PEDAGOGICAL DECISIONS AMONG VOCATIONAL COLLEGE TEACHER IN MALAYSIA

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ABSTRACT

To achieve the objective of vocational education, teachers are required to use a variety of teaching and learning methods to improve student achievement. Cultural differences in a country can influence the pattern of thinking and attitudes in implementing an educational system. This study aims to identify pedagogical decisions based on "theory", "practical" and "technical drawing", used by Vocational College teachers in Malaysia. This study is a survey of quantitative studies. This research instrument is a questionnaire which is an adaptation of Lucas (2014). The results of the pilot study found that overall questionnaire items had the Alpha Cronbach value of 0.87 - 0.90. It can be concluded that the questionnaire in this study is valid and reliable. The respondents of this study were selected using a random sampling method consisting of 312 vocational college teachers in Malaysia. The data in this study have been analyzed using the Statistical Packages for Social Science (SPSS) version 21. Based on "theory", "practical" and "technical drawing", respondents prefer "facilitative" for "Role of Teacher" element, "authentic" for "Nature of Knowing", "Bell bound time" for "Content of Curriculum", limited to specified content "for element" Organization of Space element, "individually" for "Approach to Task" element, "explicit" for "Visibility of Processes" element, "face to face" for "Attitude to Knowledge" element, and "instruction & monitor" for "Role of Learner" element. However, based on "theory" and "practical" respondents prefer "questioning" for "Organization of Time" element and "workshop" for "Proximity to Teacher" element. In addition, based on "technical drawing" respondents prefer "certain" for "Organization of Time" element and "classroom" for "Proximity to Teacher" element.

Keyword: *Pedagogical Decisions*, *TVET Education*, *Vocational Pedagogy*.

INTRODUCTION

Transformation in Malaysia includes introducing the principle of Vocational Education (PVE) and the Ministry has upgraded the TVET system by transforming Vocational Secondary School (VSS) to Vocational College (VC).[1] In Malaysia, the emphasis of TVET education is on the skills of the workshop on theoretical understanding to make the students less interested in mastering their practical basic theories which negatively affect the development of knowledge and skills among students.[2] The balance between knowledge and skills is needed to improve the competence of individuals at work.[3] Teachers have an important role in educating students to have

[1] Biden, N. & Kamin, Y. *Implications of Rebranding of Vocational Secondary School (SMV) to Vocational College (VC).* 2nd International Seminar on Quality and Affordable Education (ISQAE 2013), p.316-323.

[2] Zakaria, N., Azlin Yamin, A. & Maarof. R. *Career Management Skills Among Vocational Students. IOP Conf*. Series: Materials Science and Engineering, 2007, p.226, 012187. doi:10.1088/1757-899X/226/1/012187.

[3] Ayonmike, C. S, Okwelle, P. C. and Okeke, B. C., Towards Quality Technical Vocational Education and Training (TVET) Programmes in Nigeria: Challenges and Improvement Strategies, *Journal of Education and Learning*, 4 (1), 2015, p.25-34.

knowledge and skills, that are appropriate to the norms in a particular society. Teachers carry the education system by conducting teaching and learning activities directly with students. The role of teachers in delivering knowledge to meet educational objectives demands teachers to make pedagogical decisions. Pedagogical decision making is important for teachers as it helps teachers to create effectiveness, trust, and action.[4]

Pedagogical decisions consist of the role of teacher, nature of activities, means of knowing, attitude to knowledge, an organization of time, content of the curriculum, organization of space, approach to the task, visibility of processes, proximity to teacher and role of learner. Various pedagogical decisions can be made by teachers in an active role in controlling the implementation of teaching and controlling the learning environment. Lucas, Spencer, and Claxton[5] argued that pedagogical decision is very important in the concept of vocational pedagogy because it plays a role in determining the direction of teaching and learning process which will be conducted by the teacher.[6]

Pedagogical decision making needs to be emphasized by teachers as they have a great responsibility for the development of student academic performance. Teachers need to make appropriate pedagogical decisions to solve existing problems.[7] Decision making of pedagogy should not be ignored because it benefits the professional experience and makes the right judgment.[8] The pedagogical decisions taken by a teacher reflect his policies, thoughts, strategies, and experiences. In other words, the quality of a teacher can ensure the achievement of educational objectives through the teaching and learning activities can be identified from the pedagogical decisions taken by teachers. Therefore, this study aims to identify pedagogical decisions based on "theory", "practical" and "technical drawing" used by Vocational College teachers in Malaysia.

This study focuses on the identification of the pedagogical decisions taken by teachers at vocational colleges in Malaysia. Therefore, the objectives of this study are as follows:

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[4] Prachagool, V., Nuangchalerm, P., Subramaniam, G. and Dostál, J. *Pedagogical Decision Making through the Lens of Teacher Preparation Program*. Journal for the Education of Gifted Young Scientists, Vol.4, No.1, 2016. p. 41-52. DOI: http://dx.doi.org/10.17478/JEGYS.2016116351.

[5] Lucas, B. Spencer, E. and Claxton, C. *How to Teach Vocational Education: A Theory of Vocational Pedagogy*. London: City & Guilds, 2012.

[6] Lucas, B. Spencer, E. and Claxton, C. *How to Teach Vocational Education: A Theory of Vocational Pedagogy*. London: City & Guilds, 2012.

[7] Clift, R. T., & Brady, P. (2005). *Research on methods courses and field experiences. In M. Cochran-Smith, & K. Zeichner (Eds.), Studying Teacher Education: The report of the AERA Panel on Research and Teacher Education*. Mahwah, New Jersey: Erlbaum. 2005.

[8] Prachagool, V., Nuangchalerm, P., Subramaniam, G. and Dostál, J. Pedagogical Decision Making through the Lens of Teacher Preparation Program. *Journal for the Education of Gifted Young Scientists*, vol. 4, no. 1, 2016. pp. 41-52. DOI: http://dx.doi.org/10.17478/JEGYS.2016116351.

a. To identify pedagogical decisions based on “theory” used by Vocational College Teacher in Malaysia.
b. To identify pedagogical decisions based on “practical” used by Vocational College Teacher in Malaysia.
c. To identify pedagogical decisions based on “technical drawing” used by Vocational College Teacher in Malaysia.

METHODOLOGY

This study aims to identify pedagogical decisions based on "theory", "practical" and "technical drawing" used by Vocational College teachers in Malaysia. This study is a survey of quantitative studies. This research instrument is a questionnaire which is an adaptation of Lucas.[9] To obtain the reliability of the questionnaire, the researcher conducted a pilot study at Batu Pahat Vocational College. A total of 40 respondents answered the questionnaire. The results of the pilot study found that overall items were based on elements "Role of Teacher", "Nature of Activities", "Means of Knowing", "Organization of Time", "Content of Curriculum", "Organization of Space", "Approach to Task", "Visibility of Processes", "Attitude to Knowledge", "Proximity to Teacher" and "Role of Learner" have Alpha Cronbach value of 0.87 - 0.90. It can be concluded that thirty-three questionnaire items in this study are valid for use in obtaining research data. There are 14 states in Malaysia, namely Johor, Melaka, Negeri Sembilan, Selangor, Pahang, Terengganu, Kelantan, Perak, Kedah, Penang, Perlis, Sarawak, Sabah, and Wilayah Persekutuan. The total number of Vocational College in Malaysia is 80. Respondents were selected using a random sampling method, which consists of 312 vocational college teacher in Malaysia. Data in this study have been analyzed using the Statistical Packages for Social Science (SPSS) version 21.

[9] Lucas, B. *Vocational Pedagogy: What it is, why it Matters and What We Can Do About it*. London: 157 Group. 2014

Table 1: Demographics of Malaysian Respondents

Num.	State	Name of Vocational College (*KV*)	Respondents	Frequency	Percent
1	Wilayah Persekutuan	KV (ERT) Setapak	34	34	10.9
2	Selangor	KV Kuala Selangor	26	26	8.3
		KV Tengku Ampuan Afzan	17		
		KV (ERT) Puteri	22		
3	Pahang	KV Temerloh	21	132	42.3
		KV Sultan Ahmad Shah	13		
		KV Pertanian Chenor	59		
		KV Kluang	12		
4	Johor	KV Muar	25	76	24.4
		KV Perdagangan JB	39		
5	Melaka	KV Jasin	24	24	7.7
6	Negeri Sembilan	KV Dato' Undang Haji Muhammad Sharip	20	20	6.4
Total Respondents			**312**	**312**	**100 %**

FINDINGS AND DISCUSSION

1. Pedagogical Decisions Based On "Theory" Used By Vocational College Teacher In Malaysia.

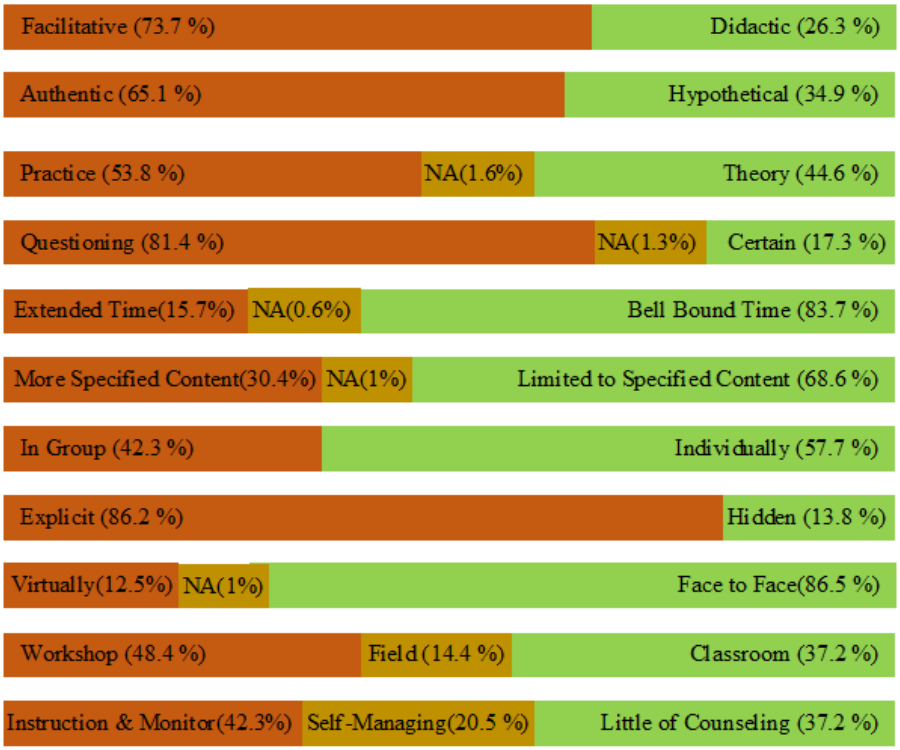

Figure 1: Pedagogical decisions based on "theory"

Pedagogical knowledge is a special knowledge that teachers have to create an environment that supports teaching and learning to improve the knowledge and skills of

students.[10] The study found that pedagogical decisions based on "theory", respondents prefer "facilitative" (73.7%) for "Role of Teacher" element, "Authentic" (65.1%) for "Nature of Activities" element, "Practice" (53.8%) for "Means of Knowing" element, "Questioning" (81.4%) for "Organization of Time" element, "Bell bound time" (83.7%) for "Content of Curriculum" element, limited to specified content "(68.6%) for "Organization of Space" element, "Individually" (57.7%) for "Approach to Task" element, explicit "(86.2%) for "Visibility of Processes" element, "Face to face" (86.5%) for the "Attitude to Knowledge" element, "Workshop" (48.4%) for "Proximity to Teacher" element and "Instruction & monitor" (42.3%) for "Role of Learner" element.

2. Pedagogical Decisions Based On "Practical" Used By Vocational College Teacher In Malaysia.

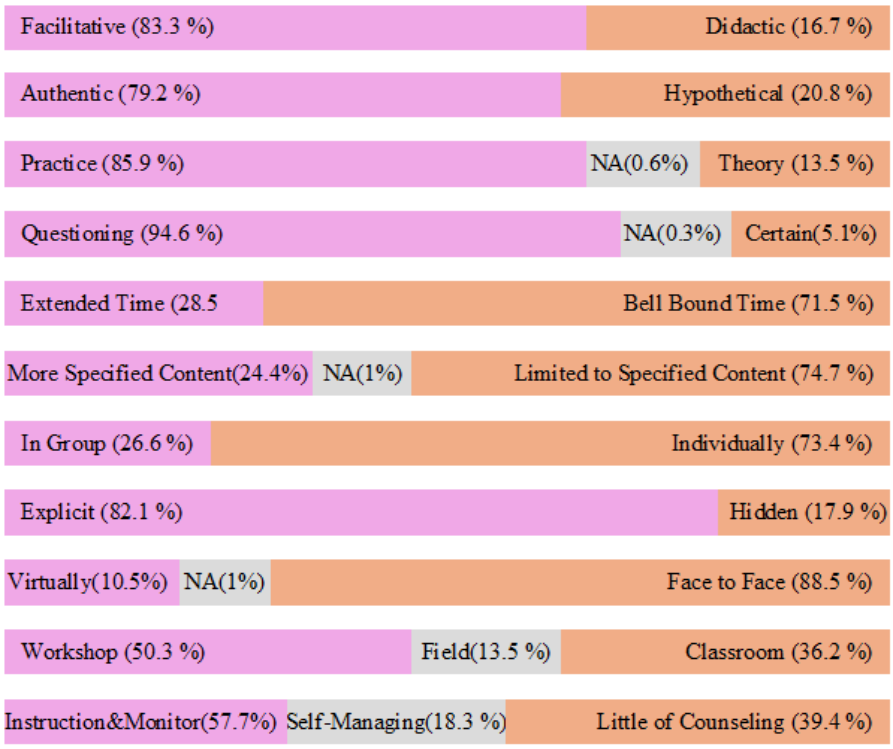

Figure 2: Pedagogical decisions based on "practical"

Teachers should use pedagogical decisions that are most suitable for education to ensure that students can easily practical and more effective learning to bring about change in accordance with the goals of education in general.[11] (Dorgu, 2015). Based on Figure 2,

[10]OECD. *Teachers' Pedagogical Knowledge and the Teaching Profession, Background Report and Project Objectives.* Paris: OECD Publishing. 2013.

[11]Dorgu, T. E. Different Teaching Methods: A Panacea for Effective Curriculum Implementation in the Classroom. *International Journal of Secondary Education*, 3(6-1), 2015, pp. 77-87.

the findings show that pedagogical decisions based on "practical", respondents prefer "facilitative" (83.3%) for "Role of Teacher" element, "authentic" (79.2%) for "Nature of Activities" element, "practice" (85.9%) for "Means of Knowing" element, "questioning" (94.6%) for "Organization of Time" element, "bell bound time" "elementally, limited to specified content" (74.7%) for the "Organization of Space" element, "individually" (73.4%) for "Approach to Task" element, “face to face” (88.5%) for the "Attitude to Knowledge" element, "workshop" (50.3%) for "Proximity to Teacher" element and "instruction & monitor" (57.7%) for "Role of Learner" element.

3. Pedagogical Decisions Based On “Technical Drawing” Used By Vocational College Teacher In Malaysia.

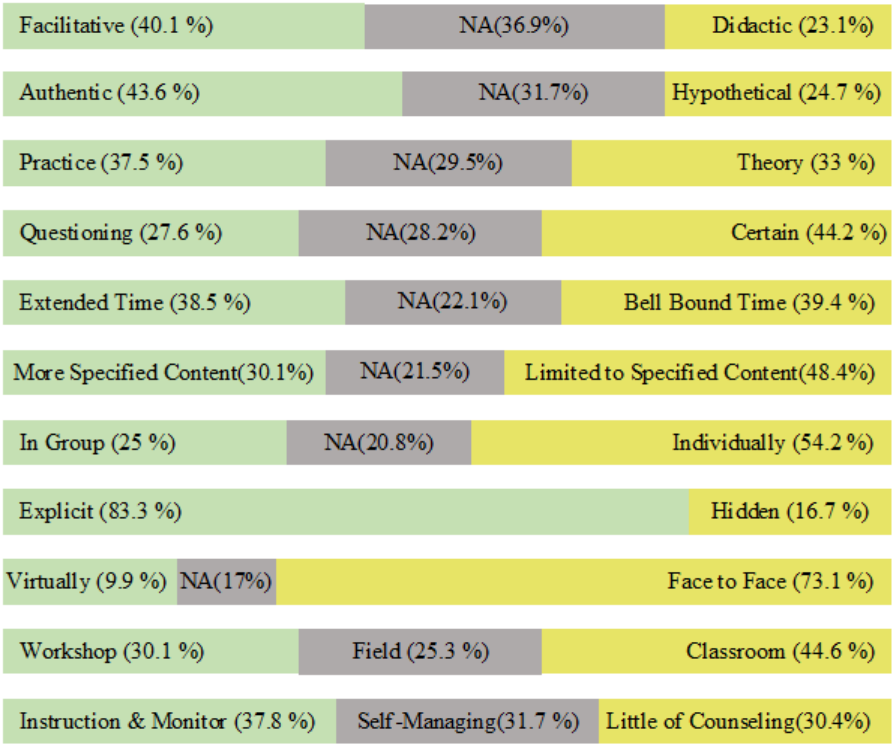

Figure 3: Pedagogical decisions based on “technical drawing”

Technical drawings aim to equip students with knowledge and enhance student skills to communicate with graphic languages.[12] (Rossi & Conte, 2017). Technical drawing is a communication tool that can be used to solve problems and be able to generate new ideas

[12]Rossi, M. & Conte, S. *Imagine, Drawing, Representation. Representation of the Project* +. Proceedings 2017, 1 (866), pp. 2-11.

that reflect the ideas into a design.[13] (Linsey et al., 2011). Based on Figure 3, the findings show that pedagogical decisions based on "technical drawing", respondents prefer "facilitative" (40.1%) for "Role of Teacher" element, "authentic" (43.6%) for "Nature of Activities" element, "practice" (37.5%) for "Means of Knowing" element, "certain" (44.2%) for "Organization of Time" element, "bell bound time" (39.4%) for "Content of Curriculum" to specific content "(48.4%) for" Organization of Space "element," individually "(54.2%) for" Approach to Task "element, (73.1%) for "Attitude to Knowledge" element, "classroom" (44.6%) for "Proximity to Teacher" element and "instruction & monitor" (37.8%) for "Role of Learner" element.

CONCLUSIONS

Based on "theory", "practical" and "technical drawing", respondents prefer "facilitative" for "Role of Teacher" element, "authentic" for "Nature of Knowing" , "Bell bound time" for "Content of Curriculum", limited to specified content "for element" Organization of Space " element," individually" for "Approach to Task" element, “explicit" for "Visibility of Processes" element, “face to face" for "Attitude to Knowledge" element, and "instruction & monitor" for "Role of Learner" element. However, based on "theory" and "practical" respondents prefer "questioning" for "Organization of Time" element and "workshop" for "Proximity to Teacher" element. In addition, based on "technical drawing" respondents prefer "certain" for "Organization of Time" element and "classroom" for "Proximity to Teacher" element. Based on the findings of this study, for "theory" and "practical" have many similarities regarding the pedagogy decision taken by the VC teacher in Malaysia. This is likely because in "practical", the teacher will apply what has been taught through "theory. Thus, this concept makes the teacher's pedagogical decision almost the same between "practical" and "theory. Meanwhile, for technical drawing, there are only two different elements compared to the other nine elements. This can happen because basically for "technical drawing" is also an application of "theory". The findings illustrate that there is a connection between "theory", "practical" and "technical drawing" so that teachers' pedagogical decisions also have a substantial similarity. This study is expected to provide an overview of the pedagogical decisions used by the Vocational College teacher in Malaysia and can further be a guide to stakeholders to improve the quality of education at Vocational College in general.

[13]Linsey, J. S., Clauss, E. F., Kurtoglu, T., Murphy, J. T., Wood, K. L., & Markman, A. B. (2011). *An experimental study of group idea generation techniques: Understanding the roles of idea representation and viewing methods*. ASME J Mech Design, 2011. pp. 133, 031008.

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