

# Result of Under Conceptualized Implementation of Activity and Future Improvements

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**Abstract:** Today education is more focused towards student - centric learning. There are different kinds of learning among one is active learning. Several pedagogical initiatives exist for different kinds of learning. The one such method experimented in class in One Minute Paper(OMP).OMP is an effective technique for evaluating student understanding and reaction to the course material. Apart the instructor can understand what part of the concept was not addressed effectively. Research informs a discussion on how practical implementation techniques can be used to maximize the benefit. Further experimented OMP with intimation and without intimation and its results were specified.

**Keywords:** Assessment, One Minute Paper, Intimation, Instructor, OMP, attentive.

## 1. Introduction

The One Minute paper is one of the assessment methods where the instructor can pose some questions related to the taught topics & in response student should write the answers in the given piece of paper. This activity reflects the student understanding towards the topic of the lesson & provides the useful feedback to the instructor; this will give you some insights as to how you might need to modify the content for your next class Thomas A. Angelo & K. Patricia Cross (1990)[6]. The Minute paper activity we can conduct at the beginning of the class or in the last minute of the class Chizmar, J.F. & Ostrosky(1998)[2].It involves students understanding, recalling, rethinking & problem-solving skill; depends on which type of questions you have asked?

In Minute Paper questions should be framed in order to meet the useful response from the student. It does not only help to know the student understands towards the topic but also improves the lecturer's delivery method. Every lecturer every day delivers some contents to the students and assumes that it has reached to students, but in reality, it does not happen. The great advantage of Minute Papers is that they provide manageable amounts of timely and useful feedback for a minimal investment of time and energy Damian Whittard (2015)[3].

## 2. Background

David R. Sted(2005)[4] stated that among other things, the questions can be made more specific to address particular issues raised in a lecture, and students responses can be anonymous or signed, and may or may not be graded. Felix Kwan(2010)[5] illustrated the difference between daily quiz and one minute paper , where it has noticed that One minute paper was quick & required less effort to conduct but the scope of the understanding level will be limited whereas daily quiz will cover most of the topic and required more time to conduct. Damian Whittard (2015)[3] reflected on One Minute Paper in such way that it created a formal channel of communication which helps to build a stronger student-lecturer relationship. It conducted in a loop so that continues improvement of learning and teaching happened. Ashakiran S MD and Deepthi R MD(2013)[1] applied One Minute Paper on a difficult topic where they divided 1hr lecture in five section, five section contained 5 component to explain which took 10 to 12 minutes. After an explanation of each component 2 to 3 minutes they gave to students to write their response ,in this way difficult concepts also covered in the easiest way.

Veena Raigangar(2014)[7]experienced conducting OMP in actual classroom promotes higher order thinking and reflection together. She has applied this method in physiotherapy and student got some guidelines for implementation to simplify the process.

## 3. Procedure of conducting the Minute Paper

There are two ways to conduct this method, at the beginning of the class or before 5 minutes when the class is about to end.If the instructor wants to know that previous topic has been understood to students or not? then he/she can conduct Minute Paper at the beginning of the class and, if he/she wants to know the status of the today's taught topics then it can conduct in the last five minutes of class.

Minute Paper conducts on the piece of paper and it will take 5 minutes to answer the asked questions. Papers will be distributed to the students and will give 5 minutes to write an answer. Based on the students understanding students will

write the answer on the given paper. Later on instructor will correct papers and analyze the students understanding. Most of the instructor uses this method to know the general status of the students. In such a case following types of questions will be asked:

1. What are the important topics you have learned today?
2. Which topic is difficult to understand?
3. Which topic in today's class needs to focus on?
4. What are the key points to be remembered in today's class?

The above questions are generalized questions to get to know whether students are attentive in class or not? Based on answers written by students, Instructor can count the number of students who were attentive during the class. This is the best method to know students understanding towards the taught topics as well as Students know you are paying attention to them and to their needs if you then begin the next class by clarifying where necessary.

Some instructor can ask subject specific questions as well. The instructor can use this method to ask some technical questions related to the course outcome. Course specific questions can help the students to improve their knowledge, at the same time, it helps the instructors to improve their teaching in order to produce the good results. If the answers are not written properly then the instructor can change their methodology to deliver the topics or can repeat the topic once again. It is better to apply this method to the difficult concepts so that it will be helpful to emphasize students to understand that respective topic.

#### 4. Implementation & Observations

In the second case when questions are subject specific or technical, perhaps results are not satisfactory. There are two ways to conduct subject specific Minute paper activity

1. Without intimation.
2. With pre intimation

##### 1) Without intimation:-

The instructor taught technical topic and last minute of the class, he/she asked to write the answer of the question, it has found that few students only answer the question properly. Out of 60 only 20 students could write the answer in appropriate manner, remaining could not.

##### 2) With Pre intimation:-

Second time the instructor informed the students he/she is going to conduct one-minute paper activity in last minute of class. Instructor explained the planned topic and at last asked the student to write answer on the given piece of paper. It has found that about 40 students have written answer properly. There was a drastic difference between the same method with and without intimation. It has been proved with pre intimation students will focus more in the class and will prepare themselves to answer the question properly and correctly.

#### 5. Results

Following chart shows the difference between two ways of the same method. It is proved if we will inform the

students that last minute of class they have to write something on paper what they have understood today? They will focus more throughout the lecture.

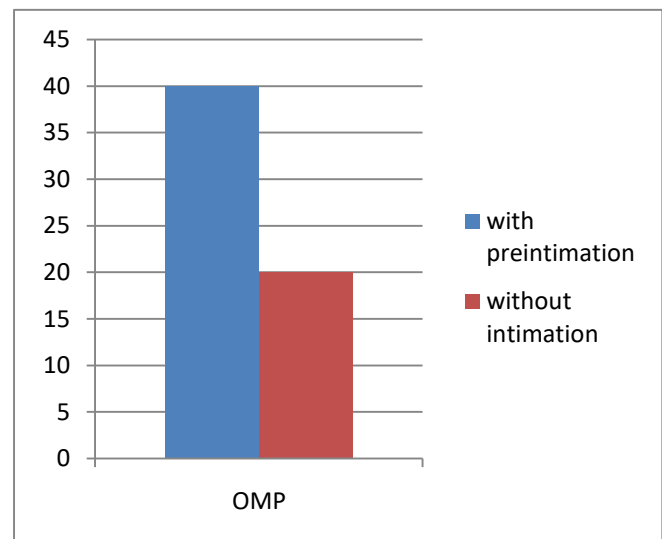


Fig. 1 Difference between with pre intimation and without intimation of conducting One Minute Paper activity.

It has proved instead of conducting OMP surprisingly, it is better to inform them or make them ready to write asked concept properly on the piece of paper.

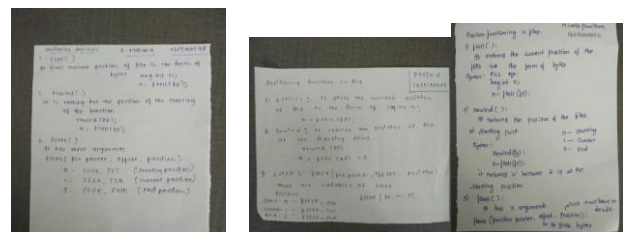


Fig. 2 Pictures of One Minute Paper written by students for Computer programming subject.

In programming subject every day we need to introduce the different concept and to test the student understanding, OMP is the best method to evaluate student by giving small exercise based on today's taught concept and ask them to write a program in last minute of class. If we will repeat this frequently definitely students programming skill will improve.

#### 6. Discussion

Despite its simplicity, the One Minute Paper assesses more than mere recall. To select the most important or significant information, learners must first evaluate what they recall. Then, to come up with a question, students must self-assess – asking themselves how well they understand what they have just heard or studied.

Thomas A. Angelo & K. Patricia(2015)[6] stated that One Minute Paper can conduct during the lab session, Group meeting and Field Trip as well. It will act like warm – up or wrap activity during beginning or ending of lecture

respectively. It provides great scope to enhance the knowledge towards the subject. David R. Sted (2005)[4] did the survey were on various subjects this method has applied and noticed the difference between each one. It is noted that students responses vary between the subjects and showing student interest in a subject.

Damian Whittard(2015)[3]focused on OMP method where content-based activity gives the useful content what student has understood and another one gives useful feedback of instructor what he/she has to improve to deliver the subject in an appropriate way. He has applied this number of times & observed the differences between direct & indirect assessment methods.

In most of the papers, it has observed that this method mostly used for getting the feedback from the students based on their understanding toward lecture. This paper only focused on subject-oriented questions which can enhance technical as well as theoretical knowledge of the respective subject. On top of that, if instructor pre intimate the students then student will focus more in the classroom.

## **7. Future Scope**

It has found the students are not properly concentrating throughout the class because of their own interest or some other reason, this method will make the students draw their attention towards the topic and will make them put into the paper what they have understood?

We can conduct OMP in the various loop to improve the student's knowledge. Some of the engineering subjects are theory based, therefore we never know they are understanding topics properly or not. In such a situation this method will help to make the students listen to lectures properly.

## **8. Limitation & Recommendations**

If OMP with pre intimation are overused or poorly used, students will begin to view the technique as a gimmick as a result they won't write contents of given topic properly

OMP is the less time consuming and more efficient assessment method to know student knowledge and status of learning and teaching in engineering education where updated knowledge is required to enhance your skills and growth. If the instructor will intimate the students before only for One Minute paper, he/she will get good results.

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