

The Relationship Between Wbl and Certificated Learning Within Higher Education Institutions: the Ghanaian Experience

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Abstract

Purpose

The study examined the relationship between WBL models and certificated learning within Higher (fashion) Education institutions in the Ghanaian context.

Design/methodology/approach

The study employed the quantitative data collection and analysis technique. Thus, questionnaires were administered. The population included postgraduate and undergraduate students of the HE institutions in Ghana offering the fashion design and textiles studies option and some fashion houses. A purposive sampling technique was used to select forty-eight (48) fashion houses and some graduates practising their acquired skills. Again, out of ten (10) technical universities, eight (8) were selected for data collection. The sampled institutions selected represent a fair distribution of the overall population of HE institutions that offer vocational education, especially higher fashion education programs. A Pearson moment correlation was run to determine the relationship between the core variables.

Findings

This study draws on the various WBL literature to inform the development of a framework to illustrate the interaction of HE, WBL and the industry. The data collected and analyzed displayed no violation of normality, linearity or homoscedasticity by visual inspection. However, HE had a weak and negative correlation against all the WBL models except for YAP and CA, which were positive, but these also had weak correlations., this is the WBL program that benefits students.

Originality

This study exhibited a sufficient comprehension of the relationship between WBL and certificated learning within higher education institutions.

1. Introduction

As pointed out by Watson and Taylor (1998), links with the industry are already a core activity for most Higher Education (HE) realized through short- and long-term student placements, the sandwich mode of study, use of commerce and industry to provide live case study and project material. Nevertheless, more lately, the significance of the world of work developing between work and education has been given renewed prominence. Thus, the link between HE and the world of work continues to be a critical policy issue amid an increasing number of unemployed graduates in many countries, including Ghana.

As Brennan and Little (1996) put it, Work-based Learning (WBL) in HE is but one aspect of a complex and evolving relationship between HE and work. The authors note that although the origins of HE in many countries lie in the professional preparation of the clergy and, later, of the other ancient professions,

ideologies of HE have frequently been opposed to a close relationship between HE and work. Several authors on HE has emphasized that the value of HE lies in something more than just a preparation for the world of work. Teichler at the International Institute for Educational Planning (IIEP) Strategic Debate presented findings from surveys conducted on Graduate Employment and Work. The studies were carried out in some selected European Countries.

The studies illustrated distinct job-seeking patterns across countries with different HE institutions' support levels. For instance, one of the surveys found that graduates from vocationally oriented HE institutions in Europe were more satisfied with their preparation for practice than graduates from academically oriented Universities, but vocational graduates report a higher discrepancy between their competencies and their work tasks (Teichler, 2018; Teichler 2009). These studies, Teichler stressed, 'call for more in-depth analysis of the associations between higher education and the world of work to better guide decision making' (p. 12). The study thus examined the relationship between WBL models and certificated learning within Higher (fashion) Education institutions in Ghana.

2. Literature Review

2.1 Defining WBL

As Faurschou et al. (2009) argue, there is a lack of consensus on the definition of WBL among stakeholders. The language barriers between employers and HE institutions are apparent (Medhat 2007). It has become clear that some general definitions exist and even different terms for WBL, such as; 'sandwich programs', 'alternation education and learning programmes' (Schuetze 2004; OECD 2008, p.1). However, many definitions contain the same elements or are too descriptive and one-dimensional (Faurschou et al., 2009).

Nevertheless, in some cases, the definitions contain some benchmarks and reveal the purpose of WBL. For instance, Smith and Betts (2000) have a three-dimensional depiction of WBL, specifying that 'learning about work is informational, learning at work is locational and learning through work is experimental' (p. 591). According to them, to accurately define WBL, it must reflect notable qualitative changes. These changes are emerging in its definition, which has been possible through the realization of active partnerships between employers, students, and educational providers.

Seufert (2000) points out that WBL differs from conventional education as it involves deep and conscious reflection on experience at the workplace. In addition to acquiring particular skills and competencies, the learner's ability to develop meta-competence and learning-to-learn skills becomes even more critical than learning specific tasks. These views were confirmed by Guile and Griffiths (2001), who argue that parallel to the learners' vertical development, WBL supports their horizontal development.

A distinction has also been made between narrow and broad interpretations of WBL; the first refers to learning in the workplace driven strictly by employer needs, and the second, more general definition denotes work-related learning driven by individual and societal needs (Nixon et al., 2006). However,

research also reveals a growing demand for a critical evaluation of the learning potential of the workplace. WBL, as Sweet (2013) puts it, is a subset of experience-based learning. It refers to learning that occurs through real work and the production of tangible goods and services. WBL must clearly be distinguished from learning that occurs in enterprise-based training workshops and classrooms. The latter, mostly referred to as enterprise-based training, is not WBL but classroom-based learning that occurs in an enterprise rather than in an educational institution.

To Borbély-Pecze and Hutchinson (2014), WBL is 'an umbrella term which describes a set of learning programs that include apprenticeships, traineeships and internships' (p. 17). These are understood differently across the nations, either as a result of the different economic structures within which they operate or as new initiatives evolved that borrow terminology from elsewhere. Boud and Solomon (2001) offered a broad definition of WBL. They describe WBL as a class of programs that bring together education and work organizations to create new and engaging learning opportunities in workplaces. The authors expanded their definition to include meeting the needs of learners and the contribution that the learning will have in the development of the organization in the long term.

Whereas there are several applications for work placements in HE systems and programs, there are also many aspects of learning in the workplace. The view of WBL adopted by Boud and Solomon (2000) is seen in the growing number of WBL partnerships. These are agreements between educational institutions and organizations specifically established to foster learning. Levy et al. (1989) explored issues of WBL in the vocational education and training sector. They defined WBL as linking education to the work role. Levy et al. explained WBL as connecting knowledge to the work function and distinguished three (3) inter-related components, each of which provided an essential contribution to learning; structuring learning in the workplace, giving appropriate on-job training/learning opportunities and identifying and providing relevant off-job learning opportunities

In defining WBL, Seagraves et al. (1996) looked at a comprehensive conception of linking education to the requirements of people's jobs and developed three (3) elements of WBL; learning for work, learning at work and learning through work. For them, learning for a job broadly encompassed anything labelled vocational. Learning at work, they argue, relates to training and development delivered in-company and learned through work is integrated into the doing of the job. Brennan and Little (1996) note that, although not necessarily definitive, learning for work, learning at work and learning through work distinctions are useful ways of investigating connections between HE and WBL. Although teaching and learning in HE are more than learning for a job, such learning is integral to the aims and objectives of a particular program of study.

Over half of all undergraduate work now relates to professional and vocational studies, many of which may be closely linked to professional formation requirements. Dearing (1997), for instance, argues the need for continuing professional advancement models and courses carried out in collaboration with employers. Despite all these insights, there is still some ambiguity about what exactly constitutes

learning in the workplace. Regarding WBL that is formally assessed and accredited, Ebbutt (1996) suggests a classification scheme representing four modes:

1. *WBL as access or accelerated access* – this is achieved mainly through the Accreditation of Prior Experiential Learning (APEL). Here, learners' experience is recognized by an institution, either to gain access to that system or as a means of obtaining credit and remission from parts of a program.
2. *WBL as initial professional preparation* – this is where full-time students gain access to learning in an industrial, commercial or service workplace as an element of their degree program.
3. *WBL as general preparation for the 'real world'* – this is where a minority of degree programs incorporate the development of transferable or core skills such as algebra, communication, and problem-solving to equip learners for work in the real world.
4. *WBL is the principal constituent of a program of study* – this is where students are full-time employees, and most research-based fieldwork is carried out in the student's workplace. The student regularly meets with the HE institution's lecturers to discuss research methodology, deliberate on problems and develop thinking.

Finally, in defining the WBL project at Leeds University, three (3) fundamental elements were brought together: the individual learner, the work context, and the academic requirements. It was apparent that this tripartite model had implications for understanding and describing the program, for structuring the curriculum, and for guiding and evaluating student learning. A simple Venn diagram demonstrating the co-option of three (3) sets of resources and the accommodation of three (3) sets of interests proved useful in simplifying some complex issues. Figure 1 represents the model.

2.2 Effects of WBL on Higher Education

The acceleration of economic growth and technological advancement in any country hinges on the clear link between an HE institution and the industry (Sanderson, 2018; Becker et al., 2017). As a result, every industrialized nation is endeavouring to make the HE institution-industry link a centrepiece of their reform system to boost productivity, sustain progress and remain competitive in the global economy. Musset (2019) and Ball and Manwaring (2010) affirm that educational systems must be urged to ensure that students are given a practical foundation for working life and are motivated to achieve their potential as well as take more responsibility for their development and continue to improve the skills they and their industries require practical and flexible systems of education must be explored, which will achieve these ends. WBL frees HE from the concept of physical borders. As delivery methods are without limit, and the landscape is rich with opportunity. Wherever people work and learn, there is an opportunity for WBL.

According to Lester and Costley (2010), there is a growing body of evidence to indicate that WBL of various kinds is effective in increasing student participation in HE and in developing the capability of individuals and industries. They noted that for individuals, evaluations of WBL suggest they can afford a valuable vehicle for personal and professional development, as well as afford an education that addresses particular workplace concerns. WBL has been shown to enhance students' self-esteem,

develop and reinforce vocational skills, improve an understanding of workplace culture and expectations, and promote a network for future job searches. Such activities also expose HE students, to work and career opportunities that would otherwise be alien to them.

HE learners frequently mention benefits such as achieving expertise and unique skills around a practical theme rather than an academic discipline. However, the outcomes that students most often value include increased confidence, a propensity to reflect, the need to understand, and a hunger for further learning and development (Anderson and Nieves, 2020; Stewart et al., 2019; Pritchard et al., 2015; Nixon et al. 2008). Professionally, WBL programs are often cited by learners as enabling them to take on greater responsibility, gain promotion, and provide them with more immediate benefits such as greater competence and assuredness, reduced stress and better recognition. The impact of WBL on industries appears to stem from three areas; the value of the work-based project and the skills and changes it brings with it (Perusso and Wagenaar, 2022; Morley, 2018).

Again, WBL can have a broader impact on industrial change. These are often outcomes associated with postgraduate programs (Perusso and Wagenaar, 2022; Moldovan, 2019; Rowe et al., 2018). The value of active WBL to employers does, however, appear to depend on the ability of the work context to respond to individuals undergoing rapid personal and professional development. Evidence, both from organizational perspectives (McGunagle and Zizka, 2020; Rowe et al., 2018) and from reviews of WBL, indicate that some work contexts thrive on this kind of development, especially when learners are already in positions of autonomy. WBL appears to positively impact professionals (Booth, 2019; Lester and Costley, 2010).

One of the key strengths of WBL is its effective way of developing expertise and the kind of skills and competence that are highly relevant to a given profession and to a specific workplace (Kis, 2016; Ferrández-Berruenco et al., 2016; Raelin, 2008). The advantages of developing creative and vocational skills and acquiring disciplinary knowledge have also been demonstrated by some studies (Atkinson, 2016; Faurischou et al., 2009 etc.). The skills generated through WBL are enhanced by the greater proximity of learning to production compared to school-based learning programs because the learners are exposed to both the production methods and the work requirements of actual workplaces.

Thus, work experience can help HE students develop self-evaluation skills and build the confidence they need to reflect on and learn from experience. People become conscious of the need to develop particular skills and competencies when they use them in practice, and such skills are challenging to develop, away from the concrete demands of a real workplace (Ornellas et al., 2018; Crebert et al., 2004). Therefore, WBL can allow learners to acquire a broad range of competencies and behaviours. However, as indicated by Raelin (2008), the degree to which these skills are developed varies considerably from one workplace to another, depending on the circumstances learners are exposed to and the support they receive.

Every individual has a unique set of career aspirations, skills, competencies, strengths, and weaknesses. Career management skills can help students navigate through complex study paths in an increasingly complex and volatile labour market characterized by fewer jobs-for-life situations. Some authors have concluded that WBL can significantly enhance a learner's career progression, thus helping them develop

career management skills (Sutiman et al., 2022; Komariah, 2015; Sweet, 2013; Ahlgren and Tett, 2010; Hutchinson et al., 2008). For instance, WBL helps individuals better understand workplace culture and expectations (Ahlgren and Tett, 2010) and develop good work habits (Sweet, 2013) because it allows students to carry out real production-related assignments and interact with peers and customers.

Overall, company simulations have been found to have the potential to help students take responsibility for their careers and personal development as they gain the experience of doing things by themselves under the guidance of teachers and professionals rather than being told to do specific tasks and assignments (Cedefop 2011). Evidence also shows that WBL programs achieve better results than student jobs in developing young people's career skills. Reasons for the better outcomes include the fact that students in WBL programs work with a mentor or trainer and that they would be unable to obtain indirect employment because they have access to workplaces and activities.

To promote the transition from school to employment, students need to develop workplace-relevant skills and competencies and understand how the working world differs from the teaching environment. WBL and professional life familiarisation measures, such as work placements, internships, and mentoring schemes, all help to prepare students for the world of work. Real work experience provides students with an opportunity not only to develop work skills but also to understand the workplace and the occupational implications of their educational choices (Cedefop 2010).

WBL programs such as apprenticeships are recognized ways to prepare students for particular occupations (Holzer and Lerman, 2014). On the one hand, this is because WBL is a particularly useful way to develop appropriate skills and competencies. Still, it is also due to employers seeking characteristics that distinguish one candidate from another and consider prior work experience an asset. Also, in many cases, WBL is seen as an opportunity to identify, train and subsequently recruit the best candidates. While most of the examples cited above relate to apprenticeships, there is also evidence that programs with less intensive WBL components positively impact career transition.

2.3 Tensions and Synergies Associated with Education through WBL

WBL and classroom-based learning, according to Sweet (2014), must not be viewed as isolated activities. They must be treated as part of a complete package. Classroom learning complements and enhances learning in the workplace, and learning at work complements and enhances learning in the classroom. Thus, for policymakers and social partners, there will constantly be policy queries that must be considered regarding how to integrate and organize the learning that occurs at the workplace and the learning that takes place in classrooms as part of the WBL curriculum.

Sweet (2014) notes that these questions will arise whether the learner is in an apprenticeship or on an internship. They will appear when creating new WBL arrangements and when trying to improve existing ones. A fundamental difference between classroom-based and WBL programs is that, in work-based programs, since learning is usually divided between the classroom and the workplace, institutions cannot do everything by themselves. They must cooperate closely with their social partners, such as the industry,

to give the best to the learner. Questions such as how work-based and classroom-based learning should be organized are always issues with WBL programs.

The choice between any proposed options Sweet (2014) points out will depend on factors including the following: (p. 28).

1. Which combination of work-based and classroom-based learning makes the most pedagogical sense? Will it make it easier or difficult for the learner to integrate theory and practice? Will it make it simpler or difficult for the student to apply what has been learned in class or to see how the theory learned in the classroom relates to practice?
2. What effect will the combination have on student motivation? Will there be enough practical learning at work to maintain the interest of bored learners?
3. What impact will attending classroom-based learning and training have on the enterprise? Will it disrupt the ongoing work of the industry? Will it mean that students will miss out on learning from work that only occurs at certain times of the business cycle or production cycles, such as stocktaking or harvest time?
4. What impact will attending the workplace have on the educational institution? Will students have to miss other classes to visit the place of work, or can the timetable be arranged so that no job is lost? If large numbers of students are absent at the same time, will this have an impact on teachers' working arrangements?
5. Suppose the workplace time is scheduled to suit the school timetable, will this connote that the opportunity to experience and learn from essential parts of the business or production cycle in the enterprise is missed?
6. How should these decisions be made? By the social partners alone, by the HE institution alone or should it be done in collaboration with the two?

The defining features of WBL emphasize working and learning concurring. The type of work determines learning assignments; likewise, work may determine the nature of learning. The two are interrelated. Learners become workers, and workers become learners. HE students in WBL environments are required to manage both roles efficiently. Thus, institutions and the workplace need to work together to ensure they are not giving conflicting knowledge. The challenge for the WBL curriculum and those who support it argue that to ensure the mutually reinforcing nature of WBL is utilized, conflicts between the requirements of work and learning must be reduced to the minimum. These can only occur if all the parties involved are aware of the potential and the traps and are appropriately prepared to face them.

Raelin (2008) infers that, though work and learning may be concurrent, they are not necessarily the same. In most cases, they may support each other but have distinct goals and may be directed towards different ends. Work is directed towards producing what the particular industry offers. While learning is directed towards the attainment of knowledge or the capacity to achieve more knowledge. The knowledge that is the intention of learning may or may not be closely related to whatever the particular industry produces

now or in the future. Learning and often working occur at the same location, and to the external observer, the activities associated with each may not be easily separated. In some cases, activities of learning and working can be shared. The workplace presents a textbook from which the learner/worker draws their problems and completes exercises and assignments, some prescribed and some not (Singh, 2015).

The Relationship between Education, WBL and Industry: A Conceptual Framework

Over the last decade, some education reformers have argued that integrating experiences outside of the school with classroom learning is an effective strategy for engaging students in their studies and assisting in preparing them for further education and work after school. Usually, these experiences involve working in organizations. These reformers make various assertions about the educational benefits of WBL; in most cases, these have struck a receptive chord. For instance, they argue that the development of partnerships between institutions and employers (industry) through WBL is a crucial factor in identifying learning requirements (Jackson et al., 2022; Doherty and Stephens, 2020; Atkinson, 2016; Bucharest Communiqué, 2012; Bruges Communiqué, 2010) as it improves the relevance of education, and facilitates access to further education and learning.

However, the difficulty with executing such WBL is that HE systems have remained sluggish in adapting their activities, particularly their curricula, to these changes. Also, there is, in some cases, strong resistance to changing the conventional HE curricula into more flexible and individual curricula based on labour experience. The benefits of WBL for students are explicit and globally recognized. However, as Ferrández-Berruoco et al. (2016) point out, WBL is only feasible if the world of work and academia join forces. This research draws on the various WBL literature to inform the development of a framework (figure 2) that depicts the interaction of these three variables (HE, WBL and the industry).

3. Methods

Due to its nature, exploratory and descriptive research designs were adopted for the current study. Exploratory research is usually done when a problem has not been explicitly defined. It also assists in determining the best research method, data collection method, and the selection of samples. The current research provides insights into and comprehension of the relationship between WBL and certificated learning within higher education institutions. Descriptive research, on the other hand, designates studies that have as their primary objective the accurate description of the characteristics of persons, situations or groups (Mishra and Alok, 2022) and offers the possibility to collect accurate data on 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.

The study further employed the quantitative data collection and analysis technique. Quantitative studies explore the processes of gathering observable data to answer research questions using statistical, computational, or mathematical methods. It is frequently viewed as more accurate and valuable than

qualitative studies, which emphasize collecting non-numerical data. This study looks at measurable, numerical relationships. The population included postgraduate and undergraduate students of the HE institution in Ghana, offering the fashion design and textiles studies option. A non-probability purposive sampling technique was used to select forty-eight (48) fashion houses and some graduates practising their acquired skills in the fashion industry. Again, out of ten (10) technical universities, eight (8) were selected. The sampled institutions selected represent a fair distribution of the overall population of HE institutions that offer vocational education, especially higher fashion education programs.

Also, some key elements have been integrated into the current study's design to enhance its credibility and validity. These included the selection of the appropriate methodology for answering the study's objectives, selecting appropriate data collection instruments for gathering the type of data required and using relevant samples. This study also demonstrates internal validity by ensuring that the data collected can answer the research questions accurately. External validity was assured by guaranteeing the outcomes of this study could be generalized to broader situations, and content validity was certified by ensuring the data instruments used reasonably covered the items it intended to cover. These ensured careful sampling of domains to guarantee their representativeness.

4. Results

4.1 Relationship between WBL and certificated learning within HE institutions

Table 1 presents the correlation results on the relationship between WBL models and certificated learning within HE institutions.

Table 1
Correlation results on WBL and HE

	JSP	I	CSP	CEE	YAP	CA	IA
HE	-.290**	-.259**	-.038	-.095**	.018	.180**	-.189**
JSP		.183**	.118**	.153**	-.048	-.163**	.083*
I			.623**	.617**	-.470**	-.679	.734**
CSP				.803**	-.727**	-.694**	.451**
CEE					-.589**	-.651**	.447**
YAP						.508**	-.343**
CA							-.544**

** . Correlation is significant at the 0.01 level (2-tailed), * . Correlation is significant at the 0.05 level (2-tailed).

HE = Higher Education, JSP = Job Shadowing programs, I = Short- and Long-term internship, CSP = Community service programs, CEE = Co-operative education experiences, YAP = Youth apprenticeship programs, CA = Career academies, IA = Industrial Attachment

A Pearson moment correlation was run to determine the relationship between the impacts of WBL Models and HE in the surveyed institutions. The data displayed no violation of normality, linearity or homoscedasticity by visual inspection. From the results in Table 1, it can be observed that Higher Education (HE) had a weak and negative correlation against all the WBL models except for YAP and CA, which were positive, but these also had weak correlations. It must be realized that the correlations were statistically significant at ($p < .0005$).

The results suggest that generally, WBL models, as currently being implemented by the various institutions, are negatively impacting students or are not affording any significant benefit to students who undertake them. However, it could be inferred from Table 1 that CA had positive correlations with HE signifying that statistically, this is the WBL program that benefits students. Nonetheless, the extent of the impact is regrettably weak. Furthermore, the results corroborate respondent's favourable ratings given to the extent of the helpfulness of the work-based models as evidenced by the mean rankings, where abstract benefits of WBL obtained higher ratings, which translates to favourable rankings as compared to benefits relating to practical fashion related statements (See Table 2). Again, it can be argued that this result explains why students considered items that do not specifically relate to the fashion industry as the most compelling aspects of their WBL experiences (See Table 3), compared to ratings accorded fashion or technically related experiences.

4.2 Benefits of WBL

Showing in Table 2 are frequencies and mean scores depicting students' perceptions regarding the usefulness of WBL models.

Table 2
The extent of the helpfulness of WBL models

Item	Percent (%)						
	1	2	3	4	5	μ	$\pm SD$
1. 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
2. Motivated me to continue learning	2.2	4.5	12.2	20.1	61.0	4.33	1.0
3. 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
4. Improved my self-confidence and motivation	2.1	7.6	10.1	23.7	56.5	4.25	1.1
5. Development of craftsmanship and professional expertise	2.9	4.6	15.6	23.9	53.0	4.19	1.1
6. Built skills and competencies required to operate in a workplace	2.5	4.2	13.5	31.3	48.5	4.19	1.0
7. Developed my career management skills and other business skills and practices	2.8	5.9	15.4	24.2	51.8	4.16	1.1
8. Learnt about leadership	3.9	10.6	14.7	21.6	49.1	4.01	1.2
9. Helped me make more informed career choices	4.6	11.3	17.7	24.4	41.9	3.88	1.2
10. To be open-minded about professional work activities	4.9	10.2	18.1	28.5	38.2	3.85	1.1
11. Will facilitate my entry into the labour market	6.7	8.9	19.6	23.1	41.7	3.84	1.3
12. 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 2 presents respondent ratings on the helpfulness of the WBL models. The results show that the majority, about 62% of the respondents, expressed that their WBL 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 WBL extremely valuable in motivating them to continue learning. Also, 20% noted that their WBL experiences have been somewhat helpful to them with regard to encouraging them to continue learning. More than two-thirds (59%) of the respondents described their WBL experiences as extremely helpful in developing their abilities to work with people from varied age groups. The results further demonstrate that 23% of the respondents considered their workplace experiences to be helpful in developing their ability to work with others.

On developing their craftsmanship and professional expertise, about half (53%) of the respondents stated their WBL experiences have been extremely helpful. This was confirmed by about 24% of the respondents, who maintained their experiences have been somewhat beneficial. Additionally, nearly half (49%) of the respondents stated that their WBL 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.

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

The items in Table 2 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 ($\mu = 4.35, \pm SD = 1.0$), hence, ranked first as the most beneficial factor of WBL. 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 WBL has not offered them much on learning about other business functions.

4.3 Effectiveness of the features of WBL models

Table 3 Perceptions regarding the effectiveness of the features of the WBL models.

Table 3
Effectiveness of the features of WBL models

Items	μ	$\pm SD$
1. New knowledge is introduced and applied in the student context	4.24	(1.00)
2. Students in their work apply new knowledge	4.24	(0.94)
3. Uses existing knowledge as basis to build new knowledge	4.23	(1.01)
4. Students collaborate with peers on the program with colleagues at work	4.16	(1.02)
5. Autonomously managed	4.08	(1.07)
6. Performance-oriented and innovative-centred, creating opportunities for learning	4.08	(1.09)
7. Program of activities is framed to enable students to share knowledge	4.08	(1.06)
8. Team-based in tackling problems	4.04	(1.06)
9. Performance or task-related, particularly where circumstances are changing	4.03	(1.01)
10. Workplace supervisors are in place to link theory to practice	4.03	(1.05)
11. Orientation of learning projects to the challenges of work and the future needs of students	3.94	(1.12)
12. It is problem-based and usually related to tackling problems of production, design or management	3.93	(1.08)
13. Different learners follow different unique pathways	3.87	(1.27)
14. It takes into account 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		

5. Conclusion, Implications And Limitations

In determining the relationship between the impacts of WBL Models and HE in the surveyed institutions, the data displayed no violation of normality, linearity or homoscedasticity by visual inspection. As HE had a weak and negative correlation against all the WBL models except for YAP and CA, which were positive, but these also had weak correlations. The study further suggest that generally; WBL models as currently being implemented by the various institutions is negatively impacting students and not affording any significant benefit to students who undertake them. However, it could be inferred that CA had positive correlations with HE signifying that statistically, this is the WBL program that benefits students.

Thus, the impact WBL had on students from the various institutions and fashion houses studied were varied and dispersed and came in several forms. As they reflected on their WBL 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 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 WBL 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 WBL activities. Thus, 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 further 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 WBL experiences extremely helpful in developing their ability to work with people from different cultural backgrounds and in motivating them to continue learning. A few respondents believed that their WBL 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 better understand 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 has provided 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 findings can be advantageous in four distinct areas: skill development, academic, personal and career advancement. HE students, being learners, have the potential through WBL to identify the knowledge gap between requirements in the institution and the workplace, as well as espoused theories taught in the classroom and methods in use in the real world. However, as the nature of work changes, the nature of WBL may also need to change. The skills required as work changes are often developed at the workplace or as a blended approach, i.e., combining learning at work with learning in an institution.

Again, several factors require consideration to ensure that HE students get the maximum benefit from their WBL experiences. Among these are linkages between the job and school-based learning, clear expectations of student activity at the workplace, clearly defined roles of worksite supervisors, and well-structured feedback on student performance. The study's findings fall short of the characteristics of quality work-based programs supported by research. The essence of WBL is to take into account the varied needs of students through personalized feedback and individualized tutorials to make them appreciate the practicals behind the theory taught them in the classroom. Quality WBL 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 WBL 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.

An obstacle to the formulation of the overarching conclusions of this study is that a comprehensive overview of the benefits associated with WBL requires many different disciplines and research methods. Consequently, while this study attempts to highlight evidence from the Ghanaian context, it can only present an outcome exclusive to higher fashion education and the fundamental issues at play, relying on primary data collection and secondary research carried out by others. The findings must, however, be interpreted with caution, given that many of the primary data used for this study are focused on HE fashion students and fashion houses. While acknowledging such limitations, this study exhibited a sufficient comprehension of the relationship between WBL and certificated learning within higher education institutions.

Declarations

The study was approved by the Ethics Review Board (ERB) of UNEM Ghana. The study adhered to the ethical principles outlined in the Declaration of Helsinki and received written informed consent from all participants. The rights and welfare of the participants were protected throughout the study, and strict confidentiality measures were put in place to protect their personal and identifying information. Any potential risks to the participants were minimized, and they were allowed to ask questions and withdraw from the study at any time.

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Figures

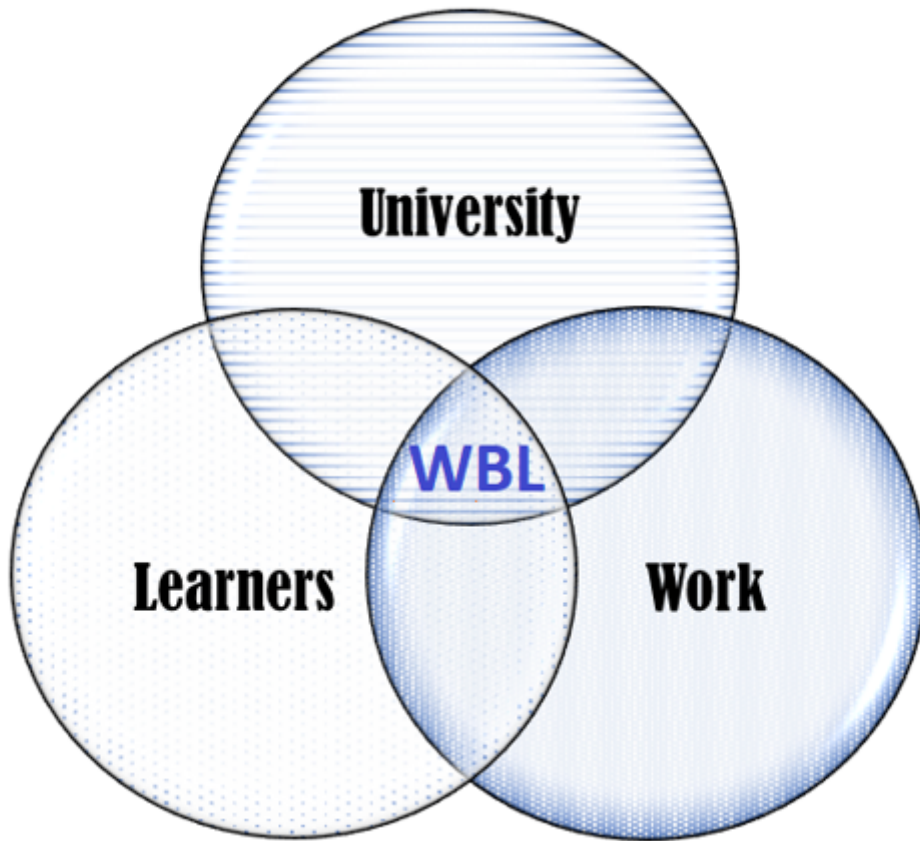


Figure 1

The essence of WBL *Source:* Adapted from Foster and Stephenson (1998)

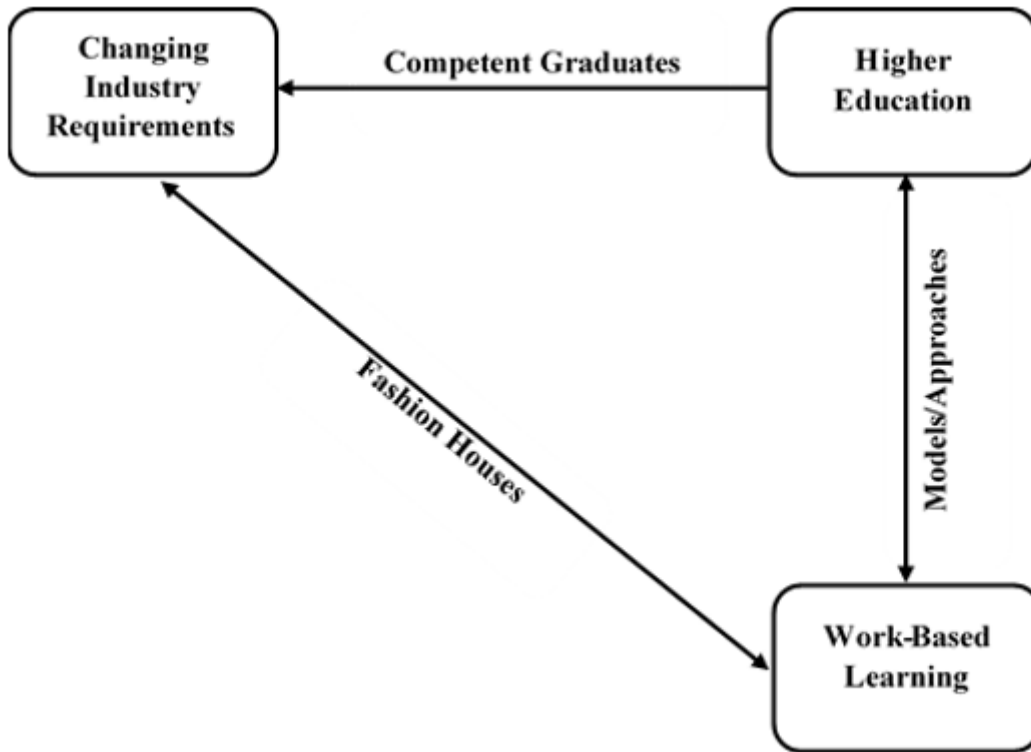


Figure 2

Conceptual framework