

Innovative Techniques to Make Teaching More Effective

NAELA ABDULLAH TAMI

The Higher Institute of Telecommunication and Navigation, Kuwait, 2017

Abstract: This paper is going to show some strategies and methods recently applied in some institutes around the world. Those methods, if applied, in our institutes will help instructors to change their teaching methods and make their classes interesting and information given stays with their students long even after they leave the classroom. Instructors biggest challenge is to attract students' attention and present ideas in such a way that stay with their students long after they leave the classroom. For this to happen, the classroom experience should be redefined and innovative ideas should be implemented that would make teaching methods more effective.

Keywords: Innovative Techniques, attention and present ideas.

1. INTRODUCTION

“Progress is impossible without change, and those who can not change their minds can not change any thing”

-George Bernard Shaw

Teaching methods and techniques have been of great importance for the classroom teaching process, so educators have focused more of their research efforts over the last century on different teaching methods and their benefits in achieving desired learning outcomes for learners in different educational stages.

This interest in teaching methods led to the spread of the saying “A successful teacher is only a successful way”. Teachers are trained to train their students to use different teaching methods to achieve the objectives of teaching easily and successfully, so the oldest definition of the method of teaching refers to being the easiest ways to teach and learn.

“Education is not the learning of facts, but the training of the mind to think.”

-Albert Einstein

Teachers' biggest challenge is to attract their students' attention. The most important question here is “What is innovative teaching and how can instructors implement it into their classes?” Innovative teaching is a proactive approach to integrate new teaching methods into the classroom. For this to happen the classroom experience ought to be changed and inventive ideas should be actualized that will help teaching methods to be more powerful. Below are some creative ideas that will enable instructors to reinvent their teaching strategies and make their classes fascinating.

2. CLICKERS

One of the most successful methods is called “CLICKERS”. Collage instructors, specially those teaching large lecture courses, often wonder how can they know whether their students are following them during class. Other instructors are troubled by the fact of having a few manipulative students, who don't participate in class discussion under many fake excuses. Other instructors wonder how they get really honest answers from students on controversial topics. These instructors have found the best solution by using the technology of classroom response system called Clickers. Professor Ian Beatty at Massachusetts said, “Classroom response system can serve as catalysts for creating a more instructive,

student-centered classroom lecture hall. They not only make it easier to engage students in learning activities during lecture but also enhance the communication among students, and between students and the instructor. This enhanced communication assists the students and the instructor in assessing understanding during class time, and affords the instructor the opportunity to devise instructional interventions that target student's needs as they arise." But what does this system consist of?

The response system called Clicker is a system that consists of four devices, the clicker base, the remote, the instructor's computer and the screen. How to apply the Clicker in a classroom? The Clicker base is a plug – play device. It takes a classroom poll by simply plugging the base into the instructor's computer, then starting software, which should be installed in the classroom before the lecture. The instructor begins by asking a question. Those questions can appear directly on a power point screen that interacts with the installed software and the receiving device. Instructors can choose whether to ask the questions orally or within the system software. Students may need to enter information into the clicker device in order to join or log in into the session within a student ID. The next step, students can use the remote device to send their responses. The clicker base receives responses in less than a second and the instructor can display the students' responses as they come in or after a period of time as they all send their responses. In general, there are three main steps for using this system in a class:

1. An instructor presents a question or a problem, often projected on a screen in front of the class.
2. Students read and input their answers. They have a specific time to input their answers using their remote devices, which will display a confirmation that their input was received.
3. The instructor and his students instantly view a display charting the distribution of responses.

The instructor will usually have a series of questions prepared either clustered together or peppered throughout the presentation. Anonymous students responses can immediately be projected to see and discuss, reviewed to inform the instructional process "on the fly", or simply gathered for future use. Responses tied to individual student or clicker ID can also be displayed and additionally can be automatically saved as a data file for later reporting.

There are many instructional strategies for using clickers. The questions or statements can serve to launch a discussion, or as check points for understanding, or as graded evaluations. One of the major uses for class response system is to foster discussions, e.g.

- Posting irrelevant question.
- Sharing aggregated results to warm up for the whole class discussion.
- Using opinion polling.
- Surveys to analyze the differences and similarities of choices and consider alternative viewpoints.

Getting an individual response to a controversial question, having students discuss with their peers and then repeating the question before and after the comparison. Some teachers may have teaching more dynamic by:

1. Having their students work in groups to discuss and vote on the best answer to a problem or dilemma, giving some possible, yet in complete solutions.
2. Using questions and student's feedback to drive every step of the instruction through out a lecture.
3. Allowing students to predict the outcome of a demonstration done in class.

By using clickers effectively, instructors can promote students' participation independent of their temperament. Students who are reluctant to speak out in class now have the opportunity to express opinions and provide feedback.

An instructor needs support to get started with this system. There should be a service department in the institution that helps instructors and check with them what system is available to them and how other colleagues have used similar classroom response system. Instructors can explore the many resources available online.

"The mind is not a vessel that needs filling, but wood that needs igniting"

3. FLIPPED CLASSROOM

In a traditional class, an instructor stands or sits in the front of the class and students watch and listen.” This is how a classroom we used to learn and how our parents before used to learn, but there are a lot of problems with this way of learning. One of them is that not all students learn at the same speed, so some get left behind. While some students learn better by listening others may learn better by doing. This means that the instructors can’t always do the best job. Some universities replaced the traditional classroom by the Flipped Classroom.

The Flipped Classroom makes learning more personal. What is a Flipped Classroom? What do instructors do to flip their classes?

First, the instructor makes a video that delivers the content that he usually teaches in the class, then he shares it online with his students, who can watch it before the next lecture, and what was once considered homework is now done in class, allowing students to work through assignments together and ask the instructors for help if they run into questions. This way makes the instructor spend the class time leading activities that help students apply the knowledge.

Students can rewind and re-watch the video as many times as they like and come back to the class with questions to the instructor, so keeping up with the class is no longer an issue. Students can access the video at any time using their mobile devices, giving them the ability to learn more independently. Instead of sitting and listening, students can spend class time applying knowledge in more practical way and instructors are free to spend their time working with students and giving them individual support and attention.

The flipped classroom is a new method of teaching that is turning the traditional classroom on its head. Everyday thousands of instructors deliver the exact same listening class to millions of students, every night millions of students sit over the exact same homework trying to figure out how to solve it. The flipped classroom is turning this upside down. Traditionally students listen to lectures and take tests in class and read textbooks and work on a problem at home.

In a flipped instructing, students first study the topic by themselves typically using video lessons on YouTube and then apply the knowledge by solving problems and doing practical working class.

Modern institutes and universities who flipped their classrooms report many benefits. First, all students were allowed to learn at their own base as videos can be watched again. Second, It is more efficient as students enter the classroom prepared to contribute. Third, It enriches the classroom as more time can be spent on group work and projects. Fourth, doing homework in class allow students to help each other which benefit both the advanced and the less advanced learners. Flipping also brings changes for the instructors. Traditionally, instructors engaged most with the confident students who ask questions, but flipping allows instructors to target the students who really need help instead of just those who are confident. Instructors can work more closely with individuals or small groups by not only instructing from the front but also on the side of the class.

Instructors who are not great presenters can use third party videos to explain the concepts and focus on methods of teaching that suit their style such as project work or experiments. Once video lectures are made available online instructors do not need to give the same lecture over and over again. They gain more time to focus on the needs of their students.

Flipped Classroom model promotes equal learning opportunities as all students get the same attention when doing their homework.

4. FORMATIVE ASSESSMENT

Formative Assessment refers to a wide variety of methods that teachers use to conduct in-process evaluation of student comprehension, learning needs, and academic progress, and help identifying their strength and weaknesses during a lesson, unit, or course.

Formative assessments focus on learning and teaching rather than on evaluation or grading. They also help instructors identify concepts that students are struggling to understand, skills they are having difficulty acquiring, or learning standards they have not yet achieved so that adjustments can be made to lessons, instructional techniques, and academic support.

The general goal of formative assessment is to collect detailed information and student learning while it's happening. But why should instructors use formative assessments in their practice?

It is the responsibility of instructors to find out if their students do not understand what is being taught, students who have misconceptions, students who become lost. Poor instructors continue to teach whether or not a student understands. However instructors need to know if their students don't understand what is being taught. Otherwise they are going to wind up with a class full of students who have not learned anything. So master instructors use formative assessments to make a decision to re-teach or move forward, so they use formative assessments to change their teaching method, to sign extra homework or even more forward into the next topic.

How often should instructors use formative assessments? It should be used continuously through out the lecture. It should be integrated with the instructor's instructions to the point where the instructor teach and assess, teach then assess etc., so they make it countable as soon as they respond to questions asked by their students.

Below are examples of formative assessments, those examples are considered the best examples for a whole class assessment.

- " Hand signal: One to Five "

One to Five is a who assessment, so an instructor may explain a problem on the board and at one point he will want to stop then he will formatively assess his students by having them rate their understanding from a scale of one to five using their fingers:

- One finger is the lowest level of understanding, so they will rise one finger if they are absolutely lost.
- Two fingers is a student who has a vague idea.
- Three fingers indicates that the student is in the middle.
- Four fingers means that the student has a good understanding.
- Five fingers is the highest level of understanding and it means that the student has mastery.

" One to Five " is the quickest way to assess a large group of students.

- Brainstorming:

Brainstorming is the act of stimulating creative thinking and developing new ideas. This method is suitable for individuals, small groups and even large group settings.

Many instructors and teachers use brainstorming in a wrong way. Brainstorming should take place before introducing a new topic. Instructors use brainstorming to get an idea to what students already know about a topic, for example, asking a question about things students know about any topic. The good part is that the students give examples on the topic as a brainstorm. Brainstorming is a great assessment for gauging a class prior knowledge on a topic.

Brainstorming is an activity that urges learners to concentrate on a topic and participate by adding stream of ideas and sentences. The instructors may start a lecture to generate new ideas by suggesting a question or an issue, or by presenting a topic. Students at that point express conceivable answers, important words and ideas.

In the critical thinking area, brainstorming presumably succeeds better than any strategy yet designed. The method was first used in industry as a tactic for defeating obstructions, finding solutions to problems and finding new and imaginative ways to deal with unacceptable or wasteful techniques or systems.

The concept of brainstorming is to produce creative ideas from learners to solve a problem. These ideas and opinions are useful because they put the mind in a state of excitement and readiness to think in all directions to generate the greatest amount of solutions to a problem or subject matter. It also creates an atmosphere of freedom that allows the emergence of all opinions and ideas.

The idea of brainstorming is very simple. It is a session that consists of a number of stages that should be carefully performed. A group of students is given a single problem or obstacle and asked to "storm their brains" for ideas. To

increase spontaneity and rapidity of ideas, each participant is encouraged to call out his thought the instant an opening presents itself. Each brainstorming session usually intensifies into an exciting rapid-fire, off-the-top-of-the-head group experience. Stimulation and motivation build as each participant contributes and interest mounts to higher and higher levels.

The thoughts and ideas produced tend to fill in as catalysts for new restraints. Inventive and successful ideas start to contrive from this group, unlike individual learners, frequently respond in conventional ways and rarely have a creative "brainstorming" session without the boost of numerous sounding groups.

- Advantages of Brainstorming:

The benefits of brainstorming are numerous - as quoted by instructors and students who have applied the method. According to experienced users of the methods,

1. It creates eagerness and keenness to participate by its open calling to join in and its fast, freewheeling approach.
2. It is extremely encouraging. Students who usually allow their verbal, articulate classmates to control question-and-answer periods get the urge to participate. They are not "put down" or degraded for "wrong answers" and feel a real sense of contribution as their ideas are noted on the project sheets. On the other hand, those who dominate traditional classroom discussions are also promoted to get their ideas out and on the record.
3. Brainstorming increases "task focus." The structure and standard of brainstorming will relieve pressure from the group members and will make them continue focusing with almost no stress from the group leader.
4. It is effective and creative. Scores of thoughts and suggestions or issues can be written down in almost no time. Parallel suggestions lead the group toward sound "next stages."
5. This method provides a lasting record and helps in creating answers for issues. The results of the sessions can be repeated or reused to make similar techniques and projects for overcoming issues or meeting targets. The creation of the group goes up against an incentive as a changeless assessment record and as declaration to individual and group attempt.
6. It activates the role of the student in the educational situations. Brainstorming motivates learners to generate creative ideas about a particular subject, by looking for correct answers or suitable solutions to issues that are presented to them.
7. This method also trains students to get used to representing and appreciating the opinions of others. Students get the maximum benefit from the ideas of others developing and building on them

Instructions any instructor should follow to start the brainstorming session:

1. Divide the class into small groups (4-6) and organize them in suitable places of the classroom, ensuring that one of them has paper and pencil to record the thoughts mentioned in the brainstorming session (a recorder).
2. Explain quickly to the class the rules for brainstorming:
 - a. Express no negative reaction of any thought introduced.
 - b. Work for quantity, not quality - the more extended the list of thoughts, the better.
 - c. Develop on others' ideas, piggyback, hitch on, expound at whatever point conceivable.
 - d. Promote crazy, far-out ideas.
 - e. Record every idea, at any rate by a key word or expression.
 - f. Set a period time and be very strict to it.
3. Ask each group to assess their outcomes as a group, and afterward, if needed, choose the best 3, 5, or 10 answers. Set a time limit.
4. Share the answers of each group with the class.
5. Assess brainstorming according to proficiency, qualities, shortcomings, and how to enhance its utilization as a class.

5. FISH BOWL

This method is also known as The Aquarium. The fish bowl method is used to manage group discussion. The general idea is that a large group having an open discussion about something can be difficult to handle and often only benefits a few active participants. A smaller group, of four to five students, is isolated to discuss while the rest of the class sit around making an outside group and observe without interrupting. Facilitation is focused on the core group discussion. Less people are easier to facilitate.

The students in the first circle called the aquarium, discuss a topic which they read about before coming to the class. The students in the second circle sit and listen without interfering or interrupting. They sit silently and recording their notes. After 10 minutes the second group members can ask questions and give opinions about what they have observed.

There are two types of aquarium: First, an open aquarium, which means that one chair in the small group, is left empty. The second type is the closed aquarium; all the chairs are occupied.

This method requires many conditions an instructor must put in mind:

1. The members of the aquarium are aware of the subject matter they are going to discuss.
2. All the students should know clearly the rules of this activity.
3. The instructor prepares and encourages his students to play their roles in a positive way.

"Fish bowls are useful for discussing "hot topics" or sharing ideas or information from a variety of angles and view points. Sometimes the discussion is a "closed conversation" among a specific group. More often, one or more chairs are open to "visitors" (i.e., members of the audience) who want to ask questions or make comments. Although largely self-organizing once the discussion gets underway. The instructor's role in the fishbowl process is usually a facilitator or moderator who controls and directs the session.

6. CONCLUSION

As an instructor you are wondering how to keep your students motivated and determined to overcome serious obstacles? Whenever you are asked about strategies for teaching students, always think back to your experience as a student.

Instructors' primary responsibility is classroom instruction. Most of them have no interest in following their students everywhere they go. It's useful to focus on in-class strategies and ideas that simultaneously benefit students outside the classroom. Although some of these ideas may seem obvious to instructors, they have to be explicit about teaching them to their students. As they incorporate the previous methods mentioned in this paper, they should remember to make no assumptions about their students' basic knowledge acquisition and remember that students aren't professionals.

Instructors need to reevaluate what they were doing in their classes every now and then, to become certain that students are making the most of all their practice time. Instructors can't guess that their students know how to practice effectively unless they follow innovative and creative ideas to motivate and encourage the students to participate positively. They should start seeing themselves not only as teachers but as learning instructors and facilitators as well.

REFERENCES

- [1] Fairclough, Marta, Beaudrie, Sara M. Innovative Strategies for Heritage Language Teaching: A Practical Guide for the Classroom. Washington. Georgetown University Press. 2016
- [2] Bergmann, Jonathan, Sams, Aaron. Flip Your Classroom: Reach Every Student in Every Class Every Day. Colorado. Courtney Burkholder. 2012
- [3] Cockrum, Tory. Flipping Your English Class To Reach All Learners Strategies And Lesson Plans. New York. Routledge. 2012
- [4] Jalbani, Laraib Nasir. The Impact of Effective Teaching Strategies on the Students' Academic Performance and Learning Out coming. Grin Verlag. 2015

- [5] Fisher, Douglas, Frey, Nancy. *The Formative assessment Action Plan: Practical Steps to More Successful Teaching and Learning (Professional Development)*. Alexandria, Virginia. 2011
- [6] Heritage, Margaret. *Formative Assessment Making It Happen in the Classroom*. Corwin. 2010
- [7] Goldstein, David S., Wallis, Peter D. *Clickers in the classroom: Using Classroom Response System to Increase Student Learning (New Pedagogies and Practices for Teaching in Higher Education)*. Washington. Stylus Publishing. 2015
- [8] Asirvatham, Margaret R. *Clickers in Action: Increasing Student Participation in General Chemistry*. Colorado. W.W. Norton. 2009
- [9] Christensen, Clayton M., Eyring, Henry J. *The Innovative University: Changing the DNA of Higher Education from the Inside Out*. Idaho. Jossey-Bass. 2011