

VOCATIONAL EDUCATION AND TRAINING (VET) PRACTICES: ISSUES AND CHALLENGES IN VOCATIONAL SECONDARY SCHOOL

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Abstract

Innovation is an important element for teaching and learning in ensuring that the product is always relevant to current requirement. In vocational education, there are a lot of innovations should be carried out such as management, administration and facilities. In terms of the national corporation to become an industrialized nation the need for vocational education becomes fundamental. The relationship between teacher's pedagogy beliefs and students learning style can be seen as one mediated through process whereby teacher's beliefs influence their teaching strategies which will turn influence student's learning style. It is therefore important in VET to address teacher's new teaching methods, vocational skills, knowledge and student's learning style to make the practices in SVS can fulfill the goal of VET in globalization. This paper is to describe the role of Vocational Education Training (VET) for preparation to produce human capital start from the basis level. VET in Malaysia started in secondary school and for specific purposes Vocational Secondary School (VSS) has been designed to fulfill the needs of future workforce. Teachers are the main factors to have systematic and interesting approach for students and stakeholders to make VET in VSS is the main choice of education to developed student carrier pathways. The focused in this paper is what is the practices in VSS can achieved the current and future workforce in flexible manner and at a consistent level of quality. It also to review what does it mean to teach in VET and what makes an effective VET teacher. The factors consists the approach to teach in VET, role of teachers and VET students preferences. In summary, the investigation of VET practices will improve the skills of VET teachers including pedagogy and vocational skills it will provide the effectiveness of teaching.

1.0 Introduction

Malaysia has gone through the first 15 year phase of development towards realizing its aspiration to become developed nation by 2020. In this regard, education has been instrumental in building national unity and producing the human resource towards the realization of Vision 2020. Much has been achieved in the four main thrusts of education, namely in increasing access to education, increasing equity in education, increasing the quality of education. In spite of the achievements gained, much more needs to be done in the next phase for education system to leap forward to excellence of global standard. The challenges to education in the Malaysia's Plan differ from the previous plans which focused on producing adequate and quality human capital a more people-centered development and brings out a bigger agenda of developing human capital will be the most importance in the achievement of the National Mission.

TVE as a preparation for an occupation fields should provide the practices of continuing education. The practices in TVE should include how to fulfill the requirement of skills by the enterprise and economy, develop the carrier paths for

workers (UNESCO, 2006). Human Resource Policy Thrusts, Malaysia-2000 stated the system in developing human capital based on the factors:

- Improving the quality of education and training delivery system to ensure that manpower supply is in line with technological change and market demand.
- Expanding the supply of highly skilled and knowledge manpower to support the development of a knowledge-based economy
- Increasing the accessibility to quality education and training enhance income generation capabilities and quality of life

In Malaysia Vocational Secondary School system slowly change to make vocational education in school level will more effective and relevance to the globalization needs. Related to the changing process vocational programs need a curriculum and current teaching methods that accommodates societal changes and meets the changing needs of the employment market, including the dynamic nature of a technological society. Vocational educators must prepare students with adequate training to be competent in the job market (Buzzell, 1993). Early in 20th century, vocational and career oriented educational programs focused on manual training, career education and industrial arts. In the 21st century, vocational education emphasizes education for all students and has been affiliated with the school to Work Legislation and Tech-Prep Programs (Foster, 1994). Effective teaching refers to those things you can do as a teacher that can increase achievement and improve social behavior of your student (Margo.A, 2002). Barbazette.J (2006), to be effective in your teaching and training, consider using a variety of training methods that appeal to different learning styles. Lewis (2000) noted that secondary education plays a major role in the selection of students for future positions in the workforce. Vocational education programs directly and positively affect the learning styles of students who need hands on curriculum.

2.0 Role of VET Teachers

George Spottl (2008) stated, VET need changing the role of teachers so for each of these elements it is recommended to set up a systematic description which is based on the current status at schools and which then allows for the description of necessary measures for the shaping of the role of the teachers. Table 1 describes the roles of new versus old teacher.

3.0 Vocational Teaching Approach and Vocational Skills

The concept of teaching is the act can be described as giving instructions to or sharing one's knowledge with another person. Teaching can be further described as a means for providing students with knowledge and skills they need to function successfully in the world (Brady, 1985). In a very practical sense, teaching is diagnosing and prescribing. Teacher diagnose what specific learning needs the prescribe the particular strategies and activities meet them. This important factor of teaching. The ability to identify student learning needs the teaching skills to design explicit lessons is what distinguished the professional teacher from person who want to teach. The relation teaching and pedagogy in short is; committing to lifelong learning, sharing one's knowledge, directing and facilitating, creating awareness for potential (Evans and Brueckner, 1992). Rapid changes are taking place in industry, the labor market, work

and work organization. At the same time the concept of skills that underpinned much of VET provision has broadened considerably. Today a much greater emphasis is placed on generic, soft or behavioral skills and technical skills of VET teaching approach. Although all these changes have important implications for VET provision there has as yet been little research that looks at the impact these changes have on the pedagogy of vocational learning.

Table 1 Change of roles of the teacher for the realization of an “Open Learning Culture”

Old role of teachers	New role of teachers
Works alone	Works in a team
Structures the learning processes according to time targets	Structures the learning processes in a task and project oriented way
Assigns marks based on facts	Assesses based on development and results
Instructs the students and imparts fact knowledge	Advises the students during their work on tasks and their solving of problems
Coordinates his/her work with the dual partner	Co-shapes training modules with dual partner and involves him/her into the instruction projects
Shapes instruction space	Shapes open instruction spaces
Develops teaching material	Develops equipment concepts
Determines the learning pace	Safeguards individual learning pace of students
Is geared to specialized theory and specialised sciences	Is geared to work and business processes and vocational educational sciences
Imparts occupationally oriented theory	Imparts occupationally oriented contents of skilled work (subjects, tools, methods, organisation and requirements for skilled work and technology)
Develops theme oriented tasks and confronts students with professional problems	Develops occupationally oriented tasks and confronts students with occupational problems
Considers a differentiation of performance by the grade of difficulty of the tasks	Considers a differentiation of performance by multi-dimensionality and complexity of occupational challenges
Develops his/her knowledge with the aid of books and theme oriented seminars and further training courses	Develops his/her knowledge by continuous learning and scientific approaches to occupational challenges
Determines the work and learning methods	Offers work and learning methods
Is responsible for the learning paths and assigns the responsibility for the learning result to the student	Determines the learning result with the students and assigns them the responsibility for the learning paths
Takes occupational experiences of the pupils for granted	Involves the occupational experiences of the pupils into instruction
Is a teacher for <i>his or her</i> subjects and organises instruction according to them	Interlinks his/her and other subjects with the subjects of colleagues in a comprehensive instruction

The widespread changes outlined significant for teaching and learning requirement of workers and for the pedagogical methods used to facilitate that learning (Ellstrom, 2001). At the same time social commentators regard learning vehicle through which issues of social equity, cohesion, citizenship and cultural development can be addressed (Larsen & Istance, 2001). UNESCO (2002) agreed governments have sought to take up both perspectives in the development of education training policies that seek to achieve lifelong learning as both the rationale and integrating goal of all educational sectors. Shift in pedagogical practices focus on full learning potential individuals which actively engage learners in the planning, development of vocational knowledge and skills. Indeed perhaps the most important goal of VET is to contribute of new students as worker-learners (Chappell & Johnston, 2003). Related in this issues the concern of this study is to identify what is the need of improvement in teaching approach for teachers in SVS.

3.1 Teaching method

What is effective teacher? Gary (1996) said it very simple effective teacher was a good person- role model who met the community ideal, a good citizen, good parent and good employee. He also pointed everyone in classroom will have to achieve affective behavior so that teachers should play many roles to make the classroom is an affective classroom. The main role is pedagogy; how they started the lesson, approach students, creative in delivery and anything to make learning in interesting. The changing of pedagogy is important to more learners centered. In classroom or workshop teachers should plan and implement new approach of teaching and learning. Teachers still use the traditional method because they did not exposed with the new trend of teaching especially for experienced teachers. Nowadays there various types of method and materials can be used in teaching. The suitable method in vocational education can use such as problem based learning (PBL), work- based learning, project -based learning and blended learning. Students can use the various source of materials from internet or discussion besides the text books provided.

3.2 Vocational skills

Improvements in knowledge and learning are harder to demonstrate than social and personal benefits. A range of studies show that benefits to students lie less in the acquisition of specific vocational skills and more in confidence, maturity and independence, improved motivation and reduced absenteeism (Malley et al. 2001a). The largest issue for students, however, is marginalisation of VET programs and the status of VET courses. School VET programs attempt to make use of real work experience to enable transfer of specific learning to generalised contexts and competencies, and to place them in a broader educational framework. Structured workplace learning is the primary mechanism for achieving this, so it is unfortunate that students' average participation has decreased in recent years, despite greater numbers receiving some exposure. Work placement was found to be a critical success factor in achieving positive employment outcomes for school VET students in rural areas (Johns et al. 2004). There is a substantial body of research that supports the value of learning at and from work, not simply for vocational skills, but for its contribution to general education. The evidence suggests that authenticity, acceptance of responsibility and freedom from school constraints are important factors in the

popularity of vocational programs and work placements among students (Ryan, R 1997, 2002; Malley et al. 2001a).

Vocational skills represents the broadest description of vocational programs in schools. It incorporates VET in schools, school-based and non-framework activities, such as enterprise, career and community-based education. Spring and Syrmas (2002) see vocational learning as an overarching concept, involving:

“... general learning that addresses the broad understandings of the world of work and develops in young people a range of knowledge, skills, competencies and attributes relevant to a wide range of work environments.” (Spring & Syrmas 2002, p.9)

3.3 Structured workplace learning

Structured workplace learning is a formally designed and managed program of work placement. Frequently this is an integral component of a VET in Schools program, but it may also be a ‘stand alone’ experience. The Australian Student Traineeship Foundation (now the Enterprise and Career Education Foundation) defined structured workplace learning as differing from work experience in the following ways:

- Training is structured.
- On-the-job training (delivered in the workplace)
- Competencies curriculum documentation, to support both on- and off-the-job training.
- In each workplace, a workplace supervisor is nominated to train the student in the range of competencies identified in the competency
- Outcomes of on- and off-the-job training contribute to industry-recognised qualification.
- The program is accredited by the board of studies (or equivalent) so that outcomes contribute to teachers knowledge
- The program is accredited by the state recognition authority (or equivalent) so that outcomes contribute to an industry-recognised qualification

According to Reese (2005), connecting education and careers can give benefit teachers as well as career vocational teachers. Reese (2005) also notes that a connection is needed for vocational students between the work place and school. Teachers who participate in this program get better understanding how to relate academic subjects to hands-on activities.

3.4 Mentoring

Whatever other kinds of learning are involved in initial teacher training/education, few would question the necessary centrality of learning through practice or experience. Whatever understanding of classroom teaching one possesses, it is only by putting these understandings into practice, by putting them to the test of practice and by developing them through practice that one can become a competent classroom teacher (McIntyre, 1993). It is crucial that competent, experienced practitioners support the ‘learning through practice’. One way of understanding the mentoring function is to

draw from the literature about mentoring. Gehrke (1988) differentiates between the notions of 'help' and 'assistance', favoring the notion of helper in a helping community. The idea of mentoring has then been imported to education from other diverse occupational context and has carried with it diverse occupational connotations. Helping trainees to learn to teach is indeed a very difficult and complex undertaking, the mentor would undeniably need to know their role and the approaches to use in helping trainees.

Margaret (2008) suggest the role of mentoring in VET system :

- Regular planned meetings plus regular informal conversations
- Joint delivery of training by teacher and mentor
- Observation and feedback of the teacher's teaching by the mentor
- Shadowing of the mentor by the teacher
- Assistance with teacher training assignments
- Constructive regular feedback on performance
- Collaborative problem solving
- Contextualizing teacher role and tasks
- Correcting mistakes
- Directing the teacher to resources
- Specific training in how to perform certain tasks
- Explaining policies, procedures and politics
- Sharing personal stories and experiences
- Assured availability of the mentor
- Trust and mutual respect.

Collaborative teaching during practical work to ensure the students do the right task and solve the problem given. Teachers in working alongside the mentor could undertake responsibility for a small part of the teaching process. When a mentor and a trainee take joint responsibility for a lesson, plan it together, and each play different parts in the teaching, very nearly ideal conditions can be achieved for the practicing of particular teaching skills or strategies. This model of mentoring (collaborative teaching) only assumes that to learn professional practice is to identify and practice skills until they have been mastered. In other words, to improve practice is to move on to harder skills and more complex situations. It is possible to mentor trainees on this basis with relatively little recourse to the theoretical aspects of teaching. There need be no discussion of the decision-making that has informed practice, beyond the simple technical decision about the means adopted in a particular lesson. This approach to mentoring may make for short-term efficiency but it would deprive trainees of individuality and the means of developing and improving their practice in the longer term.

3.5 Conducting the practical work

That is always to be reminded not all the facilities and equipment is working properly, especially while the section of that practical conduct by the different group. Bonfires demonstrate session teacher need to structure the lessons. A good demonstration has three stages: an introduction, a body and a conclusion (Gary,1996)

a) Introduction

During the introduction to the session, you should:

- State the learners session topic, objective and scope
- Interest learners by linking the demonstration to previous work, and to what they will be required to do subsequently.
- Show learners why they need to be able to do this task.

b) Body

During the body session, teacher should:

- Avoid taking short cuts when you are demonstrating how to do the task.
- Observe all safety precautions.
- Work to standards which are realistic for learners to achieve but also acceptable to the workplace.
- Checks learners understanding by asking questions.
- Avoid talking down to learners,
- Avoid time wasting delays by getting equipment and systems operational

c) Conclusion

During the conclusion to the session, teacher should:

- Revise the main point of the training session
- Distribute hands out containing exercises and reference information
- Remind learners how and when they will get an opportunity to practice doing the task.

Teachers have to be in mind that learners are more likely to learn if their attention is attracted by presentation which are related to the actual workplace, new and varied. It will be necessary to do some research before the demonstration. For example it might involve a new technology of break system which not in your equipment and student will keep ask about the system and yet you don't have any idea about that. Get advice from others who do have first hand experience, and if necessary carry out a simple task analysis. Teachers have to account each group differs, and the sessions will achieve more if it is related to the difficulties that learners have had and to their previous activities.

4.0 VET Student Preferences

Much recent research in Australian VET about students preferences for services and support has focused on two areas: learners from equity groups and learners that use online learning. For example, a number of preconditions are necessary if the goal of improved learning outcomes for students in an online environment is to be achieved. The preconditions include:

- i. taking into account differences in student backgrounds in every phase of the design and delivery of online materials and support

- ii. catering for the differences in learning styles and preferences of students
- iii. focusing on the communicative and interactive dimensions of the new environments
- iv. expecting technology to solve all the hard problems (Brennan, McFadden and Law 2001).

Mitchell et.al., 2006) stated that students want teaching and learning experiences that lead to better outcomes and have the following characteristics:

- i. Relevant training. VET clients and customers increasingly want knowledge and skills that are marketable and relevant, either for organizations, or for individuals to secure greater employability and choice in work and lifestyle.
- ii. 'Just for me' training. Increasingly, VET clients and customers want to develop these skills at times, in ways and at locations that suit them, not the VET provider.
- iii. Contextualized learning. Industry and enterprise clients want training designed in ways that suit their settings and needs.
- iv. Informal learning. With the use of technology and the speed of change, often formal training is deemed too slow or expensive. Informal workplace learning can and does fill some of this void and deserves recognition.

Innovative teaching takes account of individual learners' differences, responding to the contemporary push for all organizations, including educational ones, to be customer-centered. But catering for individual differences in VET is a major undertaking, given the vast range of learners and settings.

To cater for individual learners' differences, some Australian VET practitioners use frameworks such as the Learning Style Inventory developed by Kolb, with its categories of accommodating, diverging, assimilating and converging. Smith (2005) finds that VET teachers typically develop their own theories of learning style, either without reference to established theory, or on a basis of a theory they were aware of and that had appeal to them.

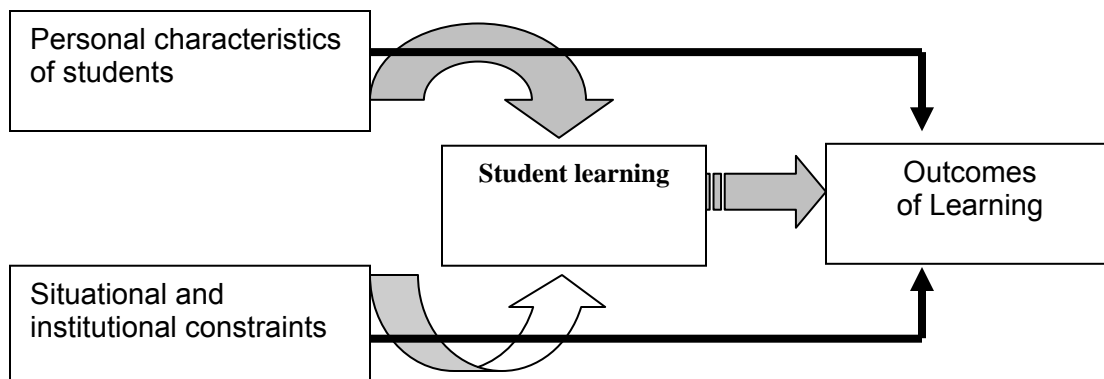


Figure 1 The 3P Model; Presage, Process and Product

The 3P model modified from John & Ross (1990) shown in Figure 1 is the personal characteristics of students and the situational constraints performance by two different routes; directly (the black arrows) and as mediated by the student's approaches to learning process (the shaded arrow). Presage are characteristics and constraints, process is learning style and product is outcomes. Evaluations of student learning conducted before or during instruction to enhance student's learning is known as formative evaluation.

5.0 Conclusion

Besides all the factors discussed, teacher attitudes can contribute the characteristics of teachers and students. Teacher attitudes hold regarding their students, their capacity to learn, their willingness to work hard and their worth as an individuals influence all exchanges between teachers and students in the classroom. Occupational teachers must be competent professional educators who continuously strive to strengthen their relationship with their students. Fullan (2001) stated that professional development is not about workshop and courses; rather it is its heart the development of habits of learning that are far more likely to be powerful if they present themselves day after day.

Therefore, secondary education students need to be lifelong learners who are prepared for the changing global economy, whatever their career and education goals (Hyslop, 2006) Teach the students how to solve the problems it can be made them understand new and complicated concepts when those concept are compared to the students already know and understand.

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