

Work-based Learning – Revisiting Its Nature and Requirements

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Abstract

Recently, the Department of Polytechnic Education (DPE) stipulated that all homegrown degree programmes and seventy –five percent of the diploma programmes should be using Work-based Learning (WBL) approach. Consequently, the need to understand WBL is paramount given that WBL approach is still in its infancy in Politeknik Malaysia system. Therefore, there is an urgency to share knowledge in WBL based on a particular field to close the gap in knowledge. The objectives of this paper are to understand the definitions of WBL; to understand the source of directives for WBL implementation; and to propose frameworks that support WBL implementation. This paper is written based on direct participation & observation of the authors who are directly involved in WBL in their professional capacity. Based on their experience, the authors find that WBL is highly doable in the presence of strong organizational framework and industrial support. It is a process in its infancy which needs continuous improvement to strengthen the programme. Consent and endorsement or a work process to enable collaboration and hierarchical power to conduct training will be useful. Fourthly, policy and guidelines should precede implementation to facilitate the process.

Keywords: Work-based learning, TVET, Polytechnic Education

1. Introduction

Teaching and learning (T&L) is a dynamic process which requires a constant innovation and changes to adapt to the changing needs of the world, which is applicable to Conventional education systems as well as Technical and Vocational Education Training (TVET) institutions. The biocentric approach of teaching and learning which focused on the teacher's role in the classroom has gradually evolved into student-centered approach and outcome-based approach, to mention a few.

Another approach which has gained considerable attention in the educational context is Work-based Learning (WBL). The recent decades have seen a growing number of TVET institutions using this approach in its system in order to ensure the relevance of TVET programmes to the industry. This is in line with the nature of TVET institutions that produce graduates who are semi- or highly skilled who are ready for the various job markets.

The conventional approach of T&L demands a total commitment from the institutions to expose students to three key areas which are knowledge, practical skills and affective values that are essential in a specific industry as embedded in the curriculum. The presence of WBL component in a programme structure means that students will undergo the conventional T&L process on campus but certain part of the programme requires students to complete tenure at a company that is related to the field he or she is studying.

Work-based learning is highly familiar in the European countries be it in the high schools, tertiary level or post-tertiary education. Politeknik Malaysia (PM) has recently adopted the WBL approach and stipulated that all its homegrown degree programmes and seventy-five per cent of its diploma programmes must include WBL approach in its programme structure. As a result, the need to understand WBL is paramount given that WBL approach is still in its infancy in PM system. The scenario of growing emphasis on WBL reflects the importance of knowledge sharing pertaining to the implementation of WBL in PM context.

Therefore, this paper is prepared to share knowledge on three key areas which are:

- i. to identify the justification for WBL implementation in Politeknik Malaysia;
- ii. to understand the definitions of WBL adopted by DPE;
- iii. to propose frameworks that support programmes with WBL.

2. Literature Review

WBL has slowly become a body of knowledge with growing number of literature discussing it from various angles. Understandably, the definition of WBL has been subjected to disputes as well. Common terms associated or used interchangeably with WBL are industrial/practical training, workplace training, internship, apprenticeship, job shadow, work placements, cooperate technical education, vocational training, and mentoring/coaching. In many instances, some of these terms have been used interchangeably within organizations (DfES, 2005). Therefore, it is important to find a terminology that can be used to quantify and qualify Work-based Learning, which can be accepted amicably by institutions and employers (Nixon et al., 2006).

2.1 Definitions

Perhaps visiting the definitions of WBL proposed by several authors may shed some lights into the variations of WBL implementation and other aspects associated with it namely definitions, forms of WBL, assessments, mode of delivery, types of learning and value-added.

2.2 Forms of WBL and types or learning

Boud and Symes (2000) were among the first to call for the differentiation of meaning between work-based learning and workplace learning. Their definition includes the types of learning that occur at workplace. According to them workplace learning is the

‘... form of learning that occurs on a day-to-day basis at work as employees acquire new skills to develop new approaches to solving problems. No formal education recognition normally accrues to such learning, whether or not it is organised systematically.’

Boud and Solomon (2001) suggest that *‘work-based learning is the term being used to describe a class of university programs that bring together universities and work organizations to create new learning opportunities in workplaces’*.

UVAC (2005) acknowledges the grey area in differentiating work-based learning and workplace learning. It offers a definition for the former which emphasizes on the forms of WBL which addresses the needs of vocational programme and emphasizes on learning that occurs at the workplace. UVAC suggests that a training programme should focus on skill sets and competencies needed by employers and complies with the national standard for that particular industry. The forms of the training may vary but is essential to assess the learning that takes place.

Some other definitions focus on students being part of the company and treated as full-time employees. Sodiechowska and Maisch (2006) suggest that WBL is a programme *‘...where students are full-time employees whose program of study is embedded in the workplace and is designed to meet the learning needs of the employees and the aims of the organization’*.

Durrant, Rhodes and Young (2009) posit that work-based learning may not need to be undertaken on a full-time basis. Instead it is *‘for anyone who is regularly engaged in work (or undertakes periods of contractual work sufficiently long enough to complete a programme of study), whatever the nature of that work.’*

Little and ESECT (2004) pointed out that work based learning could take many forms including

‘...a fulltime undergraduate undertaking a work placement planned as part of the curriculum; a fulltime undergraduate doing a part-time job; a full-time employee seeking to explore work focused and work-related issues in the context of the knowledge, skills and values of a higher education institution. The common factor linking these forms was that the individual would be doing a job of work, or would be undertaking a work role.’

Fuller and Unwin (2003) stretch the boundary of the term “workplace learning” to refer to all types of learning which has to occur at or outside the workplace in order to fulfil the needs at the workplace which includes ‘... formal on-the-job training, informal learning and work-related off-the-job education and training.’

Although these authors proposed definitions for workplace learning, many of the terms used are also reflected in the definition of work-based learning proposed by other authors.

2.3 Mode of delivery

Mode of delivery refers to how knowledge, skills and values are imparted /delivered to students while they are in the industry instead of on campus. Again, authors have different views on what should be the mode of delivery for WBL.

However, Garrick and Usher (2000) propose that ‘flexibility’ is a keyword that can support the learning process:

‘... organizations are expected to respond flexibly and rapidly to market changes and a premium is now placed on the need for flexibility not only within workplaces but also between them. Within this context are located interlinking discourses of flexible organizations, flexible workers and a consequent perceived need amongst managers (at a range of levels) for flexible structures, modes and contents of learning to service these organisations and workers.’

Flexibility is a concept that is commonly highlighted in the discussion of WBL. Its philosophy encompasses the agility of the institution and industry to respond to changes in job market where the institution initiates collaborative partnership with industry players and devised ways to obtain the desired learning outcomes stipulated in the curriculum which includes different learning domains, modes of delivery and types of assessments.

2.4 Assessments and professional certification

UVAC (2005) has pointed out that WBL should focus on two aspects; ascertaining what should be learnt at workplace and showing that learning has taken place ‘wherever and however this may have been achieved’. This should be translated into the practise of WBL where the institution and employers collaborate in ascertaining the cognitive, skills and values that are important for a particular industry, and then the institution and/or employer must assess the learning using various methods deemed appropriate.

Durrant, Rhodes and Young (2009) provide some insight into possible areas to be assessed as well as adding value to WBL tenure by allowing students to undergo professional certification.

‘...the demonstration of your ability to reflect upon your skills, knowledge and approach to your work, often called your ‘professional practice’. In some situations, learners will develop occupational competence alongside the WBL programme and this is usually assessed separately by the employer,’ (p. 2)

Their proposition particularly on reflecting on one’s skills, knowledge and approach at work is echoed by the UK’s Higher Education Academy’s guide to learning and employability which stipulates that

‘...it is not necessarily the experience of work itself that is paramount – rather it is the learning that an individual derives from that experience of work and from reflecting upon it. (Little and ESECT, 2004)

It can be concluded that WBL is a growing body of knowledge where disputes on terms and definitions are anticipated due to the varying nature of the WBL content and implementation. However, it is acknowledged that although the terms may vary, some of the definitions show common themes. Figure 1 shows two main terms used which are WBL and workplace learning. These two terms share a few common themes found in their definitions which covers assessments, types of learning, mode of delivery and value-added.

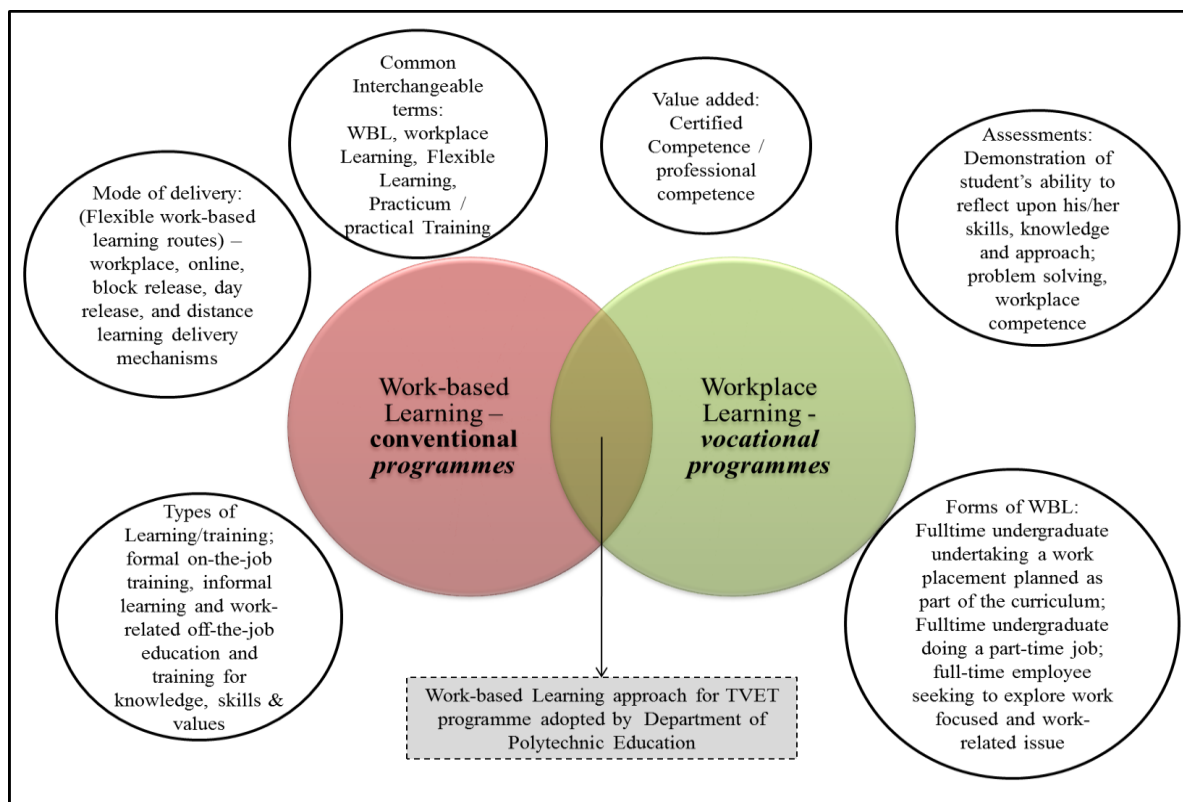


Figure 1: Common themes in the definitions of WBL and Workplace Learning

3. Methodology

It is noteworthy that this paper is based on a qualitative research approach via exploratory case study. The contextual setting for this case study is a TVET institution known as Politeknik Ibrahim Sultan (PIS) located in Johor whereas the unit of analysis is the Bachelor of Science (Hons) in International Tourism and Hospitality Management undergraduate programme. This programme is popularly known by its acronym 'BTH', a homegrown degree programme which uses WBL approach. Therefore, this is an exploratory case study because BTH is a newly introduced programme in TVET education scenario in PM and there are a lot of issues to be explored and understood.

Case study is a research method through which researchers gain a deep understanding of the phenomenon being investigated (Yin, 2009). In this study, case study enables: (1) thorough investigation of the unit of analysis; (2) involvement of multiple stakeholders (DPE, institution, implementers/lecturers, industry players and students) to explore their continuum of perspectives; and (3) the use of multiple instruments (formal and informal discussions, casual conversations, direct participation, direct observations, and document analysis). The strength of this case study lies in the use of various research instruments as strategy for data collection (Hamelet *al.* 1993, Yin 2003). This approach provides an in-depth understanding of the issues at hand, improve the validity of the findings, and most importantly address the central research questions.

For this study, the research team in PIS did a desk top study by reviewing previous literature to gain deeper understanding of WBL; definition, framework and practices. Then, data collection was done by way of formal and informal discussions, casual conversations, direct participation, direct observations, and document analysis. Next, data analysis was done by scrutinizing the data collected by examining, making association and connection, categorizing, mapping, comparing and conducting any other necessary procedures in order to answer the research questions. Eventually, these findings are interpreted to provide insights to the research questions.

However, 'snap shot' case studies is always challenged by validity and reliability issues. Robson (1993) explains that this can be overcome by doing triangulation throughout the study. He states the benefits of triangulation, which is reducing inappropriate interpretations and biasness, and eliminating "blind faith" in findings. In order to withstand scrutiny on research reliability issue, this study also adopts the triangulation approach by way of crosschecking with key informants and documents.

The key informants for this study are the authors themselves: they are lecturers attached to the BTH programme. These authors have been directly involved in the BTH programme in their professional

capacity since the inception of the programme in September 2013, which exposes them to various aspects of WBL.

4. Findings And Analysis

This section will address the objectives set out at the beginning of this paper which are to justify WBL implementation in PM; to understand the definitions of WBL adapted by DPE; to understand the frameworks that support WBL implementation.

4.1 WBL in Politeknik Malaysia

Before delving further on WBL, it is essential for implementers in institutions to understand the source of mandate to implement WBL and the demands which ensues. The directives to implement WBL approach in Higher Learning education is stipulated in Malaysia Education Blueprint 2015-2025 (Higher Education) or also popularly referred to as MEB 2015-2025 (HE). This blueprint aspires to enhance and consolidate students' learning experience by tapping on industry collaboration in the design and delivery of programs; increasing the use of experiential learning to develop 21st century skills, and leveraging on technology-enabled models to facilitate personalized learning in order to produce holistic, talented, and balanced graduates. Equally important, MEB encourages lifelong learning to adapt to changing skills needed for high income economy through reskilling and up-skilling workforce using WBL approach.

Literature has highlighted a few advantages of adopting WBL approach. It has the flexibility to adapt to the changing landscape of the workforce supply side such as part-timing, second jobs, self-employed reskilling and up-skilling and the job market demand side such as the need for highly competent, dynamic and flexible work force. In addition, WBL also provides a legitimate platform for TVET institutions to address issues associated with limited resources by engaging the industry in its teaching and learning process.

4.2 WBL by DPE

DPE aspires WBL to be a platform that can consolidate and strengthen students' knowledge, skills and values but placing them for two semesters at selected workplace at the end of their programme. Nonetheless, the content of DPE WBL approach encapsulates important aspects discussed in section 1. Figure 2 shows two main terms used for WBL and the overlapping definitions which covers assessments, types of learning, mode of delivery and value-added.

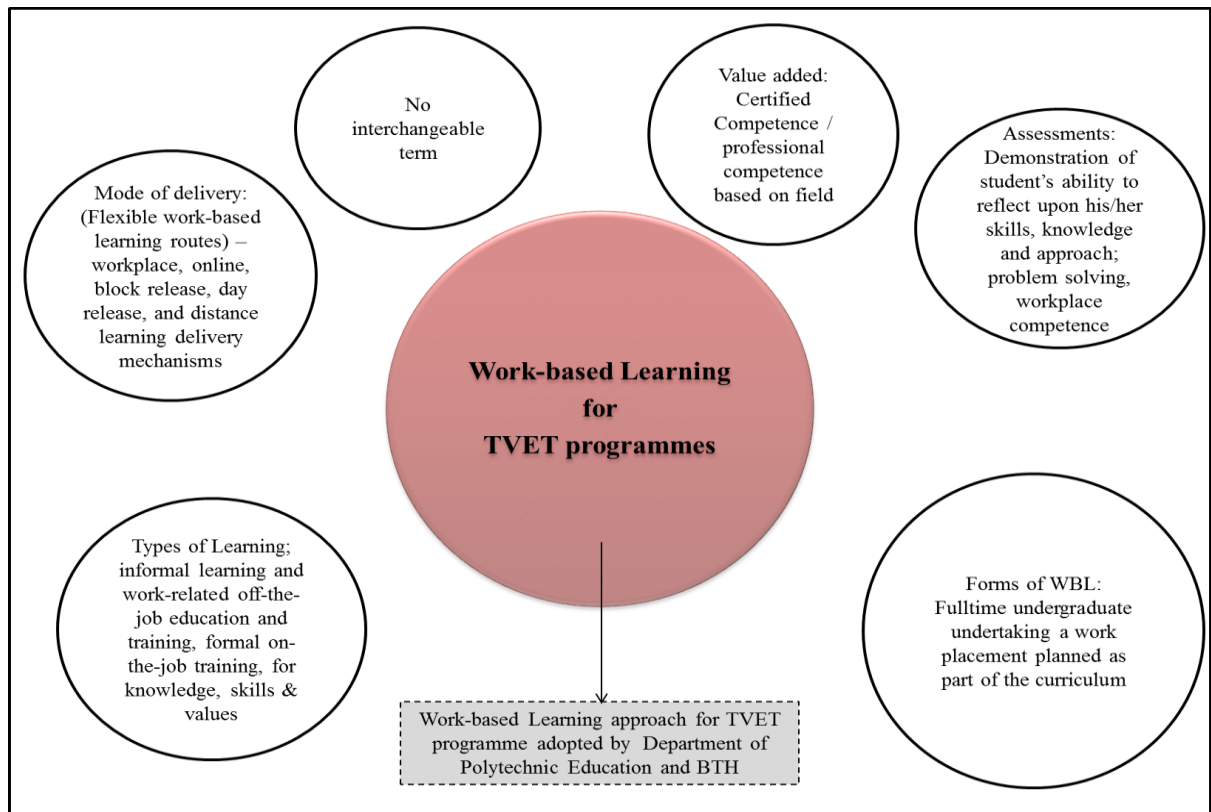


Figure 2: DPE’s WBL definitions which covers assessments, types of learning, mode of delivery and value-added.

4.3 WBL – managerial implications for Homegrown Degree Programme

In September 2013, DPE has marked another achievement towards TVET excellence by launching homegrown degree programme in Politeknik Ibrahim Sultan called Bachelors of Science (Hons) in International Tourism and Hospitality Management or more popularly called BTH. BTH programme is currently opened to Diploma holders who graduated from any PM in either Tourism Management and Hotel and Catering Management. The main advantage is that these diploma graduates can apply for a maximum of thirty percent of credit transfer for certain subjects upon approval by the academic secretariat in Politeknik Ibrahim Sultan. This credit transfer enables the students to graduate with a degree within three years. This means students will be registered into Semester Three during the first year. Then, they will undergo a conventional teaching and learning (T&L) process on campus from semester three until semester 5. During semester six, the students will go for Industrial Training at a company of their choice. Finally, in semester 7 and 8, the students will be sent to the selected companies to undergo WBL session.

Although the idea of being away from the institution for three semesters i.e. one semester for Industrial Training and two semesters for WBL was initially endorsed at DPE level with consent from Malaysia Qualification Agency, it was later revoked. Both parties consensually deemed that

industrial training is redundant with WBL. Consequently, the 10-credit hour industrial training was dropped from the structure and in its place a few courses were introduced. In other words, the first structure was used for two cohorts (September 2013 and September 2014 intakes) and the new structure – without industrial training - took effect for the third cohort that enrolled in September 2015. This change enabled new courses to be added to the structure which will later be handy during WBL. Figure 3 depicts students’ entry point and duration of T&L process.

		Year 1		Year 2		Year 3		Year 4		
Intake	Semester	1	2	3	4	5	6	7	8	
		Intake Sept 2013 (Cohort 1) & Intake Sept 2014 (Cohort 2) - Polytechnics’ Diploma Graduates (Tourism Management; Hotel Catering Management)	Credit Transfer		← T&L in PIS →					
Intake 2015 (Cohort 3) onwards - Polytechnics’ Diploma Graduates (Tourism Management; Hotel Catering Management)	Credit Transfer		← T&L in PIS →							WBL
Intake for SPM school leavers and other equivalent qualification) – pending until further notice			← T&L in PIS →							WBL

Figure 3: Students’ entry point and T&L process

4.4 Implications on WBL Implementation - Framework

WBL requires a few frameworks that should be used to guide its implementation. The following section briefly explains a few diagrams that show the framework and committee structure used by PIS.

4.4.1 WBL Organizational Framework

The WBL organizational framework used by institution in PM is contextually exact particularly to the homegrown degree programme. It PIS includes key players in WBL implementation namely DPE, PIS, department, industry and students. DPE provides the policy and guidelines that must be adhered to by the institution. These policy and guidelines comply with the aspiration of higher education and the guidelines stipulated by the Malaysia Qualification Agency. Then, all these rules and requirements are translated into workable strategies by the institution that is implementing WBL which encompasses programme-based WBL guidelines and folios for students and industry players. They are one of the important mechanisms to convey important information about WBL. At institution level, a WBL coordinator is

appointed to bridge communication between DPE and programme. It is useful when an institution has a few WBL-based programmes. Next, at department level, a WBL committee is set up to facilitate the flow of work. It is advised that a Head of Programme should not be a WBL coordinator due to the extensive job scope of each post. The programme will appoint a few staff as WBL observation team who will visit and provide consultation to students. On the industry side, a mentor or a supervisor should be appointed by each company taking in WBL students so they can receive proper guidance at the workplace. Figure 4 depicts the WBL organizational framework used by PIS whereas Figure 5 shows that structure of WBL committee in PIS.

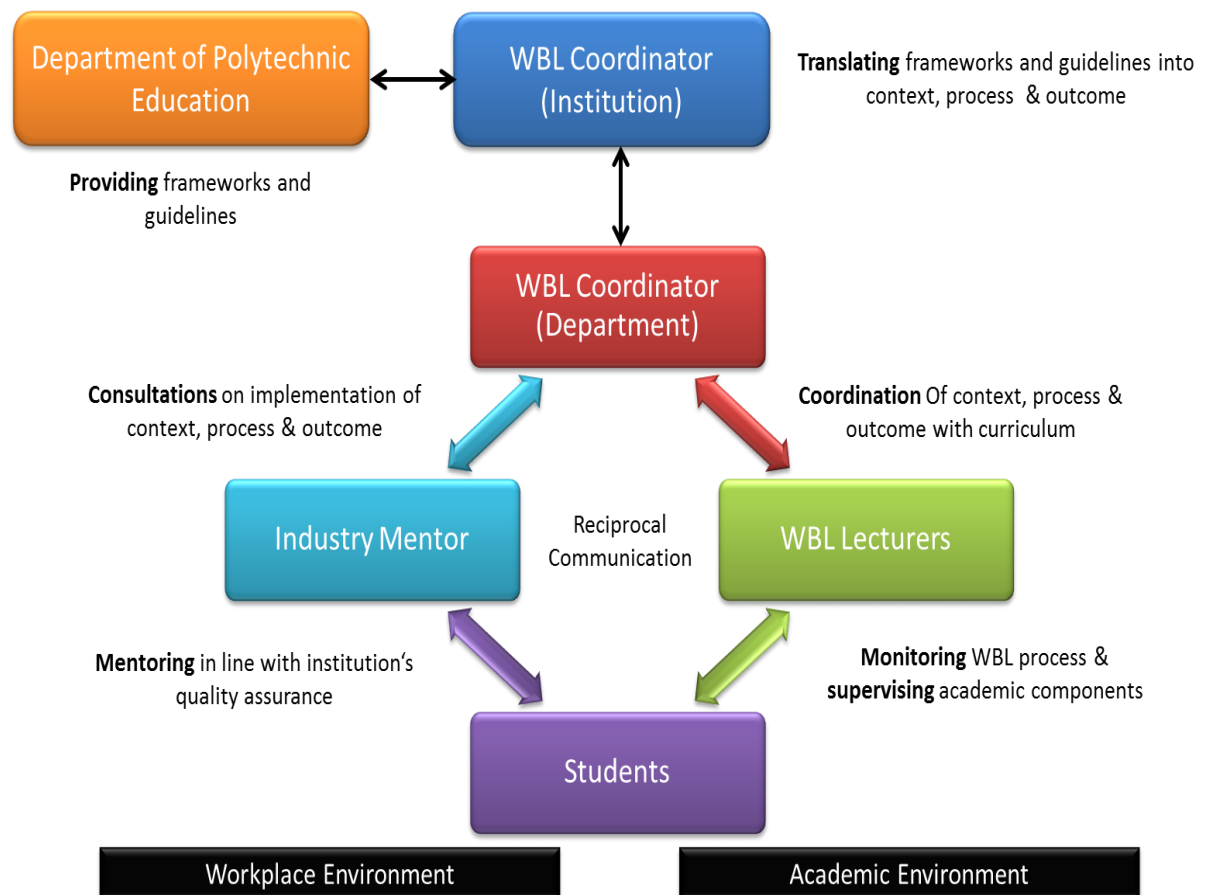


Figure 4: WBL organizational framework used by PIS

4.4.2 WBL organizational structure

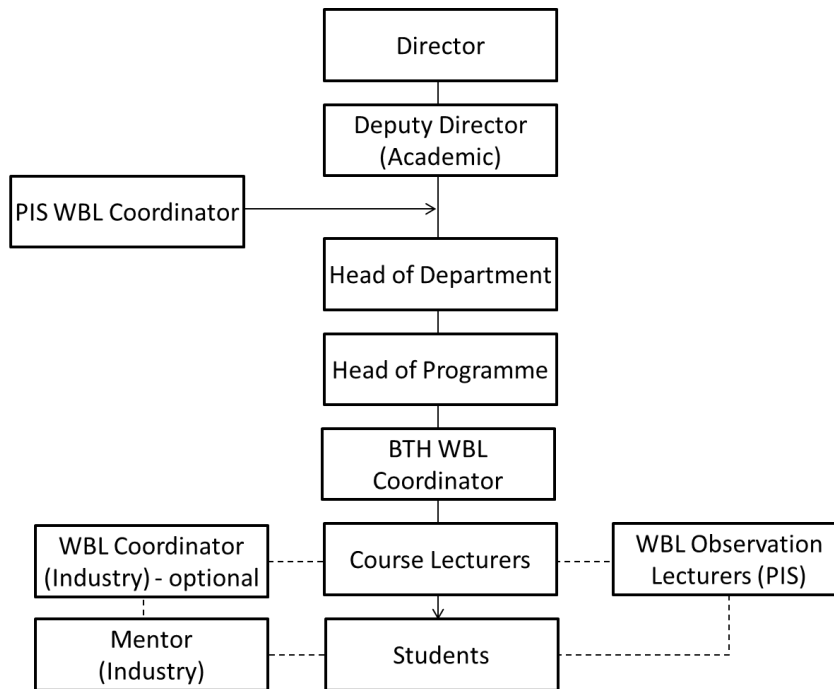


Figure 5: Structure of WBL committee in PIS

4.4.3 WBL student support framework

WBL approach used by PM requires students to work full-time at a company and at the same time register three courses, whereby each course comes with a few assessments. This can be a tricky scenario to address but justifiable as a systematic mechanism to emphasis on ‘learning’ and ‘evaluating’ how much learning has taken place at workplace. Figure 6 shows three courses that they students are taking whilst at WBL workplace accompanied by a few assessments.

SEMESTER	COURSES	ASSESSMENT METHOD	PERSON-IN-CHARGE
SEMESTER 7 Duration (minimum 20 weeks)	BTT 7016: Managing Operation in Tourism & Hospitality	<ul style="list-style-type: none"> ▪ Case based-study (20%) ▪ Reflective Journal (30%) ▪ Presentation (20%) 	• Institution
		<ul style="list-style-type: none"> ▪ Performance Appraisal (30%) 	• Employer
	BTT 7026: Managing Customer Relation in Tourism & Hospitality	<ul style="list-style-type: none"> ▪ Case based-study (20%) ▪ Reflective Journal (30%) ▪ Presentation (20%) 	• Institution

		<ul style="list-style-type: none"> ▪ Performance Appraisal (30%) 	•Employer
	BTT 7035: Innovation & Entrepreneurial Project 1	<ul style="list-style-type: none"> ▪ Consultation (20%) ▪ Project Proposal (20%) ▪ Portfolio (10%) ▪ Presentation (20%) 	•Institution
		<ul style="list-style-type: none"> ▪ Performance Appraisal (30%) 	•Employer
SEMESTER 8 Duration (minimum 20 weeks)	BTT 8016: Managing Human Resource in Tourism & Hospitality	<ul style="list-style-type: none"> ▪ Case based-study (20%) ▪ Reflective Journal (30%) ▪ Presentation (20%) 	•Institution
		<ul style="list-style-type: none"> ▪ Performance Appraisal (30%) 	•Employer
	BTT 8026: Managing Marketing & Sales in Tourism & Hospitality	<ul style="list-style-type: none"> ▪ Case based-study (20%) ▪ Reflective Journal (30%) ▪ Presentation (20%) 	•Institution
		<ul style="list-style-type: none"> ▪ Performance Appraisal (30%) 	•Employer
	BTT 8035: Innovation & Entrepreneurial Project 2	<ul style="list-style-type: none"> ▪ Consultation (20%) ▪ Project Report (20%) ▪ Portfolio (10%) ▪ Viva (20%) 	•Institution
		<ul style="list-style-type: none"> ▪ Performance Appraisal (30%) 	•Employer

Figure 6: Courses and assessments during WBL stint

Acknowledging that the combination of minimum 800 working hours each semester and the number of assessments to attend to, it is appropriate that WBL students receive full support from the institution and the employer. The support that PIS and employer provide to the students is shown in Figure 7.

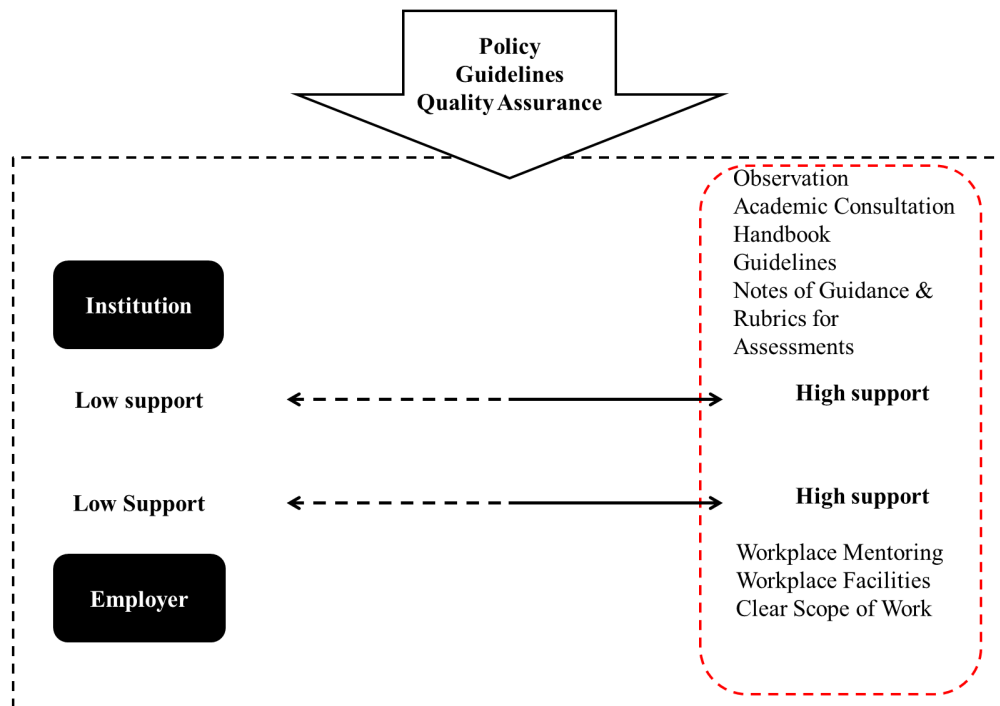


Figure 7: Student support provided by PIS and employer

5. Conclusion

This paper shares some information on the definitions of WBL; the source of directives for WBL implementation in PM system; DPE's definition of WBL; WBL structure for a homegrown degree programme in PM. It can be safely surmised that there are various definitions of WBL that focus on different aspects. Nonetheless, this provides a better understanding of what WBL encompasses. In PM context, the implementation of WBL has become a national higher education agenda as specified in MEB 2015-2025 (HE). DPE has provided a WBL definition for PM which is in line with previous literature. The WBL session in home-grown degree programmes in PM is pushed to the last two semester of programme.

The authors would like to maintain a few stands pertaining to WBL. Firstly, DPE's policy to infuse WBL approach in its TVET programme is a dynamic step. Secondly, WBL is a process which is still in its infancy. Each programme must address the constraints they face which may be a world apart from each other. Thirdly, these programmes must be run meticulously, through continuous quality improvement process, which focuses on the course learning outcomes, the assessment methods and assessment rubrics. Lackadaisical attitude in managing these fundamental components may jeopardize the programme's full accreditation application at a later stage. Fourthly, it must be acknowledged that understanding of WBL at institutional level is still limited due to reasons such as lack of prioritization from departments and programmes, inadequate communication to promote the WBL approach, lack of presence from the institution's 'bigger picture'; and lack

of force and endorsement for a hierarchical collaboration to conduct training. Fifth, WBL approach demands organizational policy and framework, whereby relevant policies and guidelines should be put in place to precede implementation.

This paper is written based in the experience of BTH but there are many common place issues that can be learnt by other programmes. WBL has many benefits when the enablers are put in place. Meaningful collaboration among PM institutions offering WBL, led by DPE, will expedite the learning cycle and avoid 'reinvention of the wheel'.

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