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EXPLORING SELF-DIRECTED LEARNING IN PRACTICAL CLASS FOR HOSPITALITY STUDENTS

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Abstract:

The Malaysia Education Development Plan 2015-2025 (Higher Education) aims to strengthen Technical and Vocational Education and Training (TVET) to meet the demands of the industry by producing skilled workers. It is crucial for TVET students to enhance their skills through high-quality practical training. This study aims to investigate the self-directed learning as learning styles and the achievement of practical hospitality courses among hospitality students in community college in the northern part of peninsular Malaysia. This study proposes to apply the Kolb's Learning Style. This quantitative study utilizes a survey method, with preliminary study involving 30 students and the actual sample of 136 participants comprising students from semester two and semester three at the identified Community Colleges using Proportionate Stratified Random Sampling technique. The preliminary collected data were analyzed using the Statistical Package for Social Science (SPSS) version 27.0. The findings of this study are expected to provide a better understanding of learning styles and self -directed learning on academic achievement in the context of TVET among hospitality students at Community Colleges.

Keywords:

Self-Directed Learning, Learning Styles, Practical Learning

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Introduction

The transformation of Technical and Vocational Education and Training (TVET) in the Malaysian Education Development Plan 2015-2025 (Higher Education) aims to produce a skilled and semi-skilled workforce to meet industry demand (Ministry of Education Malaysia, 2015). The government has chosen TVET in line with the Malaysian Education Blueprint (MEP) 2015-2025 with the goal of enhancing the quality of TVET graduates (Yusof & Nawi, 2019). Ahmed and Islam (2021) revealed the workforce demand in the hospitality industry in Malaysia has significantly increased in recent years. Thus, to meet the workforce demand in this industry, hospitality students need to enhance their skills. Rather than acquiring skills while undergoing industrial training, hospitality students can improve the skills and the ability to perform the required tasks through self- directed learning. Accordingly, the students can acquire skills not only through internship period in the industry but during their college studies. As revealed by Savin-Baden and Major (2004), self-directed learning help to intensify the student's learning experience. The Malaysian Qualifications Framework (MQF) emphasizes the importance of a student-centered approach as one of the main criteria to improve students learning (Malaysian Qualification Agency (MQA), 2019). In connection with that, self-directed learning has become an essential element in curriculum design. This approach plays a role in helping educational institutions produce holistic and skilled graduates to face challenges in the increasingly complex and dynamic work environment. This study aims to investigate the self-directed learning as learning styles and the achievement of practical hospitality courses among hospitality students in community colleges in the northern part of peninsular Malaysia.

Literature Review

Self- Directed Learning

Self-directed learning is one of the alternatives for students to enhance their understanding of what they learn during formal learning sessions in classrooms or workshops. Self-directed learning reinforces student skills or understanding of a particular subject outside of formal learning hours. MQA sets a requirement that at least 70% of the course components based on practical or hands-on skills in specific areas must be achieved (MQA, 2013). The design and delivery of this curriculum must be adhered to for TVET training providers to obtain accreditation from MQA. Hospitality students have some elements of practical learning in the curriculum involving psychomotor skills. Practical learning helps students to better understand the psychomotor skills which translate cognitive knowledge after students have been equipped with learning theories and before engaging in the practical work (Abigail, 2016).

Self-directed learning through self-efficacy refers to the achievement of quality tasks that involve students' belief and competence in planning and executing the task (Bandura, 2010). Self-directed learning is learning carried out by the students themselves without the presence of instructors or others. It refers to the thinking, feelings, and behaviours generated by students to achieve specific goals and is a process where students can transform their mental abilities into academic skills (Zimmerman, 2002). This learning approach is one of the elements of student-centred learning, designed to meet the individual needs of students (Mat Tahir et al., 2017). Examples of student-centred teaching and learning practices include problem-based learning, case studies and hands-on training (Soubra et al., 2022). Additionally, for DeBoer et al., (2014), self-control is an essential factor in self-directed learning because students need to manage their time, location, methods, and learning resources required to meet their needs.

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Learning Styles

Learning styles play a significant role in helping students discover the best ways to learn (Carol, 2015). Learning styles are an important factor in the teaching and learning (T&L) process. Each student employs their preferred learning style to study something because they understand how to learn more effectively. According to Kolb (2014), if there is a mismatch between the learning style and the learning environment, someone is likely to reject or resist that style.

In the context of learning, each student's learning style differs. Some students learn by visual observation, while others learn through reading. Learning style is a crucial factor that can impact a student's academic achievement. If students understand their suitable learning style, they can develop their potential and enhance their talents. Many studies have been conducted on learning styles and their impact on students' academic achievement for example by Chetty et al. (2019), Hashim et al. (2014) and Mohd Salleh and Teo (2022). Hashim et al. (2014) examined learning styles, gender-based learning styles, and the relationship between learning styles and students' academic achievements using the Kolb learning style.

Kolb Learning Styles

The Kolb's 1984 Learning Style Theory consists of two parts. The first part is based on a four-stage cycle of learning. Kolb believes that ideally, learners will go through several complete cycles, and through these experiences, they will convert them into knowledge. The second part of this theory focuses on learning styles, which are the cognitive processes involved in acquiring knowledge. The first part of Kolb's Learning Style Theory comprises the four stages in Kolb's Learning Styles (1984), which includes concrete experience, reflective observation, abstract conceptualization, and active experimentation.

Concrete Experience (Intuition/Getting the Experience)

The experiences acquired by students serve as the starting point for developing competence in a formal educational setting (Sharlanova, 2004). In the context of this study, students need to be present with instructors during practical demonstrations so that they can see and practice the correct methods during assessment sessions. They can also gain experience from what they and their peers do during practical learning sessions. According to Jossberger et al. (2019), students learn a lot from direct experiences, where when students practice and perform tasks themselves, this process will help them remember.

Reflective Observation (Reviewing/Reflecting on Experience)

This learning style focuses on the act of feeling and observing to connect past experiences to a new observation. Through this approach, students see things from different perspectives (Mc Leod, 2013). They prefer to observe rather than do, tend to gather information, and use imagination to solve problems. Students with this preference like to work in groups, listen with an open mind and can accept feedback. Their approach to problem-solving is not systematic but more creative compared to other learning styles (Junaid, 2016). The purpose of this learning cycle is to enable students to ask questions and discuss their experiences with others. Communication at this stage is crucial because it allows students to identify any discrepancies between their understanding and their own experiences. In other words, students need to review or recall what they have learned during the concrete experience phase.

Abstract Conceptualization (Summarizing/Learning from Experience)

The next step in the learning cycle is for students to apply the theories or models they have learned. Generally, this stage can be challenging to achieve in short practical activities.

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Classroom discussions or peer discussions help connect learning experiences to the overall theory (Konak et al., 2014). At this stage, instructor intervention is essential. Instructors provide input and theoretical methods to students during the third phase of the learning cycle to help them understand the overall structure and patterns of the experiences they have reflected upon. In addition to using existing course materials, students should be encouraged to seek and access open content on the Internet and assess its adequacy in collective reflection. Students use these activities to develop their ideas and models that help them achieve specific learning outcomes. Instructors can use teaching aids such as video tutorials, blogs, and group messaging applications like WhatsApp, Telegram, and so on to support students' conceptual processes. Peer discussions among students help them validate the topics presented, subsequently enabling them to develop a more abstract and general understanding of the course content they have learned (Schneckenberg et al., 2011).

Active Experimentation (Planning/Trying What Has Been Learned)

At this stage, students are ready to plan and experiment with the experiences they have gained. They can also adapt new theories from their understanding to make decisions (Yusof et al., 2005). For example, instructors provide students with new assignments, even though they are similar to what was done in the concrete experience stage, but without providing step-by-step instructions. At this point, students should be able to complete these tasks without detailed guidance.

Since Kolb's Learning Style Model (1984) is cyclical, a student can enter the cycle at any time, but they must follow the stages in the sequence of the cycle, starting from Concrete Experience, Reflective Observation, Abstract Conceptualization, and finally, Active Experimentation. Additionally, the cycle must be completed to ensure effective learning. Each stage depends on the others, and all stages must be completed so that the experiences gained by the student can be transformed into knowledge (Kolb, 1984).

In addition, Kolb (1984) has also categorized individuals or students into four categories: Accommodator, Diverger, Assimilator, and Converger. Accommodators are highly active and creative learners who learn through trial and error without the help of instructors. They are individuals who follow their instincts, take risks, easily adapt to new situations, and have leadership qualities to become leaders. Accommodator-type students prefer learning from direct experiences. They enjoy acting and engaging in challenging new situations. When faced with problems, Accommodator-type students rely more on information from others than their technical analysis. They are more comfortable working with others to complete tasks, set goals, carry out fieldwork, and test various informal learning situations to solve problems (Idkhan & Idris, 2021).

Meanwhile, students in the Diverger category can generate ideas, enjoy listening and exchanging suggestions, like to combine feelings and experiences, have creativity and innovation, and can see things from different perspectives. Students with a Diverger learning style see problems from various perspectives, to take ideas and arrange them into a coherent whole. They have a sense of creativity and are known as "creators." They are imaginative and sensitive. They are usually people-oriented, and the greatest strength of a Diverger is in their imaginative abilities (Kurgun & Işıldar, 2016).

On the other hand, students characterized as Assimilators can create something based on theory and understand abstract concepts, enjoy combining knowledge and observation, and

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always seek the correct answers when problem-solving. Assimilator-type students tend to prefer reading, lectures, and taking time to analyze various aspects of the information they receive (Kolb & Kolb, 2005).

The Converger category refers to active learners who like to combine theory with practice, use abstract knowledge and logical reasoning, with the ability to use practical ideas in the learning process. Students of this type prefer to handle technical tasks and technical issues rather than social and interpersonal issues, excel in technology-related careers, and prefer to try new ideas such as laboratory assignments and practical applications (Ignacio & Reyes, 2017). Table 1 simplifies the four categories of students' characteristics in Kolb learning styles:

Table 1: Students' Characteristics in Kolb Learning

Learning Styles	Students' Characteristic
Accommodator	Follow instincts, take risks, easily adapt to new situations, leadership qualities
Diverger	See problems from various perspectives, creative, imaginative and sensitive
Assimilator	Prefer reading, lecture, take time to analyze various aspects of the information
Converger	Active learners. Prefer to handle technical tasks and technical issues, excel in technology-related careers, and prefer to try new ideas such as laboratory assignments and practical applications

Source: Literature reviews

Practical Learning for Hospitality Students

Practical learning for hospitality students is an essential method in the Community College curriculum especially learning involving psychomotor skills. This method serves as a tool to test students' understanding and knowledge, where these psychomotor skills will translate cognitive knowledge after they have been equipped with learning theories before engaging in practical work (Abigail, 2016). When facing real job situations, students need to master the correct and precise work procedures, and this can be achieved through continuous practical work (Muthusamy, 2016). Practical learning is conducted in laboratories or workshops where all teaching and learning materials are provided to facilitate students in carrying out practical work. Watai et al. (2007) argued that students can develop and demonstrate their skills through practical activities in laboratories. In a productive learning environment such as a workshop or laboratory, students can develop the skills they desire in various domains, including cognitive, psychomotor, or affective, through practical learning (Mathew & Earnest, 2004).

For hospitality programmes in the College Community, which encompasses the Hospitality Operations Certificate and the Culinary Certificate, the practical learning method consists of 80% hands-on work and 20% theory. In the process of Teaching and Learning (T&L), instructors typically begin by explaining the theory in the classroom. Then, instructors demonstrate the methods and techniques in the workshop, and students carry out practical work under the supervision of the instructor. Finally, the instructor provides feedback or suggestions based on the practical work performed, and discussion sessions are held to strengthen students' understanding.

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Methodology

Population and Study Sample

This study used quantitative methods and was conducted in the form survey using questionnaires. The preliminary study was conducted on 30 students from the third-semester Sungai Petani Community College of March 2023 intake, who had undergone industrial training in September 2023. According to Johanson and Brooks (2010), 30 were reasonable numbers of minimum recommendations for initial survey or scale development. For Ismail et al. (2017), the preliminary study sample should not involve real participants, as they cautioned against using the same sample which leads to a loss of interest in the study, a phenomenon known as "semantic satiation". For actual data collection of this study, a total of 160 second and third-semester hospitality students from the northern zone, including Nibong Tebal, Sungai Petani, and Langkawi Community Colleges, were considered, eliminating students involved in the pilot study. Based on Krejcie and Morgan's (1970) with a population of 160 students, a sample size of 113 students is sufficient to represent the entire study findings. Isaac and Michael (1995) recommended that with a population of 160 individuals, for a one percent margin of error, the sample size should be 129 individuals, followed by 110 individuals for a five percent margin of error, and lastly, 101 individuals for a ten percent margin of error. Nevertheless, Hair et al. (2019) stated that the minimum sample size should be 20 percent more than the actual sample size so that when outliers or data cleaning is performed, the collected sample remains sufficient. Therefore, for this study, the study's sample size were 136 individuals, considering the opinions of scholars in determining an appropriate sample size. The selected students as samples consist of those in the hospitality field pursuing the Hospitality Operations Certificate and the Culinary Certificate.

Instrument Development

The questionnaire instrument has been adapted from Kolb's Learning Style Inventory (LSI) taken from Muslims (1995). LSI is derived from the theory of experience and a learning model developed by Kolb (1984) based on the seminal contributions of Dewey (1938), Lewin (1951), and Piaget (1962). LSI can inform respondents about their preferred approach to learning in daily life (Kolb, 1984). Additionally, Kolb developed the Learning Style Inventory (LSI) to validate the Experiential Learning Theory (ELT), further research in the field of learning styles, and help individuals assess their learning style preferences. LSI is a self-scoring instrument designed to assess individual preferences for learning across four dimensions of ELT. This instrument measures learning styles by assessing relative preferences for the use of four learning modes in Kolb's Learning Style Cycle.

The LSI used in this study is in the form of a rank-order questionnaire. Respondents are asked to rank four statements based on their preferences for using the four learning modes starting from the highest ranking (4) to their top preference for learning, the second-highest ranking (3) to the next preference, and so on, until they reach the lowest ranking (1) for the least preferred preference.

The rating process will be conducted a total of 10 times. The result is a survey of 40 items. The total score scales are provided at the bottom of each of the four modes. The scores obtained from the students' rankings will be used to classify each student into one of the four learning modes. Higher scores for a specific learning mode indicate a greater emphasis on that learning mode. Furthermore, composite scores for each of the two bipolar dimensions will be calculated, resulting in two-dimensional scores that measure relative preferences for modes (Concrete

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Experience-Active Experimentation (CE-AE) and dimensions (Active Experimentation-Reflective Observation (AE-RO). In addition, this study will also use a questionnaire based on a 4-point Likert scale to gather information about individual practical learning styles and their influence on students' academic mastery where it will assess students' beliefs, following the recommendations of previous scholars (Ibrahim, 2014).

Data Analysis

This study used quantitative data analysis methods to analyze the collected data. The preliminary data collected were assessed for reliability using Statistical Packages for Social Science (SPSS) version 27.0. The Cronbach Alpha values were used to generate reliability for each construct in the questionnaire. The results of the analysis were conducted to determine the validity and reliability of the items. The study findings revealed that each construct item achieved good and acceptable Cronbach Alpha values, namely Diverging Learning Style α=.890, Assimilating Learning Style α=.657, Converging Learning Style, α=.629, Accommodating Learning Style α=.605, Self-Directed Practical Learning Style, α=.742, and Students' Academic Mastery, α=.694. Therefore, all the construct items were retained for the actual data collection stage.

Discussion

Learning style plays a crucial role in ensuring the achievement of learning objectives, and the teaching and learning process runs smoothly. The government's aspiration to enhance education in the field of Technical and Vocational Education and Training (TVET) helps to shape highly performing, competitive, and competent future TVET graduates. Learning styles are important in influencing the academic mastery levels of students. The formal authority teaching style includes providing positive and negative feedback, setting learning goals, and enforcing rules to monitor students learning. Simultaneously, the personal model teaching style refers to teachers who teach based on their example. This type of teaching provides direct guidance and encourages students to emulate them. Learning styles are ways in which students absorb and organize received information and are generally divided into three aspects: visual, auditory, and kinesthetic (Mahadi, 2022).

Learning styles explain how an individual directs their attention to understand and remember new information or skills. Additionally, learning styles represent how an individual reacts to the surrounding world and adapts their learning style by interacting with their environment. Moreover, learning can present something new, whether in the form of understanding, awareness, or skills (Hernandez, 2021). Through learning styles, students can receive input and process information in various ways. Accordingly, the learning styles of students in Higher Education Institutions (HEI) significantly influence students' self-maturity, as well as improve interactions amongst peers which aids in peer learning (Aminuddin et al., 2020).

Conclusion

This study provides insights into self-directed learning and learning styles for practical learning among hospitality students by applying Kolb's 1984 Learning Style Theory as the basis of the study. It consists of two main parts involving a four-stage cycle of learning the first part includes concrete experience, reflective observation, abstract conceptualization, and active experimentation. The second part categorized individuals or students into four categories: Accommodator, Diverger, Assimilator, and Converger. This study used quantitative methods, using questionnaires which were distributed to 30 students from the third-semester Sungai Petani Community College of March 2023 intake. Apart from demographic questions in Part

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A, this study assesses students' learning styles using an instrument adapted from Kolb's LSI (Muslim, 1995) in Part B where a total of 40 questions represent different self-perceptions of learning styles. The study also identifies the learning styles using scores obtained from the data through the first column totals the score for Concrete Experience (CE), the second column provides the score for Reflective Observation (RO), the third column totals the score for Abstract Conceptualization (AC), and the fourth column provides the score for Active Experimentation (AE). These scores are then transferred to the learning style profile by placing a mark according to the number indicated in each of the four dimensions. Individual scores indicate the relative importance assigned to each of the four different learning styles. The study also identifies whether individual practical learning styles influence students' academic mastery using ten questions adapted from Ibrahim (2014). The study findings can benefit the educational institution that embeds TVET as part of the curriculum to better understand the learning styles for practical learning of TVET students.

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