

## Conceptualizing Learning Experience of Students in Indonesian Vocational Education and Training (VET)

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### ABSTRAK

The notion of learning experience can be attributed to the founder of Experience-Based Learning Systems (EBLS), David Kolb. The main elements of learning experience covered concrete experience; observation and reflection of the experience; developing abstract concepts based upon reflection; and testing the new concepts. This paper was aimed to examine and elaborate how the learning experience of students in Vocational Education and Training (VET) was conceptualized. In particular, two main issues were elaborated: the learning experience of students in the workplace and the role of instructors in helping and support students learn in the workplace. This paper was fully based on the library research. The data and information were derived from different resources such as books, journal articles, proceedings, chapter books, handbooks that were relevant to the issues being discussed. The data collection was carried out through observations and conceptualizations of learning experiences of students in two different settings (school and workplace). The implication of this paper is to inform educational stakeholders especially those who are in the field of VET to provide a well-developed and integrated curriculum from which a good and effective learning experience of students in workplace can be achieved. Hence, it is suggested to have a case study for better portraying the needs for effective learning in the workplace.

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### 1. Introduction

The notion of learning experience is based on the theory of Experiential Learning Model (ELM) of Kolb (1984). Kolb (1984) viewed that experience of individual as a transactional relationship between a person and his or her environment. Marsick and Watkins (1990) perceived that experience is the way people make sense of situations they encounter in their daily lives. These viewpoints highlight the importance of interaction as social practices that individuals undertake with situations and environments. Kolb et al (2014) and Marsick and Watkins (1990) viewed that the interaction that individuals take is interdependent on what and how individuals deal with the same or similar situation beforehand. Kolb (1984), however, viewed experience as a continuous process especially when it is related to learning as an activity.

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Dewey (1938: 35, 44) provided a comprehensive conceptualization experience regarding its process. He noted that: "The principle of continuity of experience means that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after..... as an individual passes from one situation to another, his world, his environment, expands and contracts. He does not find himself living in another world but in a different part or aspect of one and the same world. What he has learned in the way of knowledge and skill in one situation becomes an instrument of understanding and dealings effectively with the situation which follow. The process goes on as long as life and learning continue (Kolb, 1984: 27)

The viewpoint of Dewey illustrates that experience of individuals is something that is dynamic in the lives of people and the quality of their engagements in learning has a strong interconnection with their previous experiences. In the context of the present paper, the understanding of the learning experience of students cannot be detached from the insight of what and how the students learn their lesson at school including outside school prior to the apprenticeship program. It is understood that situations and environments (e.g. school, home, and workplace) individuals engage in determine the quality of learning they might achieve. These two aspects together influence the way individuals deal with and approach new situations that follow. Kolb (1984) describe this interaction as transactional relationship between person (personal and subjective) and environment (objective) and the relationship of the two sets of transaction is very complex (p.27) because many factors may have influenced the relationship (e.g. institutional policy, prerequisite knowledge and skill of students, workplace environment, and instructors' role). Based on the argument of Dewey (1938), this library-based research was focused on two issues regarding the learning experiences of VET students in the workplaces. First issue dealt with the conceptualization of the learning experience of students in the workplace. Second issue was particularly aimed at elaborating how the role of instructors affected the ways VET students learn knowledge and develop skills in the workplace.

## **2. Methodology**

This paper employed a library-based research design. This design reflects priority made for a research process. The framework was developed to provide a systematic direction for making priorities throughout the research process (Bryman, 2004; 2008).

This paper was aimed to examine and elaborate data descriptively and analytically by integrating and connecting concepts, thoughts and rules regarding the issues related to the issues of learning experiences of VET students in the workplace and the roles taken by instructors during the workplace learning. Zed (2004: 2-3) elaborated that the use of library resources for collecting data regarding the issues of learning experiences of VET students and the roles of instructors allowed rich data and information. This was true as the data and information were derived from different resources such as books, journal articles, proceedings, chapter books and handbooks that were relevant to the issues being examined and elaborated. Data collection was carried out through a process of observing and conceptualizing various issues related to the learning experiences of VET students. The data collected was then mapped out, analyzed and interactively triangulated. This ways of analysis were used to ensure relevance, consistency, and rigorousness of the data. In addition, the questions raised up for the research in the realm of learning experiences of VET students in the workplace were appropriately addressed.

## **3. Results and Discussions**

### **3.1 Conceptualizing learning experience of students in the workplace**

The study on learning in the workplace particularly in the context of apprenticeship began when Lave and Wenger (1991) introduced situated learning theory in which principal element of Community of Practice (CoP) was brought together. At the initial phase of the studies in the field of workplace learning, the focus was mainly on individual and largely in the context of formal education. Over the last two decades, however, the study of learning in the workplace has expanded and encompassed formal and informal learning, multi types of learning (Hager, 2013; Poell et al., 2006) such as organizational (e.g. Argyris and Schon, 1978; Marsick and Watkins, 1990; and Fuller and Unwin, 2013), integrated learning (e.g. Barnett,

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1999; Elstrom, 2001; Evans and Rainbird, 2004; and Zuboff, 1988). There were also a number of studies that embarked their analyses on the integration between work and learning potential of workplace (e.g. Billet, 2001, 2004; Ellstrom et al, 2008; Nieuwenhuis and van Woerkom, 2008; and Evans and Rainbird 2004) or an important learning environment (e.g. Jacobs 2002; Eraut, 2007). The emergence of social perspectives on workplace learning was triggered by a prolonged hegemony of psychological tradition of research in the field of learning as noted by Sfard (1998) that places acquisition and participation learning metaphors in competition for dominance (Engestrom, 2013). Also, the growing attention on the learning in the workplace is motivated by the views that work organisation is potential catalysts for learning, a site for learning, and governmental concern on the skills of workforces for global market competitions (Fuller and Unwin, 2013).

To date most research has focused attention on different issues of learning in the workplace. The focus of the studies cover institutional influences of VET on the workplace learning, for example, competence-based curriculum (Biemanns et al., 2004; Guile and Griffith, 2001); the implications of the context of work for skill formation of students (e.g. Eraut, 1999; Billet, 1993 and Dall'Alba and Sandberg, 1996); and students' experiences with assessment (Sandal et al., 2014). There are also studies relating to the concept of generic skills (Descy and Tessaring, 2001; Onstenk, 2003) and key skills, core skills, and transferability (Hyland, 1999; Keep, 1999) or apprenticeship as a mode of learning that integrates school-based and workplace learnings (e.g. Vickerstaff, 2007; Taylor and Freeman, 2011; Fuller and Unwin, 2011; Guile, 2011; Virolainen et al., 2011). Other studies view the ways in how students learn in the workplace (e.g. Billet, 2004; Bova and Phillips, 1984; Orvis and Leffler, 2011; Noe et al., 2013) and how the role of instructors (mainly referred to coach, mentor, counsellor, or facilitator in the human resource development – HRD) influences their learning and learning achievement (e.g. Owen, 2009; Eraut et al., 2002; Eraut, 2007; Poell et al., 2006; Ellinger and Cseh, 2007; Manathunga, 2007; and Liu et al., 2005). However, little attention is given to how in combination of the influence of institutional policies, learning experience of students, and role of instructors on the learning experiences of students in the workplace. Therefore, the study is important to provide a new insight about learning in the workplace especially in relation to the context of apprenticeship developed in the Dual System of Education (DSE) in VET system.

The study of Billet (2004) in the context of workplace learning environment suggests that construction of knowledge and skills of individuals is an interdependent process of individuals' way of electing how they want to engage and what they construct from that engagement (p. 316). Billet (2004) argued that students come to workplace are not passive individuals but they come with their previous learning experiences regardless weak or strong. Learners are principally ready to contribute to the environment but again are very much dependent on their approaches in the light of their previous learning experiences and their learning goals. Goodnow (1990) previously noted that individuals engage actively in the process of determining the worth of what they experience and how they might engage with their experience and learn from it (cited in Billet, 2004: 316).

When students interact with practical learning activities (e.g. fixing car electrical system) provided by teachers, they construct their previous learning experiences. This can either hinder or enhance their learning experiences as Ellstrom (2001) and Fuller and Unwin (2004) noted. These practical learning activities may, for example, hinder the students who are lacking risk-taking skills. Students with risk-taking skills, on the other hand, are likely prepared and this helps them flourish their knowledge and skills development swiftly. In the context of mentoring, Bova and Phillips (1984) noted the importance of mentor's encouragement to protégé to take risk which is also similar to apprentice in the context of apprenticeship. They believed that preparing students with awareness about the worst case to happen if unfamiliar task is offered and the strategy about to be used flopped is very important to develop students' confidence. However, Bova and Phillips (1984) argued that risk-taking attitudes of students cannot be learned overnight (p.18).

Drawing on the study of 180 restaurant managers, Noe et al. (2013) examined the influence of individual differences (e.g. openness to experience) and zest on the informal learning. They found out that each of the individual differences has a significant relationship with informal learning. For example, an employee who has an intellectual curiosity and preference for variety of experience tend to receive new things to learn and is likely creative (Costa and McCrae, 1992; Orvis and Leffler, 2011: 173). By contrast, Orvis and Leffler (2011) noted that lack of openness to experience behavior most likely lead to resistancy to new experience. Noe et al. (2013) argued that enthusiasm of individual was the only significant predictor for the employee self-development in the workplace when all the individual differences were considered together (p. 327). There is

methodological problem of the study especially in relation to its sample that is homogeneous (restaurant managers predominantly white males and middle age) so that a picture about diversified group regarding jobs, workplaces, and demographic groups cannot be obtained. Also, the study is mainly focused on individual learning that is more behavioristic and therefore the interaction of individuals with environment and the contexts are completely ignored.

The study of Orvis and Leffler (2011) about individual (e.g. learning goal orientation) and contextual (workplace support) factors to understand self-development of employees suggest that there is a significant interaction between workplace support with learning goal orientation, openness to experience, and conscientiousness (p. 173). Orvis and Leffler (2011) argue that students with learning goal orientation more likely have a high motivation to learn and aspiration to advance in their career (see also Godshalk and Sosik, 2003) and they are eager to learn and develop skills and master new situations. Orvis and Leffler (2011) also found out that more workplace support is needed for students with lack of such individual traits (e.g. learning goal orientation, openness to experience, and conscientiousness).

### **3.2 Conceptualizing the role of instructors in learning in the workplace**

In the field of workplace learning the term 'instructor' is not widely used as mentor for mentoring, training for trainer, and coach for coaching. Rather, it is frequently related to the role of teacher in formal, non-formal, and distant or online learning. However, in the context of apprenticeship program in the Indonesian VUSS system, the term instructor is commonly used to characterize the position of a teacher as in formal classroom. An instructor is a person nominated (usually by manager or director of the company) to take responsibility for looking after student(s) during the apprenticeship program.

In the last two decades, the growth and interest in workplace learning increase remarkably. However, little attention is given to how instructors, informal trainers, supervisors, and colleagues help employees learn (Owen, 2009; Eraut et al., 2002; Eraut, 2007; Poell et al., 2006 cited in Ellinger and Cseh, 2007: 436). Therefore, more researches are needed to uncover the influence of these agents on the development of knowledge and skills of learners in the workplace.

The study of Poell et al. (2006) on the informal workplace trainers in the Australian companies revealed that there were three factors describing core role dimensions of trainers namely support, structure, and performance. Support dimension characterizes the actions undertaken by the trainer to support learners as they learn. This dimension has a close link to the workplace environment (Ellstrom, 2001, 2013; Billet, 2003; Marsick and Watkins, 2003). As learners and their development is central to this dimension, the construction of knowledge is related to the way learners approach learning activities based on their previous experience and what they can learn from that engagement (Billet, 2003). Structure dimension is aimed to structure the work of employees for learning and more to do with learning potential of workplace (Ellstrom, 2001). For example, when the trainer plan the structure of work task, employee is able to join in and work at the level that is best for him or her. Performance, on the other hand, focuses on work performance of the employees itself (Poell et al., 2006: 191).

The study also found three types of informal workplace trainers that are based on their role conceptions (e.g. passive, restricted, and active). It was revealed that the informal work trainers who have received formal training in preparing their role have a broader, multifaceted repertoire than those who have not (Poell et al., 2006: 193). However, there is methodological problem in the study especially regarding the selection of companies from which the insight of the informal trainers' roles was revealed. As the study only focused on three enterprises (e.g. building and construction, IT Company, and real estate) despite its diversities, the picture of the roles of similar trainers on other type of companies (e.g. apprenticeship, social work, and midwifery) cannot be explained.

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The study of Ellinger and Cseh (2007) focused on how employees (e.g. colleagues, supervisors, and managers) facilitate others' learning and the contextual factors. The finding of the study suggests that two aspects were revealed to have triggered employees facilitating learning, i.e., the behaviors of facilitators and the perceived of outcomes of the activity. The implication of the study is that leadership and management in the company are two main factors enabling facilitation to learning. The study, however, is bounded by the fact that it has only thirteen employees interviewed despite of representing various functional areas and therefore a comprehensive understanding about the issue is limited to their personal experiences of the participant. Moreover, the absence of observation that can provide a more contextual insight about how facilitators facilitate others' learning has further confined robustness of the argument.

Drawing on air traffic controllers in Australia, Owen (2009) found that organizational culture, values, and beliefs (e.g. belief in ability, the value of performance in demonstrating ability, the need to show confidence) mediated the approach that instructors took to help learners learn. It was revealed that three predominant strategies of engagement were identified such as acting on, working with, and working against trainee (Owen, 2009: 477). The study suggests that the role of instructors is mainly incidental and dependent on the culture embraced in the company they work for similar to that of the Kaizen philosophy of knowledge transfer, 'look and learn' (Elsey and Fujiwara, 2000: 334).

As workplace learning emphasizes collaboration (e.g. interaction and negotiation), Owen (2009) noted that there is an issue of hierarchy and power (Lave and Wenger, 1991) that may disrupt the learning relationship (Foucault, 2014). In that situation, a greater need of understanding on the part of instructors is needed to minimize the impacts of their position on students' learning activities. This issue is also addressed in the study of Manathunga (2007) and Hughes (2004). Drawing on the postgraduate supervision practices, Manathunga (2007) argued that there is a greater need for the supervisors to be conscious about power operating in the supervisory practice. Manathunga (2007) and Pearson and Brew (2002) assumed that placing supervisor as a mentor can remove hierarchical and problematic aspects traditional supervisory practice especially when modeling and emphatic dialogue are employed. In the same manner, the position of instructor can bring hierarchical impacts on the part of students that may negatively affect their learning and skills development.

Liu et al. (2005) explained that there are four types of roles use by instructors (online) to facilitate learning: pedagogical, social, managerial, and technical roles. Although these roles are mainly addressed to online learners, there is similarity with the roles instructors take to guide students learn in the apprenticeship program. For example, an instructor in the workplace is required to have the ability to encourage students' knowledge sharing, providing feedback, and assessing learning progress of students. Likewise, a good instructor should have managerial skill that enables students to learn skills gradually. Ellinger and Cseh (2007) found out that fourteen type of behaviors (e.g. providing feedback, being a role model, role playing, observing, listening, and even removing obstacles) defined as actions or sets of actions employees used to help others learn (p. 443). Orvis and Leffler (2011) also noted that the provision of workplace support (e.g. active encouragement for participation and suggestions of supervisor) help employees' self-development especially those with low motivation.

Regarding the role of informal trainers in the workplace, Poell et al. (2006) provide four statements representing the degree the trainers play their roles to help learners learn and develop their skills as follows:

1. I am required to act as a workplace trainer because it is written into my job description.
2. I am expected to train other employees, but it is not something written into my job description.
3. I train other employees because it is something that I think is a part of my job
4. I train other employees because they ask me for help (p. 183)

As there is little attention to how supervisor, mentor, coach and instructors in particular help learners learn, refine and develop skills, the study focuses one of its investigation on this issue. This section, therefore, reviews confined literature on the influences of the instructors, supervisors, mentors, and the roles they take to help students develop their knowledge and skills in the workplace, and the ways in which these areas are relevant to the current study. Drawing on the literature review and the relevant areas of the study, the current study discusses four main areas on this issue, i.e., the view of instructors about their roles, their roles in knowledge transfer, the ways they give feedback, and their roles in the assessment.

#### 4. Conclusion

In the context of the current study, learning experience of VET students is bound to a complex interrelationship between many factors. A number of factors may expand or contract the learning experiences of VET students in the workplace. This paper particularly focused on two main aspects: the learning experiences of students in the workplace and the role of instructors in helping and providing support for students to learn better experience in the workplace. If these combined issues of learning experience were fully provided and continuously developed in the workplace, knowledge and skills of VET students during their attendances in the apprenticeship programme would flourish as targeted in the curriculum. In addition, this research-based paper informed VET educational stakeholders in general and teachers in particular to provide relevant knowledge and skills needed from which fruitful and beneficial learning experiences could be achieved in the future.

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