

Traditional Teaching Method Vs Modern Teaching Method

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Abstract

Teaching and learning is an old methodology that in existence for many thousands years ago. However, higher education is in existence for six hundred years without any major change. We measure education in the twenty first century by *how many students have graduated*. Such measure does not relate the real life with education, even when we try to relate education with employment. Therefore, the question is “why do we educate?” Until we find the answer to the question, then we will be able to measure the performance of education.

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The traditional way of teaching and learning

Traditional teaching lasted 600 hundred years from middles ages without major changes. This continuous traditional way of teaching to the twenty first century is failing. Some Higher education performance assessments measure worldwide mainly based on the growth on number of students enrolling in universities. According to the United Nations Educational, Scientific, and Cultural Organisation, the number of people entering higher education has increased from 19% in year 2000 to 29% in year 2012.

According to Bob Goddard in his book, (*Making a Difference, 2012*) estimates that the number of students around the globe enrolled in higher education will reach 262 million by 2025, up from 178 million in 2010.

According to Philip Altbach, (*director of the Center for International Higher Education at Boston College in the US*), only two countries in the world will be responsible for much of the increase in the students enrolment numbers in Higher Education. Therefore, “the Chinese are rethinking expansion as they’re beginning to have more unemployment of university graduates”.

Such financial modelling measure of Higher Education performance focuses on expansion of student numbers, rather than on quality of teaching and learning. What happened to the rest of the percentages of students that never reached Universities? The current teaching style is based on production measure of supply and demand. This production chain system is serving only a small section of the employment market. In response to the increase of student’s enrolments, Universities build larger lecturer theatres. Except for a few Universities in Europe like Germany, Denmark, and Finland, where the teaching and learning use other methods than lecturing.

Donald Bligh findings in his research about teaching in higher education, (book titled *what is the Use of Lectures?*) summarises:
“lecturing is inefficient and any other present methods of teaching are much better compared to the traditional lecturing.”

The traditional teaching and learning method makes the Lecturer/Tutor in charge of the classroom/theatre, where teaching mainly relies on textbooks, emphasises on basic skills, and learning assessment placed as separate entity on the number of study hours, rather than on lecturing hours.

Lecturer rooms still extensively used because they are economical, and meet University schools budget.

In University where I teach Physical Science students, I found students have a culture of listening and become passive learners. In Physical Science, students are required to participate in teaching and learning, to participate in laboratory experiment, workshops,

and other methods that make teaching and learning interactive and use participating approach.

The modern teaching and learning

The modern teaching method is effective because the learner learns through sociable interactive environment and becomes independent learner (Muijus and Reynolds, 2005). This method is based on hands-on the big idea in practical workshop. Therefore, the assessment is an activity integrated with teaching and learning, and occurs through portfolios and observation (Brooks and Brooks, 1999).

The strategic approach to modern teaching is focussed on “*why we want to teach?*” This question will lead us to consider the culture of the individual classroom, its diversity, considering students’ background, experience, knowledge, environment, and learning goals. Explanation and demonstration is the new way of teaching in today modern world. These leads to considering the two methods that may come from the historical words *educere* and *educare*. In modern teaching, if the two methods used as a combination, it may give good results throughout the age of learners learning.

From my own experience, *educare* style may be used from the primary education, and then will overlap with *educere* style in secondary education, then fade away, where *educere* will takeover up to higher education.

My new approach to teaching and learning was with Physical Science students in higher education session, when I begin by posing Physical Science problem and draw out several answers or solutions from the students. Then I will go on to explore and build a lesson plan on the suggestions that emerge from the discussion. The best example when I posed the question of “what the definition of *friction*”, where can we experience such phenomenon? How can we reduce such negative effect to save energy? What consequences in our everyday life will be if we do not attained to it?

A great way of inviting students to participate in teaching and learning is to create an atmosphere that encourages student participation by giving them a coursework or assignment that is relevant to their everyday life. A method that will make their learning related and constructive to what they learn. In the classroom, I use a discussion atmosphere to discuss their assignment in groups and use the feedback and comments from the whole class. When I give such opportunity to students to contribute to their learning, they fill confident and assertive, particularly when I invite challenges to their ideas. This can lead to constructive debates that encourage students to engage with the material of Physical Science. Such approach I found it provocative to invite questions and a way to present different points of view on any given topic. Finally, I conclude with an approach that believes on only certain views are best accounts for evidence.

The learning theory that I found works better with students learning Physical Science is based on “**the learning pyramid**” on the active learning section, adapted from (*Edgar Dale Audio-Visual methods in Teaching, Holt, Rinehart, and Winston.*).

I used a mixture of teaching and learning styles of three multiple intelligence methods of visual, Kinaesthetic and logical and mathematical logic. These three styles are adapted from (*eight ways of understanding the world of learning using eight intelligences styles* by Howard Gardner).

The seven laws of teaching by John Milton Gregory have most influence on my teaching. Lecturing must take the seven important factors of teaching and learning:

- (1) The Teacher is the one with the *knowledge*, and the *method* on how to convey the right information to the learner, and with the right balance of learning capacity.
- (2) The learner who attends has immense interest and passion to learn.
- (3) The *language* used must be the fundamental *medium* between teacher and learner and it has to be common to both teacher and learner.
- (4) The teacher must explain the lesson using the known knowledge of the learner.
- (5) The teacher uses the learners mind to grasp the desired thought or art of the knowledge required from the lesson.
- (6) The teacher must fully understand that the crucial thinking into learner's own understanding of a new idea, truth, or knowledge.
- (7) The reflection on the reviewing style process must use reviewing, rethinking, re-knowing, reproducing, and applying.

Communication in teaching is also the most important factor that conveys information to learners. Any distortion or ineffective communication may lead to wrong information or even misunderstanding. Petty noted:

‘In practice, a number of barriers present themselves, preventing or inhibiting effective communication’.

(Petty, 2004, p. 40).

I have explored the main three theories of learning *Behaviourism, Cognitive, and Humanistic* successfully in communication with learners. I have examined these theories against my own teaching practice, and I have found them to overcome barriers to learning by learners from different cultural backgrounds.

The theory of *behaviourism* as a theory of learning, I found it to be effective on young learner as a direct response to the continued application of specific stimuli, where it is used to positively reinforcing and encouraging wanted behaviour and negatively reinforcing and discouraging unwanted behaviour. Reece and Walker expressed this theory by their comment:

‘thought that sensations, feelings, and instinct were not a necessary part of the study of learning. The only area of interest is what the ‘subject’ is doing in response to the stimuli.

(Reece and Walker, 2007, p.81)

I found this theory of behaviourist working well in motivating the learners by praising them for their good work. Such approach is helpful to overcome their difficulties on punctuality and attendance and stimuli to the course.

The theory of *Cognitivism* found to have a step further than the *Behaviourism* theory. This because is based on “*teaching for understanding*”. As Petty notes:
‘... new learning is built on existing learning’...‘cognitivist theory called ‘constructivism’ is now almost universally accepted by all experts on the brain or the mind. They all agree that learning occurs when students construct their own meanings, usually out of their prior learning and experience, and of course out of their instructional experience’.
(Petty, 2004, p.4)

I found such theory helpful when teaching higher education students, where group learning and workshop take place, particularly discussion session after watching a video clip of a certain topic. I use this method to overcoming barriers such as lack of practice with social interaction.

The theory of *Humanism* found to be more suitable for matured experienced learners, what Reece and Walker describe as a *‘meaningful context to the information learned’*.
(Reece and Walker, 2007, p.16).

Also by Petty comment:

‘The humanistic school believes that emotional factors, and personal growth and development, are the highest values, ...that society, schools and colleges exist to meet the needs of the individual learner’ and that *‘Teachers are encouraged to help each learner choose what knowledge and skills they want to learn’*.
(Petty, 2004, p.16).

The assessment of teaching and learning that we use is the one that assess the new skills learned by the learner and adapted from **Tummons** (2007, p.4), particularly the last part of his definition:

‘discover whether or not the learner could perform a specified task in a workshop, or to judge the extent to which the learner has mastered a new skill or a new body of theoretical knowledge’.

The importance of this method is to assess the new skills learned by the learner using kinaesthetic method.

Education performance is measured in the twenty first century by how many students are graduated, which is a financial measure. A measure that has no compatibility with education or students career. Future market of china and India also has a trend of incompatibility of such measure according to their own measure. Therefore, what is the solution?

The education programmes worldwide are frameworks that require learners to fit within them, rather than the programme to fit each learners requirements. Education programmes would be better if it could be programmed to individual learner, by introducing Individual learning Plan (ILP).

Summary

The traditional teaching and learning method is not working according to Donald Bligh findings in his book titled *what is the Use of Lectures.*). It makes the Lecturer/Tutor in charge, and relies on economic assessment in all teaching and learning resources. Such method makes student passive learners.

The modern teaching and learning makes learners independent according to Muijus and Reynolds, 2005. Its assessment is an activity integrated with teaching and learning according to Brooks and Brooks, (1999). The strategic approach to modern teaching is focussed on “*why we want to teach?*” using the two methodologies of *educere* and *educare* from Latin meaning of general education.

Every topic in education (such as Physical Science) must have a way on how a teacher conveys information to learners, by using different methods according to learners requirement using visual, aural or kinaesthetic methods. This method makes learning active according to Edgar Dale and “**the learning pyramid**”.

The seven laws of teaching by John Milton Gregory have most influence on modern teaching and learning. Communication between teacher and learner is also important in modern teaching according to Petty,(2004, p. 40).

The three theories of learning: *Behaviourism, Cognitive and Humanistic* are theories used in different areas, where Behaviourism is used with young learners, Cognitive is used with higher education learners and Humanism is used with mature students.

The best method of assessing teaching and learning, is by using *Tummons* (2007, p.4) method, which assess new skills learned by learners.

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