

Effective or Ineffective: Features of Work-Based Learning Models in Higher Fashion Education Institutions in Ghana

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Abstract

The current study analysed the features of work-based learning models in higher fashion education institutions in Ghana. The study emphasized the need for skilled human resources in the new era of the knowledge-based economy, as this would be crucial for Ghana to become a developed nation. Creative and vocational education in Higher Education (HE) is about creativity and innovativeness. These are the most significant attributes that higher fashion education graduates must possess. The study adopted descriptive research designs due to their nature. The mixed methods technique was considered appropriate for answering the research question as it concerns dynamic phenomena such as innovation and change. A non-probability purposive sampling technique was adopted to select fashion houses in eight regions of Ghana. Both undergraduate and postgraduate fashion students and some graduates practising their acquired skills in the fashion industry were also used as samples for the study. Questionnaires and interviews were utilized to collect data. The major empirical findings of this study suggest that students possess inadequate skills as they embark on work-based learning programs from their various academic institutions. Distinctly, the results revealed that students lacked practical competence in their field of specialization.

Keywords: Features of work-based learning, models, work-based learning programs, work-based learning approaches, higher fashion education, Ghana, creative and vocational education

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1. Introduction

As Husbands, et al. (2013) put it, ‘skills matter’ (p. 1). All over the world, governments and employers are addressing urgent questions about developing high-skill and talent-rich economies that can drive exceptional economic growth and enhance social cohesion. Husbands and his colleagues affirm that the most successful economies of the 21st century will be those that can ensure that their young citizens maximize their potential, develop high levels of skills and contribute effectively to building successful companies. The stakes, according to them, are high.

A well-developed and equitable system of Higher Education (HE) that promotes complete learning as a result of the amalgamation of theory and practice to enhance student learning is crucial for success in the emerging knowledge economy (Heleta & Bagus, 2021; Chankseliani et al., 2021; George Mwangi & Yao, 2021). All educational stakeholders are united around the idea that; students need higher-level skills to be successful today (McGunagle & Zizka, 2020; Rahman, 2019). The developed world understood much earlier the fact that individuals with a comprehensive HE has the edge over their counterparts who do not (Annunziata & Bourgeois, 2018). Therefore, developing countries, such as Ghana, must give due prominence to the qualitative acquisition of skills in HE.

The World Bank (2018) acknowledges that education has become a critical driver of growth and advancement. Nations with higher skill levels are better equipped to face new challenges and master technological discoveries. In Sub-Saharan Africa (SSA), qualified human capital remains scarce compared to the continent’s development needs. This hinders growth and undermines the foundation for sustainable development (World Bank - TEIA 2013). Since skills for the knowledge economy are organized at the tertiary education level, improving HE systems should be high on a nation’s development agenda. It behoves Ghanaian HE institutions and policymakers to ensure that their workforce acquires the skills to compete, innovate, and respond to multifaceted social, environmental, as well as economic situations. (World Bank - TEIA 2013).

HE, in the 21st century, faces several unprecedented challenges. The fundamental reason is that knowledge has become the central feature of an advancement process for several countries (see Nuere & De Miguel, 2021; Waller et al., 2019; Malik, 2018). Nigavekar (2006) specifies that the youth now require three new skills – the ability to learn, change, and analyze – to prepare for the challenges ahead. They also need to develop the proper skills to adapt to the changes that will arise since the 21st century represents change. It is HE that has to prepare graduates with these new skills and competencies to enter a more complex and interdependent world.

There is considerable interest, both in Ghana and globally, in curricular and pedagogical improvement that

will both support students from different backgrounds and equip them for the challenges of the global economy. Governments worldwide are concerned about HE institutions since they make the highest possible contribution to students' ability to be gainfully employed. Programmes that promote graduates' successful integration into the world of work and enable them to make meaningful contributions in contexts of advancement require innovative curricular, teaching, learning and assessment practices (Laurie et al., 2016; Winberg et al., 2011).

Content creation, collaboration, personalization, productivity, and informal learning, according to Scott (2015), are central to the competencies and skills HE learners are expected to develop. Also, how these skills are acquired is vital. These factors are essential to the overall concept of 21st Century learning. Scott (2015) believes that the curriculum is the most open gateway for innovation, combined with the appropriate teaching and learning strategies and decisions. For the most part, according to her, curriculum development universally has not kept pace with contemporary expectations about learner competencies and skills or innovative tools to assist learning. There are some practical, research-based curriculum models capable of guiding modern learning. Sternberg and Subotnik (2006), for instance, advocate for a curriculum focused on fostering learners' capabilities. These can be done in with 'The other 3 Rs': Resilience (life skills such as flexibility, adaptability, and self-reliance); Reasoning (analytical, critical thinking and problem-solving skills); and Responsibility (the application of creativity and knowledge for the public good)' (p. 1).

Wagner et al. (2006) also argue for a curriculum founded on very different principles – 'The new 3 Rs': Relevance, Rigor, and Respect. Relevance refers to learners' understanding of how their learning connects to the current real-world challenges and future work. Rigour refers to the abilities and capacities students acquire due to their education. Respect refers to promoting respectful relationships among teachers and students that foster academic and social competence (p. 1-2). The Assessment and Teaching of 21st Century Skills project (ATC21S) categorized 21st Century skills internationally into four (4) general categories – ways of thinking, ways of working, tools for working and skills for living in the world (Griffin 2012).

Winberg et al. (2011) emphasize that most HE institutions that are committed to positive graduate outcomes add extra dimensions to the importance of work-related learning in curriculum design and development as a process of reciprocal relationships that can benefit students, professions, and workplaces. As a means of addressing concerns about student development and graduate attributes, there has been an eclectic interest in fostering HE learning that is less didactic, more situated, participative, and real-world oriented.

Isaksen and Parnes (1985) specify that the literature has been contributed to by many authors in creative thinking, problem-solving and relevant curriculum development, but few have tried to integrate the three. In 1981, Isaksen conducted a computer search using the ERIC database to find help in devising programs to improve creative thinking and problem-solving. The research yielded six thousand three hundred and seventy-six (6,376) entries linked to creative thinking, thousand and ninety-four (1,094) for problem-solving and forty-six thousand four hundred and sixty-five (46,465) associated with the curriculum. However, out of these almost sixty thousand 60,000 listings, only fifty-seven (57) were connected to all three domains. Of the fifty-seven (57), only a few were directly linked to curriculum planning practices for designing programs to improve creative thinking and problem-solving skills (see Isaksen 1988, 1983).

This lack of information, coupled with the fact that it is usually easier to do more of the same old thing, explains Goodlad's (1983) findings that not much has changed in our lecture halls. The primary emphasis is still on the lecturer providing necessary information to passive learners. Brandt (1984) presented an overview of a recent issue of *Educational Leadership*, which included a particular emphasis on the teaching of thinking; he explains that educators are reviewing their curricula and looking for assistance in planning skills programs.

Dewey (1933) distinguished an appropriate emphasis on education as the process of reflective thinking. He charged educators with the duty to know this process and facilitate its growth in students by affording suitable conditions to spur and guide thinking. By inference, paying attention to building a relevant curriculum will provide learners with broad opportunities for different physical and intellectual activities.

It cannot be overemphasized that developing an excellent base of skills has become the key driver of economic growth in the developed world (Rodrik, 2022; Oliinyk et al., 2021). It is widely acknowledged that it is 'only through enhancing people's skills that future competitive advantage will emerge' (Linehan 2008, p. 8). The requirement for skilled human resources in the new era of the knowledge-based economy would be crucial for Ghana to become a developed nation.

Afeti and Adubra (2012) describe knowledge and skills as the key drivers of most economies since they oil the wheels of industry. The authors stress that new ways of doing things regularly, technologies, and products are being made. The dynamic interaction between knowledge, skills, and enterprise is central to this continuous change. They maintain that a critical mass of knowledge and expertise is, therefore, crucial for the efficient participation of a country in the global economy.

According to Global Information Technology Report (GITR) (2013), the past few years have seen an incredible and rapid transformation in the world's industrial landscape. Transforming not only the foundations of the economy and social life but knowledge, skills and competencies that people need in almost every field of

endeavour (Primi & Toselli, 2020; Baller et al., 2016; Baker et al., 2014). The last decade, in particular, has seen many industries enter a period of unimaginable, more rapid change. The most recent global recession that started in December 2007 has contributed to an environment many professionals believe is fundamentally different from 10 years ago (Petrie 2014).

Creative and vocational education is one of the effective human resource development strategies that developing countries need to embrace to modernize the technical workforce for rapid industrialization and national development (Afeti 2012). Creative and vocational skills acquisition plays a vital role in the economic evolution of a nation. Because of their dynamic nature, creative skills are continuously subject to the forces driving change in schools, industry, and society.

The realization that creative and vocational skills are critical to improving competitiveness and contributing to decent employment, as well as poverty reduction, should be a high incentive for restructuring the sector. Technical Vocational Education and Training (TVET) is an essential area in the development process of every nation. TVET has been evolving as a crucial strategy directly linked to growth, development, poverty reduction and industrial employment in the last few years.

One of the most notable characteristics of creative and vocational education is its orientation towards the world of work as well as its emphasis in the curriculum on the acquisition of employable skills. Therefore, creative and vocational training delivery systems are well-placed in training the needed skilled workforce needed by Africa to create wealth and emerge out of poverty (Afeti 2012). Another critical characteristic of creative and vocational education is that it can be delivered at different levels of sophistication.

It means creative and vocational education can respond not only to the needs of various kinds of industries. But also to the diverse training needs of learners from different academic backgrounds and prepare them for gainful employment and sustainable livelihoods. A skilled workforce is a fundamental requirement for driving the engine of industrial and economic growth. Creative and vocational education holds the key to building this technical and entrepreneurial workforce.

Over the past few years, Ghana, like several other countries in Sub-Saharan Africa, has devised several approaches to address and re-engineer creative and vocational education. This re-engineering and repositioning have been reflected in several national policy reports, including, but not limited to, The New Education Reform 2007 (NER); Ghana Poverty Reduction Strategy (GPRS I & II). The draft Long Term Development Plan 2008 – 2015. The rest are the revised Education Strategic Plan (ESP) 2010 – 2020, The Private Sector Development Strategy 2010 - 2015 (PSD II), and the 2004 TVET Policy Framework. This led to the passing of Act 718 and the subsequent formation of the Council for TVET in 2006. The primary objective of these policies and the formulation of the Council is to guide, streamline and promote Ghana's creative and technological system.

Since Ghana attained independence in 1957, all Governments have pursued, with varying degrees of success, several educational policies and programs to accelerate the economy's growth. As well as raise the people's living standards (The Coordinated Program of Economic and Social Development Policies, 2010 – 2016). The Ghanaian economy is undergoing a change driven by some factors, including emerging technology, international trade and finance, competitiveness, innovation, and technical progress. This type of change has seen an increasing focus on the capability and willingness of industries to adapt to change. Ghanaian educational institutions also need the capacity to innovate and respond flexibly to the shifting demands of the industries.

There is broad agreement on guiding principles linking skills and work. According to ILO (2011), establishing fixed bridges between creative and vocational education and skills improvement and the world of work makes it possible that students will learn the 'right' skills, specifically those needed by the evolving demands of labour markets, enterprises and workplaces in different economic sectors and industries. However, Burke et al. (2017) and Humburg et al. (2013) argue that there are fundamental differences in the appreciation of graduate employability between employers and HE institutions. These, he said, have impeded progress in promoting graduate employment measures. These studies advocate that there are some misinterpretations between employers and HE institutions over the concept of relevant skills and that increasingly, the skill of the graduate student and their ability to manage complex information and communicate it effectively are seen by employers as more valuable than the degree program they studied (e.g., Bol, et al., 2019; Somers et al., 2019; McGuinness et al., 2018; Verhaest et al., 2017).

Bahl and Dietzen (2019) maintain that work-based learning in educational institutions, which intends to encourage students to reflect on their experiences and develop and refine their conceptual understanding, is only an aspect of the complex and evolving relationships between HE and work. Even though the origins of HE all over the world emphasized the professional preparation of 'ancient' professions, the ideologies of HE have frequently been averse to a close relationship between HE and work. Even attempts at analyzing the relationship between HE and work have encountered terminological difficulties in describing the latter part of the relationship (Ali & Marwan, 2019).

According to Unwin and Fuller (2003), 'the term "workplace learning" is utilized to include all kinds of learning generated or stimulated by the demands of the workplace including formal on-the-job training, informal

learning and work-related off-the-job education and training'. (p. 7) However, confusion persists over work-based learning terminology for employers and HE institutions, as mentioned earlier, and as a result, a common language must be established. Also, work-based learning is a diverse HE subject, that is taught, studied and researched, 'a field of study' in its right (Garnett et al. 2009, p. 3). It is not a traditional part-time course undertaken while at work. It is 'the demonstration of one's ability to reflect on their skills, knowledge, and approach to the job, often called the professional practice. In some circumstances, learners will develop occupational competence alongside the work-based learning program, which is frequently assessed independently by the employer' (Durrant et al. 2009, p. 2).

Roodhouse (2010) notes that the 'focus on the work-based or workplace learning has not unexpectedly been theorized' (p. 23). According to him, much of the literature is derived from studies into different forms of learning which have been of interest to HE institutions, schools of education, adult and continuing education, and several more. According to Roodhouse, what was challenging to conceptualize was the lack of sustained engagement with HE institutions in workforce development when there have been long vocational learning traditions.

Moreover, Sweet (2013) suggests that most of the literature on work-based learning comes from developed economies rather than the developing world. Moreover, most well-known models that connect work-based learning to formal creative and vocational education, such as apprenticeship, and the recognition of prior learning, have their origins in developed economies. An obvious question one will ask is, if an advanced stage of economic and social development, as well as a high-skilled economy, are necessary for the existence of well-organized systems of work-based learning that connect creative and vocational education systems to enterprises, what then does a developing economy like Ghana need? However, Dewey (1938) advocates that not all experiences are educative, and by implication, not all workplace experience results in learning. Hence, a fundamental challenge of finding practical methods of translating knowledge into experience.

The new economy and the '*new work order*' relative to the workplace (Gee et al., 2018) demand a competent, flexible and committed workforce as well as more stimulating working conditions. The new work order influences HE, especially creative and vocational education, to move toward work-based learning. To become an expert in the workplace, the student must develop the unique capacity to change and implement school-based abstract knowledge into domain-specific work life (Schaap et al., 2012; Tynjälä, 2008). It has become imperative to apply science-based knowledge in real-world settings and to effect work experiences in the world of science. An expert should utilize knowledge of contemporary problems effectively and consider new issues as learning opportunities.

This research work has as its primary focus Higher Fashion Education (HFE), and Yates (2011) defines fashion as part of our lives. Whatever our age, whether we protest that we have no interest in '*fashion*' or not, clothes are and will continually be part of our lives. As individuals, we reveal a part of who we are by choosing what we wear. It is the fashion industry's task to meet these different needs. Stone & Farnan (2018) describe fashion as fast and forward, challenging and changing, and constantly in motion. Fashion is a big deal since the industry is vital for sustainable development.

The fashion industry is one of the most exciting, creative, and dynamic industries. It is enormous, worth money, and constantly changing (Stone & Farnan, 2018). It does not only create jobs. It also has a massive effect on society and the economy through its publicizing, regular customer transactions and complex, globalized supply chains (Fashion Futures 2025, 2010). The revenue of the global apparel market amounted to some 1.5 trillion US dollars in 2021 and is projected to rise to almost 2 trillion dollars by 2026. These revenues represent a Compound Annual Growth Rate (CAGR) of 5.5% between 2020 and 2025 (Smith, 2022).

The fashion industry, therefore, has a significant and positive impact on the economy and global society. The sector brings many benefits to everyday life. Fashion goes beyond mere clothing to express identity, create well-being, embrace creativity, and connect global communities (Fashion Futures 2025, 2010). Students of fashion in an HE institution must 'develop all sorts of skills that will be useful in many other arenas' (Yates 2011, p. 16). Yates (2011) acknowledged that, traditionally, most people in the fashion industry learned their trade through apprenticeship programs of some sort. Nonetheless, the picture is different presently for multiple reasons. She argues that the degree of technical knowledge required of fashion professionals has increased drastically over the last few decades. Second, according to her, is the difference in the range of courses that can be studied.

The third reason, Yates suggests, is the fiercely competitive nature of securing a job in the fashion industry. Contemporary fashion design professionals generally require artistic, creative and vocational qualities. They can use these creative skills to create unique design concepts for various fashion applications. Today, fashion design professionals are in constant demand in a variety of industries. However, like most industries, the fashion industry is waking up to the immense challenges plaguing our world – the unavailability of the required skills needed to go beyond a certain threshold. Hence, the need for work-based learning.

According to Sweet (2013), there have been arguments for work-based learning within creative and vocational education, such as fashion education. These are mainly based on the superior quality and relevance of

the skills developed through the learner's involvement in producing authentic goods and services. For instance, it is problematic, if not impossible, to replicate the actual production demands in a lecture hall or workshop. Lecture halls cannot easily reproduce the context in which skills must be applied.

Another argument for work-based learning within creative and vocational education is that: It can be a way of more closely involving employers in education and training. Thus, increasing their confidence in the system and strengthening the link between learners and the labour market to improve their chances of employment after graduation. Also, learning that uses state-of-the-art equipment on employer premises results in it being more up-to-date with current industry practices, thus leading to skills with greater relevance (Sweet 2013).

A skilled workforce is competent to identify more readily and adapt and implement new ideas (Sarder, 2016; ILO, 2011), positively influencing the introduction of new technologies within the Ghanaian fashion industry. Increasing skills build human capital and encourage the growth of high-productivity industries that employ high-quality skilled workers. A labour market experiencing such significant levels of change and demand for higher level skills is increasing. Hence, employers need to be confident that holders of higher fashion education qualifications do possess the necessary skills and knowledge defined by such credentials.

It would be essential, therefore, to examine and establish practice-related issues under the creative and industrial sectors, such as standards and signs of quality and organize the curriculum to improve the needed skills. OECD (2014) notes that in modern societies, all of life is problem-solving. Changes in society, the environment, and in technology. All this means that the content of practical knowledge is evolving swiftly. Therefore, adapting, learning, and adventuring to try new things are the keys to resilience and success in an unpredictable world. The study, thus, sought to examine the varieties of approaches to work-based learning currently being implemented in Ghanaian HE and determine features of work-based learning models considered effective or otherwise.

2. Literature review

2.1 The significance of higher education

As Teichler (2009) puts it, education, in general, 'is a social mechanism which, as a rule, dissociates the learner physically for a particular period of his or her life from the regular world of work and other life spheres' (p. 21). Mostly, HE education is undertaken to prepare the individual more rationally to cope successfully with the diversity of work and other life tasks through explanations, rules, general reasoning strategies, etc. The more efficient the industries are in creating wealth, the more expanded the education system and the more education is viewed as a means of generating competencies that contribute to producing goods and services (Teichler, 2009). As Young and Garnett (2007) put it, developing skills to ensure industries can compete successfully in the global economic marketplace is an essential objective for HE.

Education, especially HE, is linked to the world of work in two significant ways. First, education has a qualifying function of fostering the cognitive and possibly efficient and sensu-motoric capabilities (Teichler, 2015; Bloom et al., 1956) of students, which might be helpful to cope with work tasks, and challenges in other spheres of life. Second, education has a status-distributive function (Gellert, 1997). That is why Bawakyillenuo et al. (2013) specify that the contribution of HE to economic growth and development has been debated over the years. Stakeholders have argued that HE has been neglected as a means of improving economic growth and development in the past. According to Bloom et al. (2005), the neglect of HE within development initiatives is due to the unavailability of empirical evidence, thereby impairing the growth and development of an economy.

HE is a dominant factor in opening up or closing access to prestigious occupations and providing the means for personal and professional achievement, which are directly linked to differential remuneration and socio-economic status (Teichler, 2009). These fundamental functions of HE are undisputed. However, Bloom et al. (2005) challenged the long-held assumption that HE contributes little to social and economic development. Accordingly, a year's rise in the entire education stock in Africa could boost productivity, output and Gross Domestic Product (GDP) in Sub-Sahara Africa (SSA) by 0.63% that is according to Bloom et al. (2005). Their conclusions confirmed other findings that HE improves economic development in developing countries through technological catch-up.

In examining the financial benefits to society, Payea and Baum (2005) contended that in addition to general productivity increases, the higher earnings of educated employees generate larger tax revenue for the nation, and regular productive employment decreases dependence on national income transfer programs. They further recognized ways by which society derives non-monetary benefits from HE graduates. It includes the increase in the level of civic participation and the development of positive perceptions and attitudes towards health. The World Bank (2008) supported the contention that HE contributes to economic growth as it can assist developing economies in keeping up with more technologically advanced societies. Since HE graduates are likely to be more informed of and better able to use technologies, they are more liable to develop new tools and skills.

However, according to Teichler (2009), it is widely assumed that HE is bound to be imperfect in preparing for the world of work. Because cognitive learning through dissociation from practice has its price in less direct

preparation for occupational tasks than on-the-job learning and because HE is expected to serve broader functions than just preparing the individual for work. Consequently, it is not surprising to note the controversial debates as regards the exact ways HE is and ought to be shaped to serve the world of work.

Indeed, HE is seen by many as fundamental to the creation of opportunities and prosperity in all modern economies. The speed of global change requires a continued evolution of teaching, learning and research (O'Brien et al., 2013). Dommartin (2003) explained that this is vital to improving HE institutions continuously, to move them 'further towards excellence by recognizing, anticipating and understanding the needs of our students, and enhancing the whole student experience' (p. 2). Understanding quality and excellence in HE is difficult. This difficulty is linked to customer satisfaction. In HE, there are different groups of customers. Maguad (2007) explained that HE institutions view students as their chief customers who experience the educational services, parents as clients who fund their children's education, corporations as customers who engage the students, and staff members as customers who give students the knowledge required to perform the job.

Little and William (2011) explained that the number of learners engaging in HE learning has increased and diversified, as has the variety of provisions on offer. While HE institutions may be valued for both the excellence and the accessibility of their knowledge. It can also be argued that tensions exist between the two ideals and that the pursuit of recognition and positional good for its sake is now detracting from broader notions of HE and the public good. HE is seen as the best way to ensure people have opportunities to access professional jobs, thereby increasing the level of human capital. On the other side, Hyland (2015) and Clifton et al. (2014) acknowledge that creative and vocational education has tended to be neglected as a way to boost skills and growth. The ability of HE systems to meet skills needs and drive change in Africa, in general, has been dramatically affected by broad global shifts and trends that have appeared and evolved in recent decades.

The requirement for the right human resources has increased due to the rapid development of science and technology and globalization. Having adequate human capital aligned with economic needs is becoming increasingly crucial for countries such as Ghana, which is seeking to enter or move up the global value chains and transform into a knowledge-intensive economy. Notwithstanding more than 20 years of robust economic growth, Darvas and Palmer (2014) stipulate that little change has occurred in Ghana's labour market structure. They argue that an insufficient number of formal job opportunities remain, and most of all, employment opportunities remain in the large informal economy. The economy's structure continues to be dominated by micro and small enterprises, which typically have low productivity. According to them, this structure has worsened over the last decade as few micro and small businesses managed to grow, and the larger ones appear to be able to substitute labour investment with capital investment.

2.2 Foundations of the Theories of Work-Based Learning

The theoretical background of work-based learning can be traced to some principal theorists, including Dewey (1958), Polanyi (1958) and Vygotsky (1978). The work of these scholars inspired the work of contemporary psychologists such as Wertsch (1985), Moll (1990), and Engeström (2005), who viewed learning as existential, culturally embedded and activity orientated. Vygotsky (1978) argued for a culturally orientated study of knowledge and specified that the process of a child's development was better understood through the study of culture. He argued that 'the most appropriate investigation stage is the external cultural method of behaviour (p. 70).

Vygotsky developed his theory of the zone of proximal development and held that children should be given tasks they had not previously performed and were known to be competent in performing. In essence, Vygotsky proposed that children should always be presented with activities not based on their perceived ability, rendering the analysis of a child's attainment of little value. Vygotsky argued that learning occurs relative to its cultural backdrop. His effort led to the development of a school of thought advanced by Luria (1994) and Cole (1996), who argued that learning is culturally mediated. For instance, Luria (1994) detailed the significance of tools as signifiers of cultural and historical development. Luria argued that tools have value as culturally mediated objects.

Cole (1996), on the other hand, improves on Vygotsky's ideas and describes tools as being culturally mediated artefacts which human beings arrange for the rediscovery of the already-created devices in each succeeding generation. These perspectives are relevant to work-based learners because the cultural setting and significance associated with tools and objects are necessary for students who lack the underpinning knowledge of a standard operating procedure. Within the creative and vocational setting, tools and other equipment are not only introduced to a student in relation to their functionality. Students will be required to prove that they are competent to use these devices to show they are efficient and hence, can prove sound knowledge acceptable within that particular vocational setting.

Piaget (1972) studied cognitive development and learning. According to him, cognitive development and basic language are integral parts of a child's development. According to him occurs in the following phases:

sensorimotor – from birth to 2 years and is characterized by the manipulation of objects and non-verbal communication. Then the preoperational stage – where symbolic thinking and structured grammar and language begin, happens between 2 – 6 years. Then the concrete operational stage – where logical thinking commences and language, using the passive tense- is mastered between 7-11 years, and finally, the formal operational stage, where abstract thinking and near adult-like skills are developed.

In contrast to culture, Piaget maintained that learning relied on adaptation. The relationship between a child and their environment is based on their ability to engage in activities associated with assimilation and accommodation to adapt to new and changing situations. However, Tudge and Rogoff (1989) argued that Piaget and Vygotsky regarded the role of the individual and environment as inseparable and shared the belief that children are active in their development and understand the world through activity. According to them, Piaget was primarily concerned with the development of logic and how children shift their understanding perspectives, upholding that each stage of a child's development could be accounted for logically. While Vygotsky was concerned with developing knowledge and skills based on culturally advanced tools that mediated mental functioning.

Engeström (2005) deliberated on the textbook's cultural impact on students' minds. He claimed that for children to engage in comprehensive learning, they must treat their course books as historical pieces and be inspired to devise their activities to find novel ways of learning. Engeström believed that this approach would allow students to encapsulate school learning by obtaining valuable intellectual tools that could grasp the world's complexity, utilizing a learning process through self-organization. These, he argues, could lead to systems of learning activity that might exceed institutional boundaries.

It would seem strange to consider educational and psychological perspectives relating to children in respect of a study associated with learning within the world of work and where, under many constitutions, only adults aged 18 and above can be employed as workers. Conversely, Dewey (1958) argued that children should be encouraged to learn by meeting the demands that arise from social situations within their community. Dewey emphasized that a child's learning should be driven by instinct, intuition, and impulsiveness as opposed to the social constraints of a school environment.

Dewey's work gave rise to debates about the influence of academic experience on an adult's willingness to participate in education, which defines a learner's identity. A study by Gorard and Selwyn (2005) on educational participation and the impact of technology acknowledged these. They advocate that 'where individuals create, for themselves and through their early experiences, a learner identity inimical to study further; then the probability of learning can become a burden rather than an investment for them' (p. 71). Ramsden (2003) believes that their previous experiences of formal schooling shape the level of a student's interest. Ramsden notes that:

"It is hard to separate the context of learning and past experiences in describing learning...Deep approaches [to learning] are closely related to a student's interest in the task for its sake. Inherent interest and a sense of ownership of the subject matter provide a fertile ground for attempts to impose meaning and structure... how a student perceives a task...is partly determined by his or her previous experiences...some students will begin higher education with habitual tendencies to use surface [learning] approaches..." (p. 65-66).

Understanding a child's development and learning and the impact academic experience has on learning identity is essential. Studies suggest that such influences not only determine participation in adult learning but also how adults utilize a focused, appropriate and meaningful approach to their learning (Biggs 2003). Though the connection between education as an activity and its impact on work and communities of practice have been explored by writers such as Dewey (1958) and Engeström (2005), institutional and organizational boundaries are shaped by culture, and cultural artefacts continue to influence the learning of both children and adults.

2.3 Approaches to Current Practices of Work-Based Learning

There are various ways in which work-based learning is currently incorporated into programs leading to academic awards within HE institutions (Brennan & Little 1996). These, they indicate, range from one extreme of short visits to the industry, through placements, to employment-based learning programs. Work-based learning may also be considered when assessing an individual's prior experiential learning for access to HE and determining the appropriate stage or level of entry. The primary stakeholders in work-based learning are the individual, their employer and the academic institution, which provides public recognition through academic credit.

All these stakeholders' interests in work-based learning may vary. For instance, as Brennan and Little (1996) point out, the individual may be seeking personal development, career advancement, and some form of qualifications. On the other hand, the employer may seek adequate and affordable workforce improvement opportunities, employee motivation, and access to a comprehensive knowledge base within the establishment, which, when put together, may be appreciated as one way of enhancing competitiveness. Regarding the HE

institution, work-based learning could be considered as a way of maintaining and improving the quality of its teaching and learning functions, fulfilling social responsibilities, and increasing its market value, particularly in continuing vocational and professional education. Such varying interests are unlikely to overlap.

According to Doherty and Stephens (2020), Bahl and Dietzen (2019) and European Commission (2013), there is extensive experience in how to establish and support quality work-based learning in HE. When drawing on practical examples, as well as on studies and research, the issues identified below can be used as success factors. They can be classified under three (3) main concepts, governance, quality, and partnerships. Integrating work-based learning into the broader education and training system is the first condition of success. For it to be attractive to a range of learners and employers, it must be structured to enable students to access additional, continuing and advanced HE. Within a particular training program, it is vital that the work-based learning aspects clearly articulate the school-based features, thereby complementing each other.

In well-established dual systems, recognition in the school environment of what learners learn in the workplace is a crucial success factor, ensuring the coherence of the utilized pathways. Alternatively, a program's work-based learning aspects must consider the progress made in school-based instruction. These provide a clear regulatory framework for work-based learning (European Commission 2013). Students involved in work-based learning are learning but, at the same time, taking part in the production process of a company. Over time, the business profits from its work. Therefore, there is a need for an explicit regulatory framework that clarifies each party's responsibilities, rights, and obligations (European Commission, 2013). It should specify the status of the learner together with the duties of the employer.

According to the European Commission, involving social partners in this collaboration is necessary to ensure that work-based learning remains responsive. Their involvement is essential for identifying future skills requirements so that the development of competencies across the economy keeps pace with the needs of industries. Training/occupational standards need to be reviewed and updated regularly, and social partners are well-positioned to input into the process. They have first-hand knowledge of the extent to which work-based learning provision is user-friendly and successfully geared towards employability and competitiveness. Social partners who work in partnership with HE institutions are also valuable for making the necessary arrangements to maximize work-based learning opportunities.

One core aspect of the quality of work-based learning, according to the European Commission, is the profile of knowledge, skills, and competencies that learners develop. Excellent work-based learning is related to a range of skills and, in combination with school-based learning, results in professional profiles that embrace an entire profession and enable learners to fully understand a professional field. Such knowledge is needed for people to be able to adapt to changes later when technologies and processes change, and some tasks disappear while new ones arise. The active involvement of social partners in defining these standards is an essential quality factor and is exceptionally well-developed in dual systems.

Work-based learning opportunities must offer numerous prospects with clearly defined learning outcomes and objectives. They must prepare and support learners for work. All the various types of work-based learning, Brennan and Little (1996) note, can be linked to broader changes in HE. These can lead to the changing relationships between HE and society and between HE and work. Developments in HE appears to question the following; traditional theoretical assumptions – relating to structured and sequential learning. Intellectual assumptions – relating to the industry and nature of knowledge. As well as social assumptions – referring to the need to initiate the learner into particular disciplinary and professional cultures (Scott 1995, p. 157). Those involved in designing work-based learning within HE has often challenged these inherent values.

They seek to extend the boundaries of the validity of knowledge, skills, and understanding for which some form of public recognition can be awarded. But Brennan and Little (1996) suggest that, whether work-based learning is at the heart of an individual's overall educational program, leading to the award of some academic credit or is only a part of a comprehensive program, the individualistic orientation of work-based learning in HE is well founded in both theory and practice. As this mirrors more general moves towards student-centred learning. However, not all learning is individualistic. Saunders (1995), writing about work-based learning and HE in the U.K., suggests that the way professional life produces knowledge is not captured in current developments. Again, from her Europe-wide investigation into work-based learning, Sommerlad (1996) explains that any re-evaluation of what constitutes industry competitiveness and any notion of organizational life outside corporate boundaries would necessitate new social learning models that situate the collective rather than the individual at their heart.

In most Ghanaian HE institutions that offer creative and vocational programs, work-based learning programs come in many forms and intensities. They include several activities situated along a continuum of shorter-term basic types of experiences in a workplace to longer-term, more intensive placements. These include field trips, internships, apprenticeships, and in-company student training. Applied learning that takes place through school-based, workplace simulations, workshops and even project-based learning in the classroom is also labelled as work-based learning in some institutions. For instance, work-based learning programs in Ghanaian Technical Universities (T.U.s) are designed exclusively for students in different years of their

education. They may be company-specific, school-wide, local, regional, or even national. These can last from a few hours to as long as a whole academic year.

2.4 Features of Work-based Learning

Traditionally, as Ball and Manwaring (2010) and Ertmer and Newby (2013) point out, most curriculum design often focuses on information transfer and the acquisition of new knowledge and leaves the student to make connections about how to use this unique experience in practice. However, work-based curriculum design is increasingly interested in methodologies that blend and combine information and communications technologies in the form of Virtual Learning Environments (VLE) with problem-based learning focused on solving real and concrete workplace problems or concerns. Such curricula and modules, according to Ball & Manwaring, often contain many of the following features.

- i. Existing knowledge is mainly used as a basis on which new knowledge is built.
- ii. New insights are introduced and applied in context to the student.
- iii. New ideas are then used by the student in their work context and are therefore integrated into the student's world.
- iv. Students collaborate with peers in the program and with colleagues in the workplace.
- v. Course or module activities are framed in such a way as to enable students to share knowledge in the workplace with colleagues and to facilitate solution-focused collaboration with peers, experts, mentors and significant others in the workplace.
- vi. Workplace supervisors are available to make the theory-practice links and to stimulate practice learning and reflection.
- vii. Workplace resources are generated and shared and are reusable as learning objects on the VLE.
- viii. Students' diverse needs are considered, and individual students can be differentiated via personalized feedback and individual tutorials.
- ix. The VLE outlines the course structure, such as study times, assignment deadlines, etc. It is also used to encourage a student-to-student collaboration and networking.

While there are many features and aspects of work-based learning, the view of work-based learning adopted by Boud and Solomon (2000) is what is found in the increasing number of work-based learning partnerships established to foster the acquisition of relevant skills. The schedule follows the workplace and learner needs rather than being controlled or framed by the disciplinary or professional curriculum. They detail the following features of work-based learning:

- i. The starting point of work-based learning is established after learners have recognized current competencies and identified the knowledge; they wish to participate in rather than by their existing educational qualifications.
- ii. Learning projects are offered in the workplace. These are adapted to the challenges of work and the future requirements of the learner and the organization.
- iii. The educational institution assesses the learning outcomes of the negotiated programs within a framework of standards and levels. Such a framework is necessarily trans-disciplinary. The features of work-based learning require a new focus on the notion of a course of study and ideas about the education which underpins it. This discussion arises from the different relationships between knowledge in work-based learning relevant to the HE programs.

A project at the University of Leeds also distinguished the following features of work-based learning (University of Leeds 1996, cited by Brennan & Little 1996).

- i. Work-based learning is performance or task-related, especially when circumstances are changing.
- ii. Work-based learning is problem-based, usually associated with tackling problems of production, design or management.
- iii. Work-based learning is autonomously managed, with learners expected to take a considerable measure of responsibility to ensure they learn from their work activities.
- iv. Work-based learning is team-based in that tackling problems often requires active cooperation between people with different roles and expertise.
- v. Work-based learning is concerned with performance enhancement.
- vi. Work-based learning is innovation centred, which creates learning opportunities and provides the experience of managing change.

Evidence gained from the literature shows some acknowledged concerns with program delivery and work-based learning experiences (Nouwen et al., 2022; Anselmann, 2022) that challenge both HE institutions and employers in delivering an integrated system of creative and vocational education both at the university and the workplace. Nonetheless, through the various models of incorporating the curricula with work-based learning, it is evident that this form of training has the general approval of stakeholders and has developed and improved students' skills and professional knowledge through positive work-based learning.

As Choy et al. (2008) note, through research into work-based learning models in Australia in the manufacturing industries, the key drivers for change by all stakeholders and core features of the current training models are necessary for employment. However, for those models to be useful, they must have five (5) main dimensions. They must be ‘pedagogically sound, operationally efficient, provide quality skills, have utility and be sustainable and address requirements for quality outcomes’ (p. 36). For Curson (2004), ‘finding the right training to suit the needs of industry and the learner can be challenging. No single formula suits everyone, and diverse strategies will depend on the needs of the business and the characteristics and skill needs of the learner’. (p.17).

3. Materials and Methods

Due to its nature, the descriptive research design was adopted for the current study. Descriptive research designates research studies that have as their primary objective the accurate description of the characteristics of persons, situations, or groups (Coe et al., 2021; Bougie & Sekaran, 2019). A descriptive approach to data collection offers the possibility to collect accurate data and provide a clear picture of the phenomenon under study. In the current study, the descriptive approach is particularly appropriate because an accurate and authentic description is required of the experiences of both managers/owners and workers in the various fashion houses as well as students from the different HE institutions in Ghana.

The mixed methods approach, defined as the collection and analysis of both quantitative and qualitative data within a single study in which the data are collected and analysed concurrently or sequentially, was adopted (McBeath & Bager-Charleston, 2020; Taguchi, 2018). Thus, the data collection instruments included self-administered questionnaires and interview protocols. When both quantitative and qualitative data are included in a study, researchers enrich their findings in ways that one mode of data collection and analysis does not allow (Bergin, 2018). Harrison et al. (2020) buttress that point by clarifying that the application of both data collection and analysis enables researchers to generalize conclusions simultaneously from a sample to a population and achieve a broader appreciation of the phenomenon of interest. It also allows researchers to test theoretical models and modify them based on participant feedback.

The sample used for the study were postgraduate and undergraduate students offering Fashion Design and Textiles studies option from public-funded universities in Ghana, whereas the purposive sampling technique was used to select forty-eight (48) fashion houses and some graduates practising their acquired skills in the fashion industry in Ghana.

4. Results

4.1 Quantitative Analysis

4.1.1 Demographic analysis of respondents

Respondents’ demographics in Table 1 show nearly three-quarters of those surveyed were female (n=546), while just 215 (28%) were male students enrolled in fashion or fashion-related programs at the universities surveyed. Table 1 shows that out of the total number of respondents, 54% (n=414) were between the ages of 21 and 25. Of the total responders, 181 (or around 24%) were in their twenties. However, respondents older than 36 years old were the least-represented age group. The majority of respondents (n=405, 53.2%), based on their institutions’ reports, had at least an HND as their higher education. These indicate that the respondents are from TUs, whereas 323 (or 42.4% of the total) are enrolled in the undergraduate fashion program at the institution where the poll was conducted. Only a small percentage of responders were graduate students.

Table 1: Demographic characteristics of respondents

Characteristic	Frequency (n)	Percent (%)
Gender		
Male	215	28.3
Female	546	71.7
Age (years)		
< 20	75	9.9
21 – 25	414	54.4
26 – 30	181	23.8
31 – 35	54	7.1
36 >	37	4.9
Educational Level		
HND	405	53.2
Undergraduate	323	42.4
Postgraduate	33	4.3
Academic Year		
First	263	34.6
Second	234	3.7
Third	199	26.1
Fourth	65	8.5
Mode of Study		
Regular	531	69.8
Distance	197	25.9
Sandwich	33	4.3

The students that participated in the survey were also broken down by their enrolment status. According to the data in Table 1, the vast majority of respondents (n=263, 34.6%) were in their first year, while just 234 (30.7%) were in their second year. In addition, 199 (26.1%) were in their third year, and 65 (8.5%) were in their fourth year. Moreover, two-thirds of respondents (n=531, 69.8%) were traditional in-classroom students, while almost a quarter (197, 25.9%) were distance learners, and almost five percent (33, 4.3%) were enrolled in the Sandwich program.

Table 2: Approaches to work-based learning

Approaches	Yes		No		Mean Ranking
	Freq. (n)	%	Freq. (n)	%	
Industrial attachment	602	79.1	159	20.9	4.79
Short and Long-term internship	529	69.5	232	30.5	4.46
Youth apprenticeship programs	489	64.3	272	35.7	4.27
Cooperative education experiences	374	49.1	387	50.9	3.75
Community service programs	357	46.9	404	53.1	3.67
Job Shadowing programs	334	43.9	427	56.1	3.56
Career academies	320	42.0	441	58.0	3.50

N: 761, Kendall's $W_a=0.083$, $\chi^2=377.695$, $df=6$, $Sig=.001$

Table 2 presents the outcomes of the descriptive statistics and mean rankings of the various approaches to work-based learning currently being implemented in HE institutions in Ghana. From the table, it can be observed that more than two-thirds (n=602, 79.1%) of the respondents have undergone Industrial Attachment compared to 159 (20.9%) who responded otherwise. Furthermore, responses showed that (n=529, 69.5%) of the respondents had undertaken Short- and Long-Term Internships, while 232 (30.5%) of the respondents indicated they had not undertaken any short- or long-term internships. However, 320 respondents comprising 42%, pointed out they had undergone the career academies program, whereas 441 (58%), on the other hand, stated they had not had any experience with career academies as an approach to work-based learning.

Also, Kendall's mean rank computations show that the most embarked upon work-based learning module being used in HE institutions is the 'Industrial Attachment' with a Mean score of 4.79, hence ranked first. Furthermore, 'Short- and Long-Term Internship' was the second work-based learning approach implemented mainly by the institutions surveyed; hence, ranked second. It is important to note that Cooperative education experiences (m=3.75), Community service programs (m=3.67), Job Shadowing programs (m=3.56) and Career Academies (m=3.50) obtained the lowest set of mean scores compared to the rest of the approaches.

By implication, cooperative education experiences, community service programs, job shadowing programs and career academies are the less implemented work-based learning approaches implemented in Ghanaian HE institutions. However, industrial attachment, short- and long-term internships and youth apprenticeship programs

currently remain the most widely used work-based learning approaches in HE institutions in Ghana.

Kendall's coefficient of concordance for ranks (W) was used to assess the level of agreement in the ratings among the respondents. Kendall's result statistics of ($W^a=0.83$, $\chi^2=377.695$, $df=6$, $p<.05$) represent a statistically significant near-perfect agreement between the ratings given by the respondents on the approaches to work-based learning currently being implemented in Ghanaian HE institutions.

Table 3: Institutional differences in the approaches to work-based learning

Items	Yes		No		Total	
	Freq. (n)	%	Freq. (n)	%	Freq. (n)	%
Industrial Attachment						
Technical University	286	47.5	119	74.8	405	53.2
University	316	52.5	40	25.2	356	46.8
Short- and Long-Term Internship						
Technical University	273	51.6	132	56.9	405	53.2
University	256	48.4	100	43.1	356	46.8
Youth Apprenticeship Programs						
Technical University	159	32.5	246	90.4	405	53.2
University	330	67.5	26	9.6	356	46.8
Cooperative education experiences						
Technical University	248	66.3	157	40.6	387	50.9
University	126	33.7	230	59.4	374	49.1
Community Service Programs						
Technical University	273	76.5	132	32.7	405	53.1
University	84	23.5	272	67.3	356	46.9
Job Shadowing Programs						
Technical University	159	47.6	246	57.6	405	53.2
University	175	52.4	181	42.4	356	46.8
Career Academies						
Technical University	152	47.5	253	57.4	405	43.2
University	168	52.5	57.4	42.6	356	46.8

Table 3 shows the institutional differences regarding the implementation of the various approaches to work-based learning. From the table, it could be observed that there were more students from the Universities ($n=316$, 52.5%) undertaking Industrial Attachment programs than students in the Technical University ($n=286$, 47.5%). However, the results show that Short- and Long-Term Internships were undertaken more by Technical Universities ($n=273$, 51.6%) than the Universities surveyed ($n=256$, 48.4%).

4.1.2 Benefits of work-based learning

Table 4: Descriptive statistics on the extent of the helpfulness of work-based learning models

Item	Percent (%)					μ	$\pm SD$
	1	2	3	4	5		
Developed my ability to work with people from different cultural backgrounds	2.4	4.7	10.0	21.0	61.9	4.35	1.0
Motivates me to continue learning	2.2	4.5	12.2	20.1	61.0	4.33	1.0
Developed my capacity to work with people from varied age groups	2.8	3.8	11.2	23.3	59.3	4.32	1.0
Improved my self-confidence and motivation	2.1	7.6	10.1	23.7	56.5	4.25	1.1
Development of craftsmanship and professional expertise	2.9	4.6	15.6	23.9	53.0	4.19	1.1
Built skills and competencies required to operate in a workplace	2.5	4.2	13.5	31.3	48.5	4.19	1.0
Developed by career management skills and other business skills and practices	2.8	5.9	15.4	24.2	51.8	4.16	1.1
Learnt about leadership	3.9	10.6	14.7	21.6	49.1	4.01	1.2
Helped me make more informed career choices	4.6	11.3	17.7	24.4	41.9	3.88	1.2
To be open-minded about professional work activities	4.9	10.2	18.1	28.5	38.2	3.85	1.1
Will facilitate my entry into the labour market	6.7	8.9	19.6	23.1	41.7	3.84	1.3
Learnt about other business functions	5.1	10.0	21.4	23.4	40.1	3.83	1.2

$N=761$, *Extremely Helpful*=5, *Somewhat Helpful*=4, *Not sure*=3, *Helpful*=2, *Not Helpful*=1, μ =mean, $\pm SD$ =standard deviation

Table 4 presents the results of respondents' ratings on the helpfulness of the work-based learning models. The results show that the majority, about 62% of the respondents, expressed that their work-based learning

experiences have been extremely helpful in developing their ability to work with people from different cultural backgrounds. About 21% of the respondents buttressed this by noting that their experiences have been somewhat useful.

Again, the results indicate that majority (61%) of the respondents considered work-based learning extremely valuable in motivating them to continue learning. Also, 20% noted that their work-based learning experiences have been somewhat helpful to them in motivating them to continue learning. More than two-thirds (59%) of the respondents described their work-based learning experiences as extremely helpful in developing their ability to work with people from varied age groups. The results further demonstrate that 23% of the respondents considered their experiences in the workplace to be somewhat helpful in developing their ability to work with other people.

On developing their craftsmanship and professional expertise, about half (53%) of the respondents stated their work-based learning experiences have been extremely helpful. This was confirmed by about 24% of the respondents, who maintained their experiences have been somewhat helpful. Additionally, nearly half (49%) of the respondents stated that their work-based learning experiences have been extremely useful in building the skills and competencies required to operate in a workplace such as (Teamwork). Likewise, 31% of the respondents also regarded their experiences as somewhat helpful in helping them to build their skills and competencies.

Furthermore, 51.8% and 24.2% of the respondents noted that their acquired work-based learning experiences had been extremely helpful in developing their career management skills and other business skills and practices. Additionally, as shown in Table 4, almost half (49.1%) of the respondents considered their work-based learning experiences extremely helpful. Similarly, 21.6% of the respondents also regarded their experiences in the workplace as somewhat useful in providing them with the opportunity to learn about leadership. Again, the majority, about 42% of the respondents, specified that their work-based learning experiences have been extremely helpful to them, with approximately 24% indicating their experiences have been somewhat helpful in aiding them to make more informed career choices.

That notwithstanding, the table further shows that about 38% of the respondents regard their work-based learning experiences as being extremely helpful in developing their ability to be open-minded about their work activities. The majority (about (42%) of the respondents noted that their work-based learning experiences have been extremely helpful and, in their opinion, will facilitate their entry into the labour market. Also, 29% of the respondents found it somewhat helpful. Regarding learning about other business functions, about 41% of the respondents found their work-based learning experiences extremely helpful, just as about 23% of the respondents found it somewhat helpful to that effect.

The items in Table 4 have been ranked according to their mean scores. The output confirms that ‘developing my ability to work with people from different cultural backgrounds’ obtained the highest mean score ($\mu=4.35, \pm SD=1.0$), ranking first as the most beneficial factor of work-based learning. However, learning about other business functions attained the lowest mean mark ($\mu=3.83, \pm SD=1.2$) and hence ranked last, indicating that the respondents believe work-based learning has not offered them much on learning about other business functions.

4.1.3 Effectiveness of the features of work-based learning models

Table 5: Effectiveness of the features of work-based learning models

Items	μ	$\pm SD$
New knowledge is introduced and applied in the student’s context	4.24	(1.00)
Students in their work apply new knowledge	4.24	(0.94)
Uses existing knowledge as a basis to build new knowledge	4.23	(1.01)
Students collaborate with peers on the program with colleagues at work	4.16	(1.02)
Autonomously managed	4.08	(1.07)
Performance-oriented and innovative-centred, creating opportunities for learning	4.08	(1.09)
The program of activities is framed to enable students to share knowledge	4.08	(1.06)
Team-based in tackling problems	4.04	(1.06)
Performance or task-related, particularly where circumstances are changing	4.03	(1.01)
Workplace supervisors are in place to link theory to practice	4.03	(1.05)
Orientation of learning projects to the challenges of work and the future needs of students	3.94	(1.12)
It is problem-based and usually related to tackling problems of production, design or management	3.93	(1.08)
Different learners follow different unique pathways	3.87	(1.27)
It considers students’ diverse needs through tailored feedback and individualized tutorials	3.80	(1.16)

N=761, 5=Strongly Agree, 4=Agree, 3=Not Sure, 2=Disagree, 1=Strongly Disagree, μ =mean, $\pm SD$ =standard deviation

Based on responses, Table 5 presents mean ratings on the effectiveness of the features of the work-based learning models. The output illustrates that, generally, all the means obtained by the various items were above the 3.0 threshold on the rating scale, suggesting that most of the responses to the items were towards the agreement end of the scale. Consequently, ratings on ‘new knowledge are introduced and applied in student context’ ($\mu=4.24$, $\pm SD=1.00$) and ‘new knowledge is applied by students in their work’ obtained the highest mean ratings ($\mu=4.24$, $\pm SD=0.94$). On the contrary, helping different learners to follow different unique pathways earned mean ratings of ($\mu=3.87$, $\pm SD=1.27$) while ‘takes into account students’ diverse needs through tailored feedback and individualized tutorials’ received the lowest rating of ($\mu=3.80$, $\pm SD=1.16$).

4.2 Qualitative Analysis

4.2.1 Work-Based Learning Approaches Implemented in Ghana

Work-based learning is a pedagogical strategy that connects school-based instruction with activities that have consequences and value beyond school. Professional workplace standards inform work-based learning by utilizing the workplace that includes employer input to engage students and purposely promote knowledge and access to future educational and career opportunities. Work-based learning can include job shadowing, industrial attachments, internships, apprenticeships and cooperative learning experiences. Face-to-face interviews with the various fashion houses in the study areas revealed that the most utilized work-based learning program implemented by the educational institutions is the industrial attachment and long and short-term internships. Furthermore, the responses suggested that Technical University students are more involved in work-based learning activities than the Universities. The subsequent statements sum up the trend of responses;

“... We have spaces for all that, like those two ladies you met when you came; they are from KTU, they just brought their letters to me for industrial attachment, and there are eight others from KNUST who are on attachment here as well ... Then we have a classroom at the back of the building which will soon be opened for any other professional who would want to do an intensive course maybe like three months’ intensive course either through evening classes or others... We have spaces for those as well. It also helps us in capacity building because these days it is difficult to get sewing technicians to come and assist you, so we took another option where we could train in-house, and after you are done, it is either we give you a job, or you go out and set up on your own...” [FHA09]

“... Oh yea, some come from Takoradi T.U., Ho T.U., and Sunyani T.U... Previously, I had many students coming from Takoradi T.U. for industrial attachment, but now I no longer accept students for any purpose...” [FHG34]

“I take students for attachment but not for internships. However, even with the attachment, they only stay here for only three months. They come in September and leave around December or January... Those from the T.U. come during vacation, and then those I had from another vocational school sometimes ago were here as part of their coursework... then even with them, when they come, they come to learn fashion, but when they go back, they learn Textiles. Because they must be on attachment, they need a place to go, and so they just decide to come here. It does not correspond with what they are learning over there...” [FHA10]

As noted earlier, various approaches to work-based learning have been developed to enable HE students to prove that they can perform relevant practical activities and meet the occupational competencies required for their chosen professions. These practical skills are valuable learning opportunities for students to demonstrate some learning outcomes as evidence of their education. Various institutions have different approaches, and some fashion houses interacted with specified strategies used;

“... As it stands now, we have about 9 of them ... Five from KNUST have their internships, and the rest from KTU have industrial attachment ... They are basically doing their internship and attachment. Students from KNUST will be here for three months, but for KTU, it is supposed to be three months, but the long vacation has been added to it, so it is now six months...” [FHA06]

“... Yes, I even have those I pay to sew. With the attachment, it was just last year I accepted one lady. Still, normally their timing does not favour me ... This is because some of them go to school and only come here after their lectures in the evening. By this time, I would be so tired ... I do all my cutting from morning to around 4 pm, and then I begin to sew, and that is the time they normally come I would be tired by then ... if they can come in the morning and rather leave later in the day that would have been perfect for them and me as well ...” [FHBA42]

4.2.2 Benefits of work-based learning

While not an answer to all educational challenges, work-based learning affords opportunities and benefits that school-based academic programs typically do not. By introducing HE students to communities of practice (industries) in their areas of professional interest, presenting opportunities for solving difficulties, and demonstrating skills in authentic working environments, work-based learning can stimulate, augment, and strengthen student learning in ways not possible to traditional classroom instruction. Fashion houses interview

gave their thoughts on the benefits of work-based learning to them and the students;

"... The attachments students come for here, in my opinion, provide them with both social and academic benefits. For instance, they link what they learn in the classroom to the skills and knowledge needed for the industry in that students somehow apply their classroom knowledge to the problems they face here. Also, you know those who have some knowledge on how to sew, helps with the sewing sometimes..." [FHA08]

"... Hmmm, I think so, since when they come here, they can develop their skill and the kind of expertise and competence that are very relevant to our profession. They learn by observing and doing; some even help us in various ways. It also allows me to prepare future employees. ..." [FHGA34]

Many fashion houses agreed that planned, documented, and evaluated work experiences, with mentoring, result in a better understanding of career opportunities and workplace requirements and expectations. HE students participating in work-based learning have increased focus and purpose and better understand real-life issues as they learn academics in context. They are also more goal-oriented and, in many instances, develop better problem-solving skills. They understand the concept of work and work ethic and are better prepared for future employment as they have increased confidence to assume responsibility and make decisions;

"... Sure, it is very beneficial since it polishes their abilities and behaviours... You see, most of the things they learn when they come here are difficult to learn outside of the workplace. Take, for instance, attitudes towards work, such as being accountable, meeting deadlines, and understanding how to act in each situation can only be learnt in the industry proper..." [FHC19]

"... many benefits. I had a girl who came here, and it appeared she did not know anything, but at the end of her stay here, she obtained the honour of best student... She is so creative, and she used to teach, but unfortunately, she passed away... When she came here, it was as if she did not know what she was doing, and it came out that she was forced to study fashion, so then I had time for her and taught her very well, and I gave them an orientation to assess them to know their problems... She did not like the course, so I had to counsel her before she calmed down to concentrate on learning. It was her design that stood out as the best ..." [FHC18]

This fashion house puts it differently by pointing out that students who undergo these work-based learning programs become better entrepreneurs.

"...we still need more people on the field. I must say that a few individuals who have gone through this place are doing quite well and have become real entrepreneurs. When students come here, I impress on them the need to move faster so they can go there and sew for people ... But here, aside from the training, we try to introduce students who come here to the business aspects as well. We always try to teach them that this is a business you cannot do alone, and one person cannot be buying the fabric and coming down to do the cutting ... You cannot be the one person doing the sewing, ironing, packaging, and selling ... You need to get other people to assist you ... Because of that, I got my wife involved in the business. I do the real sewing, and because she is into marketing, she oversees the business aspect of the business ... I also have my manager. I am basically in charge of the production side, and others oversee sales as well..." [FHGA29]

The purpose of equipping students for employment is not to take away from academic excellence but rather to combine formal and occupational curricula to link school and work. Students from various HE institutions in Ghana must be afforded every opportunity to experience academic and professional development that equips them with essential skills for securing employment or creating one. The ensuing are some benefits of work-based learning enumerated by some fashion houses.

"...what helps them is that they can know something small to start on campus ... My policy is that when you come here for your shirt and skirt if you cannot learn anything, you should be able to sew these two ... Because everybody wants to be casual on campus, so if you learn how to sew simple shirts and skirts you can do that and sell to colleagues and make some money ... That has been my policy; if the time is short, you must do your shirt, skirt all types, whether pencil, gathers, straight or pleated skirt or any one of them..." [FHN42]

"We impart much knowledge in them because we do things differently from how the school does it. Because the school focuses so much on the theory than the practical, but here we do much practical work than the theory..." [FHW14]

4.2.3 Entry-Level Skill of Students Embarking on Work-Based Learning Programs

Global economic competition increasingly challenges countries to compete on the quality of goods and services, and this requires a labour force with a variety of adequate middle-level professions, such as vocational and technical skills. In this regard, fashion houses were asked to indicate the assessment of the entry-level skills of the students who embarked on work-based learning programs with them. The responses suggest that students possess an inadequate skill set as they embark on work-based learning programs from various academic institutions. Notably, the fashion houses found the students lacking practical competence in fashion. It was

further intimated that educational institutions focus too much on the theoretical aspect than the practical aspect. Some of the responses to that effect have been outlined below.

“... Not at all. The skills they came here with are just inadequate! ... They are in their third year, so they must go for industrial attachment, but most of them have never sat behind an industrial machine before ... So, we must teach them how to handle the sewing machine before we must teach them how to cut ...yea! It's like that, and it all boils down to the fact that we see the profession as a vocation, and so if you want to learn, you cannot learn them at a higher level; you must learn them somewhere before you come...” [FHA07]

“My assessment is that when it comes to the practical aspect, it is a big problem or challenge ... You know there are individual differences... Two people will be in the same class, but one will perform better when it comes to the theoretical side, but when it comes to the technical or practical aspect, they struggle a lot because they have a lot of problems... Another funny thing is that as an HND student, you should be abreast with the current trends of doing things ... When they come here, they are so much more interested in the freehand cutting than the pattern making...” [FHG19]

Regarding the opinions on the relevance of creative and vocational education provision for the labour market and students' needs, comments from respondents demonstrate a mismatch between skills provided by HE institutions and industry needs. There is a widespread disagreement that the training provided does not meet industry expectations. The Fashion houses below also agreed with their colleagues that the skills provided by the institutions were not adequate to meet industry needs.

“As for skills on paper, they are ok, but when you give them practical work to do, they find it difficult because most of the time what we do in school is not detailed like the industry ... At our place, for instance, Industrial Arts we do Textiles and fashion, and the Textile was more and so if you were there, and you did not have the fashion idea it will be difficult for you ... Before I got there, I had finished HND and worked for years. So, what I am saying is that the students have the book knowledge but not enough of the practical ... Even with the book knowledge, it is not that good... Most importantly the time the students spend with us is too short ... They should spend like a year doing proper practicals, or there should be a centre on campus that can invite us there to share our experiences with them ... This is because the books they use in the schools are all from foreign countries ... At school, we learned many things by chewing ... It was until I went to U.K. that I saw certain things with my eyes ... We were selected for a fashion show there, and we realized that this is the thing they have been talking about ... Imagine I completed university in 1994, but then they were using industrial machines...” [FHGA30]

4.2.4 Skills Students need to develop their Professional and Employment Needs thoroughly

The gap between the skills students acquires and the expertise they need is becoming more apparent as traditional instruction falls short of equipping students with the knowledge they require to succeed in the fashion industry. Consequently, the fashion houses were requested to make suggestions on the types of skills they believe students need most to develop more thoroughly for their professional careers; the following sums up their ideas;

“... They need more practical skills ... When we were in school, practical lessons were taking like 30% with theory 70%, but it should have been the other way round ... if you do not include yourself in the practical, you may have a 'B' and pass ... The irony is that when you take part in the practical and not perform well in theory, you may fail, but meanwhile, you are the one who will perform well in the industry...” [FHA01]

“... Yea, I must say the pattern is good, but if it is infused with the free hand cutting, it will help them a lot ... This is because using the free hand cutting; I can cut about ten shirts before the fellow using the pattern will be done with one ... If I can keep the distractions away by locking myself up in my shop, I am able to sew up to 20 outfits a day ... I use industrial machines, so there is no slacking...” [FHGA33]

A successful work-based learning program is clearly distinct from a typical education experience. Adding value to the experience is both the justification for an institution's involvement and the critical factor in making work a learning experience. Hence, proactive supervision of the exposure is essential to accomplish a meaningful learning outcome. This careful attention to differentiation puts work-based experiences as a quality substantive activity suitable for creative and vocational students. Inherent in work-based learning is the capacity to employ content knowledge relevant to the job and to augment the skill required for increased performance and quality of work. Students, therefore, need to develop appropriate skills to meet industry expectations. Some fashion houses described vividly the skills students need to develop their professional and employment needs thoroughly.

“The only form of skill they require is the pattern book. I feel that whatever you want to do commercially, if you are creating something, you have to deal with patterns because nobody taught me how to cut freehand. I have to learn what is there and picture my fabric as my brown paper and draft it direct...” [FHA10]

“It is the practical aspect of it. They need more practicals. The thing is that in school, they show you a

figure in a book, and it becomes a standard, but the kind of figures we are getting today! I tell you; it is not about the book figure ... My project was on figure types and their psychological effect on marriages...” [FHC22]

4.2.5 Recommended Changes to Student’s Work Based Learning

There were glimpses of inefficiencies with how the work-based learning programs are currently implemented in Ghana from the trend of responses. Based on that, fashion houses were requested to recommend changes to improve work-based learning programs. Most responses infer that the institutions must extend the period allocated for students to embark on these programs. The following statements summarise the general trend of responses;

“I do not know the school’s arrangements, but for me, at least if the students were coming here for 18 months, that would have been the best ... Because they do more of the theory in school, and so if they were to come here for the practice for that length of time, by the time they leave here they would be complete professionals ready even to set up on their own ...” [FHB44]

“...it is not enough if we can get some extension, like six months to 1 year ... I am talking about my side; this is because I sew a lot of things here. Ladies wear, gents wear and even sportswear, so if they want to master only one side, then the three months is enough, but if they want to learn everything, then they need more time...” [FHV24]

Through a work-based learning experience, HE students are required not just to apply the theory and skills acquired in the classroom but also to gain a higher level of critical thinking skills, problem-solving and decision-making in the complex industrial environment. However, this is mostly not the case with most students who engage in work-based learning programs from the various institutions in Ghana. For instance, one fashion house owner recounted how haphazardly students undertake internships at his outfit. These cannot lead to the achievement of the critical skills needed for the profession and hence needs to be improved. Below are the respondent’s exact words.

“... I do not know the kind of program they run there, but, for instance, I have one student here who comes in the morning to learn and leaves for school in the afternoon ... I am convinced by her attitude that she is learning a lot from here ... I do not know how they are taught in school ... I think they just give them assignments to do; whether they can do it or not is another issue ... For the students, once they have the assignment, they will find all possible means to do it ... So, it does not actually bring out the impact on students learning...” [FHBA36]

Most of the fashion houses interviewed are proposing an increase in the time students spend on these work-based learning programs.

“... The duration of the program is too small. Because when I went for attachment, sometimes the things you want to learn you only get it when you are about to leave after the attachment ... Because wherever I went for attachment, I had the opportunity to work with only one person in the sample room, and he was teaching me how to do many things ... It was only when I was about leaving that I got to understand how things are done ... Meanwhile, if we had understood things earlier, I would have been able to practice it, but we left ... However, when we came to school, our lecturer taught different processes, so I had to forget about that one. So, I only learnt that again on the internet...” [FHGA31]

“I wish that when they come, we can determine what they want to do so that we work towards it ... I think they should do theory for one semester, and the rest should be practical...” [FHA01]

“Yea, usually when they come in, and they have the interest to learn, they can pick up a lot more than the apprentices who are here for like three years ... Because they are here for a purpose, they are usually focused and can pick up a lot more than the school dropout who does the three years ... Well, I am still learning, and so I cannot say they will be able to learn everything within the three months, but the basic thing is to keep them interested so that even when they leave our environment, they can come back...” [FHA05]

5. Discussions, Conclusions and Limitations

The findings indicate that most HE institutions, especially those offering higher fashion education, as part of their curriculum, allow students to participate in various forms of work-based learning programs because of the practice of what they term Competency Based Training (CBT) provided to students. According to the findings, all students, at one time or another, have participated in one or more forms of work-based learning with industrial attachment, short- and long-term internships and youth apprenticeship programs currently being the most widely used in Ghana. Whiles cooperative education experiences, community service programs, job shadowing programs and career academies are the least implemented work-based learning approaches.

Scott (2015) confirms the findings of the study to the effect that the past two decades have witnessed the evolution of a global movement that calls for unique learning models for the twenty-first century. According to

Scott, there is presently a significant body of literature focusing principally on three topics – motivations for an innovative model of learning, the precise competencies and skills required to function productively in the twenty-first century, and the pedagogy necessary to spur those capabilities. To Scott, preparing students for work and life in the twenty-first century is a very daunting task. Globalization, innovative technologies, migration, international competition, changing markets and industrial needs, as well as political challenges. All these drive the acquisition of expertise and knowledge needed by learners to survive and thrive in the twenty-first century. Scott notes that education ministries and governments, educators, employers, and researchers refer to these abilities as twenty-first-century skills, higher-order deeper learning outcomes, and advanced thinking skills. As mentioned earlier, the current approach to work-based learning in Ghanaian HE institutions includes an industrial attachment, short- and long-term internships and youth apprenticeship programs.

It also validates Carneiro's (2007) contention that the debate regarding the competencies and experiences learners require to cope with the unexpected challenges ahead has given rise to innovative ways of learning. According to him, this must accommodate today's students' characteristics to become more inclusive and address the contemporary needs of employers. Thus, acquiring relevant creative and vocational skills is vital to peak performance in the modern workplace. However, Salas-Pilco (2013) explains that while many of these competencies and expertise may seem modern, they are not new, just newly prominent.

The impact work-based learning had on students from the various institutions and fashion houses studied was varied and dispersed and came in several forms. As they reflected on their work-based learning experiences, they reported both excitement and disappointment in their activities. Some professed they had gained vital experiences during their placement period and wished the time would be extended; others were, however, disappointed because they were given only limited duties. However, they believed that appreciable lessons had been learned. Despite the differing nature and varied work-based learning opportunities organized by the various HE institutions, students can strategize the intended learning outcomes related to the program they are studying when they embark on these work-based learning activities. These substantiate Chang's (2019) assertion that to maximize learning opportunities, students need to be capable of contributing to the workplace environment and encouraged to reflect on their experiences to appreciate that new learning has occurred.

Students reported gaining personalized experiences from the world of work and the nature of different professions and jobs. Specifically, findings from the study suggest that students find their work-based learning experiences to be extremely helpful in developing their ability to work with people from different cultural backgrounds as well as in motivating them to continue learning. A few respondents believed that their work-based learning experiences have been extremely helpful in building the skills and competencies required to operate in a workplace successfully. Most of them also specified it helped them develop a better understanding of their chosen occupational route based on real work practices during the training period. Also, they believed it would support easier access to the labour market evidencing their achievements through accreditation by their institutions. To them, it will further support transitions through to employment since it provides them with concrete experiences. Moreover, it will give individuals having difficulty making their first transition into the labour market the motivation, experience, and skills to affect a more rapid transfer of employment.

These results also support Dressler and Keeling's (2004) contention that work-based learning can be beneficial in four key areas: skill development, academic success, career advancement, and personal and personal growth. HE students have the capacity to identify the knowledge gap between the demands of the institution and the workplace through work-based learning, as well as between the theories advocated in the classroom and the practices used in the real world. The nature of work-based learning, however, may need to change as well as the nature of work itself. The skills needed as the nature of work changes are frequently acquired on the job or through a blended approach, which combines classroom and workplace learning. To ensure that HE students benefit from their work-based learning, several factors need to be considered.

Explicitly, the findings demonstrate that the features of work-based learning beneficial to students included new knowledge introduced and applied in their context, which obtained the highest mean ratings. On the contrary, helping different learners to follow different unique pathways and considering their diverse needs through tailored feedback and individualized tutorials received the lowest rating. This is unsatisfactory since the essence of work-based learning is to consider students' varied needs through personalized feedback and individualized tutorials to make them appreciate the practicals behind the theory taught in the classroom.

Quality work-based learning features must comprise clear program goals and clear roles and responsibilities for worksite supervisors, mentors and support personnel. It must also embrace training plans that specify learning goals tailored to individual students with specific outcomes connected to student learning. Also included must be a range of work-based learning opportunities that offer authentic value and benefit to students beyond the classroom. Further, there must be clear expectations and feedback to assess progress toward achieving goals and assessments to identify skills, interests, as well as support needs at the worksite.

This paper has highlighted the features of work-based learning models in higher fashion education institutions in Ghana. There are some constrain to the generalizability of this paper. First, because data were

collected from a single country, Ghana, the findings may not reflect what is happening in other jurisdictions regarding creative and vocational education. For instance, countries such as Australia and Germany depict a different picture of creative and vocational training. Readers should, accordingly, approach the findings and conclusions with caution. Again, the non-random and cross-sectional nature of the study implies that the interpretation of results must be limited to the samples studied at the time of this investigation.

Based on the findings, future research directions are required in the creation of close linkages with the industry to increase industry participation in the essential skills requirements. Besides, understanding changing industry requirements for skilled workforce, labour market trends, employment opportunities, recruitment demands and concerns of the industry is vital. Hence, continued research will help in fashioning courses and programs that would meet industry needs.

References

- Afeti, G., & Adubra, A. L. (2012). Lifelong technical and vocational skills development for sustainable socioeconomic growth in Africa. Synthesis Paper-Sub-Theme 2, Triennale on Education and Training in Africa.
- Ali, A., & Marwan, H. (2019). Exploring career management competencies in work-based learning (WBL) implementation. *Journal of Technical Education and Training*, 11(1).
- Annunziata, M., & Bourgeois, H. (2018). The future of work: How G20 countries can leverage digital-industrial innovations into stronger high-quality jobs growth (No. 2018-28). Economics Discussion Papers.
- Anselmann, S. (2022). Trainers' learning conditions, informal and formal learning and barriers to learning. *Journal of Workplace Learning*, 34(8), 742-764.
- Bahl, A., & Dietzen, A. (2019). Work-based Learning as a Pathway to Competence-based Education. A UNEVOC Network Contribution. Bonn 2019
- Baker, L. K. (2014). The skills mismatch. London: Edge Foundation. Available at http://www.edge.co.uk/media/130721/the_skills_mismatch_march_2014_final.pdf
- Ball, L & Manwaring, G. (2010). Making it work: A guidebook exploring work-based learning. The Quality Assurance Agency for Higher Education (QAA).
- Baller, S., Dutta, S., & Lanvin, B. (2016). Global information technology report 2016. Geneva: Ouranos.
- Baum, S., & Payea, K. (2005). The benefits of higher education for individuals and society. Education Pays 2004: Trends in Higher Education Series.
- Bawakyillenuo, S., Osei Akoto, I., Ahiadeke, C., Aryeetey, E. & Agbe, E. (2013). Tertiary education and industrial development in Ghana. Ghana: Institute of Statistical, Social and Economic Research (ISSER), University of Ghana, Legon/The International Growth Centre (IGC).
- Bergin, T. (2018). *An introduction to data analysis: Quantitative, qualitative and mixed methods*. Sage.
- Biggs, J. (2003). Teaching for quality learning at University (2nd Edn.). Maidenhead: SRHE/Open University Press.
- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives: the classification of educational goals: Handbook I: cognitive domain* (No. 373.19 C734t). New York, US: D. McKay.
- Bloom, D. Canning, D. & Chan, K. (2005). Higher education and economic development in Africa. Harvard University: USA.
- Bol, T., Ciocca Eller, C., Van De Werfhorst, H. G., & DiPrete, T. A. (2019). School-to-work linkages, educational mismatches, and labour market outcomes. *American Sociological Review*, 84(2), 275-307.
- Boud, D. & Solomon, N (2000). Work as the curriculum: Pedagogical and identity implications. Sydney: UTS Research Centre Vocational Education & Training Working Knowledge: Productive learning at work Conference proceedings 10-13 December 2000 University of Technology.
- Bougie, R., & Sekaran, U. (2019). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Brandt, R. (1984). Overview: Teaching of thinking, for thinking, about thinking. *Educational Leadership*, 42 (1), 3-15.
- Brennan, J. & Little, B. (1996). A review of work-based learning in higher education. London: Quality Support Centre.
- Burke, C., Scurry, T., Blenkinsopp, J., & Graley, K. (2017). Critical perspectives on graduate employability. In *Graduate employability in context* (pp. 87-107). Palgrave Macmillan, London.
- Carneiro, R. (2007). The big picture: Understanding learning and meta-learning challenges. *European Journal of Education*, 42(2), 151-172.
- Chang, B. (2019). Reflection in learning. *Online Learning*, 23(1), 95-110.
- Chankseliani, M., Qoraboyev, I., & Gimranova, D. (2021). Higher education contributing to local, national, and global development: new empirical and conceptual insights. *Higher Education*, 81(1), 109-127.

- Choy, S., Bowman, K., Billett, S., Wignall, L. & Haukka, S. (2008). *Effective models of employment-based training*. Adelaide: NCVER.
- Clifton, J., Thompson, S. & Thorley, C. (2014). *Winning the global race? Jobs, skills and the importance of vocational education*. London: Institute for Public Policy Research (IPPR).
- Coe, R., Waring, M., Hedges, L. V., & Ashley, L. D. (Eds.). (2021). *Research methods and methodologies in education*. Sage.
- Cole, M. (1996). *Cultural Psychology – a once and future discipline*. Cambridge, Massachusetts: Harvard University Press.
- Curson, R. (2004). *Completion issues in industry training and effective learning in the workplace*. Wellington: Industry Training Federation.
- Darvas, P. & Palmer, R. (2014). *Demand and supply of skills in Ghana: How can training programs improve employment and productivity?* Washington, DC: International Bank for Reconstruction and Development/the World Bank.
- Dewey, J. (1933). *How we think: a restatement of the relation of reflective thinking to the educative process* (Lexington, MA, DC Heath & Company).
- Doherty, O., & Stephens, S. (2020). The cultural web, higher education and work-based learning. *Industry and Higher Education*, 34(5), 330-341.
- Yates, J. (2011). *The fashion careers guidebook*. London: Quarto Publishing plc.
- Dommartin, A. (2003). *Using the excellence model in higher education*. In EFQM Excellence Model® Higher Education Version 2003, Sheffield Hallam University.
- Dressler, S. & Keeling, A. E. (2004). Benefits of cooperative education for students. In R. K. Coll & C. Eames (Eds.), *International Handbook for Cooperative Education: An International Perspective of the Theory, Research, and Practice of Work-Integrated Learning*. Boston: World Association for Cooperative Education.
- Durrant, A., Rhodes, G. & Young, D. (Eds.) (2009). *Getting started with university-level work-based learning*. London: Middlesex University Press.
- Engeström, Y. (2005). *Developmental work research: Expanding activity theory in practice*. Berlin: Lehmanns Media.
- Ertmer, P. A., & Newby, T. J. (2013). Behaviourism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance improvement quarterly*, 26(2), 43-71.
- European Commission (2013). *Work-Based Learning in Europe: Practices and Policy Pointers*. European Commission, Education and training.
- Forum for the Future (2010). *Fashion Futures 2025 - Global scenarios for a sustainable fashion industry*. London: Overseas House.
- Garnett, J., Costley, C. & Workman, B. (Eds.) (2009) *Work-based learning in higher education*. Middlesex University Press.
- Gee, J. P., Hull, G., & Lankshear, C. (2018). *The new work order: Behind the language of the new capitalism*. Routledge.
- Gellert, C. (1997). Élite Versus Mass Higher Education--A Misconceived Dichotomy?. *Higher Education in Europe*, 22(2), 193-199.
- George Mwangi, C. A., & Yao, C. W. (2021). US higher education internationalization through an equity-driven Lens: An analysis of concepts, history, and research. *Higher Education: Handbook of Theory and Research: Volume 36*, 549-609.
- Goodlad, J. I. (1983). A study of schooling: Some findings and hypotheses. *Phi Delta Kappan*, 64(7), 465-470.
- Gorard, S, & Selwyn, N. (2005). Towards a learning society? The impact of technology on patterns of lifelong learning. *British Journal of Sociology of Education*, 26 (1), 71-89.
- Griffin, P., McGaw, B. & Care, E. (Eds.). (2012). *Assessment and teaching of 21st-century skills*. Dordrecht: Springer.
- Harrison, R. L., Reilly, T. M., & Creswell, J. W. (2020). Methodological rigour in mixed methods: An application in management studies. *Journal of Mixed Methods Research*, 14(4), 473-495.
- Heleta, S., & Bagus, T. (2021). Sustainable development goals and higher education: leaving many behind. *Higher Education*, 81(1), 163-177.
- Humburg, M., van der Velden, R. K. W., & Verhagen, A. M. C. (2013). The employability of higher education graduates: The employer's perspective. *ROA External Reports*.
- Husbands, C., Alambratis, S., Cole, G., Henerson, J., Limb, A., Thomas, B. & Wilson, T. (2013). *Skills task force interim report: Talent matters -why England needs a new approach to skills* Talent Matters -why England needs a new approach to skills. UK: Labour Policy Review.
- Hyland, T. (2015). *McMindfulness in the workplace: Vocational learning and the commodification of the present moment*. *Journal of Vocational Education & Training*, 67(2), 219-234.
- International Labor Organization (ILO). (2011). *A skilled workforce for strong, sustainable and balanced growth*:

- A G20 training strategy. Geneva: ILO.
- International Labor Organization (ILO). (2014). Skills mismatch in Europe: Statistics Brief. International Labour Office, Department of Statistics. Geneva: ILO.
- Isaksen, S. G. & Parnes, S. J. (1985). Curriculum Planning for Creative Thinking and Problem Solving. *The Journal of Creative Behavior* 19(1), 1-29.
- Isaksen, S. G. (1983). A curriculum planning schema for the facilitation of creative thinking and problem-solving skills. New York: Unpublished doctoral dissertation. State University of New York.
- Isaksen, S. G. (1998). *A review of brainstorming research: Six critical issues for inquiry*. Buffalo, NY: Creative Research Unit, Creative Problem-Solving Group-Buffalo.
- Laurie, R., Nonoyama-Tarumi, Y., Mckeown, R., & Hopkins, C. (2016). Contributions of education for sustainable development (ESD) to quality education: A synthesis of research. *Journal of Education for Sustainable development*, 10(2), 226-242.
- Linehan, M. (2008). Work-based learning: graduating through the workplace. Bishoptown: CIT Press.
- Little, B., & William, L. (2011). Conceptions of excellence in teaching and learning and implications for future policy and practice. In *Questioning excellence in higher education* (pp. 117-137). Brill.
- Luria, A. (1994). The problem of the cultural behaviour of the child. In: van der Veer, R. and Valsiner, J. (Eds.) (1994). *The Vygotsky Reader*, Oxford, Blackwell.
- Maguad, B. A. (2007). Identifying the Needs of Customers in Higher Education. *Education*, 127(3), 332-343.
- Malik, R. S. (2018). Educational challenges in 21st century and sustainable development. *Journal of Sustainable Development Education and Research*, 2(1), 9-20.
- McBeath, A., & Bager-Charleson, S. (2020). Introduction: Considering qualitative, quantitative and mixed methods research. In *Enjoying Research in Counselling and Psychotherapy* (pp. 1-12). Palgrave Macmillan, Cham.
- McGuinness, S., Pouliakas, K., & Redmond, P. (2018). Skills mismatch: Concepts, measurement and policy approaches. *Journal of Economic Surveys*, 32(4), 985-1015.
- McGunagle, D., & Zizka, L. (2020). Employability skills for 21st-century STEM students: the employers' perspective. *Higher Education, Skills and Work-Based Learning*, 10(3), 591-606.
- Moll, L. C. (Ed.) (1990). *Vygotsky and Education – instructional implications and applications of socio-historical psychology*. Cambridge: Cambridge University Press.
- Nigavekar, A. (2006). Roadmap for Reforms in Governance & Management of Indian Higher Education System. *Journal of Engineering Education Transformations*, 20(2), 1-17.
- Nouwen, W., Clycq, N., Struyf, A., & Donche, V. (2022). The role of work-based learning for student engagement in vocational education and training: an application of the self-system model of motivational development. *European Journal of Psychology of Education*, 37(3), 877-900.
- Nuere, S., & De Miguel, L. (2021). The digital/technological connection with Covid-19: An unprecedented challenge in university teaching. *Technology, Knowledge and Learning*, 26(4), 931-943.
- O'Brien, K., Reams, J., Caspari, A., Dugmore, A., Faghihimani, M., Fazey, I., ... & Winiwarter, V. (2013). You say you want a revolution? Transforming education and capacity building in response to global change. *Environmental Science & Policy*, 28, 48-59.
- Oliinyk, O., Bilan, Y., & Mishchuk, H. (2021). Knowledge Management and Economic Growth: The Assessment of Links and Determinants of Regulation. *Central European Management Journal*, 29(3), 20-39.
- Organisation for Economic Co-operation and Development (OECD) (2014). PISA 2012 Results: Creative Problem Solving: Students' Skills in Tackling Real-life Problems (Volume V), PISA, OECD Publishing. Available at <http://dx.doi.org/10.1787/9789264208070-en>
- Piaget, J. (1966). *The Psychology of Intelligence*, Totowa, NJ: Littlefield, Adams, and Co.
- Piaget, J. (1972). *The child's conception of the world*. England: Rowan & Littlefield.
- Polanyi M (1958). *Personal knowledge – towards a post-critical philosophy*. London: Routledge.
- Primi, A., & Toselli, M. (2020). A global perspective on industry 4.0 and development: new gaps or opportunities to leapfrog?. *Journal of Economic Policy Reform*, 23(4), 371-389.
- Rahman, M. (2019). 21st-century 'skill problem solving': Defining the concept. *Rahman, MM (2019). 21st Century Skill "Problem Solving": Defining the Concept. Asian Journal of Interdisciplinary Research*, 2(1), 64-74.
- Ramsden, P. (2003). *Learning to teach in higher education* (2nd Edn.), London: Routledge Falmer.
- Rodrik, D. (2022). 4 Prospects for global economic convergence under new technologies. *An inclusive future? Technology, new dynamics, and policy challenges*, 65.
- Roodhouse, S. (2010). Defining and theorizing University work-based learning. In S. Roodhouse and J. Mumford, *understanding work-based learning England*: Gower Publishing Limited.
- Salas-Pilco, S. Z. (2013). Evolution of the framework for 21st-century competencies. *Knowledge Management &*

- E-Learning: An International Journal*, 5(1), 10-24.
- Sarder, R. (2016). *Building an innovative learning organization: A framework to build a smarter workforce, adapt to change, and drive growth*. John Wiley & Sons.
- Saunders, M. (1995). The Integrative Principle: Higher Education and work-based learning in the UK. In *European Journal of Education*, 30(2), 203-216.
- Schaap, H., Baartman, L., & De Bruijn, E. (2012). Students learning processes during school-based learning and workplace learning in vocational education: A review. *Vocations and learning*, 5(2), 99-117.
- Scott, C. L. (2015). *The futures of learning 2: what kind of learning for the 21st century?* Paris: UNESCO Education Research and Foresight. [ERF Working Papers Series, No. 14].
- Scott, P. (1995). *The Meanings of Mass Higher Education*. Buckingham: Open University Press.
- Seagraves, L., Osborne, M., Neal, P., Dockrell, R., Hartshorn, C. and Boyd, A. (1996). *Learning in smaller companies (LISC) Final Report*. University of Stirling: Educational Policy and Development.
- Smith, P. (2022). Global apparel market - statistics & facts. Statista.
- Somers, M. A., Cabus, S. J., Groot, W., & van den Brink, H. M. (2019). Horizontal mismatch between employment and field of education: Evidence from a systematic literature review. *Journal of Economic Surveys*, 33(2), 567-603.
- Sommerlad, E. (1996). *Work-based learning for enterprise renewal: panacea or problematic?* Drew on work undertaken jointly by the Tavistock Institute (London) and the European Centre for Work and Society (Maastricht) for EU-funded action research initiative on work-based learning.
- Sternberg, R. J. & Subotnik, R. F. (Eds.). (2006). *Optimizing student success in school with the other three Rs: reasoning, resilience, and responsibility*. Research in Educational Productivity Series. Charlotte, NC: Information Age Publishing.
- Stone, E., & Farnan, S. A. (2018). *The dynamics of fashion*. Bloomsbury Publishing USA.
- Sweet, R. (2013). Work-based learning: Why? How. *Revisiting global trends in TVET: Reflections on theory and practice*, 164, 164-203.
- Taguchi, N. (2018). Description and explanation of pragmatic development: Quantitative, qualitative, and mixed methods research. *System*, 75, 23-32.
- Teichler, U. (2009). *Higher education and the world of work: conceptual frameworks, comparative perspectives, empirical findings*. Rotterdam: Sense Publishers.
- Teichler, U. (2015). Higher education and the world of work: What's the evidence behind educational policies? Strategic Debate, held on 3 June 2015, International Institute for Educational Planning (IIEP), UNESCO.
- The Global Information Technology Report (2013). *Growth and jobs in a hyper-connected world*. Geneva: World Economic Forum Insight Report.
- The World Bank (2008). *World Development Report: Agriculture for development*. Available at <http://go.worldbank.org/2DNNMCBGIO>
- Tudge, J. & Rogoff, B. (1989). Peer influences in cognitive development: Piagetian and Vygotskian perspectives. In Bernstein, M. H. and Bruner, J. S. (Eds.). *Interaction in Human Development*. New Jersey: Lawrence Erlbaum Associates.
- Tynjälä, P. (2008). Perspectives into learning at the workplace. *Educational research review*, 3(2), 130-154.
- Unwin, L. & Fuller, A. (2003). *Expanding learning in the workplace*. NIACE Policy Discussion Paper, Leicester: NIACE.
- Verhaest, D., Sellami, S., & Van der Velden, R. (2017). Differences in horizontal and vertical mismatches across countries and fields of study. *International Labour Review*, 156(1), 1-23.
- Vygotsky, L. S. (1978). Interaction between learning and development (M. Lopez-Morillas, Trans.). In M. Cole, V. John-Steiner, S. Scribner and E. Soubberman (Eds.), *Mind in society: The development of higher psychological processes* (pp. 79-91). Cambridge, MA: Harvard University Press.
- Waller, R. E., Lemoine, P. A., Mense, E. G., Garretson, C. J., & Richardson, M. D. (2019). Global higher education in a VUCA world: Concerns and projections. *Journal of Education and Development*, 3(2), 73-83.
- Wenger, E. (2011). *Communities of practice: A brief introduction*. <http://hdl.handle.net/1794/11736>
- Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*. London: Harvard University Press.
- Winberg, C., Engel-Hills, P., Garraway, J., & Jacobs, C. (2011). *Work-integrated learning: Good practice guide—HE Monitor No. 12*. Council on Higher Education (CHE).
- World Bank (2013). *Tertiary education in Africa (TEIA)*. Education in Sub-Saharan Africa. Available at <http://go.worldbank.org/K09Q14BTT0>
- World Bank. (2018). *World development report 2019: The changing nature of work*. The World Bank.
- Young, D., & Garnett, J. (2007). *Work-based learning futures: proceedings from the Work-based Learning Futures Conference, Buxton, April 2007, organised by the University of Derby and Middlesex University*.

APPENDIX
Coding scheme for interviews

Region	Code	Code Range
Ashanti	FHA	FHA01 – FHA10
Western	FHW	FHW11 – FHW17
Central	FHC	FHC18 – FHC23
Volta	FHV	FHV24 – FHV29
Greater Accra	FHGA	FHGA30 – FHGA36
Bono	FHBA	FHBA37 – FHBA42
Northern	FHN	FHN43 – FHN48

***FH= Fashion House**