

## KNOWLEDGE CAPACITY BUILDING THROUGH QUALITY MANAGEMENT OF EDUCATION AND INSTITUTIONS OF HIGHER LEARNING

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### ABSTRACT

The globalization of knowledge or information is multidirectional. It only makes sense when the provider and recipient of the knowledge or information are capable of both providing and receiving. The fact currently is that this is not the case, especially when it involves developing countries. While the expectations are that developing countries should at least be able to receive, if not provide, the education infrastructure is normally not present to allow that to happen. This paper proposes an exploration into effective learning, a move away from current pedagogical thinking and delivery and instilling innovative management of institutions of higher learning, so that we could *catch up* with the rest of the world and hence join them in globalizing knowledge and information. In particular, this paper discusses the demise of *rote learning* in this technological and globalised world and challenges the Asian values concept of *acceptance*. In combating these educational drawbacks, this paper advocates a fundamental change in the requirements of teachers in the broadest sense of the word (i.e. including lecturers and professors). At the same time this paper also discusses the need for a conducive environment to allow the above to occur. This leads to a quality-based management of higher education institutions. This requirement has become a given in many developed countries.

### INTRODUCTION

Globalization is inevitable. Like everything else, it is up to us to gain from it. Like everything else also, we must prepare ourselves for it too. This is not child's play. Preparing for globalization is a serious undertaking. The problem is that globalization started some time ago. Will we be able to catch up? The answer is very simple. We absolutely will not if we don't start doing something now.

Since this century is the knowledge century, it is also inevitable that education must figure prominently in our preparation for globalization. Here lies a formidable challenge. Differences in the philosophy of education between the members of the global village, in the current level of education, in the current educational environment, in the current educational technology, in the current educational and knowledge capacity; all contribute to the rigour of the challenge.

With globalization, sharing is fundamental. Sharing of experience, sharing of different resources, sharing of expertise and so on. However, the most appropriate sharing of course is where the partners are equal. However, we know that no two countries anywhere in the world are equal. The USA is different than the UK, France, Germany and so on, as the UK is different from India, Malaysia, Japan and Korea. Closer to home, of course Malaysia is different from Indonesia, the Philippines, Thailand, Cambodia and so on. Therefore, by nature, globalization is going to be dotted with imbalances of sorts. Nevertheless, only those with the capability of receiving what others are providing will gain. Like playing sport, we know that we will learn more from playing with somebody who is much much better than us. But will s/he play with us if we are too far below their standard?

In similar ways, countries that would like to be involved in globalization will also need to raise their standards so that they could *play* with other countries from whom they may gain something.

This paper is an attempt to make us aware of this need to prepare ourselves in terms of education development in order to allow us to become an active player in the globalization of knowledge and information. By no means is it saying that we are not at all there, but that awareness will make us more focus on the need to continually improve ourselves. Perhaps one day we will be the instigator of change and globalization of some particular knowledge and/or information.

## **ROTE LEARNING**

Rote learning has been discussed at many fora pointing mainly to its disadvantages in our modern and technological world (Schoenfield, 1987, 1991; Reusser & Stebler, 1997; Harvey, 2002; Idrus, 2003; Pangulangan, 2005). Arguments for its efficacy have also been equally expounded (Bartolli, 1989; Dixon, 1994; Blumenfeld, 2000; Heward, 2003). What we could derive from these arguments is simply that rote-learning and non-rote-learning (for want of a better description at this stage) have got their respective places in learning. It is a matter of finding out what these places are before applying the type(s) of learning most appropriate for them. In knowledge and information development, I contend that rote-learning has a major disadvantage.

In both knowledge and information development we need to be able to think, to experiment, to seek new knowledge, to logically expound it, to disseminate it and to continually enhance it. Even superficial assessment of these requirements could only point to the misfit of rote-learning. The common definitions of *rote* range from *fix in memory by means of frequent repetition, use of memory usually with little intelligence, repetition carried out mechanically or unthinkingly* (Webster's Dictionaries, 1850, 2002) to *learning that avoids grasping the complexities...* (Wikipedia, 2005).

Recent discussions with those who are either involved in or researching in the area point to the ubiquity of rote learning in many Asian countries. In one Jakarta's leading private high school, for example, a student's answer is declared incorrect because it is not the answer given in the answer book held by the teacher (Wijaya, 2005), even though the

student's answer was more logical than the answer given in the teacher's handbook. Dictation rather than lectures at university level in several Southeast Asian countries appears common, although information transfer could now be more effectively and efficiently done through the web and electronically. The opportunity to use class times for knowledge discussion and development is then forgone.

Compare this to a case of a seven-year old pupil in a New Zealand primary school, who was given an assignment to write about volcanoes in Russia. The teacher did not even tell the pupil how to do the assignment other than indicating that pupils should refer to books, magazines and journals in the Public Library or access information on the web.

Is this not a practice of the famous Chinese saying "*Give a man a fish and he will live for a day. Teach the man how to fish and he will live a thousand years...*"? The obvious question is of course, why we in Asia are not practicing this in our education and training?

Given that the shelf-lives of many disciplines and knowledge are reducing rapidly, is it also not logical to ensure that students learn how to learn rather than learn a particular subject which may not even exist over the same period that it was learnt?

## ASIAN VALUES

Going by discussions on Asian Values (Amartya Sen, 1997; Inoguchi & Newman, 1997; Suryadinata, 1997; Fukuyama, 1998; Shaw, 1999 and Koh, 1999) little wonder that *rote learning* is a natural extension of control by the elites who misappropriated the Confucian teaching as the Asian Values. And control of education through *rote learning* of course simply completes the loop.

The typical Confucian teaching that has been excerpted is that *people are born not with rights but with duties in a hierarchical setting*, vindicated even recently by the result of a survey (Koh, 1999) that only 32% of Asians interviewed appreciated *personal freedom* (against 82% of Americans) and only 29% of Asians believed in *individual rights* (against 78% of Americans).

Such teaching and such results gave rise to a phenomenon of *acceptance*, particularly by the masses which by definition form the majority. As a result the elites are firmly entrenched in their place at the peak of the hierarchy and the masses simply accept their fate at the hands of the elites. If they are fortunate, the masses somehow inherit a benevolent leader and everybody is happy ever after. If not, which is mostly the case as history would show, then the *teaching* is reinforced and passive acceptance pervades every walk of life including education.

In these cases of course, the students do not and are not allowed to engage the teachers who sit much higher in the hierarchy. This is repeated *ad infinitum* as students become teachers and their students become teachers and so on. The system is self-reinforcing as the current students aspire to be teachers as soon as possible in order to claim the benefits

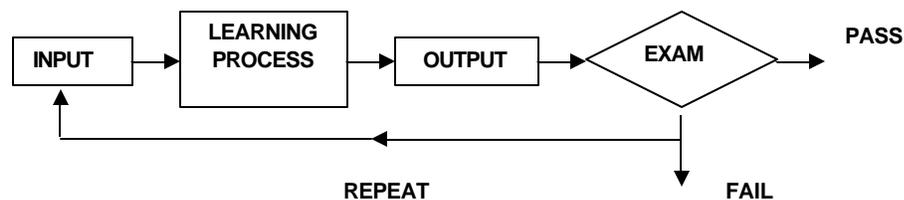
of the higher level in the hierarchy. Many a time of course even before they are qualified to be teachers.

## QUALITY IN HIGHER EDUCATION

Literature shows that quality in higher education is here to stay (Barnett, 1992; Green, 1994; Gordon, 1997, 2005; Idrus, 1996, 1999, 2001, 2003, 2004(a, b), 2005; Woodhouse, 2001). Quality, however defined, is in the higher education vocabulary and searches through university websites inevitably found the word quality prominently displayed in their visions, mission statements and their management plans.

Regrettably, not all involved understand quality in the same way. Academics who are naturally proud of their standing and the standards of their lectures and exam questions think of the quality process as students ability to crawl over the academic hurdles put in front of them. The tragedy of course is that it does not matter whether the students are indeed able to get over the hurdles or not, quality is claimed to be proven. On the one hand, the professors or lecturers would be proud when most of their students passed and could therefore claim the quality of their teaching that allows their students to pass the already difficult academic hurdles put in front of them. On the other hand, the professors and lecturers would also claim quality when a lot of their students are not able to pass their subjects.

The understanding of quality shown by academics above is what is known as quality control shown in Figure 1 below.



***Figure 1*** Diagrammatic description of Quality Control

Essentially, the output of the learning process is put through an assessment process or examination where the results could only be a *pass* or a *fail*. Those who passed would be considered successful while those who failed are not. Some of those who failed may be given another chance by repeating the learning process, even though this learning process had failed them in the first place.

In quality control, an inspection (or examination in the educational case) is done post the output or production. Nothing is done to the process (learning process in the educational case).

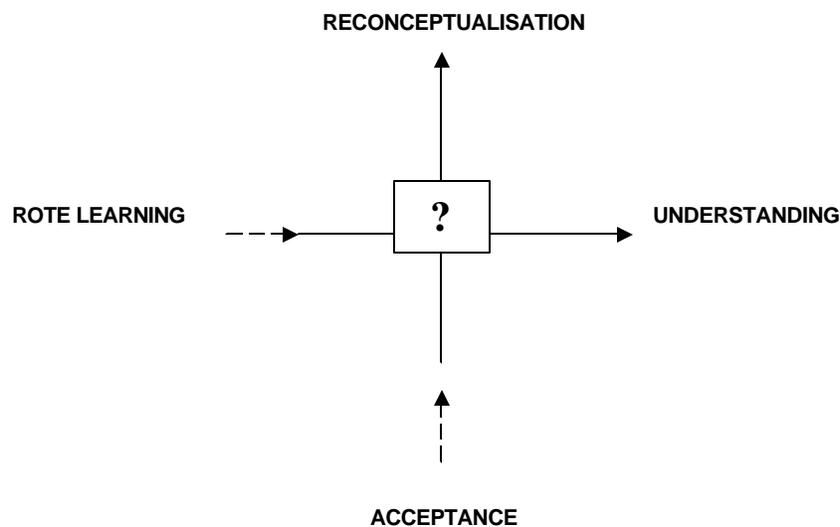
Just like *rote learning* and *Asian values* discussed earlier, *quality control* (or QC in brief) is but another manifestation of control by one over another.

While examinations still rule high in many higher education institutions everywhere in the world, the freedom of assessing students is very limited in many Asian and developing countries (Wijaya, 2005; Idrus, 2003; Hazman 2004 (a), 2004(b)).

The *trinity* of *rote learning*, *Asian values* and *QC* must therefore be addressed if we wish to catch up with the lost time and to allow us to participate actively in globalization.

## TRANSFORMATIVE LEARNING

For *rote learning* and *Asian values* (in particular the *acceptance* phenomenon), transformative learning propounded by Harvey (2002) promises a practical solution. Harvey proposed that we should move from *rote learning* where by definition lacks depth, to *understanding* where by definition delves deeper into the matter. At the same time we should move from *acceptance* where by definition lacks critical analysis, to *reconceptualisation* where by definition requires deep critical analysis which in turn demands an ability to synthesize. Figure 2 shows this diagrammatically.



***Figure 2*** *Diagrammatic view of Transformative Learning*

The box with the question mark is instructive in its appearance. The question posed is obviously what should we do in moving from *rote learning* to *understanding* and simultaneously from *acceptance* to *reconceptualisation*.

The answer for both axes is simply engaging the students. This means a number of things, from respecting the students as able and thinking individuals to changing the way learning is done by both the teachers and the students. It also means that the students, as in the case of the seven-year old in the New Zealand primary school, must be empowered in the full and correct sense of the word.

Empowerment is yet another related concept that appears to be pushed to oblivion by both *rote learning* and *acceptance*. At best, empowerment is given lip service by many managers not only in Asia. The resulting abrogation of the managers' responsibilities naturally created problems.

One definition of empowerment (Kinlaw, 2002) is “...*the process of achieving continuous improvement in an organizations' performance by developing and extending the competent influence of individuals and teams over the areas and functions which affect their performance and that of the total organization...*”

Simply, empowerment is the sharing of competence and the ability to influence others in order to improve their performance. In other words the roles of the manager (in the broadest sense of the words, so at institutions of higher learning it means, Vice-Chancellors, Deans, Directors etc) have essentially changed to coaching their staff and students in our case, to impart them with new knowledge and competence, to lead them in the most appropriate way so that they become better, more capable and more competent.

Empowered learning is therefore an essential and necessary part of *transformative learning*. This therefore is the ***student engagement*** that should fill the box with the question mark in Figure 2.

The transformation, however, is still unfinished until the learning system moves from QC to something else that makes more sense.

## QUALITY ASSURANCE

QC can be described as a system by which we separate the good from the bad products. We cannot do much about improving the products because they have been processed and manufactured. More importantly we do not look to improving the process in this system. Whilst elegant and sophisticated sampling methods have been devised and used to extrapolate results to all batches of the products, it nevertheless defies simple logic.

Is it not simpler if the process can be tuned to ensure that all the products at the output end meet the requirements? Firstly, we eliminate one element in the process, namely Inspection. Remembering that quality or efficiency is the product of the elemental quality or efficiency, reducing one element in the system will also definitely improve the overall quality of the system. Secondly, if we can tune the process in order to ensure perfect outputs, then we would have saved a lot of unnecessary costs which arise from manufacturing products that would be rejected. We call this system Quality Assurance or QA for short.

Taking the parallel in education, much savings will also accrue from reducing failures without reducing the quality of the process or outputs. Imagine if the average full-fee of a course is RM 30,000 per annum per student, the failure of only 5 students in a class

would therefore waste some RM 150,000. Imagine a university with 10,000 students enrolled and a policy of using the bell curve distribution in passing students (in other words a specific failure rates) of say even 90% (that is a failure of 10% or some 1,000 students). Multiply this number by RM 30,000 and we will end up with RM 30 million. In fact if universities are sincere enough to state their failure rates in their annual reports, we will find that 10% failure rate is quite conservative. What will this cost the whole country? If we assume the country has 14 state universities with an average of 10,000 students each, this will cost the country a whopping RM 420 million a year. Could we not put this to better use? We have not even included the private university-colleges that number more than the state universities. Doesn't putting this way make one think twice or thrice about our current educational system?

The caveat however, of course is that we must not increase the passing rate with reduced quality. This would defeat the purpose. One of the better ways to do so therefore is through *transformative learning* and *QA*. But how do we do that?

### CONDUCTIVE ENVIRONMENT

Every improvement must start with an environment that is conducive to creating that improvement. Environment is itself created by physical site as well as mental and psychological conditions. It is therefore not enough to have a new organizational structure alone. The people sitting in each of the boxes of the organizational chart must also have the predilections towards providing the mental and psychological environment essential to encourage the doers practice both *transformative learning* and *QA*.

That is, firstly, managers in a university must be committed to the changes mentioned above. This commitment must not be in words alone. The best manifestation is through action. Walk the talk is another way of saying it. It is one thing to say that staff are empowered and then slap on a log-in and log-out time and get staff to explain why they are late, why they didn't log out the day before and so on. At the other end, it is one thing to tell staff that bonuses are paid on the basis of performance and another when staff found out that those who don't perform are getting higher bonuses than those who do. It is one thing for management to say that it cares about all staff and then staff found themselves queuing up for food in a humid open air stalls while management is being served in air-conditioned tents.

Ricardo Semler (2003), proprietor of the famous Brazilian company Semco, made several interesting points when he asked:

1. Why are we able to answer emails on Sundays, but unable to go to the movies on Monday afternoons?
2. Why can't we take the kids to work if we can take work home?
3. Why do we think the opposite of work is leisure, when in fact it is idleness?

He further suggested that organizations must provide opportunities for success to staff and must do their utmost to give staff opportunities to use their talent reservoir. This is

not easy. Managers need to put a brake to showing off their wisdom and let staff have their say and get these properly considered and recognized by management.

Semco continued to dominate various businesses in Brazil and elsewhere around the world through different and sometimes hostile governments. All initiatives, ideas, new businesses and development emanate from and dealt with democratically by staff. Semler though the son of the owner and a major shareholder, has no more rights and no more votes than any other staff at Semco. Any staff member can attend any management meetings and s/he is recognized as a full member of the meetings when they attend.

Semco is indeed at one extreme of the management spectrum and not many organizations around the world operate in this manner. However, this does not mean that we cannot start thinking about it and perhaps even try to emulate some of its practices. After all, we have some way to catch up and anything that may help us in this endeavour should at least be tried.

### **NO MORE TEACHING, JUST COACHING AND LEARNING**

Engaging students in transformative learning involves a major change in teacher-student interaction as we know it. Like Semler, teachers (in the broadest sense includes lecturers and professors) will also need to put a brake to their teaching and let students learn. Teachers should lose their superiority towards students and treat them as adults with deep talent reservoir that needs to be mined. The roles of teachers will need to change. Mining students' deep talent reservoirs must become a priority. Coaching students and letting them learn in a democratic way will engage them.

Given the chronic domination of the old system, it is only appropriate that these changes be eased in. Students will need time to adjust as will teachers. In addition university management will need to prove their support for this fundamental change.

Fukuyama (1998) concluded that there is correlation between democracy and development and that wealthier countries in fact expand political participation. There is no reason that this cannot be true with education as well.

### **CONCLUSION**

Things have moved on a lot particularly with the advent of computers and information technology. Our management and education unfortunately are still trying to catch up with these advances.

If we wish to build our knowledge capacity which now cannot but must be global, improve our ability to participate in its globalization and be considered an equal in these interactions, we must inevitably change our educational system and practices.

Transformative Learning which moves us from *rote learning* to *understanding* and simultaneously move us from passive *acceptance* to *reconceptualisation* is suggested

here as an alternative to current learning method in most Asian countries that had stagnated knowledge development capacity.

This paper complemented the suggested change in learning methodology with the *democratization* of management style, the introduction of real and substantial empowerment of both staff and students, all of which are mandatory to create the appropriate environment for *transformative learning*.

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