

Teaching and Learning on Work-Based Learning (WBL) Program in Malaysia: Issues and Challenges in Industries

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Abstract

Work-Based Learning (WBL) is defined as a learning method that provides students with both theoretical knowledge in college and practical skills in the industrial work field. Capable employees are chosen by employers in the industry as instructors to guide WBL students. However, these instructors lack knowledge of pedagogical level to teach and guide the students because they are not trained formally as educators. This study aims to explore the teaching and learning style of industry instructors in handling WBL students. This study employed the interview technique, a qualitative approach, to conduct surveys at four industrial work fields participating in WBL. A total of nine participants were involved in this study, and they were chosen based on the snowball method. The findings show that the teaching and learning style of the industry instructors are not effective in dealing with the students of the WBL programs.

Key Words: Education style, teaching and learning, Work-Based Learning (WBL).

1. Introduction

Teaching refers to the process of guiding students to learn through acquisition of information, ideas, skills and values with creative and innovative thinking.¹ Meanwhile, learning refers to the process of behavioral change as a result of exposure to environment, going through experiences, and interactions and reactions.² Teachers are required to identify students’ learning style, whereas the students need to recognize the teachers’ teaching style as an effective education method.² It is important for teachers to master ideas and philosophy of teaching and learning so that they can evaluate every reaction that occurred during this process.³ Besides that, the effective teaching and learning is able to achieve the desired goals to fulfill an instructional learning objective, creating critical evaluation, and generating brainstorming by both teachers and students. Work-Based Learning (WBL) is one example of teaching and learning program that is widely adopted in most developed countries decades ago, for example, the United States, the United Kingdom and Canada.⁴ However, in Malaysia, the WBL program is considered new.

2. Teaching and Learning

One important example of teaching and learning model is the Kolb model⁶ as shown in Fig. 1.

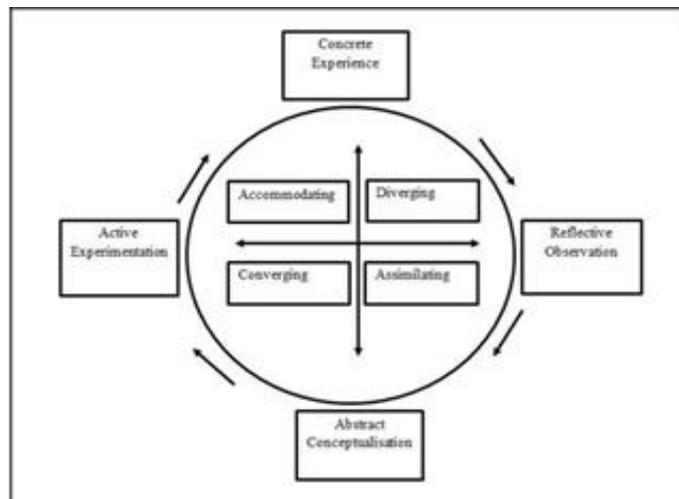


Fig. 1: The Kolb Model (Jullien& Kolb, 1984)

This model is derived from the students’ experience comprised of four elements namely concrete experience, reflective observation, abstract conceptual and active experimentation as shown in Table 1.

Table 1: Elements of Kolb Model

Element	Description	Involvement
Concrete Experience	Getting involved with new experience	Accommodating
Reflective Observation	Creating experience on observation in all angles	Diverging
Abstract Conceptual	Creating concept based on experience and perception	Converging
Active Experimental	Using experience and theory to solve problems	Assimilating

Work-Based Learning (WBL)

WBL is a learning method that is clear and gives rich experience to provide students with a wide opportunity to place themselves in the industrial field.⁵ On the other hand, WBL can be loosely described as an effective learning method that connects the lecture room with actual work field. The effective learning is through experience, and students are capable of solving problems when facing current issues in the work field, through the communication process from people of various age levels, standards and posts.⁸

Benefits of Work-Based Learning (WBL)

Several benefits are clearly derived from the WBL programs in the developed countries. Firstly, students' employability increases as they possess both academic knowledge and technical skills.⁹ Secondly, WBL provides competency-based learning through the integration of classroom learning and work experience.⁹ Thirdly, WBL provides students an exposure to work field environment, experience and career training, specifically based on a student's interest.^{9; 12}

Issues and Challenges of Work-Based Learning (WBL)

TPC Interest behavior is a major obstacle to the successful implementation of the WBL program.¹⁰ The WBL program could not be carried out effectively due to the several issues arising from the industrial instructors' lack of interest. The normal issues of the WBL implementation are referred to as bilateral relations between the educational institutions and the industries, whose instructors are not cooperative.¹¹⁻¹² For example, many employers are not aware of the advantages and benefit that can be derived through WBL cooperation.¹³ Hence, these employers are not keen to introduce WBL in their workplace. Some of the excuses cited by the industries are high teaching costs and little cooperation from the educational institutions.¹⁴ There are several important factors that determine the effectiveness of WBL implementation. 5 Firstly, a comprehensive strategy needs to be outlined and connected with every stage of WBL by involving educational institutions and industries as partners.

Secondly, effective WBL programs require cooperation from all parties at all levels, including the educational institutions, industries, industrial instructors, lecturers and students. Thirdly, a system, carefully planned for the WBL program should be well prepared. Fourthly, for the effective implementation of the WBL program, integration of academic and vocational learning is encouraged. Hence, the students of the educational institution and the employer

should play their respective roles during the implementation of the WBL program to ensure success.¹⁵ Fig. 2 shows the WBL implementation model by Vermont.¹⁶ A good bilateral relationship between the industries and educational institutions is important in running the WBL programs.¹⁶ This is because good cooperation between them will strengthen the WBL implementation and the clear goals of the program can be attained efficiently and effectively.

Malaysian Work-Based Learning (WBL) in Malaysia

In Malaysia, WBL started in the year 2007 after the Community College entered into collaboration with industrial companies; the two parties signed a memorandum to cooperate with each other in running this program in 2007.¹⁷ Community College was the first education institution to be given the responsibility to implement the WBL program; this was followed by Polytechnic in July 2010.¹⁸ The introduction and running of WBL is under the purview of the Malaysian Ministry of Education (MOE). The term WBL has been applied to situations where students' learning is associated with the requirements of the job sector; students learn to do their tasks and carry out responsibilities through the work in their industrial work fields.¹⁹

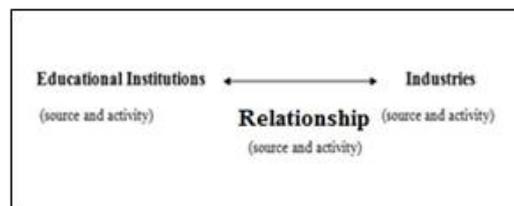


Fig. 2: WBL Model (Adapted from Oregon WBL model in Vermont, 1998).

Moreover, good bilateral relationships between the educational institutions and the industries are critical, especially in evaluating students undergoing the WBL program²⁰. The lack of cooperation and communication between both parties are the main factors causing the unsuccessful implementation of the WBL programs in Malaysia.²⁰

3. Method

A qualitative approach was employed in this study by using the interview technique, which is the most important data collection technique in qualitative study.²³ A case study method was employed in this study. Case study refers to a study that analyzes a concrete and contextual phenomenon to retain the complete and meaningful characteristics in real-life events.²⁴ Therefore, it was conducted at two higher educational institutions and two industrial companies. Based on the purposive sampling, nine participants were chosen, which included

industrial instructors, lecturers of educational institution and WBL students.

A snowball technique was utilized to identify the next participant based on previous participants' suggestion. This technique is described in three stages of interviews as shown in Table 2.

Table 2: The Interview Stages

Element	Description
First Stage	Interview begins with director of education institution, director of industrial company.
Second Stage	The next participants identified based on the director of education institution or director of industrial company.
Third Stage	The next participants identified based on previous participants (the WBL students).

A tape recorder was used to record the interviews. Thereafter, the data were transcribed verbatim. A computer software package, namely NVivo was utilized to code the verbatim data by using the content analysis method. In this study, the data analysis comprised three elements as follows: 1) Data Reduction; 2) Data Display; and 3) Conclusion Drawing and Verification.²⁵

4. Results and Discussions

The findings show that the participants responded to several issues in the teaching style of industrial work field instructors as shown in Table 3. These issues include a lack of pedagogical knowledge; no standardized subjects or modules in teaching style; and negative interest behavior among the industrial work field instructors. According to Fig. 3, the most critical issue of the WBL program is the lack of pedagogical knowledge with 88.9% score, followed by no standardized in teaching style by different industrial work fields with 66.7% score and the negative interest behavior of the industrial work field instructors with 55.6% score.

Table 3: The Responded Participants

Issues of Industrial Work Field Instructors	PPPPPPPPPP								
	1	2	3	4	5	6	7	8	9
Lack of pedagogical Knowledge	√	√	√	√	√	√	√	√	√
No Standards Subjects or Modules in Teaching Style	√	√	√		√	√	√		
Negative Interest Behavior	√	√	√					√	√

Lack of Pedagogical Knowledge

According to the findings, 88.9% of the participants agreed there was a lack of pedagogical knowledge in the teaching style of the industrial work field instructors, which is the most critical issue revealed in this study. This is because the instructors have limited knowledge and experience in teaching.

No Standardize Subjects or Modules in Teaching Style

The findings show that 66.7% of the participants opined there was no standardized teaching style adopted by the different industrial work field instructors. This study discovered that different industrial instructors have different teaching styles. In addition, no proper subject schedule was prepared by the higher education institutions or MOE in teaching the WBL students in industrial work fields. As a result, different industrial instructors taught different things, and hence the WBL students obtained different outcomes.

Negative Interest Behavior

There are 55.6% of the participants who responded that the industrial work field instructors had a negative interest behavior. This study shows that the WBL program was a burden to the industrial work field instructors. This is because the instructors were obligated to spend extra time in teaching WBL students in the industry. Their workload increased as they were responsible for teaching; providing assignments and tests; and assigning evaluation to the WBL students. Furthermore, there was no compensation given to the instructors as a token of appreciation. This issue has a negative impact on the industrial work field instructors, and it could adversely affect the quality of teaching in the WBL program.

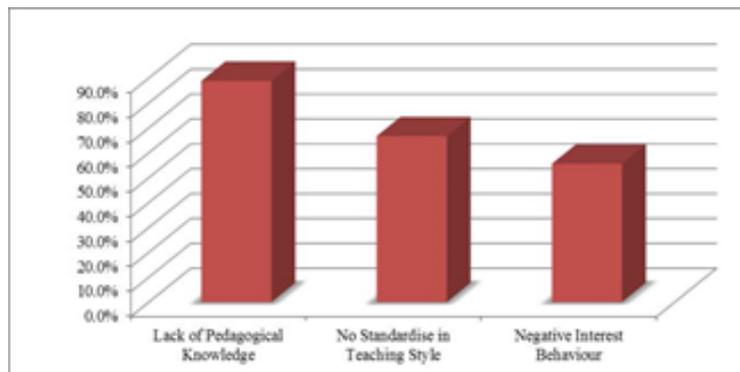


Fig. 3: Issues in Teaching Style in Industries

The WBL program in Malaysia has not been implemented successfully. This is because the industrial work field instructors face several issues in teaching the WBL students. The findings show the most critical issue is the lack of pedagogical knowledge among the industrial work field instructors. In addition, proper trainings of teaching the WBL students in the industries are not provided. This situation is exacerbated when WBL students fail to understand what the industrial instructors teach. Teaching and learning can produce good results when the teachers or instructors recognize the best concept in teaching so that the students can understand the content. This is agreed by several researchers.²⁰⁻²²

5. Conclusion

In conclusion, teaching and learning are two processes that cannot be separated; teachers are there to help students to learn. Teachers or instructors should play the role of training students to acquire information, ideas, skills, values and good attitudes.

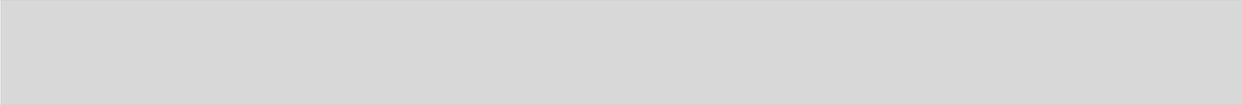
Theoretically, WBL is an excellent learning method that can produce quality students with good subject knowledge, technical skills and work ethics. However, the implementation requires commitment and cooperation between the educational institutions and industries to improve the quality of teaching and learning process. A good teaching and learning style could be achieved by using the Kolb model⁶ as a guide. All the parties will benefit from the WBL program as suggested by Jackson and Wirt.³⁰ Observation and data analysis of the different industrial work fields involved with the WBL program and the different participating educational institutions are required in the future.

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