

Cultivating Learning: A Grounded Theory of Modern Apprenticeship in Malaysia

Ridzwan Che Rus*

Faculty of Technical and Vocational Education
Sultan Idris Education University, Tanjong Malim, Perak, Malaysia

Ruhizan Mohammad Yasin

Faculty of Education
The National University of Malaysia, Bangi, Selangor, Malaysia

**Corresponding author: ridzwan@fptv.upsi.edu.my*

ABSTRACT

The Malaysian government has emphasized in the 10th Malaysian Plan 2010-2015 on mainstreaming of vocational education in its pursuit to transform Malaysia into a high-income nation by 2020. In order to achieve this vision, Malaysia requires more skilled and semi-skilled workers. Transformation of vocational education needs more trainees to be trained to improve their skills through various training institutions. Previous studies in Malaysia showed that there was gap between the skills learned in training institutions and skills that were required by employers. However, studies and models that look at the basic social process that supports the development of skills occurred in training institutions and industries were scarcely found. The question was how basic social process that supported the creation of highly skilled trainers took place? Grounded theory that explores the basic social process was utilized to understand this process. The major issues occurred among respondents and how they resolved their main concern were determined using grounded theory approach. Data were presented using emerging themes from the interviews. The results showed that the cultivating of basic social process in industrial training is crucial.

Keywords: Modern apprenticeship, vocational education, grounded theory, skills acquisition, Malaysia

INTRODUCTION

Apprenticeship can accommodate a wide range of abilities and aptitudes due to its accuracy in reflecting the equally wide range of skills required in a modern economy. However, apprenticeship was not an adequate solution to improve the labor market transition of young people with poor school achievements or other disadvantages (ILO, 2012). Economic factors often have great influence on the apprentice system in any country or sector (Behrens, Pilz & Greuling, 2008).

Research has shown that in times of recession, people feel more pressure to acquire relevant training and attempt to obtain job at an optimal salary based on their existing qualifications (Abdel-Wahab, 2012; Hawkins, 2008). In times of economic security, people are more likely to choose to re-train and take part in an apprenticeship scheme (Christman, 2012; City & Guild, 2009; Dieckoff, 2008; Kammermann, Stalder & Hattich, 2011; Nyhan, 2009). There is a general belief that the job skills can be taught effectively by apprenticeship.

Apprenticeship as a Model of Learning Acquisition

A classic definition of apprenticeship is a mode of training where trainees learn their chosen job skills by working together with master craftsman's in the industry (Abdel-Wahab, 2012; Barab & Hay, 2001; Berik, Bilginsoy & Williams, 2011; Collins, Brown, & Holum, 1991; Christman, 2012; Fuller & Unwin, 2003; Hawkins, 2008; Smith & Hemmis, 2013). In apprenticeship, trainees observed and practiced a skill, and then followed the process step-by-step until gaining the expected results. The skill was practise over and over again until it became habitual rooted for trainees (Barab & Hay, 2001; Collins, Brown, & Holum, 1991).

Industrial learning is at the core of apprenticeship in building the capacity of talent and it strives to produce skilled workers in the related industries (Hawkins, 2008; Nyhan, 2009). Pedagogical theory assumed that students would only learn what was available during learning experience. Although in the case of adult learner who had been exposed to industrial practices in early learning experience, he may be willing to participate in this type of industrial experience in the future. In certain circumstances, students may attend an educational experience with little background knowledge (Collins, Brown, & Holum, 1991). In this case, remedial may be necessary (Brandt, Farmer & Buckmaster, 1993; Collins, Brown, & Newman, 1989).

According to Pratt (1998), the concept of apprenticeship consisted of four elements: master craftsman, student apprentice, knowledge of specific, and on the job training. Guile and Young (1998) stated there were three main features of the apprenticeship training system: individual concept of the learning process, transmission model of teaching methods and expertise of the instructor. To ensure the success of the apprenticeship training system; it requires mental and physical readiness, the process of socialization and also the validity of the training system (Pratt, 1998).

The field of vocational training emphasized individual skills through experiential learning. The cognitive-functionalistic perspective focused on the individual. Learning is a result of both in and from the processing of information in an individual brain (Tanggaard, 2007). Learn to do something to obtain experience was based on the notion that individual's understanding was formed and re-formed through experience. Although workers learned through participation at work, learning through everyday practice alone may be insufficient to maintain currency of knowledge and to sustain employability (Billet & Choy, 2013). It was then argued that learning did not primarily involved the transfer of knowledge from trade vocational schools to practical contexts of application, but rather the process of gaining increasing familiarity with the objects and persons in and across different communities of practice (Tanggaard, 2007).

PROBLEM STATEMENT

Previous studies showed that trainees learned through several phases during the process of learning (Dreyfus & Dreyfus 1986; Lave, 1991; Ryberg & Christiansen, 2008). However, few studies were examining social factor in cultivating industrial learning. Thus, this study filled the gap and explored the basic social process that occurred through the exploration of the main concern of trainees in industrial training.

METHODOLOGY

Participants

Respondents were selected based on the theoretical sampling in which we believe that those selected could contribute to the substantive area of the study. The snowball sampling method was employed for this study. Respondents were selected among the several groups of people in which they were able to provide information on the research areas. The study was conducted until theoretical saturation achieved, when the number of respondents among administrators, teachers, employers and industrial supervisors and the students themselves reached 32. Specifically, there were 15 students, two administrators, 10 instructors, five industrial employers and supervisors were interviewed. Respondents were selected from various sectors offered at selected locations to enable a variety of perspectives obtained. As such, the diversity that existed can be observed. Different in-depth

explorations were carried out to obtain better understanding on the main issue and to know how they resolved the issue in different contexts.

Data collection

In order to answer the research questions, three main instruments of data collection were employed: interviews, observation and document analysis. Interview sessions were conducted using a set of open interview protocols developed by the researchers. The interview data were collected based on the responses given by the respondents. Interview sessions were conducted at various locations based on the request of the respondents and took about 60 to 90 minutes. A letter of consent was signed by each interviewee stated his or her willingness to be interviewed. The ethics and respondents' rights during the interviews were stated in the consent letter. In addition to the interviews field notes of observations, the interview sessions were also recorded for the researchers to write a reflection of the perceived situation and the concepts developed during the observation. Document analysis was also conducted to enable the researchers to examine the appropriate documents as well as to help the researchers to gain more in-depth information about basic social processes stated in the said documents.

Data analysis

Grounded theory methods were utilized during the process of data analysis. We started with writing memos after each interview conducted. The memos were formed differently from one another based on the emerging indicators, incidents, concepts, and categories. According to Glaser (1998; 2002), memoing is a core process in grounded theory study. It is the writing about the ideas that emerged during the coding process and analysis. Codes and categories that emerged were formed by critical synthesis based on the emerging categories. It was different from the common qualitative method where the analysis was based on the themes that have been formed earlier. The data were analyzed using the substantive coding involving open coding and selective coding (Glaser, 2004). The researchers also used the constant comparative method where it compared the incident to another incident, incident and concept, and concept to concept (Glaser & Strauss, 1967). Every concept that emerged was compared with other concepts until eventually the core categories were identified.

FINDINGS

Grounded theory in the data emerged when the concepts that appeared were analyzed using constant comparative method to see whether there were differences in the characteristics of each of the concept by different respondents. This comparison was recorded to facilitate the compilation of memos and coding. Memoing started from first interview until theoretical saturation was achieved. Figure 1 outlined the process where writing memo formed concepts.

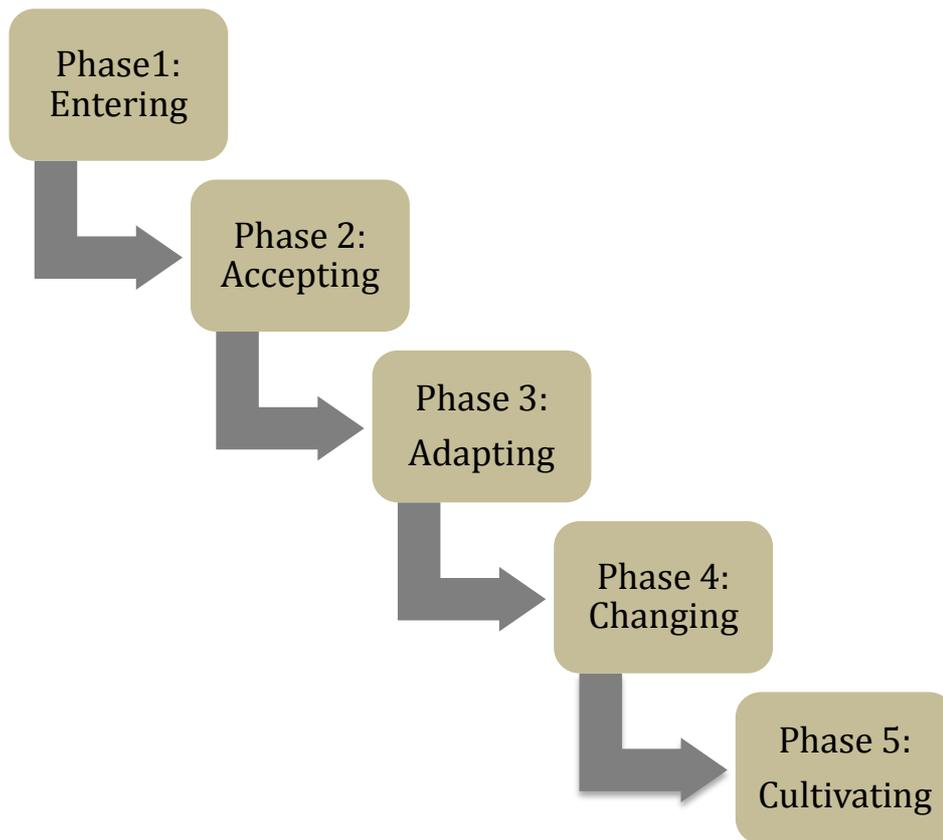


Figure 1: Basic social process of cultivating learning

Entering

There were several categories of students who chose to enter the Industrial Training Institutes ITI : (1) they were interested, (2) influence from friends, (3) coercive from family. Category 1 trainees had interest in the field. Many factors supported this situation. They were among the vocational trainees during their secondary schooling and were among who had previously failed academically elsewhere. They changed and determined to succeed in a new place. They were also among trainees who thought that was an opportunity for them to obtain a job. Category 2 trainees were usually had friends who were studying or had graduated the ITI where the friends had convinced them that ITI was good a learning experience. While the third category were the trainees who entered skills training due to parental pressure. This social process of the ITI trainees created a concept known as the entry phase.

Accepting

The second phase, the researchers found that the students were willing to learn and change on their own accord. Trainees accepted the fact that they had formed relationships with new friends at ITI in order to succeed in their study. At this level, trainees were also willing to accept learning sessions to increase knowledge and skills. Trainees also accepted the fact that initial perception of a different ITI existed and accepted the situation. This stage was consistent with the early stages of the apprenticeship model of participation (Brandt, Farmer & Buckmaster, 1993; Dreyfus, 1981; Dreyfus & Dreyfus, 1986; Ryberg & Christiansen, 2008).

Adapting

The teaching and learning environment was critical to the trainees. The study showed that the students managed to adapt to the new environment. Trainees had also successfully mixed with their new friends and also able to adapt themselves to the new learning environment. During the adaptation process, cooperative learning had already begun because trainees were beginning to choose their compatible friends to study with. Social interaction in the ITI happened mostly by social circle of the

trainees. Trainees had successfully adapted to this situation. This social process was also in line with the apprenticeship model of participation (Brandt, Farmer & Buckmaster, 1993; Ryberg & Christiansen, 2008).

Changing

The social process happened at this phase where the trainees managed to their change based on the environment. The trainees received learning skills as routine process in life as a trainee. The trainees may change their cognitive alignment as a result of industrial atmosphere emphasized by the instructors on real industrial situations at ITI. The trainees who successfully achieved this phase had confident with their ability to adapt to the learning environment in the industry.

Cultivating

The final phase was where the trainees accepted the fact that the skills learned were to assist them to obtain future job. Hence any input acquired, knowledge and skills, would be associated with future employment in the industry. They were aware of what employers want from them. The employers expected them to be knowledgeable and skilled workers as well as having the characteristics of highly skilled trainers in the future.

DISCUSSIONS

Based on the empirical data, the basic social process that occurred was due to the trainees behaviors. This finding was in line with the pedagogical theory that assumes that students would only learn what was available during their learning process. This is also consistent with the process proposed by Ryberg and Christiansen (2008). The process was described in the five phases.

Entering

This phase was the initial stage where the trainees put forward the reason they chose to study at ITI. At this stage, there were three categories of incoming students: (a) those with specific interest to pursue skill training, (b) those who followed their friends, and (c) those who were forced by their parents. The social process happened at this stage was a decision making phase where the trainees decided to enter ITI based on several options. The findings were also consistent with studies by University Putra Malaysia (2012), which emphasized the importance of early selection process to the public skills training institutes. It was found that the early entry process should begin with an interest in the course. However, in the stage of the apprenticeship the formation of basic skills has mainly through imitation behaviors.

Accepting

The second phase, the researchers found that students were willing to learn and change based on their own accord. Trainees accepted the fact that he had formed relationships with new friends at ITI. At this level, the trainees were also willing to accept learning sessions to increase knowledge and skills. Trainees also accepted the fact that initial perception of a different ITI existed and accepted the situation. This stage was consistent with the early stages of the apprenticeship model of participation (Dreyfus, 1981; Dreyfus & Dreyfus, 1986; Brandt, Farmer & Buckmaster, 1993; Ryberg & Christiansen, 2008).

Adapting

The teaching and learning environment was essential to the trainees. The trainees had also successfully showed that they managed to adapt to the new environment. During the adaptation process, cooperative learning had already begun because trainees were beginning to choose their compatible friends to study with. Social interaction in the ITI happened mostly by social circle of the trainees. Trainees had successfully adapted to this situation. This social process was also in line with the apprenticeship model of participation (Brandt, Farmer & Buckmaster, 1993; Ryberg & Christiansen, 2008).

Changing

The social process happened at this phase where the trainees managed to change based on the environment. The trainees could adjust their cognitive alignment as a result industrial atmosphere emphasized by the instructors on the real industrial situations at ITI. Trainees who successfully achieved this phase had confident with their ability to adapt to the learning in the industry. This stage was also supported by the apprenticeship model of participation (Brandt, Farmer & Buckmaster, 1993; Ryberg & Christiansen, 2008).

Cultivating

In the final phase, the trainees believed that thinking about their future job is critical. They accepted the fact that the skills learned were to help them to obtain job. Hence, any input acquired, knowledge and skills, would be associated with future employment in the industry. They were aware of what employers want from them. They are expected to be knowledgeable and skilled as well as having the characteristics of highly skilled trainers at their level. This finding was consistent with the self-study process outlined by Zimmerman (2002). At this stage, trainees cultivated the context of the new knowledge skills. Learning did not primarily involved the transfer of knowledge from trade vocational schools to practical contexts of industry, but rather the process of gaining increasing familiarity with the objects and persons in and across different communities of practice (Tanggaard, 2007).

The findings were also supported the culture of lifelong learning which seeks to overcome the seven main problems: (i) the absence of lifelong learning policy, (ii) the lack of monitoring of lifelong learning programs at the national level, (iii) poor awareness and participation in lifelong learning program (iv) inadequate financial support for lifelong learners, (v) inadequate mechanisms and infrastructure for implementation of lifelong learning program, (vi) the overlapping activities of lifelong learning, and (vii) lack of recognition (Kementerian Pengajian Tinggi, 2011). The results also supported the concept of lifelong learning asserted the trainees should learn in varied contexts (Hansman, 2001).

FUTURE RESEARCH

In future, further research could involve more public and private skills training institutes for broader and greater perspectives. This would provide a more in-depth input from diverse apprentices. Explorations on other variables, for example, gender, socio-economic status, and family background such as parental education should be used in order to determine parental supporting factors in choosing ITI institutes or other skills institutes.

CONCLUSION

The basic social processes occurred at ITI provided a broad view about the learning concepts that could contribute to the formation of apprenticeship model using the grounded theory method. Basic social processes occurred showed that the cultivating of learning for the job seeking skills encompassed of certain phases. The five phases showed that the initial selection of trainees to training institutions was an important process. It assisted in the determination of the success for the training provided to the trainees. If the trainees were not interested in what follows, they would affect the overall learning system.

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