundation towards in the Visual Arts specialism.

In the methodology subjects which were purely practical-based examination, the overall performance in terms of good grades from excellence to satisfactory came from the student-teachers without prior-knowledge in Visual Arts again. It was seen that the tutors' modes of facilitation was purely multiple-disciplinary approaches such as the use of differentiated learning and universal design methodologies. A cursory look at the lesson plans of the Visual Arts tutors showed that they laid emphasis on ensuring equity and inclusivity. On the other hand, the student-teachers with prior-knowledge in Visual Arts rested much of their aspirations for good grades on their background knowledge at the expense of learning harder for good performance. As a result, they ended up not performing well as compared to student-teachers without prior-knowledge in the courses.

From the upshot, it is clear that the number of students admitted into the Visual Arts specialism in Bagabaga College of Education keeps dwindling as the expectations are on only to admit those who truly apply for it and

have the requisite prior-knowledge. Per the findings of the study, the College Management needs to admit any student interested in the Visual Arts programme irrespective of their backgrounds in the Visual Arts. The study found that the 2018/2019 batch who have been used for this study had more students without prior-knowledge in Visual Arts than those with prior-knowledge in the course. Therefore, the admission committee of the College should admit some students without prior-knowledge in Visual Arts such as students with qualified grades in Business, General Arts, Home Economics and even the pure Sciences to pursue the Visual Arts programme.

Again, lack of a well-furnished studio and other facilities contributes to the woes of the Visual Arts Unit for effective training of student-teachers. The provision of these facilities by College Management, the Government and other benevolent institutions will attract more students with different subject backgrounds to apply to offer the Visual Arts programme. Meanwhile, Visual Arts tutors as well as other departmental members should mount outreach programmes, with the assistance of the College, to sensitise second cycle students on the study of Visual Arts specialism in Bagabaga College of Education. More so, the College Head of Department for Vocational and Technical Department in collaboration with the College Management should design adverts to advertise on social media platforms about admissions to the various programmes run in the College.

Reference

- Abd Rahman, F., Scaife, J., Aini Yahya, N. & Ab Jalil, H. (2010). Knowledge of diverse learners: implications for the practice of teaching. *International Journal of Instruction*, 3(2), 83-96.
- Accra Technical University (2022). Student code of conduct.
- Adamu, B. Y. (2016). Entry qualification as correlate to academic performance students in Nigerian certificate in Education (Technical) at Polytechnic level in Bauchi. *ATBU, Journal of Science, Technology & Education, (JOSTE)*, 4(4), 209-2018.
- Adjei, P. B. (2007). Decolonising knowledge production: The pedagogic relevance of Gandhian Satyagraha to schooling and education in Ghana. *Canadian Journal of Education*, 30, 1046-1067.

- Adom, D., Yeboah, A. & Attah Kusi, A. (2016). Constructivism philosophical paradigm: implication for research, teaching and learning. *Global Journal of Arts Humanities and Social Sciences*, 4(10), 1-9.
- Aidoo, J. B. K. (2018). Challenges facing Visual Arts programme of senior high schools in Ghana. *International Journal of Humanities, Social Sciences and Education*, 5(3), 136-142.
- Aidoo-Buameh, J. & Ayagre, P. (2013). The effects of entry grades on academic performance of university accounting students: A case of undergraduates of Central University College. *Research Journal of Finance and Accounting*, 4(7), 198-207.
- Anamuah-Mensah, J. (2004, December 30). *Vocational/technical education for accelerated wealth creation: Critical issues facing the nation* [Paper presentation]. Winneba at the 56th Annual New Year School, Winneba-Ghana. <https://www.artwatchghana.org/wp-content/uploads/2018/07/NEW=YEARSCHOOL-LECTURE.pdf>
- Anane, G. K; Ofori-Badu, E. & Asante, K. (2020). Correlates of 'cut-off aggregates and academic performance of students in public universities in Ghana. *Ghana Journal of Higher Education Management*, 5, 1-8.
- Ancheta, R. F., Daniel, D. & Ahmad, R. (2021). Effects of class attendance on student performance. *European Journal of Educational Studies*, 8, 115-131.
- Angela, M. P. & David, A. K. (2020). The learning way: *Learning from experience as the path to lifelong learning and development*. EBLS Working Paper, 1-20. <https://weatherhead.case.edu/departments/organizational-behavior/workingpapers/wp-11-03.pdf>
- Aquino, E., Lee, Y. M., Spawn, N., & Bishop-Royse, J. (2018). The impact of burnout on doctorate nursing faculty's intent to leave their academic position: A descriptive survey research design. *Nurse education today*, 69, 35-40.
- Atkinson, C. (2009). Promoting high school boys' reading engagement and motivation. *School Psychology International*, 30(3), 237-254.
- Bekoe, S., Eshun, I. Bordoh, A. (2013). Formative assessment techniques tutors use to access teacher trainees' learning in Social Studies in Colleges of Education in Ghana. *Research on Humanities and Social Sciences*, 3(4). 20-31.

- Better Policies for better Lives (n.d). *Teachers' pedagogical knowledge and the teaching profession*. OECD.
- Binder, T.; Angela, S.; Bernd, S.; Gunnar, F.; Heike, T. & Philipp, S. (2019). Assessing prior knowledge types as predictors of academic achievement in the introductory phase of biology and physics study programmes using logistic regression. *International Journal of STEM Education*, 6(33), 1-14.
- Christina, B. (2012). Restructuring vocational and technical education in Ghana: The role of leadership development. *International Journal of Humanities and Social Science*, 2(4), 108-114.
- Clay, B. & Root, E. (2001). *A short guide to writing effective test questions*. Kansa State Department of Education.
- Cohn, E. & Johnson, E. (2006). Class attendance and performance in principles of economics. *Education Economics*, 142, 211-233. .
- Denicia, P. (2020). *Learning theories: Understanding the 4 major ones for the classroom*. Retrieved from: <https://www.leaderinme.org/blog/learning-theories/>
- Erisen, Y. Sahin, M. & Celikos, N. (2016). *Cognitive learning theories: Learning and teaching theories, approaches and models*. Cozum.
- Fadelelmoula, T. (2018). The impact of class attendance on student performance. *International Research Journal of Medicine and Medical Sciences*, 6, 47-49. DOI: 10.30918/IRJMS.62.18.021.
- Fusheini, M. Z & Adams, A. (2021). Virtual practical lessons: The views of Visual Arts student-teachers on their challenges and suggested solutions. *ADDRI Journal of Arts and Social Sciences*, 2(6), 18, 97-114.
- Fusheini, M. Z. & Musah, B. (2017). Materials and methods for producing basic instructional support resources for teaching Creative Arts in Zohe Evangelical Presbyterian primary school, Yendi, Ghana. *Journal of Education and Practice*, 8(34), 83-96.
- Fusheini, M. Z. (2020). The choice of Visual Arts option: Perceptions of newly admitted JHS 1 students at Bagabaga College of Education Model school, Tamale, Ghana. *Journal of Arts and Social Sciences*, 17(1), 65-85.
- Introduction to Textiles Design (2021). *Course outline for studio practice in Textiles*. University of Cape Coast.

- Jayeeta, B. (2015). Constructivist approach to learning: An effective approach of teaching learning. *International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJMS)*, 1(6), 65-74.
- Kang, H., & Furtak, E. M. (2021). Learning theory, classroom assessment, and equity. *Educational Measurement: Issues and Practice*, 40(3), 73-82.
- Kara, O. (2009). Factors affecting students' grades in principles of Economics. *American Journal of Business Education*, 2(7), 25-34.
- Kennedy, J. K.; Fok, P. K. & Yu, Y. M. (2008). Forms of assessment and their potential in enhancing learning: Conceptual and cultural issues. *Educational Research for Policy and Practice*. DOI: 10.1007/s10671-008-9052-3
- Kim, S. J. (2005). The effects of a constructivist teaching approach on student academic achievement, self-concept and learning strategies. *Asia Pacific Education Review*, 6(1), 7-19.
- Leech, N. L., Dellinger, A. B., Brannagan, K. B., & Tanaka, H. (2010). Evaluating mixed research studies: a mixed methods approach. *Journal of mixed methods research*, 4(1), 17-31.
- Lydia, W. & Emeke, A. (n.d). *Relationship between entry qualification and academic performance in undergraduate science courses at the University of Nairobi*. University of Nairobi.
- Marburger, D. R. (2001). Absenteeism and undergraduate exam performance. *Journal of Economics Education*, 32(2), 99-109.
- McCoy, D. C., Wolf, S. & Godfrey, E. B. (2014). Student motivation for learning in Ghana: Relationship with caregivers' values toward education, attendance, and academic achievement. *School Psychology International*, 33(3), 294-308.
- Molly, Z. & David, B. (2015). *Educational learning theories(2nd ed.)*. University System of Gergia.
- National Teaching Council (2017). *National teachers' standards for Ghana: guidelines*. Ministry of Education.
- Newman, E. (2013). *The upgrading of teacher training institutions to colleges of education: Issues and prospects*. National College of Teacher Education, Ghana.

- Nimoh, A. A. (2019). *Gender inequalities among Visual Arts students in selected senior high schools in Kumasi* (Master's thesis), Kwame Nkrumah University of Science and Technology, Kumasi). <http://ir.knust.edu.gh/handle/123456789/13881>
- Olivia, L., Laura, G. & Courtney, B. (2009). *A practical guide to evaluating teacher effectiveness*. National Comprehensive Center for Teacher Quality.
- Opoku-Asare, N. A. & Siaw, A. O (2016). Curricula and institutional factors that affect student achievement in rural, urban and peri-urban senior high schools in Ghana: Evidence from Visual Arts Program. *SAGE Open*, 1-13. DOI: 10.1177/2158244016661747
- Ozaydin, L., Kayhan, N., Tokers, M. & Karahan, S. (2017). Resource room implementation in secondary school and on-the-job training for teachers. *Educational Journal of Psycho-Educational Sciences*, 6(2), 111-136.
- Seery, M. (2009). *The effects of prior knowledge in undergraduate performance in chemistry: A correlation-prediction study*. Technology University Dublin.
- Stina, W. (2003). Art education-mostly for girls? A gender perspective on the Art subject in Swedish compulsory school. *Education Inquiry*, 4, 577-593. DOI: 10.3402/edui.v4i3.22630
- Sulphay, M. M; Al-Kahtani, N. S; & Abdul Malik Syed, A. M. (2018). Relationship between admission grades and academic achievement. *Entrepreneurship and Sustainability Issues, Entrepreneurship and Sustainability Center*, 5(3), 648-658.
- Swann, W. (2013). The impact of applied cognitive learning theory on engagement with eLearning courseware. *Journal of Learning Design*, 6(1), 61-74.
- Tomas, A. C. Y. (2020). *Assessment and evaluation in education*. Research Gate. https://www.researchgate.net/publication/342918149_ASSESSMENT_AND_EVALUATION_IN_EDUCATION/link/5f0d737aa6fdcc547aee9fb3/download
- T-TEL (2017). National teacher education curriculum framework. Ministry of Education, Ghana.
- T-TEL (2020). *National teachers' standard*. Ministry of Education. <https://t-tel.org/wp-content/uploads/2021/04/Policy-Briefing-006-National-Teachers%C2%B9-Standards-final.pdf>

T-TEL (2019). *Four-year B.Ed. course Manual: Foundations of social studies and technical, vocational education and training*. Ministry of Education. <http://resourceshub.ncte.edu.gh/files/CurriculumResources/student-teacher/UG/All%20specialisms/Yr1%20Sem1%20-%20All%20Specialisms-Social%20Studies,%20Technical%20and%20Vocational%20-course%20manual.pdf>

University of Education (2018). *Four-year bachelor education degree*. ITECPD.

Valamis Group (2021). *Cognitive learning*. <https://www.valamis.com/hub/cognitive-learning>

Western Governors University (2021). What is cognitive learning? <https://www.wgu.edu/blog/what-is-cognitive-learning2003.html#close>

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