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Module Development of Teaching Soft Skills Application in Learning and Facilitating Theory Class for Technical

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Abstract*: Nowadays, Malaysia is moving towards being a developed nation in which it has worked hard to develop the country, especially in the field of Technical and Vocational Education Training (TVET) which is strongly emphasized in producing first-class human capital. The application of seven (7) elements of soft skills (KI) which are communication skills, leadership skills, skills work skills, professional entrepreneurship, morals and ethics, continuous learning and information management, critical thinking and problem solving skills should be emphasized to the students. Mastering soft skills is very important to technical students as it is demanded by the industry. Hence, the purpose of this study is to develop the Soft Skill Implementation Teaching Module in Teaching and Learning Theory Class for Technical Lecturers. The objective of this study is to identify the suitability of the format, content and functionality of the module based on the feedback of the technical lecturers. The development of this module uses the Sidek model while the content of the module is based on UTHM publisher guidelines. The researcher chose the Sidek model as the module development model because it has systematic steps to develop the module. The Sidek model has two phases where the first phase is the draft phase and the second phase is the testing and evaluation phase. Each module built is considered a draft before it is evaluated and tested for its effectiveness. In addition, this study uses the quantitative approach involving ten (10) technical lecturers at FPTV, UTHM. The data were descriptively analyzed and presented in the form of frequency and percentages. The findings have shown that 97.27% of technical lecturers agree with the design format, 98% agree with the suitability of the module content and 100% agree with the functionality of the Soft Skill Implementation Teaching Module in Teaching and Learning Theory Class for Technical Lecturers. In conclusion, this module is suitable to be used by technical lecturers as a guidance and references in applying soft skills systematically.

***Keywords* : Soft skills, module, teaching and facilitating**

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I. INTRODUCTION

With the increasingly sophisticated technological development, technical students are needed to support the nation's development. Thus, technical students need to prepare themselves with the technical skills and soft skills required to meet the needs of today's industry market. TVET (Technical Vocational Educational and Training) is a stage in producing individuals who are skilled in the field of systematic and recognized skills. According to Yosuf, Roddin, Warman and Deraman (2017), the educational transformation outlined in the Malaysia Education Blueprint 2013-2025, among others, aims to mainstream the field of TVET to produce highly skilled and flexible manpower to produce innovative, creative, and competitive workers with current requirements. Idris (2015) notes that 60% of the 1.5 million employees in 2020 are in the jobs that require knowledge or skills in the field of TVET.

Thahar & Rashid (2013) states that KI is a very technical or non-technical skill in the development of self-esteem, personality and the everyday life of the student as well as useful for producing self-employed and competitive people both nationally and internationally. In terms of self-development of students, this aspect of soft skills should be given due attention in accordance with the nation's vision to produce quality human beings. The KI applied to all Institutions of Higher Learning (IPT) includes seven (7) elements of communication skills, teamwork skills, critical thinking and problem solving skills, continuous learning skills and information management, morals and ethics, entrepreneurial skills, and leadership skills.

The teaching module is one of the science-based BBM or reading material. Modules usually guide individuals to do things in the right and proper way. According to Ibrahim (2017), teaching modules contain various learning functions that are considered beneficial, but it is an alternative to eliminating the lack of learning courses. This teaching module is more flexible and uses interstitial instruction in individual or group learning.

Each module development requires some guidance based on the models to produce a quality module according to the correct specifications. The Sidek model is a potential model to guide the modules produced to give a positive impact to the user. According to Sidek (2005), the academic module is a complete module and contains teaching and learning materials and resources in which it includes notes provided by instructors.

The Sidek Model has two main stages which are the draft stage as the first stage and the second stage is the level of testing and evaluating the module.

II. BACKGROUND PROBLEM

There are some issues with KI which is the difficulty of getting a job because of lack of KI to meet industry requirements. There are thousands of university graduates who are unemployed due to the weakness and lack of KI in each student. Furthermore, the lack of instructional guides restricts the application of KI elements systematically in PdPC theoretical class for technical students. Instructions such as modules are very important for educators to create a learning activity to conceptualize the application of soft skills according to the suitability of the subjects taken by technical students.

In addition, the disproportion of soft skills and technical skills influences the credibility of technical students when they are in the workplace. When technical students are too concerned with technical and academic skills such as science, mathematics, etc., they will take KI for granted.

Furthermore, a handful of technical students are still weak in seven soft skills namely communication skills, leadership skills, teamwork skills, critical thinking and problem solving skills, information management skills and continuous learning, entrepreneurial skills and professional ethics and morals. Finally, the researchers hope that the modules that will be produced will benefit the lecturers and technical students themselves.

The objectives of the research are as follows:

i. Identify the suitable format of teaching modules in the implementation of soft skills in learning and facilitating theoretical class for technical lecturers.
ii. Identify the suitable content of the teaching modules in the implementation of soft skills in learning and classification of theoretical class for technical lecturers.
iii. Identify the functionality of the teaching modules of the application of soft skills in learning and facilitating theoretical class for technical lecturers.

III. METHODOLOGY

The approach used in this study is a survey method and uses quantitative methods to solve the research questions conducted by researchers. Questionnaire forms were distributed to technical lecturers as a procedure in the survey method. The quantitative approach is best suited for saving time, cost and easy analysis. According to Konting (2000), quantitative methods are appropriate for information.

A. Population Sample

The population for this study is technical lecturers at Universiti Tun Hussein Onn (UTHM). According to Yahaya (2007), the sample is part of the population regardless of whether it is a population representative or otherwise. In this study, the researcher uses a sample size consisting of ten (10) technical lecturers of FPTV, UTHM. The sampling of this study involved technical lecturers at UTHM.

B. Research Instrument

Researchers used feedback tools to obtain more consistent data. The instrument provided to the sample is adapted from Yee (2015) and the UTHM book manuscript evaluation form. Furthermore, through the research, the questionnaire form is needed as a research instrument to obtain feedback from the lecturers to identify the content of the module content, identify format adaptability and identify the usability of the module. The questionnaire form is divided into four sections. Table 1 shows the description of the questionnaire items section for technical lecturers.

Table 1: Description of the questionnaire items section for technical lecturers

Section	Item	No of Item
A	Demographic of respondent	3
B	Suitable format of teaching modules for soft skills implementation in teaching classification and facilitation for technical lecturers	11
C	Suitable content of teaching modules for soft skills implementation in teaching classification and facilitation for technical lecturers	15
D	Functionality of teaching modules for soft skill implementation in teaching classification and classification for technical lecturers	3
	Total	29

C. Module Development

The researcher chose the Sidek model as the module development model because it has systematic steps to develop the module. According to Sidek (2005), the academic module is a complete module and contains teaching and learning materials and resources including notes provided by the lecturers. The Sidek model has two phases where the first phase is the draft phase and the second phase is the testing and evaluation phase.

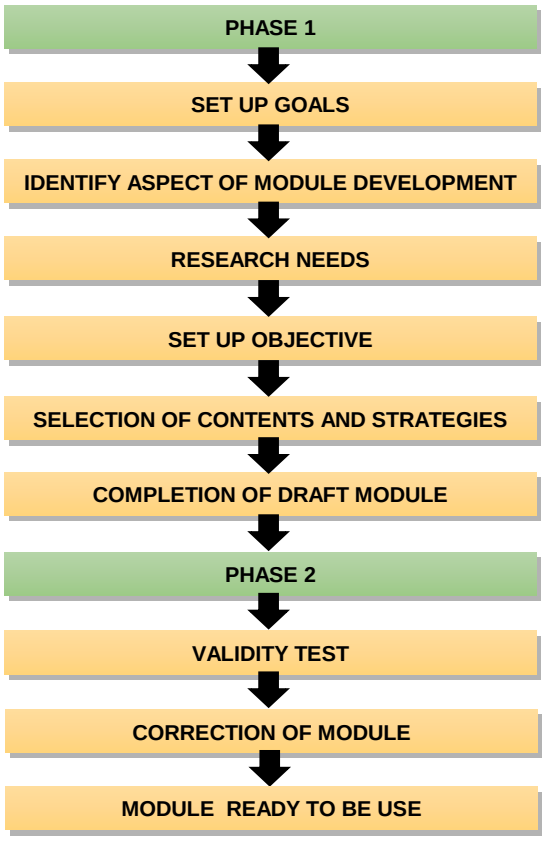

Fig 1: Flowchart for the process of generating a module using Sidek Model Development Model

IV. FINDINGS AND DISCUSSION

Descriptive statistical methods are used by researchers to describe the information obtained from the respondents and will be processed, analyzed and evaluated by the percentage and frequency of the method used. The data obtained were analyzed using SPSS version 22.0 software.

A. Suitability of Format Teaching Modules for Soft Skills Implementation in Teaching Classification and Facilitation for Technical Lecturers

In this section, the questionnaire form submitted is about the design of the soft module implementation of the soft skills implementation. There are eleven (11) items mentioned in the questionnaire form for technical lecturers to answer questions of the module format. The results of the study in Table 2 show that 97.27% of technical lecturers agree that the design modules of the soft tutorials are suitable for learning and facilitating theoretical class because each unit in the module provides a clear explanation which is used accordingly and the layout (layout) is well organized. In helping users achieve effective learning and facilitating learning, the module must have a good set of information, an interesting format and a systematic module design (Rahman, 2002). 2.73% of respondents do not agree with the module's design format, the use of the color on the module, the use of spacing and the layout of this page because of too much color can cause confusion over the user. The use of colors must be appropriate to the user. In addition, a technical lecturer also disagrees with the use of spacing. This is because the spacing of the writing is not parallel at the end of each sentence. Every long sentence needs to be clashed and make sure to close each other (justify). Next, a technical lecturer disagrees with the layout of each page of the module. This is because the modules appear to be dense with infographics that can confuse the user.

Table 2: Format analysis of teaching modules for technical lecturers

Item	TS (Disagree)		S (Agree)	
	F (Frequency)	% (Percent)	F (Frequency)	% (Percent)
1.All units provide a clear and appropriate explanation.	0	0	10	100
2.All visual elements have been integrated in the module well.	0	0	10	100
3.All units are organized according to user requirements.	0	0	10	100
4.The continuity of each sub-topic has been identified with the divider in each section.	0	0	10	100
5.Interesting use of colors.	1	10	9	90
6.Appropriate use of appropriate size.	0	0	10	100
7.The use of the appropriate font type (font).	0	0	10	100
8.The continuity of each sub-topic has been identified with the divider in each section.	0	0	10	100
9.The continuity of each sub-topic has been identified with the divider in each section.	0	0	10	100
10.Interesting use of colors.	1	10	9	90
11.Appropriate use of appropriate size.	0	0	10	100
12.The use of the appropriate font type (font).	0	0	10	100
13.Use appropriate spacing.	1	10	9	90
14.Layout (layout) of the page is well organized.	1	10	9	90
15.Layout (layout) of the page causes interesting modules.	0	0	10	100
16.Easy page layout (layout).	0	0	10	100
Total Average	**0.27**	**2.73**	**9.73**	**97.27**

B. Suitability of Content of Teaching Modules for Soft Skills Implementation in Teaching Classification and Facilitation for Technical Lecturers

In this section, the questionnaire form presented is about the content of teaching modules of soft skills implementation. There are 15 items mentioned for technical lecturers in the questionnaire form to answer the questions of this module. The results of the study in Table 3 show that 98% of technical lecturers agree that the content of teaching module designs of soft skills implementation is appropriate for learning and classifying theory of this subject as this module meets the needs of soft skills, module content has been logically arranged in sequence of each unit and strengthening exercises on each unit are appropriate. According to Ahmad (2010), complete and structured content and engaging learning activities can make a good reference source for users. However, 2% of respondents do not agree with the module design content, ie the objective is less likely to achieve the module's objectives, the graphs and graphs used also do not provide a clear explanation. This is due to the purpose of the module being used is unclear for the lecturer. In addition, researchers found that unrelated graphics and diagrams could affect the quality of a module. According to Anwar (2010), a systematic and interesting arrangement that includes the content, terms, methods and assessments can affect the competence and objectives of the study itself.

Table 3: Content analysis of teaching modules for technical lecturers

Item	TS (Disagree)		S (Agree)	
	F (Frequency)	% (Percent)	F (Frequency)	% (Percent)
1.This module meets the needs of soft skills.	0	0	10	100
2.The introduction of this module gives a clear picture of the scope of soft skills.	0	0	10	100
3.The general goal is clearly related to the purpose of the development of teaching modules of the application of soft skills.	0	0	10	100
4.All objectives tend to achieve the objectives of the module clearly to assist technical lecturers to apply systematic soft skills in theoretical classroom teaching.	1	10	9	90
5.Module content is directly related to the objective.	0	0	10	100
6.The contents of the modules have been arranged logically in order of each unit.	0	0	10	100
7.The entire unit of the module is divided into categories clearly.	0	0	10	100
8.The application of soft skills is suitable for module content and objectives.	0	0	10	100
9.Each soft skill application is divided accordingly.	0	0	10	100
10.The instructions are clear and understandable.	0	0	10	100
11.Instructions are easy to follow.	0	0	10	100
12.The diagrams are used to give a clear explanation.	1	10	9	90
13.Tables are used to provide clear explanations.	0	0	10	100
14.The graph is used to give a clear explanation.	1	10	9	90
15.Strengthening training on each unit is appropriate.	0	0	10	100
Total Average	**0.2**	**2**	**9.8**	**98**

D. Functionality of Teaching Modules for Soft Skill Implementation in Teaching Classification and Classification for Technical Lecturers

In this section, the questionnaire form presented is about the usability of teaching module for soft skills implementation. There are three items specified for technical lecturers to answer the question of the usability of the module. The results of the study in Table 4 show that 100% of the technical lecturers agree that the functionality of teaching modules of soft skills implementation is appropriate for learning and facilitating theoretical class for technical lecturers. This is because these modules can be used as references to technical lecturers to apply soft skills in learning and facilitating theoretical classes. In addition, technical lecturers are highly motivated with the contents of the module. This can inspire a technical lecturer to use this module. With the content and good layout of the content, the module can attract users (Atan & Tambai, 2011).

Table 1: Description of the questionnaire items section for technical lecturers

ITEM	TS (Disagree)		S (Agree)	
	F (Frequency)	% (Percent)	F (Frequency)	% (Percent)
1.Teaching activity promotes student engagement.	0	0	10	100
2.All aspects of the module can be used as a source of success in teaching.	0	0	10	100
3.Overall, this module can motivate lecturers.	0	0	10	100
Total Average	**0**	**0**	**10**	**100**

V. CONCLUSION

Based on the research conducted, it aims to develop the teaching modules of the application of soft skills in learning and facilitating theoretical class for technical lecturers. In developing the module on teaching soft skills application, the Sidek model is used as a guide in producing modules in two stages and in three (3) phases. The phase begins with phase 1 of goal setting, identifying aspects of module development and needs analysis. In phase two, the researcher sets the objectives, content selection and strategy as well as the draft module in operation. In the final phase of phase three (3) there is a pilot study, testing the validity and reliability, the purification of the module and finally the evaluation of the module. Overall, the development of this module is a step towards enhancing the effectiveness of teaching in applying soft skills systematically in learning and facilitating. Although there are generally available modules but this module covers the needs of students and technical lecturers themselves. Based on respondents' questionnaire forms that have been collected and analyzed, the researcher finds that this study has achieved the stated objectives which are the suitability of format design, content adaptability and functionality of the module. However, there are weaknesses in the modules as well as the need for improvements in terms of design and content that are relevant to this module.

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