

The Learning Style among Technical and Vocational Education and Training Student

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Abstract. Every student has their style in their learning process such as using a picture, reading, group discussion, observing and more. This learning style detected from the physical, mental, emotions and social of the students. This identification will help a lecturer to prepare and design their learning material. Therefore, this study conducted to determine the dominant learning style among TVET students based on VARK Model consist of Visual, Aural, Reading/Writing and Kinaesthetic learning style. A questionnaire used as a tool to collect the data among second-year degree and master degree students at the Faculty of Technical and Vocational Education, Universiti Tun Hussein Onn Malaysia. The data was collected by approaching target respondents during a classroom after get an approval from their subject lecturer. After data collection completed, all the data has been analysing using Statistical Package for Social Science (SPSS) to gain descriptive result based on existing paper score. Based on the result obtained, postgraduate and undergraduate students tend to apply kinaesthetic as their learning style. For further study, this study will conduct a study to identify the differences learning style between postgraduate and undergraduate TVET students.

Keywords: Learning Style, VARK Model, TVET students, bachelor degree, master degree

1. Introduction

The learning style of each individual is different, where inequalities influence these differences in terms of physical, mental, emotional and social development among individuals. Learning style is seen as necessary in the teaching and learning process and the academic world (Gündüz & Özcan, 2010). Each student has their way of learning, and some are fond of learning styles that use pictures, listening to music as well as in schools such as reading, observing, group learning discussions and more (Azizi et al., 2002). The differences in the students can be detected from the physical, mental, emotions, and social aspects of each student, causing a variety and inclination to learn, and different learning skills. When this learning style is identifying, then it will facilitate the teaching and learning process performed by educators. Abdul Latif et al., (2010), stated that learning style of students that have been identified would help lecturers and instructors in finding and design suitable learning materials for students based on their dominant learning style. Therefore, this study conducted to determine the learning style among TVET students based VARK Model.

2. VARK Model

This study will determine the dominant learning style among TVET students based on the VARK model. Fleming (2001) proposed the VARK Model, which offers users a learning preferences profile. The three main learning style model methods defined as visually (V), aural (A), and kinesthetic (K), they are known as VAK. However, Fleming (1995) has expanded VAK to VARK to further differentiate visual

categories into two categories, where (V) represents their graphic or pictorial information and (R) describes as text such as reading/writing.

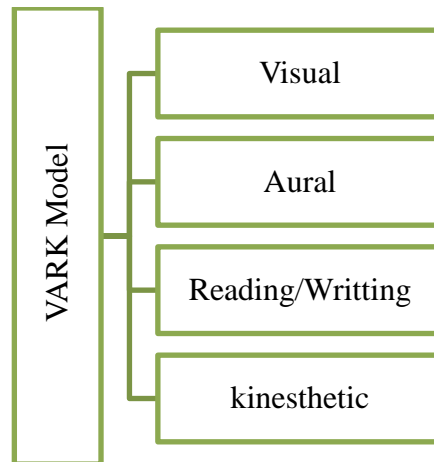


Figure 1. VARK Model

Visual

Individuals who prefer to use pictures, mind maps and graphics to learn and understand new things and acquired information.

Aural

An individual who applied this learning style is easy to understand information through listening and speaking as in group work. These aural students use repetition in learning skills, and it is the result of memorisation methods.

Reading/Writing

These individuals are usually fond of writing notes and interest in reading. Also, these students can translate the information they obtain in abstract form into a word and essay.

Kinesthetic

Kinesthetic students are Students who love to apply or practice what they learn in class, such as conducted lab science experiment. Esa (2009) stated that students in this category like activities in the laboratory because they can do the experiment and experience by themselves.

3. Methodology

A quantitative research methodology was designed to achieve an objective of the study. This study aims to examine the learning style among postgraduate and undergraduate TVET students.

3.1. Instrument

A questionnaire is one of the most tools to collect data, especially in social science research (Taherdost, 2006). Therefore, this study chooses a questionnaire as a tool to collect the data. All items in the survey form are adapted from the VARK Model developed by Neil Fleming and translated into Malay version by Ahbul Zailani Binti Mohamed Ibrahim (UiTM Melaka Lecturer). Besides, demographic respondents also were asked to the respondents such as gender, age, educational background and educational background based on GPA.

3.2. Population and Sample Size

This study was chosen education students at Faculty Technical and Vocational Education, Universiti Tun Hussein Onn Malaysia and focusing on a second-year bachelor degree and final year master degree student. Only full-time students were approached as target respondents. However, full-time students for master research mode will not be taken as a respondent and only focusing on coursework mode. Based

on population, the size sample obtained is 71 respondents for master degree and 89 students for bachelor degree.

3.3. Data Collection Procedures

In administering the questionnaire, the data collection was conducted in a phase.

First Phase: meet with the lecturer who teaches for the class selected as the respondent for the study.

Second Phase: The researcher explains the objective of the study to the students.

Third Phase: Distribution of questionnaires and give a few minutes to the students to fill-up the form.

Fourth Phase: Once the respondents answer the questionnaire entirely, the researcher will collect all the questionnaires.

Fifth Phase: the researcher thanked the respondents and the lecturers who cooperated for this study.

3.4. Data Analyses

All the data collected will analyse by the aid of the Statistical Package for Social Science (SPSS) software to gain a descriptive result. The dominant learning style was determined based on VAK Model by paper score.

4. Result and Discussion

4.1. Demographic Respondents

Questionnaires were distributed to 175 final years Master's Degree and third-year Bachelor Degree students. A total of 136 questionnaires were returned. Therefore, the response rate is 78%. Table 1 showed demographic respondents as a result of data collection that has been done. Based on the result obtained, most of the respondents are female, aged between 20 to 25 years old and master's degree students. Postgraduate and undergraduate students showed that they have an excellent GPA which majority of master's degree students have 3.99-3.70 GPA while half of bachelor degree students have 3.69-3.00 GPA. None of them have a GPA of 2.99 and below.

Table 1. Demographic Respondents (n = 136)

Demographic	Frequency	Percentage (%)
Gender		
Female	36	26.5
Male	100	73.5
Age		
20 to 25 years old		72.1
26 to 32 years old		27.9
Educational Background		
Master's Degree	71	52.2
Bachelor Degree	65	47.8
Educational background based on GPA		
<i>Master's Degree</i>		
4.0	1	1.4
3.99-3.70	35	49.3
3.69-3.30	33	46.5
3.29-3.30	2	2.8
<i>Bachelor Degree</i>		
4.00-3.70 (First Class)	31	47.7
3.69-3.00 (Upper Second Class)	34	52.3

4.2. Learning Style Analysis

The VARK model was applied to determine the dominant learning style among TVET students. Below show the result obtained from the VARK model learning style analysis by using existing score paper.

Table 2. Learning style score among Master degree student

Learning Style	Total
Visual	330
Aural	331
Read/write	313
kinesthetic	367

Table 2 showed a result obtained for learning style among master degree students. The result showed that master degree students tend to apply the kinesthetic learning style with 367 scores. Followed by Aural learning style (331 scores), Visual learning style (330 scores) and lastly is read/write learning style (313 scores).

Table 3. Learning style score among bachelor degree student

Learning Style	Total
Visual	218
Aural	224
Read/write	229
kinesthetic	268

Table 3 showed a result obtained for learning style among bachelor degree students. The result showed that bachelor degree students tend to apply a kinesthetic learning style with 268 scores. Followed by Aural learning style (224 scores), read/write learning style (229 scores), Aural learning style (224 scores) and visual learning style (218 scores).

Based on the result obtained, postgraduate and undergraduate students preferred to apply the kinesthetic learning style. Kinesthetic students are Students who love to use or practice what they learn in class. Even though they are education students, however, most of the technical and vocational course involving in a laboratory. Klement (2014) also stated that most of the students are the tendency to apply kinesthetic learning style compare than visual, aural and read/write learning style.

5. Conclusion

A questionnaires adapted from the VARK model has been distributed among respondents to examine the tendencies learning style among TVET students. The result of the study found that undergraduate and postgraduate students are dominant in kinaesthetic learning styles. Vorhous (2010) study stated that VET learners prefer to learn by doing and by practising. For further study, this study will conduct a study to identify the differences in learning style between TVET postgraduate and undergraduate students.

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