Defamation Revisited and the Concept and Punishment of Al-Qadzf Amiruldin Md Sham & Mohd Sabri Yusof

Introduction to New Iterative Method Mat Salim Selamat

A Review of Trade Dispute Settlement in the Malaysian Manufacturing Sector

Mohd Zahid Laton

Interactive Whiteboard as a Teaching Aid Nor Zalina Ismail, Mohd Rizal Razak, Azlini Razali & Mahfudzah Othman

Perkembangan Kaedah Analisis Hidrokarbon Aromatik Polisiklik (PAH) dalam Air, Sedimen & Tanah Siti Norhafizah Khazaai

A Comparative Study between Two Landslide Events at the Sultan Ahmad Shah Mosque, Jengka, Pahang Rohaya Alias & Mohd Fairuz Bachok

Klasifikasi Hujan Pencetus Tanah Runtuh Mohd Fairuz Bachok & Rohaya Alias

The Importance of Communication in Our Life *Norlaili Harun*

Penghasilan Estolide Berasaskan Asid Risinoleik Ricinus Communis Nazrizawati Ahmad Tajuddin

Adapting Cooperative Learning (Jigsaw) in Teaching Mohd Norafizal A.Aziz, Hasnizawati Hashim & Rozieana A.Halid



Adapting Cooperative Learning (Jigsaw) in Teaching

Mohd Norafizal A.Aziz Hasnizawati Hashim Rozieana A.Halid

ABSTRACT

Implementing cooperative learning in teaching is one of the many teaching concepts that can be used by the educator in teaching and learning process at every level of education. This paper will stress on the importance of cooperative teaching methodology and how it can be used in the classroom. A few examples will be explained in detail in implementing this approach successfully so that it could become a guideline to the lecturers to suit with the subjects taught by them. It is hoped that this paper will bring more benefits not only to the lecturers, but also to the students as well to improve the teaching skills and enhancing the knowledge delivering process in the classroom.

Keywords: Teaching and Learning, Cooperative Learning, Higher learning, knowledge

Introduction

Learning can best be described as the process of delivering knowledge from one person to another with the mixed use of modern and conventional methods (using white chalks and blackboard), devices including transparency notes, presentation applications, graphics and many others techniques. From the learning aspect, there are many approaches that can be applied by the lecturers. In this paper, we would like to describe and explain the cooperative learning concept. The technique in delivering and teaching process for cooperative learning is fully concentrated on group approach. With the help of the members of the group, the process of learning can be easily delivered to the students and the major players (active students in the group) can influence the minor members (passive students) to be more cooperative in groups especially in solving problems. Besides, this concept can be applied to actively create new ideas by the students in solving any problems pertaining to the discussion planned by the lecturer. On the other hand, the cooperative technique works best in any subject that requires students to discuss their understanding in any topics from as wide as the general issues or current issues to any academic (subject related) topics.

Definition

Cooperative learning is concentrating on working with a dedicated and effective small group while the discussion is based on the group's rather than the individual's learning process. With this technique, students will be divided into small groups (4 - 5) members in a group and will work or discuss based on the topics given by the lecturer

and some kind of reward will be given to the group with the best performance (Cruickshank, Bainer & Metcalf, 1995). The important aspect of this technique is the commitment given by the group members which plays a vital role to ensure that the cooperative learning will be successfully benefited by the students and lecturers in the teaching and learning process.

Why Cooperative Learning?

There are many benefits for adapting this technique in the teaching process as listed in Table 1.

Table 1: The benefits of cooperative learning process

No	Aspects	Benefits
1	To improve students' responsibility in the learning process.	It is believed that cooperative learning will affect the students' responsibility with other members of the group by sharing knowledge and experience when they have to solve the problems.
2	To improve memorizing techniques.	It will make the process easier for the students to memorize any knowledge given by the lecturers to the students if they share it with others. In teaching, students are able to memorize almost 90% of the knowledge based on the activities that they did in groups.
3	To improve teamwork.	Cooperative learning could improve the efforts and teamwork by the students in solving problems. Each member has his own different opinion and perspective of issues and will try hard to find the solutions and be actively involved in that activity.
4	To improve students' performance	Cooperative learning could improve the per- formance of students in terms of discussion, participation, sharing ideas and opinions as well as remembering all the points discussed better.
5	To improve students' behavior	Another benefit of cooperative learning is it could develop the self-behavior of students in conducting group discussion as well as creating a positive impact towards teamwork, open discussion, sharing ideas, listening and also respecting other people.
6	To improve the communication skills	Communication skills among members in a group can be improved as they will talk a lot and try to find ideas as part of their contribution in the group.

Cooperative Learning Implementation

In applying this technique, it is advisable that lecturers should give the assignment or topics of discussion a day earlier or more before the activities can be done. It will help students to make the preparation outside of class before the discussion day together with their group. The process in implementing the technique is shown in Table 2.

Table 2: Steps In Implementing Cooperative Learning

Step 1: Assign groups	The members appointed will be decided by the lecturer based on their academic performances or some other heterogeneous factors (races, student performances etc.) (Slavin, 1990). Members in the group will include students with good, average and low CGPA. It is hoped that they can help each other and share their knowledge during the discussion. The number of members in a group is between 4 to 6 people. (Modul APP, 2006).
Step 2: Methodology	Students will be given different topics (4 – 5 topics based on the number of groups) for each group to be discussed. Each group is called as an expert group as they are basically expert in one topic. The lecturer must control the classroom by observing the students while they are discussing to assure that each student is involve. After they have finished with the discussion, each of the group members has to go to the other groups and explain the topics that they have discussed in their expert group. They will take turn to explain their topic to the other groups until all the topics given by the lecturer is fully explained and shared with all the group members.
Step 3: Assessment	Questions based on the topics discussed should be asked by the lecturer to examine the students' level of understanding. Members of the group are responsible to help each other in giving the correct answer. The lecturer should encourage the commitment of the students as the purpose of asking questions is to look at the team work among them as well as their understanding.
Step 4: Incentives	At the end of the discussion, the lecturer must prepare the summary based on the topics to conclude the discussion. Incentives / rewards can be given to the group that is actively involved or delivered the best ideas during the discussion as an appreciation of their hard work. It is hoped that the rewards given could stimulate their motivation in giving more ideas and always practicing group discussion.

Limitation to the Techniques

This teaching technique is subjected to some limitations. The limitations are:

Requirement of large size classroom

The implementation of this technique requires a large size classroom as it involves the lecturer and the students to move from one group to another group. Students need to move to another group so that they can explain the topics that they are already expert in. The lecturer also needs to move around in order to monitor the students. Therefore, this technique might be difficult to be practiced if there is lack of large classrooms in the institution.

Suitable to be applied to certain subject

This technique might be difficult to be applied to subjects that deal with calculation and technical explanations. It is more practical to be used in reading subjects or theoretical based topics.

Difficulty in getting cooperation from group members

During the discussion, there are students who refuse to discuss the given topic with the group members. They prefer to understand the topic themselves without the help of the group members. As a result, problem of getting cooperation to understand the topic given by the lecturer from the whole group members may occur.

Failure of students to utilize the discussion time effectively

There are students who waste their time by discussing topics which are not given to them during the group discussion. Therefore, information on the topic cannot be delivered to the other group members in the specified time.

Conclusion

Cooperative learning implies the cooperation and sharing of knowledge. It is believed that cooperative learning will give more benefits to the students and lecturers as well. Moreover, it could help in creating the teamwork spirit among students by helping each other to find more ideas during the discussion, to be more creative and to remember the topics easier as they have the opportunity to explain it to others. Towards the new era of ICT and internet, a variety of learning methodologies like cooperative learning could also be implemented and applied by the lecturers to improve their skills in teaching and achieve the objectives of the learning outcomes for the subjects taught.

References

Cruickshank, D.R., Bainer ,D. & Metcalf. K. (1995). The Act Of Teaching. US: McGraw Hill.

Modul Kursus Asas Pengajaran Dan Pembelajaran Pensyarah Baru.(2006). Kementerian Pengajian Tinggi Malaysia.

Slavin, R.E. (1990). *Cooperative Learning: Theory Research and Practice*. Englewood Cliffs, NJ: Prentice Hall.

MOHD NORAFIZAL ABD AZIZ, Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA Pahang. mnorafizal@pahang.uitm.edu.my.

HASNIZAWATI HASHIM & ROZIEANA A. HALID, Faculty of Business Management, Universiti Teknologi MARA Pahang. hasnizawati@pahang.uitm.edu.my, rozieana@pahang.uitm.edu.my