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WOULD THE PROPOSED MODULAR ASSESSMENT FOR THE STPM PROMOTE DEEPER LEARNING OR WOULD IT ERODE THE QUALITY OF MALAYSIA'S PRE-UNIVERSITY EXAMINATION?

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ABSTRACT

It has been proposed that the existing terminal system of assessment for STPM be changed to a modular system of assessment. This paper examines the feasibility of changing the traditional and accepted norm of terminal assessment to modular assessment and it discusses whether the proposed modular system may compromise the academic rigor that the STPM is renowned for.

1.0 Introduction

The *Sijil Tinggi Pelajaran Malaysia* (STPM) is the pre-university examination taken by students in Malaysia and was formerly known as the Higher School Certificate (HSC). The STPM has been set by the Malaysian Examination Council since 1982. It is deemed equivalent to the GCE A levels examination and is recognized internationally which includes countries in the Commonwealth of Nations, the United States of America and the Republic of Ireland. In June 2009 it was proposed by the Deputy Education Minister of Malaysia, Datuk Dr Wee Ka Siong (New Straits Times , 19th June 2009), that the existing terminal system of assessment for the STPM be changed to the modular system of assessment. This paper discusses the feasibility of implementing the modular system of assessment as well as the practical implications if implemented.

Students with the intention of pursuing the undergraduate programmes in the public institutions of higher learning are expected to achieve excellent results in the STPM examinations. In order to critically evaluate the viability of changing the so-called 'successful and stable education system', it is imperative that the learning outcomes of the STPM are reflected upon. It is undeniable that a student who has achieved flying colours in the STPM examinations will virtually sail through his undergraduate studies. The general consensus of the Malaysian students is that the STPM is one of the most difficult examinations as there is only one final examination for each subject after an intensive a year and a half of study whereas the undergraduate as well as the post graduate programmes consist of modular assessments. Students who actually qualify for the public institutions are generally considered the crème de la crème bearing in mind the difficulty of the STPM examination.

2.0 The Objective of Education

The learning outcome of the STPM is to equip a student with a good foundation which will enable him to successfully complete an undergraduate programme and based on this narrow definition the learning outcome has definitely been met. To be able to critically reflect on the repercussions of a terminal assessment the broader purpose of education should be discussed. Globalisation and the demanding business environment have impelled educators to review their perspectives on education. Traditionally teachers were seen as

harbingers of knowledge, and knowledge was assumed to be transmitted from teachers to learners. As such learning was viewed as a passive activity and this was referred as the banking concept of education (Freire, 1993). This narrow and simplified perspective presupposes that knowledge can be acquired only through teachers, text books and CDs. The concept of knowledge was focused on facts and memorization (Moursund, 1999). This traditional perspective has a seen a paradigm shift where education now is largely driven by cognitive and social constructivist principles.

The cognitive perspective argues that an optimal learning environment is one which consists of dynamic interactions between instructors and learners, is sequenced and comprises recursive tasks which enable learners to command a mastery of their knowledge through reflective interpretation (Gruber, 1995). The social constructivist theory, on the other hand, argues that learning is very much situational and learners are very much accountable for constructing their own knowledge (Vygotsky, 1986). Hence learning extends beyond the classroom and is formed through relationships, reflections and experiences (Moursund, 1999). This dramatic shift of paradigm clearly demonstrates that learning is no longer confined to the four walls of the classroom but it is more of the process of a learner scaffolding his experiences and relationships to build on prior knowledge. With this new overview of education, the question to be answered would be if the traditional method of terminal assessment will suffice? Assessments are mechanisms that can be used to control students. It can be regarded as far more insidious and pervasive than what educators would care to admit (Boud, 1995). Hence an area of concern that should be addressed is whether the terminal system or the modular system of assessment would be more effective in achieving deep learning.

3.0 Benefits of Changing to Modular Assessments

Deep learning is defined as an intrinsically motivated process of learning and the outcomes of deep learning are more consistent with the goals of higher education (Biggs, 1987). Deep approaches of learning have also been associated with higher quality outcomes and grades (Ramsden, 1992). As such an educator should always emphasise on achieving deep learning when they design learning outcomes and assessments. As cited by Refshauge and Higgs (2009), deep learning is fostered through assessments like coursework which promotes discussion, analysis, interpretation as well as understanding as opposed to relying solely on examinations which may focus on recall of information. Though this statement is valid, one cannot negate the importance of examinations. It is imperative that there is a balance between examinations and coursework. Hence, it would appear that the STPM examination should incorporate modular assessments and, where possible, it should include authentic assessments which will enable learners to apply the theories learnt.

An authentic assessment is one which enables authentic learning to occur and an authentic learning takes place when educators provide meaningful opportunities and appropriate support for learners to achieve self directed learning as well as enabling them to solve real life dilemmas (State University of New York at Oswega School of Education Conceptual Framework, 1998). In a concise definition authentic assessments put a realistic value of the task and context (Herrington & Herington, 1998) and this in turn will facilitate a student in the application of theories to practice. Clare (2007) also proposed that students' assessments could be designed to be a critical reflection of their learning outcomes. Where

possible these criteria should be taken into consideration when assessments for the modular system are designed. Birenbaum & Dochy, (1996) further reinforced that assessments are viewed as trivial if they are purely factual. Huang (2002) claimed that motivation increases for adults when they know that they can use their knowledge to resolve real life dilemmas. Though assessments are external motivators, over time these external motivators will be internalised by the learners and will motivate them intrinsically (Deci & Ryan, 2002). Hence, assessments play a greater impact on learners than what most educators can fathom.

The point that is being driven is that terminal assessment may not suffice in providing the opportunities to achieve deep learning. It is critical to realize that not all students perform well in examinations more so when their academic performance is measured by one terminal examination. A study by Ramburuth & Mladenovic (2004) indicated that less than 25 % of undergraduate students exhibited the relational and abstract SOLO levels (requiring greater reasoning and analytical skills) which could be a result of surface learning. Hence, it would appear the proposed idea of the modular system for STPM should be implemented as a means to achieve deep learning.

The other major drawback of the STPM is that the students who are subjected to this terminal assessment average only 19 years old. They may lack the maturity to be self directed and their future is dependent on only one examination. This ONE examination plays a pivotal role in determining their future. If for some reason their technique of studying is wrong or they succumb to usual examination pressures their entire future can be jeopardized. No doubt they can repeat these papers the next academic year but it is worth pondering whether these young minds can withstand failure and still remain motivated to study while their counterparts are rejoicing in the universities. Hence, it appears neither pragmatic nor fair to assess students based only on one assessment more so when this assessment will determine their future.

Another fundamental purpose of assessments is to provide feedbacks which can enhance the learning experiences of students. Feedbacks should be constructive, impersonal and be free from bias. It should be a two way process where learners have the opportunity to question the feedbacks provided. By having the STPM assessed terminally it will not provide much opportunity for the learners to benefit from the two way process of learning. No doubt students have the opportunity to interact with the teachers on a regular basis to learn from their internal assessments to enhance the learning outcomes but very often these assessments are not taken very seriously as they do carry any weight towards the final examinations. Only intrinsically motivated students will pay heed to these assessments. As such Boud (1995) suggested that educators should shift away from the practice of terminal assessments as they impeded any form of response from the learners. Piaget's cognitive constructivism asserts that knowledge results from self constructivism that tries to obtain an equilibrium between existing and new information (Huitt, 2004) and this can be only be attainable through continuous engagement between the learner and the teacher. As pointed out by Heron (1990), supportive intervention is imperative to affirm the actions and attitudes of the participant. Hence, it can be concluded at this phase that terminal assessments does not permit interactive and timely feedback which reinforces the point that the STPM should be converted to the proposed modular system.

4.0 Challenges of Implementing the Modular System

However, the practical implementation of the modular system may be easier said than done. Firstly, the education system in the Malaysian schools are still very much teacher centered where learners are relatively passive. As such, implementing the coursework method of assessment would require constant interaction between the teacher and learners. It would difficult to change the mindset of teachers who are comfortable in their respective teaching and assessment methods. Teachers need to be retrained as facilitators rather than being the guardian of knowledge and this was explicitly expressed by Clare (2007), "My role was that of a guide and facilitator rather than a 'guardian of truth' for students". As facilitators they would need to provide regular constructive feedbacks that are based on critical dialogue. They should be free from bias and they should be objective. A teacher who is not trained to engage in constructive dialogues may hinder the learning outcome of the students and may even demoralize the learners. Training these teachers to provide effective feedbacks will result in a substantial cost to the government.

Moreover implementation of the modular system of assessment will increase the workload of teachers. The age-old complaints of teachers have always been pressure of work and low wages. Hence, introducing the new modular system will require the Ministry of Education Malaysia to review the existing pay scale of the STPM teachers order to make them more receptive to the proposed modular system. It is crucial to bear in mind that though the tenets of the modular system would be assessments, it is not a stand alone feature. A change in assessment will require the educators to scrutinize the curriculum.

The additional assessments that have to be set need to be standardised across the nation so as to ensure fairness. This will once again be a costly affair especially now when the government is trying to recover from the global recession. The assessments will have to be carefully tailored to ensure that the contents are relevant and the learners develop the necessary skills needed for a very competitive business environment. The assessments should also be synoptic in nature so as to ensure that the learners are able to competently link the various areas of the subject and see the subject as a whole. More importantly, the assessments should be designed not so much to distinguish the better learners from the weaker ones but instead be able to intrinsically motivate students to acquire and construct new knowledge. It must develop the love of learning among students. As appropriately cited by Lim (2001), learners must be actively involved in and be responsible for their own learning. As assessments are the hallmarks of the learning outcomes, educators must pay a great deal of thought and effort to safeguard the quality of assessments. Moreover, poor assessments can invalidate results of student learning (Marsh A.P., 2007)

Besides ensuring that the assessment is standard, the other great hurdle that the Education Ministry may face is ensuring that the assessments are marked consistently. It would be an arduous task to ensure that educators around the nation assess these assessments to the precise standards given considering that all teachers have different prior knowledge, experience and interpretation of the assessments. The only way to safeguard the consistency of the marks allocation of these assessments would be to ensure that every assessment is marked by at least by two examiners and these assessments are further moderated by independent external moderators.

The   concern that will plague most educators is whether the proposed system of the modular assessment will strip the STPM of all its virtues. To date the STPM is renowned for its high standards and has been accepted internationally. The change in the assessment may compromise the standards and quality of the examinations which took years to establish. Quality is not defined by the choice of assessments but rather the process of ensuring that that the assessments are valid, reliable and authentic. The pertinent issue here is to examine how education is perceived. Education should be made available to all and it should motivate learners. The GCE A levels have implemented the modular system since early 2000 and it is still renowned for its quality. There has been significant improvement in the A levels results. No doubt some educators have raised the concern that the modular system with the numerous amount of coursework has driven these students to surface learning due to the shortage of time to comprehend and digest the entire curriculum. If these allegations are indeed true then the very purpose of achieving deep learning has been defeated. Research has further demonstrated that young learners feel the voluminous content and assessments practices and are forced to practice surface learning (Choy & Delahaye, 2009). Hence, it is fundamental to implement the modular system while ensuring there is an equilibrium between quantity versus quality of assessments. The quality will be compromised only if educators have a lack of shared vision (Srikanthan and Dalrymple, 2003)

5.0 Conclusion
It is apparent that there has been a paradigm shift in how knowledge is developed. Learning is no longer limited to the conventional method of the transmission of knowledge from teachers to students in a confined environment. The emphasis in education has also changed from memorization to an integrative concept of knowledge, skills and attitudes (Stoof, Martens, van Merrienboer & Bastiaen, 2002). The learning process is an active process where there is constant exchange of knowledge as well as ideas between facilitators and learners. Teachers are meant to facilitate the learning process while students are accountable for their own learning outcomes. Learning is a continuous lifelong process and is largely contributed by the interaction and critical dialogues between the learners, teachers, peers and society at large. The new definition of learner is further complicated with globalization where learners have different needs, cultural backgrounds and prior knowledge. But what remains constant is that education plays a pivotal role in the betterment of mankind. Hence, educators must constantly reflect on the teaching and assessment methods to suit the needs of the diverse learners.

Another apparent force to be reckoned with is the importance of assessments in facilitating the accumulation of knowledge. Educators cannot negate the impact of assessments on the learning outcomes of students. So educators must constantly engage in discussions, debates and reflective practices on how to continuously improve assessments and match them to best suit the needs of the learners. There is no one size fits all panacea in the assessment methods for learners.   However, it is imperative to ensure that the assessments are authentic as students who are confronted with stimulated real life problems have higher order thinking processes (Newmann & Wehlage, 1993). It must allow room for continuous feedback which clearly a terminal assessment does not. Moreover, companies have argued that though students have the knowledge, they often lack the competency (Bastiaens &

Martens, 2000), which probably is a result of poor interaction between facilitators and learners.

It can be concluded that terminal assessments is definitely not the method to use in the STPM considering that education has long moved from its traditional role. It is clearly not fair for learners to be judged based on only one assessment. However, implementing the modular system may not be as easy as it looks. It has to be done without compromising quality and changes must adhere to the stipulations of the local Malaysian Qualifying Agency. It would probably take more time, effort and cost before a refined model can be established but the role of educators in society has never been easy. Their role is to continuously challenge the existing models as well as to continuously improve the education system. The quality of the STPM will not be compromised if educators continue to review the assessment methods to ensure that they motivate, stimulate and encourage lifelong learning.

In conclusion, the STPM should move away from terminal assessment and its quality will not be compromised if due reflection, effort and discussions are incorporated. It can definitely emulate the success of the GCE A levels. A quotation that may be worth pondering on would be, ***the only person who is educated is the one who has learnt how to learn and change (Carl Rogers).***

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