

PRACTICAL-BASED TEACHING AND LEARNING AND ITS INFLUENCE ON ACADEMIC PERFORMANCE IN SEWING AMONG JUNIOR HIGH SCHOOLS LEARNERS IN MAMPONG-ASHANTI MUNICIPALITY, GHANA: A REVIEW OF CHALLENGES TEACHERS FACE IN IMPLEMENTING PRACTICAL-BASED TEACHING IN BDT SEWING

Peace Akosua Tsekpo, Vocational and Technical Department, St Monica's College of Education, Ashanti-Mampong-Ghana

Prof. Ondigi Samson, Executive Dean School of Education and Lifelong Learning, Kenyatta University, Nairobi-Kenya

Dr. David Oludhe, Department of Education Communication and Technology, Kenyatta University, Nairobi-Kenya

#### **Abstract**

The study made the claim that the use of practical-based teaching modes can improve students' learning experiences and result in academic success using pragmatism and ecological systems theory. A descriptive survey that combines qualitative and quantitative methodologies was employed in the study. Various sampling techniques (stratified, purposive, and plain random) were used to determine the population and sample size. The researcher employed questionnaires, sewing proficiency exams, interviews, and a checklist for observing classes to obtain data. This aided in establishing the link between practical-based learning and its effect on students' academic progress. The majority of teachers employ practical-based teaching and learning techniques less frequently than the other teaching strategies mentioned in this thesis, according to the findings.

**Keywords:** Basic Design Technology, Teachers Pedagogy, Education, Vocational and Technical Education

#### Introduction

To interact with learners and improve the effectiveness of learning, practical-based teaching is a key technique. Home economics students and teachers can greatly benefit from the use of practical instruction because sewing is a hands-on subject. Because B.D.T. sewing strives to foster individuals who are artistic and competent to utilize a

wide range of skills and capabilities in product advancements, practical teaching equips and stimulates the attention of students. Additionally, when students are taught using the ideal teaching techniques, practical-based instruction captures their interest and fosters a spirit of competition to improve learning outcomes. In order to accomplish some predetermined goals, teaching incorporates a number of variables, including the instructor, the student, the curriculum, and others. Given that it is the factor that most significantly influences students' outcomes within a given educational system, effective teaching is essential to the development of learning. Student engagement, performance, and participation are all influenced by effective teaching (including social outcomes).

By providing opportunities for students to grow physically, emotionally, academically, and socially, teaching gives us the ability to help individuals live their lives to the fullest. Because of this, a student's performance is greatly influenced by the teacher's instructional planning, teaching strategies, and usage of various learning activities. Teaching is an effort to bring about positive changes in human learning, abilities, and behavior to help people live better lives. It assists individuals in acquiring the knowledge, abilities, and attitudes necessary to be productive people. Additionally, it serves as a means of transmitting information to the following generation (Lado, 2014). Awotua-Efebo (2015) defines teaching as an interaction between a teacher and a student that occurs under the instructor's control and aims to cause the desired change in the student's behavior. According to Smith (2000), teaching entails disseminating both knowledge and expertise. Despite the obvious benefits of BDT sewing to the economy, there remain obstacles that prevent BDT sewing from being taught. These obstacles are elaborated on below:

# **Major Obstacles Faced When Using Practical Instruction Methods**

Because of a dearth of finances, vocational centers have had difficulties keeping their programs, which have had an impact on how practical training is organized. The acquisition of vocational skills is aided, for instance, by workshops in institutions of vocational education impact on how practical training is organized. The acquisition of vocational skills is aided, for instance, by workshops in institutions of vocational education. Physical resources are therefore necessary for any actual learning to occur. Poplin (1992) concurs that the effectiveness of non-formal training is frequently severely constrained by a lack of appropriate infrastructure materials.

(Boakye & Ampiah, 2017) examined the difficulties five recently qualified teachers (NQTs) had in the teaching and learning environment and the solutions they came up with. Data were gathered through content analysis, interviews, and observation. It was discovered that the NQTs encountered the following difficulties, in addition to others: (a) a lack of tools for instruction and learning, (b) poor time management, (c) a lack of subject-matter expertise, (d) their students' inability to comprehend the lessons taught, (e) student indiscipline, (f) a lack of interest on the part of their students, and (g) their inability to finish the syllabus. All of the NQTs faced the problem of inadequate resources and a lack of subject-matter knowledge. Among the strategies they employed to overcome their obstacles were (a) making do with what they had, (b) changing the way they taught, and (c) speaking with the parents. It was suggested, among other things, that the equipment and materials for the elementary schools be provided, as well as that pre-service training give aspiring teachers the abilities to help them deal with difficulties.

## Related Challenges that influence learners' academic performance

Home-Related Factors - A variety of household factors can influence a child's academic achievement (Engin-Demir, 2009; Tanieh, 2013). Rasheed (2017) discovered in his study a significant and strong influence of school-based determinants on agricultural science students' academic achievement in senior secondary schools in Oyo West Local Government Area of Oyo State. The empirical literature is rich in specific school-based factors that influence student academic achievement, which are briefly discussed below.

*Parents' Educational Status* - Higher parental education correlates with higher pupil academic performance (Schiller, Khmelkov, & Wang, 2002; Acheampong, 1992, as cited in Avotri et al., 1999; Johnson & Kyle, 2001; Fertig & Schmidt, 2002; Fuchs & Woessmann, 2004; Currie, 1995; Gregg & Machin, 1999; Coleman, 2006; Irin & Ahin, 2020).

**Parents' Occupation** - Children whose parents work in "skilled" professions such as teaching, healthcare, banking, and the like performed better academically than their peers whose parents work in "unskilled" professions such as street vending, subsistence agriculture, and day laborers at construction sites, wood loading sites, and cocoa loading sites, according to Okwan (2014). As a result, students whose parents have steady, formal jobs outperform students whose parents are itinerant, peasants, or unemployed. Mudassir and Abubakar (2015) investigated the impact of learners' academic success on their parents' occupations in Malaysia. Students with formal-sector parents outperform those with informal-sector parents. As a result, according to Juma (2016), there is a significant and positive relationship between students' academic achievement and their parents' careers.

*Family Income* - Higher levels of family income are associated with higher levels of student achievement (Hanushek, 1992; Tracy & Walter, 1998; Akanle, 2007; Jing-Lin, Gang, & Wei, 2009; Asikhia, 2010, as quoted in Adane, 2013; Nadzido et al., 2016; Machebe, Ezegbe, & Onuoha, 2017).

*Family Size* - Most previous empirical studies have found a negative relationship between family size (number of children) and pupil academic achievement (Parcel & Menagham, 1994; Downey, 1995; Asikhia, 2010, cited in Adane, 2013; Ella, Odok, & Ella, 2015).

Parental Discipline and Parenting Style - A study found that the type of parental discipline has an impact on children's academic success (Aremu, 2000; Oluwole, 2001). Students raised in democratic homes outperform their peers raised in authoritarian homes.

Family Structure - Further, a family is either fractured or whole structurally. A fragmented family where one parent is dead, or both parents are divorced, separated, deserted each other and the kids or both parents are living together illegitimately hinders the academic achievement of pupils compared to an intact, competitive family, where both parents are alive, married legitimately, and provide the children with the requisite financial support (Coukline, 1996; Agulanna, 1999; Nzewunwah 1995 Cited in Uwaifo, 2008). In general, children coming from two-parent families tend to perform better than those coming from single-parent families (Stone, 2012; Ella, Odok & Ella, 2015; Peter, 2016).

*Parental Involvement* - Students with active parents outperform students whose parents are not involved in their school (Grolnick & Slowiaczek, 1987; Reynolds & Gill, 1994; Conway & Houtenwille, 2008, as stated in Adane, 2013; Melhinsh et al., 2001, reported in Ademola & Olajumoke, 2009; Tremblay, Ross, & Berthelot, 2001; Odinko & Adeyemo, 1999; Ghanney, 2007; Ghanney, 2007; Azumah et al., 2018).

## **School Factors**

Tanieh (2013) discovered that the following school-related factors have a significant (positive or negative) impact on students' academic success:

*Teaching and Learning Materials:* The quality and quantity of teaching and learning resources available to students boosts their academic progress (Cohen et al., 2009; Durlak et al., 2011, Adane, 2013; Agudzeamegah, 2014; Basal, 2015; Butakor & Dziwornu, 2018).

School Location and Quality of Physical Building: Harbison and Hanushek (1992) discovered that the quality of physical facilities, such as fantastic seating arrangements and good buildings, leads to high academic attainment and performance, but deteriorating structures with no or few seating configurations are detrimental (Isangedighi, 1998; Engin-Demir, 2009; Danesty, 2004, as quoted in Adane, 2013). According to Asikhia (2010), the location of a school has a significant impact on the number of students it attracts. According to Adepoju (2001), children in urban schools outperform their peers in rural schools in this regard.

Class Size: Academically, schools with smaller class sizes outperform schools with larger class sizes (Fabunmi, Brai-Abu & Adeniji, 2007; Salfi & Saeed, 2007). As a result, class size has a negative relationship with student achievement (Tremblay, Ross, & Berthelot, 2001; Kraft, 1994; Adeyela, 2000; Kraft, 2003, cited in Adane, 2013; Butakor & Dziwornu, 2018).

Effective Supervision of Teaching and Learning Activities-In addition, schools that effectively supervise teaching and learning activities outperform those that do not (Etsey, Amedahe, & Edjah, 2004; Etsey, 2005; Mankoe, 2002; Okyerefo et al., 2011; Butakor & Dziwornu, 2018). Syllabus Content-Another school-related concern that contributes to students' poor academic performance is an overload of content in the syllabus (Kraft, 2003; Lee & Shute, 2010; Lubienski et al., 2008; Adane, 2013).

**Student Characteristics** - Numerous characteristics of students have been identified as having an impact on their academic success. Intelligence, time spent on books and coursework, school punctuality, students' attitudes toward school, self-concept and motivation, and students' health and nutritional status are all factors to consider (Tanieh, 2013; Alhassan & Alhassan, 2019).

*Intelligence* - Higher-intelligent students outperform lower-intelligent students (Nichols & Sutton, 2013).

Time Spent on Books and Homework-Children who devote more time to assignments and homework, regardless of intelligence, are more likely to be successful in school (Engin-Demir, 2009; Butler, 1987, as cited in Etsey, 2005; Harbison & Hanushek, 1992; Alomar, 2006; Stricker & Rock, 1995; Kolan & Dzandza, 2018).

*School Attendance*: Attending class regularly is essential for a student to succeed academically. Cutting classes, being tardy, and leaving school without permission are all examples of behaviors that can negatively affect students' academic achievement (Allen-Meares, Washington, & Welsh, 2000; Heady, 2003; Akabayashi & Psacharopoulos, 1999; Ray & Lancaster, 2003).

*Student Attitudes*: Laziness, indiscipline, and other negative attitudes might affect pupils' academic achievement. Academic accomplishment may be enhanced by positive attitudes, including regular attendance in class, discipline, and diligent work on homework and other projects (McLean, 1997; Abu-Hilal, 2000; House, 1997; Hassan, 2002; Kashem, 2019).

Student Self-Concept: Previous research tends to indicate that there is a negative or inverse correlation between students' self-perceptions and their academic success (Marsh, 1990; Marsh & Yeung, 1997; Edwards, 2002). Helmke and Van Aken (1995) observed that primary school achievement had little effect on past self-concept. However, some new research indicates a strong link between academic success and a positive self-concept (Rady, Kabeer, & El-Nady, 2016).

Student Motivation - It is believed that motivation is what drives a student's interest in their studies. When a student is highly motivated, they focus all of their attention, energy, and resources on achieving one specific goal (Diaz, 2003). When it pertains to this, how kids feel their parents are supporting them and their academic goals might be an advantage. When children perceive their parents' support and involvement constructively, they will perform well in school (Grolnick & Slowiaczek, 1994; Wang & Wildman, 1995; Gottfried, 1994; Engin-Demir, 2009).

Health and Nutritional Status of Students: The academic success of a child is affected by their health. Children that are underfed, hungry, or missing essential micronutrients do not learn as effectively as healthy, well-fed children (Pridmore, 2007, p. 21). Because of this, there is a positive association between children's academic achievement and their overall health and nutritional status (Harbison & Hanushek, 1992; Pridmore, 2007; GNCC, 2000; Fentiman, Hall, & Bundy, 2001; Sarris & Shams, 1991; Glewwe & Jacoby, 1995; Fentiman, Hall, & Bundy, 1999, 2001; Vegas & Petrow, 2008; Lockheed & Verspoor, 1991; Ong, Chandran, Chen & Poh, 2010; Pollitt, 1990, cited in Adane, 2013).

**Pupil's Age:** Previous studies investigating the link between age and academic performance have revealed a somewhat ambiguous set of findings on the age of students (Mendez, Kim, Ferron, & Woods, 2015). This may be the case since academic achievement is affected by a variety of factors besides age. Numerous earlier scholars have discovered a significant link between age and academic success (e.g., Momanyi, Too & Simiyu, 2016). If traditional classroom interaction (i.e., face-to-face communication) is prioritized above contemporary teaching technology, Hanan, Marie-Anne, and Lori (2015) concurred that age and gender could be the only indicators of postsecondary students' academic achievement (online). According to Eze, Ezenwafor, and Obi (2015), there have been significant differences in academic achievement among university graduates in the Vocational and Technical Education (VTE) Unit as a result of age and gender. Age and gender had no linear correlation with academic success, and their combined influence was insignificant. They assert that this is a result of the curriculum of VTE courses, which includes mathematics, science, and ICT. According to Ebenuwa-Okoh (2010), gender, age, and socioeconomic status were not reliable indicators of academic success among undergraduate students. According to John, Jackson, and Simiyu (2015), a student's chronological age had a significant impact on how well they did academically, with the youngest kid being able to outperform their older counterpart on a test made by the teacher.

**Pupil's gender**: Previous studies on the relationship between gender and academic achievement have resulted in a variety of results. Gender and academic success in mathematics were shown to be related, according to Abubakar and Adegboyega (2012), among College of Education students. According to Aransi (2017), class streams like science, art, or commercial have an effect on secondary school students' educational outcomes, particularly in the English language, although gender and class size were found to have no effect. Additionally, Olayemi (2018) found that there was a significant gender difference in the academic success of high school students in economics, with female students outperforming male students.

## **Teacher-Side Factors**

Many teacher factors have an impact on students' academic progress. These variables include the presence and motivation of the instructor, the effectiveness of the training, and the methods used (Tanieh, 2013)

Teacher Regularity in School - The frequency of teachers in the classroom is critical in terms of both children's access to education and the type of education they receive. Teacher absence is a common occurrence that can lead to poor student performance. Thus, there is a negative relationship between teacher absenteeism and student academic performance (World Bank, 2004; CARE International, 2003; Dunne & Leach, 2005; Barnes, 2003; Fobih, Akyeampong & Koomson, 1999). On the other hand, there is a positive relationship between teacher attendance in class and student academic achievement (Etsey, 2005; Pryor & Ampiah, 2003; Bennell & Akyeampong, 2007; Adane, 2013; Butakor & Dziwornu, 2018).

**Teacher Motivation** -Another factor to consider is teacher motivation. A highly motivated person gives their all to their work. Poor student academic achievement, according to Ofoegbu (2004), is associated with poor teacher productivity in terms of completing the teaching task, unfavorable attitudes toward work, and poor teaching strategies, all of which are associated with insufficient motivation. Low attendance and unprofessional behavior toward students result from instructors' lack of enthusiasm and professional dedication, both of which have an impact on academic advancement (Lockheed & Verspoor, 1991; Adane, 2013).

*Teacher Competence and Commitment* - Teachers' quality (qualification, years of experience, and expertise) and dedication become critical determinants of students' academic achievement in order to achieve higher levels of performance. (Lockheed & Verspoor, 1991; Agyemang, 1993; Hedges, 2002; Darling-Hammond, 2000; Ingersoll, 1999; Greenwald, Hedges, and Laine, 1996; Abuseji, 2007; Bilesanmi, 1999; Okoruwa, 1999; Fettler, 1999; Adane, 2013; Butakor & Dziwornu, 2018; *Şirin* & Şahin, 2020).

**Effective teaching**: Effective teaching entails subject mastery, effective communication, lesson preparation and presentation, pacing the class to the students' level and taking individual differences into account, allowing students to practice and implement what they have learned, letting students know what is expected of them, and monitoring and evaluating performance (Lockheed & Verspoor, 1991). Effective teaching is a strong predictor of students'

academic achievement, and good teaching produces better students (Jacob & Lefgren, 2006; Adediwura & Tayo, 2007; Akiri & Ugborugbo, 2009; McSweeney, 2014; Butakor & Dziwornu, 2018; Irin & Ahin, 2020).

## **MEHODS**

The study made the claim that the use of practical-based teaching modes can improve students' learning experiences and result in academic success using pragmatism and ecological systems theory. A descriptive survey that combines qualitative and quantitative methodologies was employed in the study. Various sampling techniques (stratified, purposive, and plain random) were used to determine the population and sample size. The researcher employed questionnaires, sewing proficiency exams, interviews, and a checklist for observing classes to obtain data. This aided in establishing the link between practical-based learning and its effect on students' academic progress. The majority of teachers employ practical-based teaching and learning techniques less frequently than the other teaching strategies mentioned in this thesis, according to the findings.

## **RESULTS AND DISCUSSION**

In an effort to understand how much practical-based teaching and learning affects students' academic performance in BDT Home-Economies Sewing among Junior High Schools in Ghana's Mampong-Ashanti Municipality, the researcher asks respondents for their opinions on what challenges they face when trying to implement practical-based teaching. The assignment given to the respondents was to indicate how much they agreed or disagreed with the assertions.

Table 1: Factors hindering implementation of practical – based teaching

	Strongly				Strongly
Factors hindering implementation of practical	Agree	Agree	Neutral	Disagree	Disagree
<ul> <li>based teaching</li> </ul>					
	n(%)	n(%)	n(%)	n(%)	n(%)
Allocated time for teaching the subject is enough.	1(10)	4(40)	1(10)	3(30)	1(10)
There is enough teaching and learning materials for teaching the subject.	Dos	001	ah la	5(50)	5(50)
Students prefer sewing aspect as compared to food and nutrition.	Mes	1(10)	1(10)	6(60)	2(20)
Parents support learners with necessary required resources.	-	-	1(10)	8(80)	1(10)
School management provides teaching and learning resources for the subject.	1(10)	1(10)	2(20)	4(40)	2(20)

# **Source: Field Data**

It was discovered that 40% of respondents agreed that the time allotted for teaching the subject is sufficient, 30% disagreed, and 10% of respondents strongly agreed, neutrally agreed, and strongly disagreed, respectively, that the time allotted for teaching the subject is sufficient. Additionally, it was shown that 50% of respondents disagreed, and the other 50% strongly disagreed, that there is a sufficient amount of teaching and learning resources available for the subject. None strongly agreed, agreed, or were neutral about the matter of whether there are enough teaching and learning resources for the subject. Sixty percent of respondents disagreed that students prefer the sewing aspect as opposed to food and nutrition; 20% of respondents strongly disagreed; 10% of respondents agreed and were neutral; and none of the respondents disagreed that students prefer the sewing aspect as opposed to food and nutrition. Nearly all (80%) respondents disagreed that parents should provide students with the resources they need; 10% of respondents were neutral or strongly disagreed; and none of the respondents strongly agreed or disagreed that parents should provide students with the resources they need. Forty percent of respondents disagreed that school management provides teaching and learning resources for the subject; 20% of respondents are neutral or strongly

disagree; and 10% of respondents strongly agree that school management provides teaching and learning resources for the subject.

The findings of this study are consistent with those of Afolabi et al. (2017), who found that a lack of resources was a significant obstacle to the adoption of practical-based teaching in schools. Students are likely interested in learning about both parts of BDT Home-Economies Sewing, as seen by the majority of answers disagreeing with students' preference for sewing as opposed to food and nutrition. The fact that a sizable minority of respondents concurred with this assertion suggests that some kids might be more engaged in sewing than in food and nutrition. Parental support is one of the characteristics that researchers have determined to have contributed to student learning and accomplishment. The results of this study suggest that parents are not giving their kids the tools they need to succeed in BDT Home-Economies Sewing. This could be a result of the parents' ignorance of the value of practical learning or a lack of financial resources. The start of practical-based teaching of BDT sewing and related disciplines could be hampered by a number of reasons, according to the findings of this study.

# **Classroom Observation of Teachers**

The researcher tried and found places where teachers encountered difficulties while attempting to teach the BDT Sewing course in the classroom. It was found that most teachers did not use teaching and learning resources, lacked sufficient subject-matter knowledge, only used the lecture method in all of the courses they saw, had poorly prepared lessons, and lacked sufficient practical skills. It was shown that few teachers interacted with students as much due to poor presentations, a lack of knowledge of effective teaching strategies, and overconfidence, which prevented teachers from unwinding and giving effective presentations.

# Challenges Teachers Face Instructing Learners in BDT Sewing

In an attempt to find out from the respondents their opinions on the four key challenges faced by teachers when implementing practical-based teaching methods for instructing learners in BDT Sewing, it was found that the majority asserted that lack of teaching and learning materials, inadequate resource personnel for BDT Sewing, lack of parent support, and inadequate time allotted to BDT Sewing were key challenges faced by teachers when implementing practical-based teaching methods for instructing learners in BDT Sewing. This is in line with Diise et al. (2018), who stated that, in decreasing order of severity, the challenges in implementing the project method of teaching as a practical method were identified as inadequate tools and equipment, large class size and grouping problems, short periods allocated to practical, poor skilled farm labourers, difficult and time-consuming tasks, and a high cost of materials. The rest of the respondents claimed that some teachers were unable to teach the BDT Sewing subject and had no knowledge of BDT Sewing as they were intentionally trained on Food and Nutrition, and that the school authority and Ghana Education Service (GES) should make an effort to provide adequate teaching and learning materials to schools to ensure effective application of the project method of teaching for effective teaching and learning of practical lessons. Implementing practical-based teaching methods to instruct students in BDT sewing is hampered by low student interest in the topic, which causes them to prefer food and nutrition, and a lack of in-service training for teachers.

In a structured interview with the head teachers of the participating schools, the researcher also asked about potential challenges teachers might have when delivering practical curriculum courses like BDT sewing. The head teachers' comments supported the participating teachers' claims.

Table 2: Challenges that teachers are likely to face when teaching BDT Sewing

Challenges that teachers likely to face when teaching BDT Sewing	Frequency	Percent
Inadequate TLRs, lack of practical knowledge and inadequate time allocation for BDT Sewing practical lesson	9	90
Lack of in-service training, and lack of motivation	1	10
Total	10	100

## **Source: Field Data**

Insufficient teaching and learning resources (TRLs), a lack of practical knowledge, and insufficient time allotted for BDT Sewing practical lessons were found to be the three main challenges that teachers are likely to encounter in their school when instructing practical courses of the curriculum like BDT sewing, according to nearly all (90%) participating head teachers. According to research done by Joana (2015), students in Ghana's second cycle of education do not receive much attention to help them develop their talents, despite the fact that the apparel and textiles course is designed to build skills. This is due to the insufficient time and resources allotted by second-cycle colleges for the teaching of practical courses in clothes and textiles. According to Kassah (2019), one of the key resources that stands out as essential to the realisation of high-quality education and training is the possession of qualified teachers. According to Kumur (2015), teachers who are knowledgeable about pedagogical material are better able to effectively teach a subject matter within a discipline. Nearly 10% of the respondents stated that the difficulties instructors may have in their school when instructing practical courses of the curriculum like BDT sewing include a lack of in-service training and a lack of enthusiasm.

The researcher also sought information on the elements that can contribute to a teacher's decision not to use a hands-on method of teaching sewing. This is to look at additional reasons why a teacher might not be using a hands-on approach to teaching sewing.

Table 3: Factors likely to influence a teacher's lack of implementation of a hands-on approach

Factors likely to influence a teacher's lack of implementation of a hands-on approach	Frequency	Percent
Lack of TLRs for sewing and lack of interest by teachers and students	8	80
Lack of pra <mark>ctic</mark> al k <mark>now</mark> ledge	1	10
Students prefer Food and Nutrition to Sewing	1	10
Total	10	100

### **Source: Field Data**

It could be seen above that nearly all respondents affirmed that lack of TLRs for sewing is in agreement with research conducted by Yarkwah et al. (2020), which stipulated that inadequate TLMs posed a challenge to students learning in mathematics and that lack of interest by teachers and students are factors that are likely to influence a teacher's lack of implementation of a hands-on approach to teaching sewing. Almost none of the respondents concurred that lack of practical knowledge and students' preference for food and nutrition to sewing are factors that are likely to influence a teacher's lack of implementation of a hands-on approach to teaching sewing. This outcome agrees with Poplin's (1992) findings that the lack of suitable infrastructure materials, among others, severely limits the efficiency of non-formal training in many circumstances.

The findings of this survey suggest that there is a need to address the lack of TLMs for sewing in order to improve the effectiveness of teaching and learning in this subject. This could be done by providing teachers with more access to TLMs, such as sewing machines, fabric, and patterns. It is also important to create an environment where teachers and students are more interested in sewing, such as by providing more opportunities for hands-on learning.

Additionally, the findings of this survey are also consistent with the work of Poplin (1992), who established that the lack of appropriate infrastructure materials among others severely confines the competence of non-formal training in many circumstances. This suggests that the lack of TLMs for sewing is not just a problem in formal education settings, but also in non-formal settings where this subject is being taught. There are important implications in the results for policymakers and practitioners in the field. On the part of policymakers, they need to ensure that there is adequate funding for the provision of TLMs for sewing and on the part of practitioners, it is necessary to create an environment where teachers and students are more interested in BDT sewing and related subjects by providing more opportunities for hands-on learning.

#### **CONCLUSION**

The challenges teachers face when conducting skills courses have been the subject of numerous studies. However, TVETs have received the most of this research's attention. The findings might not be applicable to junior high schools because these are two distinct institutions with different characteristics. Therefore, it is crucial for this study to identify the issues junior high school teachers are running into when delivering practical-based instruction in BDT sewing. In order to fill this knowledge gap, practical-based teaching has difficulties that teachers must overcome. It was determined that a lack of teaching and learning materials, inadequate resource personnel for the BDT Sewing subject, an absence of parental support, and insufficient time allotted to the BDT Sewing subject were the key challenges faced by teachers when implementing practical based teaching methods for instructing learners in BDT Sewing. Besides that, some teachers were unable to teach the BDT Sewing subject and had no knowledge of BDT Sewing because they were intentionally trained on Food and Nutrition.

## RECOMMENDATION

- i. Teachers teaching BDT Sewing and other teachers should focus heavily on the fundamental elements of the lesson, such as the lesson goals, the teaching and learning resources (TLRs), the introduction of the lesson, the presentation of the lesson, the pace of the lesson and the audibility of the voice, questioning and feedback, mastery of the subject, students' participation, communication /use of language, the choice of the instructional method, the use of the instructional method, and the duration of use of the instructional method. When these elements are improved, students' performance and understanding of BDT sewing lessons and other lessons will improve dramatically.
- ii. Educators and policymakers should carve out the BDT sewing curriculum and specify the instructional methods to be used to teach a specific topic in the syllabus.
- iii. The junior high school administration should collaborate with TVETs, donors, corporations, alumni, parents, and other stakeholders to solicit donations and mobilize funds for the acquisition of BDT sewing materials and teaching and learning resources. This would enable the students to have easier access to sewing machines and materials at school for their practical work. When these resources are available, they will motivate students to always practice and have hands-on experience. This would also encourage educators to employ a practical-based teaching method.

#### REFERENCES

Adane, L. O. (2013). Factors Affecting Low Academic Achievement of Pupils in Kemp Methodist Junior High School in Aburi, Eastern Region [Unpublished master's thesis]. The University of Ghana.

Adepoju, T. (2001). Location Factors as correlates of private and Academic Performance of Secondary Schools in Oyo State. A Proposal presented at the higher students. Joint Staff Seminar Department of Teacher Education, University of Ibadan, Ibadan.

- Afolabi, O., Ogunsola, O., & Afolabi, O. (2017). Factors hindering the implementation of practical based teaching in senior secondary schools in Oyo State, Nigeria. International Journal of Education and Research, 5(6), 61-70.
- Agudzeamegah, A. (2014). Developing three-dimensional instructional materials from locally available resources for science education in primary schools, Ghana.
- Alhassan, I., & Alhassan, A. (2019). Determinants of students' academic achievement in a Ghanaian University. *American Journal of Educational Research*, 7(2), 178-182. <a href="https://doi.org/10.12691/education-7-2-11">https://doi.org/10.12691/education-7-2-11</a>
- Aremu, A. O. (2000). Academic performance 5 factor inventory. Ibadan: Stirling-Horden Publishers. Retrieved July 28, 2022, from; http://www.eurojournals.com/ejss\_17\_5\_0.pdf
- Asikhia (2010). Cited in: Adane, L. O. (2013). Factors Affecting Low Academic Achievement of Pupils Kemp Methodist Junior High School in Aburi, Eastern Region. Unpublished Thesis, University of Ghana, Legon.
- Asikhia, O. A. (2010). Students and Teachers" Perception of the Causes of Poor Academic Performance in Ogun State Secondary Schools [Nigeria]: Implications for Counseling for National Development. European Journal of Social Sciences, 13 (2), 1-14. Retrieved July 18, 2022, from <a href="http://www.eurojournals.com/ejss\_13\_2\_08.pdf">http://www.eurojournals.com/ejss\_13\_2\_08.pdf</a>
- Avotri, R., Owusu-Darko, L., Eghan, H., & Ocansey, S. (1999). Gender and Primary Schooling in Ghana. Brighton: IDS/FAWE.
- Butakor, P. K., & Dziwornu, M. (2018). Teachers' Perceived Causes of Poor Performance in Mathematics by Students in Basic Schools from Ningo Prampram, Ghana. *The Journal of Social Sciences Research*, 4(12), 423-431. https://doi.org/10.32861/jssr.412.423.431
- CARE International (2003). Reaching Underserved Populations with Basic Education in Deprived Areas of Ghana: Emerging Good Practices. Washington DC: USAID
- Coukline, J. (1996). Introduction to Criminology. New York: Macmillan.
- Danesty (2004). Cited in: Adane, L. O. (2013). Factors Affecting Low Academic Achievement of Pupils Kemp Methodist Junior High School in Aburi, Eastern Region. Unpublished Thesis, University of Ghana, Legon.
- Diise, A. I., Zakaria, H., & Mohammed, A. A. (2018). Challenges of Teaching and Learning of Agricultural Practical Skills: The case of Deploying Project Method of Teaching among Students of Awe Senior High School in the Upper East. 4(2), 167–179
- Engin-Demir, C. (2009). Factors affecting the academic achievement of Turkish Urban Poor. *International Journal of Educational Development*, 29 (1), 17–29.
- Joana, A. (2015). Improving the Skill Component of Clothing and Textiles among Students in Second Cycle Institutions in Ghana and its effect on the Polytechnic Fashion student. A Case Study of OLA Girls, Mawuko Girls and Mawuli Senior High School in Ho, Ghana. 6(27), 20–28.
- Kassah J. (2019). Influence of Textile Teachers' pedagogical Content Knowledge on Senior High School Graduates Participation in Modernisation of Indigenous Ghanaian Textile Industry. Unpublish Ph.D. Thesis. Kenyatta University, Kenya.

- Marsh, H. (1990). Causal ordering of academic self-concept and academic achievement. A multi-wave, longitudinal panel analysis. *Journal of Educational Psychology*, 82, 646-656.
- Marsh, H., & Yeung, A. S. (1997). Causal effects of academic achievement. Structural equation models of longitudinal data. *Journal of Educational Psychology*, 89, 41-54.
- McSweeney, K. (2014). Assessment practices and their impact on home economics education in *Ireland* [Unpublished doctoral dissertation]. The University of Stirling.
- Nichols, B. and Sutton, C. (2013). Improving academic performance through the enhancement of teacher/student relationships, The relationship teaching model. *A Journal Of The International Christian Community For Teacher Education*, 1(2): 1-2.
- Ong, L. C., Chandran, V., Lim, Y. Y., Chen, A. H., & Poh, B. K. (2010). Factors associated with poor academic achievement among urban primary school children in Malaysia. Singapore Medical Journal, 51 (3), 247. Retrieved July 24, 2022, from; <a href="http://smj.sma.org.sg/5103/5103a9.pdf">http://smj.sma.org.sg/5103/5103a9.pdf</a>
- Pridmore, P. (2007). The Impact of Health on Education Access and Achievement A cross-national review of the research evidence. CREATE Pathways to Access Research Monograph No 2. Brighton: University of Sussex.
- Pollitt (1990). Cited in: Adane, L. O. (2013). Factors Affecting Low Academic Achievement of Pupils Kemp Methodist Junior High School in Aburi, Eastern Region. Unpublished Thesis, University of Ghana, Legon.
- Schiller, K. S., Khmelkov, V. T., & Wang, X. Q. (2002). Economic development and the effect of family characteristics on mathematics achievement. *Journal of Marriage and family*, 64, 730–742.
- Tanieh, E. (2013). An Assessment of the Determinants of Academic Performance of Basic Schools in Wa West District [Unpublished master's thesis]. The University of Ghana.
- Vegas, E., & Petrow, J. (2008). Raising Student Learning in Latin America: The Challenge for the 21st Century. Washington, DC: The World Bank.
- Yarkwah, C., Arthur, B. E., & Takramah, F. A. (2020). CHALLENGES FACED BY MATHEMATICS EDUCATION STUDENT-TEACHERS DURING MACRO-TEACHING PRACTICE. April.

# Research Through Innovation