

# The Quality Assessment of Teaching Delivery Based on The National Occupational Skills Standard at MARA High Skills College

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**Abstract---** Skill Training in Malaysia is an important platform to produce skilled manpower for the local technology industry. Consequently, the delivery of teaching by the academic staff is an important factor to ensure the transfer of knowledge and skills are delivered to the students. Skill training in Malaysia is applied based on the Competency-Based Training (CBT) approach which is a standardized teaching approach at the national level that emphasizes the method of four-step patterns that comprises preparation, delivery, application, and validation in the teaching process. This method is used to ensure the quality of teaching can be delivered effectively. This research was conducted at the MARA High Skills College (KKTm) among the instructors who have completed the teaching training at the Centre for Instructor and Advanced Skill Training (CIASST). The teaching training at KKTm was evaluated based on the standard guideline. The quality of teaching delivery was evaluated using the National Occupational Skills Standard (NOSS).

**Keywords---** Skill Training, Teaching Quality, Four-Step Patterns, National Occupational Skills Standard

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## I. INTRODUCTION

Skills Training is one of the training in the Technical and Vocational Education & Training (TVET) or known as Pendidikan, Latihan Teknikal & Vokasional (PLTV) which is an important investment in the production of skilled workforce for the job industry [1].

In determining the country as a developed country, the number of skilled workers is also included in the development index of a country. Furthermore, to attract the international investor's interest in investing, the availability of skilled workers is also important to ensure that they have a stable workforce in the industry. Under the new transformation economy, Malaysia aims to create 3.3 million new employment opportunities by 2020 and, 1.3 million from the total is targeted for employment opportunities in the field of TVET (*Jabatan Penerangan Malaysia* [2].

In the government budget every year, the allocations to TVET are placed in the government of Malaysia's attention to accelerate the development of skills training and to ensure the production of skilled manpower can be achieved through Skill Training Centre, both in the public and private sectors [3]. Besides, in the 11<sup>th</sup> Malaysia Plan, the government has opened many opportunities for training and emphasized the development of the nation's skilled workforce [4]. On the other hand, it is found the increment of the budget by the government to TVET in the annual budget. For instance, for the 2020 budget, it increased by 33.8% from the previous year [5].

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To ensure the quality assurance of skills training delivery in Malaysia, the government-responsible organisation, Department of Skills Development (DSD) has issued a National Occupational Skills Standards (NOSS) Vocational Training Officer Operation (VTO), (NOSS code: I-031-3:2014) to outline the competent required by trainers in maintaining the quality of teaching delivery. Therefore, the production of skilled manpower can be accomplished through Centre for Instructor and Advanced Skill Training (CIAST), as it is the only training agency under the DSD that has given the mandate in planning, implementing, and monitoring the skills of the instructor [6].

MARA (KKTm) is a training center that enforces TVET under the management of Majlis Amanah Rakyat Malaysia (MARa) in order to assist the government to produce skilled manpower in the demand of industry in Malaysia. MARa has established 10 KKTm over Malaysia by offering skills courses with skills certificate and diploma level. Students at KKTm will be trained according to the curriculum established according to the industry and KKTm instructors are required to deliver the learning in accordance with the national standard of Skills Training.

## II. LITERATURE REVIEW

Based on previous studies, a review of the trainer teaching presentation quality is presented in Table 1. The research is conducted for eight research based on the quality of skills that involving knowledge, skills, and attitudes that are emphasized as factors in the study to determine the quality of teaching delivery.

### THE QUALITY OF TEACHING DELIVERY

Table 1 present the gap research on the quality of teaching delivery. Tang & Kong [7] states that the quality of teaching delivery will impact the learning based on (1) students' perceptions of the quality of teaching throughout the course, (2) the quality of teaching on student satisfaction. According to Sidin [8], the teacher's quality can be measured through (1) teacher communication skills, (2) strong curriculum development, and (3) the relationship between teachers and students. The study on the teacher quality also includes factors of (1) teaching and learning planning (2) teaching delivery (3) teacher professionalism [9]. Nasir et al [10] state that aspects that need to be applied in teaching and learning are (1) technical skills, (2) knowledge, and (3) behavior. The cultivation of good values can also foster effective teaching and learning to produce students with good moral character [11].

A study conducted by Abhishek & Senthilkumar [12] stated that the success of the training session depends on the method of presentation implemented during teaching and learning sessions. Therefore, lesson planning needs to be planned with various methods to ensure the quality of teaching could be improved [13]. According to Huang et al [14] the effectiveness of training depends on the variety of training patterns in the delivery of teaching.

Table 1 The comparison from previous research on the quality of teaching delivery

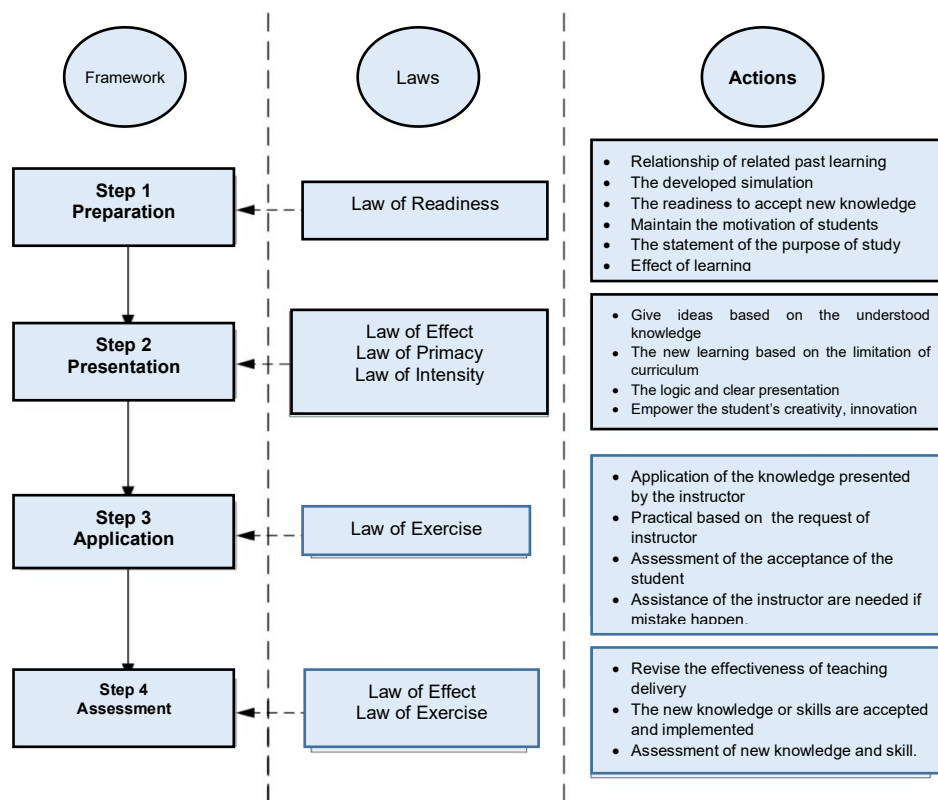
Research Title	Emphasis of Teacher Skills			
	Knowledge	Performance	Attitude	Assessment
The Relationship between Teaching and Learning Quality and Student Satisfaction: a Review (Tan & Kong, 2002)	√	√		√
The Quality of Teaching and Learning Local University (Sidin, 2000)	√	√	√	
The Level of Implementation of Outcome Based on the Education in the Learning and Teaching Process among Polytechnic Lecturers (Zakaria et al., 2013)	√	√	√	
Leadership Competencies in a Two-Way Skills Training System: A Literature Highlight				

(Nasir et al., 2017)	√	√	√	
The Implementation of Good Values in the Teaching and Learning Process towards the Student Attributes at Mara High Skills College (Zaidin, 2015)			√	
Effective Training Delivery Methodology for Corporate Employees (Abhishek & Senthilkumar, 2016)	√	√		
Learners and their workplaces: towards a strategic model of flexible delivery of training in the workplace (Mozael, 2015)	√	√		
Training Effectiveness and Trainee Performance in a Voluntary Training Program: Are Trainees Really Motivated? (Huang et al., 2014)	√	√	√	

## THE APPROACHES OF STANDARD SKILLS TRAINING

To become accredited personnel by the DSD, the instructor must pass the competencies that have been established by the NOSS in the VTO field. To ensure the quality of teaching delivery, the current approach of teaching sessions, the teaching of four-step patterns of teaching (NOSS) (Vol. I-031-3: 2014) approach has been introduced which are (1) Preparation, (2) Presentation, (3) Application and (4) Validation. The method of teaching delivery is by using these four-step patterns which are also linked to the Law of Learning [1].

Figure 1: The Illustration of Four-Step Pattern Teaching (Source: [1]).



These four-steps of teaching approach is drawn from the study of Allen [15] which stated that the four-step of teaching patterns include:

- Preparation
- Presentation
- Application
- Assessment

This approach is the result of the discovery by the German psychologist John Fedrick Herbart, known as the 'father of pedagogy' who introduced teaching delivery measures to enable the human mind to embrace the process of teaching in the form of information and knowledge through various forms and patterns [16].

### III. CONCEPTUAL FRAMEWORK

To achieve the goals of producing skilled workforce in the job industry, KKTM instructors are trained at CIAST to learn the teaching delivery method by using Competency Based Training (CBT) approach to develop competencies as skills trainers based on the national skill training Standard which is NOSS in the field of coaching and teaching; Vocational Training Operation (VTO).

In the workshops of skills development at CIAST, the future instructor will have nine (9) months of total pedagogical training that are divided into two parts, the first 3 months of learning pedagogical training in the class at CIAST and the next 6 months of the teaching practice skills at a skills training center [17].

The methodology of this study was done using the observation method for teaching delivery in theory class and practical as well as reviewing teaching and learning materials documents developed by the academicians of KKTM. The observation was made by the expert trainer from CIAST. The Specialist Instructors are only given to individuals who have been registered with *Perakuan Pengiktirafan Kelayakan Sebagai Personel Pentauliahan* (PPKSPP) in CIAST and are classified as *Pengajar Pakar* (PAJAR) by DSD.

Observation instruments of the teaching techniques assessment form (JPK / I031 / 3D-1) have been prepared by DSD for the purpose of assessing the skills in the Level 3 Malaysian Skills Certificate (SKM) award for NOSS VTO. In this assessment, observation and assessment will be focused on the skills of the instructor including the knowledge, skills, and attitudes implemented during the teaching process [18].

Instructors are also evaluated on general teaching techniques that include the ability to develop teaching and learning materials or known as Written Instructional Material (WIM). The data of the evaluation are illustrated in Table 2.

Table 2 : KKTM instructor evaluation criteria for measuring the quality of delivery according to national skills training standards (referred in the form JPK/I031/3D-1)

Type of assessment	Description of Assessment Criteria
1. Preparation	<ul style="list-style-type: none"> <li>To establish student and teacher comfortable condition before Teaching session.</li> </ul>
2. Presentation	<ul style="list-style-type: none"> <li>Presenting the teaching topics in both theory and practical</li> </ul>
3. Application	<ul style="list-style-type: none"> <li>Train students using the application they have learned to ensure that their students' understanding level</li> </ul>
4. Validation	<ul style="list-style-type: none"> <li>To validate the students' level of understanding of what they have learned by test without help.</li> </ul>
5. General Teaching Techniques	<ul style="list-style-type: none"> <li>Development of Written Instructional Material (WIM) for teaching sessions.</li> </ul>

### IV. CONCLUSION

To produce a skilled workforce according to the specifications set by the NOSS issued by the Department of Skills Development (DSD) [19], the role of instructor in teaching and training is of very important.

MARA High Skills College (KKTM) is one of the skills training agencies responsible for the efforts of the government of Malaysia to produce skilled manpower. Therefore, with the research involving the quality of KKTM instructors of teaching delivery in TVET training with the adherence to the national skills training standard, it is possible to determine the true scenario of the level of teaching that has been implemented in KKTM.

The results of this study can be used as a reference on behalf of KKTM management in planning and implementing a program of excellence skills training for instructors in KKTM to ensure continuous improvement of teaching delivery method according to the skills training standard by KKTM academic staffs.

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