

# Teaching Methodology and its Effects on Quality Learning.

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## Abstract

Teaching method is the mechanism that is used by the teacher to organize and implement a number of educational means and activities to achieve certain goals. Teaching techniques are the means that reflect the success of the learning process and the competencies of the teacher. Being a teacher, I always need to look for new ways to deliver knowledge to my learner, and in many occasions, I found that traditional teaching methods become not effective as it used to be due to the current advancement in technology. Teaching becomes more effective when it performed in a quicker response to the needs of the learner, so that blending various techniques to deliver knowledge and ideas become necessary. This paper presents the characteristics of many teaching methods including online teaching and a comparison between them is highlighted, in order to choose the method that satisfy the aims and provide the teacher with high competency.

**Keywords:** Teaching Methodology, Competency, Strengths and Limitations, Quality of Teaching, Online Learning.

## 1. Introduction

Teaching and learning are two activities that one reflects the other, so that it's preferable to use the term "Teaching and Learning Methods" rather than "Teaching Methods". As we all know the outcome of teaching is learning, therefore the separation of the two activities is not appropriate (Tom, 1997). The criteria for measuring good teaching are the amount and the quality of learning the students get (Shahida, 2011). Our aim here is to establish principles to evaluate teaching method against learning outcomes. Generally teachers intend to use the straightforward method he used to, "the traditional method of teaching". This method, focus on the teacher himself, ignoring the interaction of the student. Teacher must know, all students do not learn in the same way at the same time. Students in the class have a variety of levels in any particular subject, therefore teacher need to use different teaching methodology or to find the method that can reach all students effectively. Other reasons to look for new techniques of teaching is the advancement in communication technology; information technology and in particular education technology, these have changed the mind of current generations.

## 2. Measuring the quality of teaching method:

To achieve the learning outcomes that satisfy all the aims of the learning process, we need to establish a model approach in order to choose the teaching method. This model consider a number of criteria's in any selected teaching method in spite of their differences in engaging the students, and in the type of information they deliver. The criteria's of this model can be summarized in the following table (Al-Faraji, 2007):

. To what extent the method is suitable with the allowed time.
. To what extent the method gives a chance of learners' participation.
. To what extent the method gives a chance to exchange ideas and expertise.
. To what extent the method gives a chance to implement the real life experiences.
. To what extent the method gives a chance for self-development.
. To what extent the method gives a chance to the learner to be cooperative.
. To what extent the method gives a chance to the learner to be self-assessor.
. To what extent the method makes the learner more enthusiasm and responsive.
. To what extent the method gives a chance to correlate between different topics.
. To what extent it is able to organize groups.
. To what extent it deals with personal differences.
. To what extent it's flexible in tracing.

. To what extent the method uses the new educational technology.

. To what extent the method use the online teaching.

### 3. Selecting teaching method

The most successful teaching methods are those who have proven track record of success in employ the maximum number of the above criteria's, while each of them engages students in different ways, each has its advantages depending on the information they teach. Knowing the differences between these methods will help to select the technique that is best for particular class of study, and to define a particular teaching style. The following characteristics of the most common teaching methods, as described in many related literatures, (Pat, 1992) beside the above model will certainly help in choosing the right teaching and learning method.

#### 3.1 Lecture

It is one of the teaching method in which the teacher is the main roller, learners represent the passive elements, while the speaker represents the active one. He delivered a prepared talk or verbal presentation to an audience on outline of points to cover in one batch. Audience participation is minimal and usually confined to a brief question-and-answer session after the talk. In this method effort and time are saved.

#### Characteristics

##### Strengths

- Save time and efforts.
- Suitable for detailed subject like history, literature... etc.
- Presents factual material in direct, logical manner.
- Contains experience which inspires.
- Stimulates thinking to open discussion.
- This method is economical and useful for a large group of students.
- Material can be covered in a structured manner and the teacher has a great control of time and material.

##### Weakness

- Boring for learners.
- Concentrate on information rather than learners.
- Experts are not always good teachers.
- Audience is passive.
- Learning is difficult to gauge.
- Communication in one way.
- Do not differentiate between learners.

##### Preparations

- Needs clear introduction and summary.
- Needs time and content limit to be effective.
- Should include examples, anecdotes.

#### 3.2 Discussion and dialogue

It is the method of dialogue and discussion by using questions and answers to reach specified fact. This method goes to Greek philosopher Socrates, when he used the method to make his followers reach the truth. This method depends on three elements: the sender, the receiver, and the message. The message represents the subject of dialogue, while the sender can be the receiver and vice versa at the same time.

Discussion is different according to its aim. Some discussion could be closed around teaching subjects, or could be free to go around general subjects related to human life, or human problems.

Discussion and dialogue represent ides trial between learners and between learners and teacher.

#### Aims of discussion and dialogue

- This method tends to increase the self-confidence among the students.
- Increase the ability of proving and convincing.
- Increase the tendency for the subject of study.
- Increase the focusing and concentrating.
- Organize the thinking process.
- Discover errors and correcting them.
- Make students more active and powerful.
- Provoke thinking within dialoguers, which let them criticise their answers and the answers of the others.
- Discussion helps in interpreting information and makes it clear and understandable.

- It increases the ability to create constructive questions.
- Increase the opportunities of participating that enhance the ability of correlating and resolving problems.
- Enhance the ability of oral expressing, and the use of correct linguistics.
- Help in providing students with social needs like friendship and acceptance of others, and other good ethics.
- To achieve the goal of the discussion, following remarks has to be considered:
- Teacher should throw the question to all students not to a particular one.
- Question should be within the course of the aim and within the teacher plan.
- Question should motivate students to produce ideas, questions, trial and discussion.
- Reduce the no. of questions with (Yes) or (No) answers and increase the no. of questions that start with (Why), (How), (What).
- Increase the no. of questions that are related to the life and the living environment of the student.
- Help the students to stay within the subject of discussion, and direct them toward the aim of the plan.
- Listening to the student's answers and help in correlating between them.
- Aware the students with importance of the good listening.
- Encourage the students to create questions.
- Control and manage the time.
- Encourage and motivate students to critical thinking and searching.

### **Characteristics**

#### **Strengths**

- Suitable for all subjects of study. Subjects that are more suitable to be taught by discussion and dialogue; are those which related to social studies and social problems like; smoking, revenge, drug addiction and alcoholic.
- Pools ideas and experiences from group.
- Effective after a presentation, film or experience need to be analyzed.
- Allows everyone to participate in an active process.
- Provide enthusiastic and enjoyable atmosphere among participants.
- Participants gain communication and interaction skills, especially expressing and talking skills.
- Treats well the differences among learners.

#### **Weakness**

- Need time and efforts (time consuming).
- Need skills in questions construction and in question throwing.
- Not suitable for detailed topics (can get out of the track).
- Few people can dominate (other may not participate).
- Not practical with more than 20 people.
- Class may get out of order.

#### **Preparations**

- Require careful planning by facilitator to guide discussion.
- Require questions outline.

### **3.3 Practical demonstration**

Practical demonstration considered as one of the general teaching methods which is effective in teaching skills of using tools, lab experiments in sciences, and training on giving speech and so on. Teacher shows and performs the skills in front of the students in an optimal way, and he may repeat many times, or let the students express the skills under his supervision.

Although the success of this method depends highly on the teacher and his personal skills, this method still important because some skills can't be learned without providing real demonstration.

### **Characteristics**

#### **Strengths**

- Real-world (three dimensional).
- Sometime inexpensive and readily available.
- Experience may be tactile/auditory as well as visual.
- Avoided the risk that might occur when the students perform the skill by themselves.
- Allow everyone to participate effectively.
- Provide enthusiastic and enjoyable atmosphere.

- Treat well the differences among learners.

### **Weakness**

- Needs a skilled instructor to perform the skills.
- Not suitable for detailed subject.
- Class may loss order.
- Sometime difficult to handle.
- Usually out of natural environment.

### **Preparations**

- Sometime require in advance preparation.
- Safety measurement should be available.
- Spare equipment and instrument should be available.

### **3.4 Group learning**

Group forming by the teacher is on of the foundations of the success of group learning. Studies show that the learners get more academic and social benefits when the members of the group are heterogeneous. Groups that are formed by the teacher in the class from different standard of student gave them the opportunity to learn from each other and also to assess each other. Researches results show that the strongest group is that group which consist of students with different levels of skills. This method depends on dividing learners in a semi-homogenous groups, teaches separately with different learning situation. Each group consist of five to eight learners to obtain the goal. Members of the group can be categorizing as:

**Reader:** read the task to the group loudly.

**Registrar:** register the answers. Write names.

**Checker:** make sure that all members understand their work and he ask for explanations and the method of solution.

**Materials collector:** collect all related materials and file them.

**Coordinator:** presents the project and also the performance of the individuals.

**Observer:** observe the level of the noise in the group, and try to direct the team toward their work through time watching.

### **3.5 Investigation**

Investigation in language means reaching the aim, while investigation as a method of teaching means overcoming the problems by going through many systematic steps until achieving the aim and the result. As a definition investigation is a try to discover a new idea or a new meaning through studying a number of ideas, phenomenon's and cases. Investigation considered as a very effective method for developing scientific thinking for the students by implementing many scientific operations such as; investigation, observation, experimentation, categorization, prediction, interpretation, etc.

So by this method learners study a number of phenomenon's, facts, and information to reach to a new thing by themselves.

### **Characteristics**

- Student is the centre of the method, so his role will be positive not negative.
- Teacher is a director not a brain feeder.
- Helps the students to develop their mental and scientific skills like, observation, measurement, experimentation, prediction, interpretation, analysing, and evaluation.
- Develop the scientific thinking of the students.
- Helps students in developing positive directions like: self-confidence, self-dependent, and corporations ...etc.
- Increase the enthusiasm of the student toward learning processes, and tackling problems and find solutions by him-self.

### **3.6 Problem solving**

#### **What is a problem?**

Problem is unwanted situation faces a person or a number of persons. This new situation is due to a change in the processes of work or because of external factors (Morgan, 2001). This situation needs to be solved or corrected, but before we start the process of solving we should know what causes the problem, what has been changed, and what the consequences are, then we propose suitable solutions that lead to correct the situation or to reach an acceptable result. Teaching through problem solving is not always easy, since many of us taught by remembering facts, whether or not they were related to each other, or whether or not we were interested in the subject. In fact, many teachers may say that problem solving in their practical subject area is not possible, not helpful, or only possible in limited part of the subject matter.

However every thing that can be taught may be taught from problem solving point of reference.

We learn through the model of solution that involves:

- Understanding the problem and what has been changed.
- Categorise it depending on our past experience and experimentations with the help of the historical information (historical problems, solutions, results ... etc).
- Compares between expected results and the aims.
- External criticism.
- Comparing with similar situation.

#### **Characteristics**

- Motivate student toward learning, problem will be a challenge for research and investigation, to discover unknowns.
- Student can learn by exposing to many concepts through the process of solution.
- Students learn though their works wither their assumption is correct or not.
- The cheerful feeling, which provided when the solution is achieved.

### **3.7 Online Teaching Method**

Information technologies changing the human's live and learn (Michael-2001). Teaching occurs outside a traditional classroom using internet. As the way of learning changed, the way of teaching is also changed, tutors here should demonstrate other type of competency that reflect his knowledge, skills, attitudes and context of performance, and this competency should be validated by one of the available ways that goes through a certification process (Levy-Leboyer-1999) that consider all factors that tutors may need to the competency.

The characteristics of the online teaching method are also involved strength and weakness (Illinois 2012) which can be outlines as following:

#### **Strengths**

- Students can participate in classes from anywhere in the world, provided they have computer and internet connection.
- Online learning is efficient; unlike face-to-face classes, there is a time and space for students to thinks, discusses, responds, and solve.
- Online learning allows a dynamic interaction between tutor and students and among themselves. Resources and ideas are shared; continuous synergy will be generated through the learning process results in high quality dialogue and learning.
- Within an online discussion, students actively participate by answering discussion questions made by their classmates' building on what other have said and become actively engaged in what they are studying and what they need. As part of the learning experience, students discover the collaborative effort involved in the learning process.
- In the online environment, discriminating factors, such as age, race, gender, disabilities are absent. The focus of attention is on the content of discussion and the ability of contribution to the learning process.
- Students have an open access to resources and materials that may be located anywhere in the world.
- Self-direction and critical thinking is a result of the online interactive learning environments, the tutor or facilitator and students collaboration to create dynamic learning environments.

#### **Weakness**

- Online teaching need students who are able to access the online learning environment such as computer and internet.
- Students and facilitators must have the knowledge of using computer and how to navigate and use the internet.
- As technology is intended to be the tools used in the learning process, this tools should be trusted, available and maintained all the time.
- Online students' have more responsibility in controlling his rules, well organized, self-motivated and possess a high degree of time management skills in order to keep up to the pace of the online learning process, therefore online education is not appropriate for younger dependant learner who have difficulty assuming responsibilities requested by the online paradigm.
- Successful instructors in traditional teaching are not always be successful in online instructioning. Instructor must be adequately prepared to functions in the virtual classroom, and communicate well in writing and in the language in which the course is conducted.

- The limited view of administrator to online program as a way to increase revenues, not as a mean of providing quality education by giving adequate technology, proper facilitator training, and limitation of class size, all of these would have the impact on the success of an online program.
- The expected high level of synergy by active dialog among the participant in the virtual classroom start to decline in larger class room until it becomes independent study to accommodate the large size class. At this point dialog and interaction between participants and facilitator become limited.
- Not every subject can be taught online because the current electronic medium does not permit the best method on instruction. Examples are subject such as public speaking, surgery, sport and physical movement. The development in technology may solve this problem or permit using hybrid courses as a temporary solution.
- Curriculum of any online program must be carefully developed by qualified professionals. Curriculums that are successful in traditional education will not always be successful in online program where learning and instruction paradigms are quite different.

#### 4- Conclusion

In this study we have presented specifications that must be met by the teaching method in order to successfully achieve its goals and let teacher to be more effective so that students can learn better. To achieve our goals from this study we also present the general Specifications for the most common teaching methods including the online education method focusing on the strength and weakness of each in order to help the teacher to choose the appropriate method to teach a specified subject successfully. We also provided the most important features of online teaching as being a program that offer technology-based instructional environment that expand learning opportunities and can provide top quality education through a variety of formats and modalities.

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