Assessing the influence of University for Development Studies school environment on student learning

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Abstract. This study sets out to examine the role school environmental factors play in students’ learning in the University for Development Studies, Wa Campus. The study looked at three specific objectives which are to assess students’ characteristics responsible for their academic achievements in the University, determine how availability of school instructional resources influence academic performance of students of the University for Development Studies and explore the challenges that students’ encounter in the existing learning environment. The study adopted descriptive design with a sample size of 92 selected with purposive, simple random sampling and stratified sampling technique. The data were analysed with the aid of descriptive statistics. The study revealed that indiscipline could have detrimental effects on the performance of the student. Other issues that were raised include students’ perception about certain issues, poor relationship with students and problems with motivation. Furthermore, the study revealed that instructional resources had an influence on academic achievements. On challenges, the study revealed that existing infrastructure is inadequate for learning. The study among other things recommended that students should develop positive attitudes towards studies. This is because no positive achievement can be attained without this. The Counseling Unit of the University should monitor the progress of students in the University. Where necessary, there should be periodic assessment of student related issues in order to identify and tackle grievances.

Keywords: Environmental factors, learning, influence, detrimental effects, academic achievement.

INTRODUCTION

Education is considered as a key area through which many countries can achieve their development goals (Amon and Joviter, 2003). In the view of Saxton (2000), education transforms an individual through development of endowed capacities, which enables one to control his/her environment and fulfil his/her possibilities to a large extent (Saxton, 2000). Educational institutions are intimately linked with society as a whole; making them the temple of knowledge and agent of social change and transformation (Usaini and Bakar, 2015). This recognised role of education makes the general condition of schools, colleges and universities a matter of great concern to many countries.

Education plays a significant role in the development of the personality of students. This recognised role has motivated many countries including Ghana improve to its educational system by introducing reforms and making projections based on the educational needs of the country. For instance, the Education Act 778 of 2008 seeks to provide for the establishment of an education system intended to produce well balanced individuals with the requisite knowledge, skills, values, aptitudes and
attitudes to become functional and productive citizens for the total development and the democratic advancement of the nation and for related matters (Republic of Ghana, 2013). Since independence, Ghana has comparatively distinguished itself among many Sub-Saharan African (SSA) countries in its educational development. Tertiary education in Ghana over the past decade has witnessed tremendous growth in various frontages including relative expansion of academic facilities (Atuahene and Owusu-Ansah, 2013).

Students are the most essential assets of any educational institution (Sentamu, 2003). Higher education institutions shouldered multiple responsibilities to play a role as agents of development; preserving African identity and nation building (Woldegiorgis and Dovenspeck, 2013). Besides, tertiary education provides graduates with job-relevant skills to meet the demands of industry and economy as a whole. Based on this overreaching development objective, various state institutions have in various ways called for the need to build effective and strong linkages between tertiary education and industry (Bawakyillenuo et al., 2013). Examples of such institutions include the Ministry of Finance and Economic Planning (MOFEP), The Association of Ghana Industries (AGI), The National Council for Tertiary Education (NCTE), and The Ministry of Trade and Industries (MOTI). These efforts are in line with the belief that economic development of a nation depends on the human capital produced by the education system of a nation (Bingab et al., 2016). The determinants of students’ academic achievement and learning abilities therefore remain a major concern area in educational delivery in Ghana (Considine and Zappala, 2002; Boampong et al., 2016).

One key factor for academic performance is the environment under which learning takes place (Korir and Kipkemboi, 2014; Shamaki, 2015; Usaini et al., 2015; Koroye, 2016; Ojukwu, 2017). Watkins (2000) affirms that the school physical environment reassures parents about the safety and performance of their children at the place of learning hence, its influence on the school enrolment rates. In the views of UNESCO (2005: 28) and Watkins (2000), expansion in educational facilities improves the social, economic and political benefits for children. Besides that, parents are motivated to invest in the education of their wards because it offers them high knowledge, reasoning abilities, skills and the cherished values that they need. In another dimension, the authors also affirm that improvement in enrolment figures and completion rates are not perfect indicators of progress in measuring the substance of quality education and that participation in schooling is not an end in itself, but a means to the end of quality education. The availability and use of teaching and learning materials affect the effectiveness of a teacher’s lessons. According to Broom (1973), the creative use of a variety of media increases the probability that the student would learn more, retain better what they learn and improve their performance on the skills that they are expected to develop. Ausubel (1973) also stated that young students are capable of understanding abstract ideas if they are provided with sufficient materials and concrete experiences with the phenomenon that they are to understand.

While education provides individuals an opportunity for cognitive, social and emotional development, it maintains and creates social stratification (Montt, 2011). Socioeconomic factors, along with school- and community-related factors, cause inequalities in education. Several recent empirical studies including Usaini et al. (2015), Koroye (2016), Narad and Abdullah (2016), Oselumese et al. (2016), George et al. (2017) and Ojukwu (2017) consistently maintain that the school environment plays a critical role in academic achievement of students. These empirical studies suggest the availability of literature on school environment and academic performance nexus. However, many of them are conducted in Secondary Schools in Nigeria. The studies that are conducted in Ghana are not explicit on the influence of Universities’ environment on the academic achievement of students. Amponsah and Onuoha (2013) draw empirical evidence from Ghana and Nigeria and concluded that private universities are creditable in the provision of uninterrupted educational calendar and better quality graduates; suggesting that their existing environment supports academic performance. Evidence on the influence of school environment on student performance especially in Ghanaian Public Universities is limited. The school is an institution of learning which also acts as a second home for learners (Korir and Kipkemboi, 2014). Besides, since students often spend much of their time on the school environment as noted by Usaini and Bakar (2015), a study on the role of school environment and academic performance is critical among the recent established institutions such as the “School of Business and Law” of the University for Development Studies.

The “School of Business and Law” is one of the new faculties of the University for Development Studies in Wa Campus. It is situated in a different sub-Campus within the Wa campus which compels students to attend lectures in the main campus while accessing administrative and library services in the sub-campus. Following from the arguments put forward by related studies on the role of school environment on students’ academic performance, the movement across different environment to access different academic facilities can influence the academic achievement of students from the “School of Business and Law”. Analysis of these issues raised the question of what role do school environmental factors play in students’ learning in the University for Development Studies, Wa Campus?

The main objective of this study was, therefore, to assess the role school environmental factors play in students’ learning in the University for Development
Studies, Wa Campus. The study specifically, sought to:

i. Examine students' characteristics responsible for their academic achievements in the university.
ii. Determine how availability of school instructional resources influences academic performance of students of UDS.
iii. Explore the challenges students' encounter in the existing learning environment.

LITERATURE REVIEW

This section presents both theoretical and empirical literature related to the influence of environment and students' academic performance. The first section presents the theoretical framework and the subsequent sections presents a review of concepts as well as the empirical review.

Theoretical framework

This study adopted the Urie Bronfenbrenner's ecological systems theory. The authors developed the ecological systems theory in an attempt to define and understand human development within the context of the system of relationships that form the person's environment. According to Bronfenbrenner's initial theory, the environment is comprised of four layers of systems which interact in complex ways and can both affect and be affected by the person's development. These are Microsystems, Meso-system, Ecosystems and Macro-system. He later added a fifth dimension that comprises an element of time (Bronfenbrenner, 1995) which he called Chronosystem. This theory can be extended to explain the development of an organization as well, and is particularly appropriate for describing the complex systems of a district system or even of an individual school. Each of the four system layers is described below:

**Microsystem**

The microsystem is defined as the pattern of activities, roles, and interpersonal relationships experienced by a developing person in a particular setting with particular physical and material features and containing other persons with distinctive characteristics of temperament, personality, and systems of belief (Bronfenbrenner, 1995). In other words, this layer forms a set of structures with which a person has direct contact, and the influences between the developing person and these structures are bidirectional. The person influences and is influenced by the Microsystem. If this theory is extended from human development to organizational development, and an individual school is the unit of interest, the Microsystem of the school would include students, sponsors or parents and family members, administration, teachers, and the surrounding community (Johnson, 2008).

**Meso-system**

The meso-system, simply stated, comprises the linkages between microsystems (Bronfenbrenner, 1995). Just as the direction of influence between the school and each structure within the Microsystems is bi-directional, the meso-system involves bi-directional influences between these various structures. An example of the meso-system of an individual school can be seen in the interactions and dynamics between two of its Microsystems, students and parents. Sponsors or parental expectations regarding the academic and extra-curricular success of their children can often create a dynamic that directly and indirectly impacts the atmosphere and climate of the school. Unreasonably high expectations and low tolerance for failure can create a dynamic between parent and child that is characterized by tension and fear. This dynamic impacts the school in various direct and indirect ways, including, for example, student behaviour in the classroom resulting from such expectations, pressures to ensure their student's success placed on school personnel by the parent, or an attempt by school personnel to shield students from such parental pressures by restricting the amount of information that is communicated regarding student achievement (Johnson, 2008).

**Exosystem**

The exosystem represents the larger social system, and encompasses events, contingencies, decisions, and policies over which the developing person has no influence. The exosystem thus exerts a unidirectional influence that directly or indirectly impacts the developing person. The exosystem of an individual school might be comprised of such structures as, for example, state regulations, local economics and district mandates (Johnson, 2008).

**Macro system**

The macro system can be thought of as the “social blueprint” of a given culture, subculture, or broad social context and consists of the overarching pattern of values, belief systems, lifestyles, opportunities, customs, and resources embedded therein (Bronfenbrenner, 1995). This system is generally considered to exert a unidirectional influence upon not only the person but the
micro-, meso-, and exosystems as well. According to Johnson (2008), the macrosystem of an individual school is embodied not only in the cultural, political, social, and economic climate of the local community, but that of the nation as a whole.

**Chronosystem**

Although not one of the four system layers per se, the chronosystem represents a time based dimension that influences the operation of all levels of the ecological systems. The chronosystem can refer to both short- and long-term time dimensions of the individual over the course of a lifespan, as well as the socio-historical time dimension of the macrosystem in which the individual lives. The chronosystem of an individual school, therefore, may be represented by both the day-to-day and year-to-year developmental changes that occur in its student body, teaching staff and curricular choices, as well as the overall number of years in operation (thus, a newer school faces challenges and opportunities that differ from those of a school that has been in operation for a length of time).

For instance, in an attempt to understand academic performance in the UDS, one has to take into account the individual student as well as the context within which it occurs. The relevance of this theory to the study is that it impinges on the researcher to view the poor academic performance in the school as a phenomenon that is influenced by wider social systems. The theory posits that students’ are directly present within some of these social systems, such as their household, school and immediate neighbourhood, and there are others in which they are not directly represented, but which impinge on their development. In addition, the theory makes us aware of the influences of wider social systems including the cultures, political systems, social institutions, and values that exist in the society and argues that they should be taken into account in students’ educational upbringing.

**Conceptual review**

**The concept of school environment**

According to Oselumese et al. (2016), the school environment refers to the social and physical set up of the school where students interact with one another either through groups or individuals. They further explain that the school environment encompasses the classrooms, school location, school facilities, school climate and technology. George et al. (2017) added that classroom facilities and management strategies, as well as teaching and learning are components of the school environment. Mahmood and Gondal (2017) therefore, identify three main aspects of the school environment:

- Physical school facilities, academic facilities and classroom facilities. Citing specific examples, the physical facilities cover elements such as water systems, noiseless environment and the design of the school layout. Besides, the academic facilities include teacher attitude, and availability of essential learning materials. Finally, the classroom facilities include ventilation, lightning, and number of students per class. The concept of school environment as viewed by these authors suggest that the distances covered by students before accessing some essential academic facilities such as library services, internet availability and accessibility can be considered as components of the school environment.

Owoeye and Yara (2011) view school environment in terms of location. They exclusively distinguished between rural and urban as differences in school environment. This means that school environment can be explained in terms of geography. According to these authors, urban schools are often characterized by the availability of learning and instructional materials while their rural counterparts lack basic services such as consistent supply of electricity to support some academic services. While agreeing with this viewpoint on the concept of school environment, Chukwuemeka (2011) recognized the nature of the school building as an essential component of the school environment. He points out that school building and paint colours may attract students and hence serves as a good environment for effective learning. This position can fit into the physical facility description identified by Mahmood and Gondal (2017).

Odenneh et al. (2015) also contribute to the discussion of the concept of school environment. In their view, the school atmosphere in terms of student and behaviour cannot be overlooked. Citing specific examples such as alcoholism, drug abuse, and sexual immorality constitute the school social system. Duruji et al. (2014) agreed with these conceptualizations and cited more examples on the component of school environment. They added that the quality of teachers and maintenance culture should not be ignored in the definition of school environment.

The concept of school environment as explained by the literature relates to different facets of the school. The concept is generalized but has a strong focus on the physical, social and intellectual environment that can shape students life. This suggests that student academic achievement invariably has a link with their immediate school environmental factors.

**The concept of academic achievement**

Academic achievement refers to a successful accomplishment or performance in a particular subject area and is indicated by grades, marks and scores of descriptive commentaries (Dimbisso, 2009). This study further indicates that academic performance also refers to how students deal with their studies and how they cope
with or accomplish different tasks given to them by their teachers in a fixed time or academic year. Ferla et al. (2009) used the notion of academic self-concept referring to individuals’ knowledge and perceptions about themselves in academic achievements, and convictions that they can successfully perform a given academic tasks at designated levels. They further stated that academic self-concept represents a more past-oriented, aggregated and relatively stable judgment about one’s self-perceived ability in a particular academic domain; while academic self-efficacy represents a context specific and relatively future oriented judgment about one’s confidence for successfully performing an upcoming subject-specific academic task.

Conversely, Diaz (2003) considers low academic performance or academic failure as the situation in which the subject does not attain the expected achievement according to his or her abilities, resulting in an altered personality which affects all other aspects of life. Similarly, Diaz (2003) notes that while the current educational system perceives that the student fails if he or she does not pass, more appropriate for determining academic failure is whether the student performs below his or her potential. Aremu (2000) defines poor academic performance as performance that is adjudged by the examinee and some other significant as falling below an expected standard. The interpretation of this expected or desired standard is better appreciated from the perpetual cognitive ability of the evaluator of the performance. The evaluator or assessor can therefore give different interpretations depending on some factors. Further, Asikhia (2010) described poor academic performance as any performance that falls below a desired standard. This means, the criteria of excellence can be from 40 to 100% depending on the subjective yardstick of the evaluator or assessor.

There is no internal system of checking learning achievements other than a ‘good pass in the exams’ at other levels within the educational cycle (Reche et al., 2012). It is commonly agreed that the most important indicators of quality education have to do with literacy, cognitive abilities, performance and progression to higher levels of learning. This means that different definitions can be given to academic performance but the focus should be on the individual achieving his academic objectives through high scores, knowledge acquisition among others.

**Empirical review on the factors influencing students’ academic performance**

Several school environmental factors have generally been identified as influencing learning and academic performance. These include availability of instructional material, school location and quality of the physical facilities, class size and pupil-teacher ratios, teacher qualification and experience, and supervision.

**School location and quality of the physical facilities**

Both past (Harbison and Hanushek, 1992; Ogunleye, 2002; Engin-Demir, 2009; Asikhia, 2010) and recent (Owoeye and Yara, 2011; Chukwuemeka, 2011; Odhn et al., 2015; Usaini et al., 2015; Ado, 2015) studies have contributed to the influence of school location and the quality of facilities on academic performance of students. These studies present consistent arguments on the direct influence of quality school facilities on students’ academic performance.

It has been argued that the school location and quality of the physical building influence the performance and achievement levels of pupils. Harbison and Hanushek (1992) stated that the quality of the physical facilities is positively related to student performance. This assertion corroborates that of Danesty (2004, cited in Yinusa and Basil, 2008) who stressed that good sitting arrangement and good buildings produce high academic achievements and performance, while dilapidated buildings that lack mental stimulating facilities coupled with low or no sitting arrangements is destructive. In the view of Chukwuemeka (2011), school building is one of the school facilities that have influence on the academic performance of students. He further explains that the designs of classroom and lightning quality motivates student learning. He therefore, concludes that paint colours in particular positively affect students’ academic achievement. In their contribution to these arguments, Duruji et al. (2014) as well as Usaini et al. (2015) unanimously maintained that good school buildings should have libraries, laboratories, sanitation and recreational facilities to influence academic performance. While agreeing with the arguments put forward by the empirical studies, Odhn et al. (2015) point out that inadequate physical facilities, obsolete teaching techniques, overcrowded classrooms lead to poor academic achievement of students.

According to Asikhia (2010) where the school is located determines to a very large extent the patronage such a school would enjoy. Similarly, the entire unattractive physical structure of the school building could demotivate learners to achieve academically. Tope’s (2013) empirical results suggest that inappropriate school location, poor school planning have a negative influence on students’ academic performance. Osulunese et al. (2016) agreed to this position and maintain that location and setting of school is one of the environmental factors that influence the academic performance of students. This is what Isangedighi (1998) refers to as learner’s environment mismatch. According to him, this promotes poor academic performance. Engin-Demir (2009) argues that attending a school with a better physical environment
is associated with increased maths scores. Adepoju (2001) found that students in urban schools or Universities manifest more brilliant performance than their rural counterparts. Also, Ogunleye (2002) reported a significant difference in the achievement of students in urban peri-urban areas. Recent studies such as Owoye and Yara (2011) support the arguments on urban-rural influence on students’ performance. They maintain that students in urban locations have a very great advantage by learning in an urban environment, which apparently enriches their academic knowledge.

Another research by Owoye (2011) showed that there is a significant difference between the academic achievement of students in rural and urban secondary schools as measured by senior school certificate examinations. To him, the geographical location of schools has a significant influence on the academic achievement of students. Arul and Vimala (2012) conducted a research on the school environment and academic achievement of standard six students. The data from 400 sample participants is used to determine the relationship between school environment and academic achievement. The result of this study indicated that there is no significant difference in the school environment of standard six students in term of gender, medium of instruction. This brings to fore, the controversy of school environment and academic performance of students.

Sunday (2012) revealed that there is a significant relationship between physical school environment and students’ academic performance. To him, students with adequate laboratory facilities in physics perform better than those in school with less or without facilities; this is simply because laboratory forms part of facilities enriching the physical school environment.

Anta et al. (2013) in a research conducted in Nandi District, Kenya, aimed to establish the relationship between teachers’ characteristics and students’ academic achievement. The findings revealed that students’ academic achievement (in 2007, 2008 and 2009) was below average for 45% of the schools, 6 (30%) performance was on average while 5 (25%) of schools had high student academic achievement. Denial and Felix (2014) examined the impact of the school environment and peer influence on students’ academic performance. The study established that school environment exerts a potent influence on students’ academic performance.

**Teachers/ lecturer-side factors**

Usaini et al. (2015) share their view from their empirical investigation in Malaysia. Their results suggest that good teachers create a favourable environment for students and hence schools with quality teaching were noted to have been performing better. This means that unqualified teachers in themselves serve as threat to favourable school environment. Several teacher or lecturer factors influence academic performance or learning by students. These include teacher attendance in school, teachers’ interest and motivation, and teaching effectiveness and methods of teaching. In their contribution to the subject, Dunne and Leach (2005) talk about the low levels of professionalism in schools (especially low performing ones), with teachers having high rates of lateness, absenteeism and sometimes refusing to teach classes. The World Bank (2004) report put forward a number of reasons for the increasing teacher absenteeism. These included teachers living long distances from schools and experiencing transportation difficulties. Although factors which suggests that effective classroom management techniques supports and facilitate effective teaching and learning. In their study on the influence of school environmental factors on academic achievements in Nigeria, Odehn et al. (2015) point out that overcrowded classrooms leads to poor academic performance of students. Their subsequent arguments in the same study explicitly maintained that facilities form part of the critical determinants of academic performance, schools with limited classrooms relative to students’ population decrease academic achievement.

The argument put forward by Duruji et al. (2014) is perhaps the most convincing explanation in the relationship between class size and academic performance of students. They maintain that deteriorating condition of classrooms, and overcrowding put pressure on teaching and learning facilities hence, impair the quality of learning through health and safety insecurity. Class sizes have also been identified as determinants of academic performance. Studies have indicated that schools with smaller class sizes perform better academically than schools with larger class sizes. Fabunmi et al. (2007), for instance, indicated that three class factors (class size, student classroom space and class utilization rate), when taken together, determine significantly students’ academic performance in Oyo State, Nigeria. Kraft (1994) in his study of the ideal class size and its effects on teaching and learning in Ghana concluded that, class sizes above 40 have negative effects on students’ achievement. Adeyela (2000) opined that large class size is not conducive to serious academic work. Since most of these studies were undertaken outside Ghana, it is imperative to replicate same on the University for Development Studies (UDS).

**Class size and pupil-teacher ratios**

Classroom management has been discovered to have a significant influence on the academic performance of students. The empirical findings of George et al. (2017) argue in support of this. They maintain that the classroom should be orderly enough for lessons to be effective.
will be context-specific, multivariate analysis on teacher survey data also showed that teacher absenteeism was more likely to occur if the following factors were prevalent: poor working conditions, low morale, and high pupil-teacher ratio, living with spouse, being in their home district, and having good social relations (World Bank, 2004). These last three factors were explained as possible causes of distraction from work.

Another factor is teacher motivation. A highly motivated person puts the maximum effort in his or her job. Ofoegbu (2004) linked poor academic performance of students to poor teachers’ performance in terms of accomplishing the teaching task, negative attitudes to work and poor teaching habits which have been attributed to poor motivation. Corroborating this position, Lockheed and Verspoor (1991) asserted that lack of motivation and professional commitment on the part of teachers produce poor attendance and unprofessional attitudes towards pupils which in turn affect the performance of students academically.

Bilesanmi (1999) and Okoruwa (1999) indicated that teachers “teaching experience had significant effect on students” achievement in science. Also, Fettler (1999) investigated the relationship between measures of teachers’ experience and student achievement. He found that teaching experience as measured by years of service correlated positively with student test results. Jacob and Lefgren (2006) found a positive correlation between effective teaching and academic achievement. Similarly, Adediwura and Tayo (2007) suggest that effective teaching is a significant predictor of students’ academic achievement and conclude that effective teaching produce students of higher academic quality. Akiri and Ugborugbo (2009) showed that effective teaching produced better performing students.

Neagley and Evans (1970) were of the view that effective supervision of instruction can improve the quality of teaching and learning in the classroom. Etsey et al. (2004) in a study of 60 schools from peri-urban (29 schools) and rural (31 schools) areas in Ghana found that academic performance was better in private schools than public schools because of more effective supervision of work. If lecturers are present always following regular monitoring from Heads of Department, students would be challenged to change their attitude towards school.

**Student characteristics influencing learning and performance**

Several students’ characteristics have generally been identified as influences to their academic performance. These include time with books, attendance to school, students’ attitude towards schooling, students’ self-concept and motivation. School attendance has a high correlation with individual academic achievement. The success of a student in school is predicated on regular school attendance. According to Allen-Meares et al. (2000) poor attendance such as truancy or unexcused absence from school, cutting classes, tardiness, and leaving school without permission is seen as important in determining pupils’ academic performance. Heady (2003) argued that there is a negative relationship between student academic achievement and work during school hours. As Etsey (2005) puts it, additional working hours decrease a child’s reading and computational ability, whereas with additional hours of school attendance and study the reading and computational ability increase. From their findings, Ray and Lancaster (2003) concluded that, time spent at work has negative impact on education variables with marginal impact weakening at higher levels of study hours. Unbalanced demand of work and education places a physical and mental strain on students and often leads to poor academic performance.

Several researchers have also investigated the significant role of pupils attitude towards learning with regard to their academic achievement. Pupils’ attitude such as absenteeism, truancy, indiscipline can affect their performance. For instance, McLean (1997) asserted that, by distinguishing between the attitudes of high and low achievers, that five attitudinal factors were significantly related to academic performance. Pupils’ attitude may not only directly affect academic achievement, but also may indirectly influence the effect of other factors as well. In another study, Abu-Hilal (2000) found the effect of attitudes on student level of aspiration. Despite the difference between the findings of these two studies, the authors achieved consensus as regards the significance of attitudes in predicting achievement. House (1997) and Hassan (2002) further complemented the results of earlier studies, with the former proving that the pupil’s initial attitude towards school was significantly related to academic performance, while the latter found that attitudes predicted the pupil’s basic approach to learning.

Students’ perceptions that their parents are involved and interested in their schooling and encourage them to do well are positively related to academic achievement.
Through their involvement, parents convey the message that school is important and provide their children with positive emotional experiences in relation to school. Fuchs and Woessmann (2004) observed that students performed significantly worse in reading, maths and science in schools whose principals reported that learning was strongly hindered by the lack of parental support.

METHODOLOGY

Study area

This study was conducted in the “School of Business and Law” in the University for Development studies. Established in May 1992 by the Government of Ghana to “blend the academic world with that of the community in order to provide constructive interaction between the two for the total development of Northern Ghana, in particular, and the country as a whole” (PNDC Law 279, Section 279). “The University for Development Studies (UDS) was borne out of the new thinking in higher education which emphasizes the need for universities to play a more active role in addressing problems of the society, particularly in the rural areas” (Effah, 1998 as cited in UDS, 2016). The University by its mandate and constituency has a pro-poor focus. This is reflected in its methodology of teaching, research and outreach services. The specific emphasis on practically-oriented, research and field-based training is aimed at contributing towards poverty reduction in order to accelerate national development. With a multi-campus, its vision is pro-poor aimed at addressing the conditions and structural causes of poverty. To achieve this, the university recruits qualified staff whose performance will propel the institution to attain this vision.

The Wa Campus of the University currently has three faculties/school. These are the Faculty of Integrated Development Studies (FIDS), Faculty of Planning and Land Management (FPLM) and the School of Business and Law (SBL). The School of Business and Law (SBL) was selected by the researchers as the setting for the study. The reason for selecting the SBL was that, although part of the Wa Campus, it is located on a separate campus (Old campus) while students are expected to attend lectures at both the new and the old campus where the SBL is located.

Research design

Research design serves as a plan which states how data relating to the researchers problem are collected and analyzed. It provides a systematic outline for the conduct of the investigation (Amedahe, 2002). The researchers used the descriptive survey design. This is because it is an efficient way of obtaining information needed to describe peoples’ feelings, thoughts, opinions habits or social issues (Orodho and Kombo 2002). Its purpose is to explore and describe the characteristics of the population as it exists at the time of the study, and in some cases to establish causal relationships. This kind of information can best be achieved by use of either direct interviews or questionnaires which are the main instruments of research design. Descriptive survey allowed the researchers obtain information concerning the subject under consideration. It also ascertained what existed with respect to school attendance, parents support, the availability of instructional resources in the schools and the monitoring mechanisms. This could meet the objectives of the study and produce a means to conceptualize, interpret and understand factors influencing academic performance in study area. The researchers used the descriptive research design because it provides a large pool of information due to the large population it covers which becomes useful for identifying variables which may be further investigated.

Moreover, mixed methods approach which consists of both quantitative and qualitative methods (Crosowell, 2014) was adopted. This approach provides a comprehensive analysis of data obtained from the use of questionnaire and interviews. Findings from qualitative responses were used to support the statistical results.

Study population and sampling procedure

The study focused on the School of Business and Law of the UDS, Wa Campus. The target population consisted of lecturers and students. The school of Business and Law currently has 34 lectures and 3500 students. The sample size for students was estimated using a statistical procedure proposed by Miller and Browser (2003). The formula is given as:

\[ n = \frac{N}{1+Ne^2} \]

Where \( n \) = sample size; \( N \) = sample frame and \( e \) = error or significance level. According to Ahuja (2001), an acceptable error level traditionally is up to ± 0.05 or ± 0.10 (that is, 5 or 10 percentage point). In this study \( N \) = number of students (3500), and \( e = 10\% = 0.1 \). The required sample size for the study is 97 students.

Simple random sampling technique was used in the selection of students. The procedure involves generating the sampling frame using students Identification Numbers (ID). Besides, Microsoft Excel was used to generate random numbers which were further used to select the corresponding students ID and the selected students were identified.

Besides, two (2) Heads of Department; Department of Administration and Management Studies and the Department of Banking and Finance from the School of Business and Law were also selected on purpose.
Students in these two departments outnumber the other departments within the school. The Heads of Department will therefore, have practical experience on how the school facilities influence teaching and learning in the school.

Data

Primary data were gathered through the use of a questionnaire and interview guide from students and lectures (and Heads of department) respectively. The questionnaire was used to collect data regarding student demographic characteristics and school environmental factors influencing their academic performance. Specific concentration was on students' characteristics and academic performance, school instructional resources and academic performance, and the challenges confronting student in their academic performance. At the end of the data collection, 80 out of the 97 questionnaire distributed were retrieved. Besides, interviews were conducted for the Heads of Department on the influence of the school environment on students’ academic performance.

The data consisted of both quantitative and qualitative data. The quantitative data were edited from the questionnaire and coded. Subsequently, the data were entered into the Statistical Package for Social Scientist (SPSS) spread sheet for further transformation. Descriptive statistics were used to analyse the data. Specifically, charts and cross tabulations were generated and in some cases Chi-square test of independence was performed. Qualitative data from the interviews were summarised and used to support the quantitative analyses.

RESULTS AND DISCUSSION

The results of the study were analysed and presented. Several variables were analysed with much focus on student characteristics influencing academic performance, instructional materials and academic performance, and the challenges that are being encountered in the existing learning environment.

Demographic characteristics of respondent

As shown in Table 1, it was discovered from the study that 50 (62.5%) respondents out of the 80 students selected were males while the remaining were female students. The students belong to different age categories including those between 17-25 years, 26-30 years and those above 30 years of age. Majority (62.5%) belong to 17-25 years. About 40% of the respondents were Christians, 27% were Muslims and 30% were traditionalists. It was also discovered that 90% were full time students, 5% were workers and the remaining 5% were workers studying at the University. Finally, about 8.8% of respondents indicated that they reside in the school halls whiles others revealed otherwise.

The implication of this is that, in designing physical infrastructure to support academic learning, consideration must be given to those students who are not accommodated in the school halls.

Students’ characteristics that influence their academic achievements in the university

The results of the study revealed some characteristics of students that influence their academic performance. Among them include students’ indiscipline, low motivation, bad perception, and poor relationship with lecturers. The distribution of these characteristics is shown in Figure 1.

From Figure 1, about 73.8% of respondents indicated that indiscipline could have detrimental effects on the performance of students. Further, 10% of respondents stated that negative behaviours like absenteeism can affect the academic achievements of a student. Other issues that were raised included students’ perception about certain issues, poor relationship with students and problems with motivation. The findings confirm Denial and Felix (2014) assertion on the influence of student characteristics on student learning. This implies that school management must consider instituting disciplinary measures to help students and staff to exhibit behaviours that can influence learning positively.

Opinion on whether personal characteristics of students affect academic achievement

The respondents were asked to confirm if they have the characteristics that influence students performance. The results were obtained and presented in Table 2. From the table, about 91.3% of respondents agreed to the fact that personal traits had an influence on academic achievements. The remaining 8.8% thought otherwise. They believe there are many other factors in play and not just the personal characteristics of an individual.

Based on the findings above, there was the need to investigate whether or not personal characteristics as indicated by House (1997) and Hassan (2002) impacts on academic achievement. In relation to this, respondents were asked if personal characteristics of students affect their academic achievements. They pointed to external factor like school infrastructure and not necessarily personal characteristics as espoused by Denial and Felix (2014).

Respondents were further asked to rate the overall effect of student characteristics on academic performance
Table 1. Demographic characteristics of respondents.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender of respondents</td>
<td>Male</td>
<td>50</td>
<td>62.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>30</td>
<td>37.5</td>
</tr>
<tr>
<td>Age of respondents</td>
<td>17-25 years</td>
<td>50</td>
<td>62.5</td>
</tr>
<tr>
<td></td>
<td>26-30 years</td>
<td>28</td>
<td>35.0</td>
</tr>
<tr>
<td></td>
<td>Above 30 years</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Religious background</td>
<td>Traditionalist</td>
<td>24</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>Christian</td>
<td>32</td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>22</td>
<td>27.5</td>
</tr>
<tr>
<td></td>
<td>Other (s)</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Occupational status</td>
<td>Student</td>
<td>72</td>
<td>90.0</td>
</tr>
<tr>
<td></td>
<td>Student and worker</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>Other (s)</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>Other income generation activity</td>
<td>Yes</td>
<td>18</td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>62</td>
<td>77.5</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single</td>
<td>69</td>
<td>86.3</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>10</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Residential status</td>
<td>Residential</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>Non-residential</td>
<td>66</td>
<td>82.5</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>1</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Source: Field Survey (2017).

Figure 1. Student characteristics that influence academic achievement. Source: Field Survey (2017).

(Table 3). Responding to this, about 41.3% of respondents believe it had a good effect on academic achievements. 24.8% of respondents were even more convinced of its positive impact on academic achievement. Also, about 18.8% of respondents stated that the personal characteristics had an average effect on
the performance of students. The remaining respondents were not so convinced about a positive impact on academic achievement.

### School instructional resources influence on academic performance

Respondents were also asked to enumerate some of the physical or human resources that were easily observed on the campus of UDS. In response, about 58.8% of the respondents spoke about the existence of experienced lecturers or human resource on campus. 20% of respondents talked about the quality or adequacy of physical facilities on campus. About 17.5% of respondents talked about the quality size of classes on campus. Other respondents also emphasized on the administrative qualities of staff on campus. This implies that, to promote learning on the University campus, attention needs to be directed towards human resource development through periodic training which in the long run can influence student learning. Figure 2 illustrates this finding.

One Head of Department shared his opinion on the influence of the school facilities on academic teaching and learning as follows:

> The School of Business and Law is one of the newly established faculties in the Wa Campus of the University for Development Studies. As a result we have limited facilities such as offices, and lecture halls. Both students and lecturers have to travel for several kilometres for lectures in the new campus. This sometimes reduces the contact hours between lecturers and students.

This finding suggests that limited academic facilities in the School of Business and Law reduce the amount of time allocated to classroom interaction between lecturers and students. This invariably affects student academic performance.

Respondents were asked if the instructional resources affected the academic achievements of students. The results showed that 90% of respondents agreed to the fact that instructional resources had an influence on academic achievements. The remaining 10% thought otherwise. They believe there are many other factors at play and not just the instructional resources on campus. Some of these challenges are inadequate physical infrastructure, absence of ICT halls/centres, inadequate public address system, absence of library complex and other relevant facilities. This corroborates the World Bank (2004) assertion that poor school environment impacts negatively on learning.

Specific examples were cited by students on the instructional resources that influence academic performance. It was discovered that 43.8% of respondents rated the quality of class size as the most influential instructional resource on student performance. 32.5% of respondents are convinced that the quality of physical assets on campus affected the performance of students while 17.5% went for the quality of lecturers on campus. The limited instructional resource suggests that teaching and learning will be impaired in the School of Business and Law. This will slow down students' academic performance as argued by Odehn et al. (2015), Duruji et al. (2014) and Usaini et al. (2015). These studies maintain that limited academic facilities such as libraries and class rooms will decrease academic performance of students.

Further analysis required the respondents to rate the effect of school instructional resources on student learning. The rating was done using poor, average, good and very good. The distribution is shown in Table 4. The table shows that 31.3% of respondents believe it had a good impact on academic achievements. Furthermore, about 27.5% of respondents were even more convinced of its positive impact on academic achievement. Thirty-percent (30%) of respondents stated that personal characteristics had an average effect on the performance of students. The remaining respondents were not so convinced about a positive impact on student performance.

Table 4 reveals mixed findings in terms of the effect of the quality of instructional resources on academic performance of students. While majority of the students have at least considered as average, a small proportion (11.3%) were of the view that the effect is poor. This suggests that the existing instructional resources in the School of Business and Law do not support quality

### Table 2. Personal characteristics of students affect academic achievement.

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>73</td>
<td>91.3</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey (2017).

### Table 3. Respondent ratings of student characteristics on academic achievement.

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Average</td>
<td>15</td>
<td>18.8</td>
</tr>
<tr>
<td>Good</td>
<td>33</td>
<td>41.3</td>
</tr>
<tr>
<td>Very Good</td>
<td>19</td>
<td>23.8</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey (2017).
Figure 2. Physical/human resources easily observed on the university campus. Source: Field Survey (2017).

Table 4. Rating of impact of school instructional resources.

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>9</td>
<td>11.3</td>
</tr>
<tr>
<td>Average</td>
<td>24</td>
<td>30.0</td>
</tr>
<tr>
<td>Good</td>
<td>25</td>
<td>31.3</td>
</tr>
<tr>
<td>Very Good</td>
<td>22</td>
<td>27.5</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey (2017).

teaching and learning hence, leaves no positive influence on student performance.

Challenges students’ encounter in the existing learning environment

The results of the study provide analysis of the challenges facing students in the School of Business and Law. First, the students were asked to indicate whether they encounter challenges in their learning environment. About 77.5% of them confirmed that the school environment poses some challenges to their effective learning (Figure 3).

Further analyses sought to find out if students face any challenges in the utilization of resources in their existing learning environment. This was particularly important in establishing the linkage between resource utilization and learning outcomes. Responding to this, about 77.5% of respondents confirmed that students face lots of problems in utilizing resources in their existing learning environment. The remaining 22.5% experience no challenges in the utilization of resources in their current learning environment. Specifically, some of the challenges are absence lecture of theatres, public address systems, libraries, markets, internet or ICT halls/centres as well as other supporting recreational facilities.

An interview with one Head of Department points out the challenges faced by both students and lecturers in the School of Business and Law. The respondent articulated his experience in the following words:

As a young institution we are managing with the limited resources available. Sometimes you enter the lecture hall and many students cannot see what you are writing because of their large numbers. Besides, when there is no public address system many students cannot hear what you are saying. This in my opinion is not supporting effective teaching and learning.

This finding suggests that both students and lecturers face similar challenges in terms of limited academic facilities. The fact that students have challenges seeing or hearing their instructor implies that students attend lectures under poor conditions.

To sum up, it was considered necessary to assess student description and or perceptions on existing infrastructural facilities (Figure 4). Specifically, respondents were asked to describe the state of existing infrastructural facilities on campus. Majority of respondents described the existing infrastructure as inadequate followed by 24% of respondents who believe that existing infrastructural facilities are in a very poor state. The remaining respondents believe that existing infrastructures are adequate to support education in the university. This confirms Adedji and Owoeye (2002) view that physical structures were significantly related to academic performance and therefore there should be serious effort to acquire and maintain these resources for
Summary of findings

The sections present a summary of the findings from the study. The main findings under each theme were presented. The results from the study indicated that personal characteristics of students affected their academic achievements. Negative behaviour like indiscipline and absenteeism can affect the academic achievements of students. Other issues that were raised include students’ perception about certain issues, poor relationship with students and problems with motivation. Respondents agreed to the fact that instructional resources had an influence on academic achievements but students face lots of problems in utilizing resources in their existing learning environment. Majority of respondents described the existing infrastructure as inadequate and in need of serious upgrade.

CONCLUSION

The study revealed that factors like indiscipline and absenteeism could have detrimental effect on the performance of the student. Other issues that were raised include students’ perception about certain issues, poor relationship with students and problems with motivation. Respondents agreed to the fact that instructional resources had an influence on academic achievements and the university had some at their disposal. It was concluded that the university lacked adequate infrastructure to support teaching and learning.
RECOMMENDATIONS

The study therefore recommends that Management of the University for Development Studies should provide the enabling environment in the School of Business and Law to facilitate effective teaching and learning. More attention should be given to the provision of instructional resources such as libraries, strategies to build student-lecturer relationships and providing improved classrooms/lecture halls. These are necessary conditions because they challenge effective teaching and learning and hence academic performance of students.

REFERENCES


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