ACTIVE LEARNING PRACTICES TO INVOLVE STUDENTS IN LEARNING PROCESS – A CRITICAL REVIEW

Rekha N. Chandra
Assistant Professor, Department of Computer Science, M.G.M College, Udupi, Mangalore, Karnataka

Abstract:

It is essential to implement student centred and constructivist learning approaches to encourage students to become active, compassionate and lifelong learners. The different practices involving students in learning includes active learning, cooperative learning, inductive teaching and learning. Before adapting these practices the most important responsibility of a teacher what I felt in my fifteen years of teaching experience and learning is to create good environment for students to inculcate in learning process. Teaching/teacher becomes successful when students involve themselves in learning process without any pressure but with pleasure. Scolding students very often in the class room is not a sign of good teacher, but reflects teacher’s incapability in subject delegation. Teacher’s responsibility is to have a right blend of different learning practices in the class room. In this paper importance of one of the practices is reviewed that is active learning. Active learning is anything course related that all students in a class room are asked to do other than simply listening, watching and taking notes. There are possibilities that teacher may do mistakes in implementing the active learning process. In active learning practices some important doubts may arise in teacher’s mind - Whether it is possible to complete the syllabus and prepare the students for exams? Whether it takes lot of time to plan the activities? Whether all students like to work in the class? What teacher should do when some students refused to get into groups? These issues of active learning are reviewed in this paper.

Index Terms: Constructivist, Students Centred, Inculcate, Active Learning, Sceptical Faculty, Instructional Practices & Conceptual Understanding

Introduction:

Teaching is a process which makes us learn, so teaching to students is not merely teaching but also a process of learning. It is essential to implement student centred and constructivist learning approaches to encourage students to become active, compassionate and lifelong learners. There are different theories and practices are put forwarded to involve the students in learning. Before adapting any practice, the important point is to create a good environment to comfortable learning in the class room. Students should feel comfortable and loved to enter the class room as they enter the peer group in social function. Students will understand the subject in better way when they start to like the subject and this will happen only when they feel to like and admire the teacher. Apart from command over language and subject delegation, another important character that teacher should have is patience. Scolding students very often in the class room is not a sign of good teacher. This reflects teacher's incapability in subject delegation.

Active learning is anything course related that all students in a class room are asked to do other than simply listening, watching and taking notes. Active learning has received considerable attention over the past several years. Often presented or perceived as a radical change from traditional instruction, the topic frequently polarizes faculty (Michael Prince (2004). Active learning has attracted strong advocates among
faculty looking for alternatives to traditional teaching methods, while sceptical faculty regard active learning as another in a long line of educational fads.

**Perception in Sceptical Faculty:**

Sceptical faculty opposes active learning by giving several arguments. One of the arguments is, it is not possible to complete the syllabus. They also argue active learning doesn't work in large classes, takes lot of time to plan activities, not suitable for exam oriented educational system.

**Implementation Faults:**

Usually teachers will do mistake while implementing the active learning in class room. Giving activity too long i.e. more than three minutes and calling volunteers to respond after every activity are common mistakes of a teacher (R. M. Felder & R. Brent 2009). If the exercise is too long, some group of students very quickly finishes the task and waste rest of valuable time in class and some students struggles full time to finish the exercise which is frustrating and also waste of class time. The teacher should be prepared with the activity before implementing it in the class room. Without prior planning, the activities may take more than the expected time. Calling every time volunteer to answer makes other students to relax. Teacher has to involve every student in active learning.

**Frequent Doubts:**

Is it possible to complete the syllabus? Before answering to this question, first the question is what is teacher’s objective? If it is simply to present all of the prescribed course material, regardless of how much or little of it the students actually absorb, then teacher need not use active learning exercises. However, if the objective relates to what the students learn as opposed to what teacher present, then the goal should not be to cover the syllabus but to uncover the most important parts of it (R.M. Felder & R. Brent 1999). People acquire knowledge and develop skills only through repeated practice and feedback, not by watching and listening to someone else showing and telling them what to do (M. Pressley and C.B. McCormick 1995). In lecture classes, most students are neither practicing nor receiving feedback on anything. They are just sitting there sometimes watching and listening to the lecture, sometimes thinking of other things, sometimes daydreaming or sleeping.

If traditional lecture classes are punctuated with brief active exercises that involves students individually or in small teams to answer questions, begin problem solutions, fill in missing steps in derivations, brainstorm, formulate questions about material just presented, summarize, or do anything else that they may subsequently be asked to do in homework and on tests will energize the students, direct their focus to the most important points in the lecture, and increase their subsequent concentration when the lecture continues (R.M. Felder 1992 & 94). Even if some material were dropped from the course syllabus to make way for the exercises, the increased learning would more than compensate for the loss. Ruhl et al. show some significant results of adopting this pause procedure. The activity used by Ruhl, for example, encourages students to think about what they are learning. Adopting instructional practices that engage students in the learning process is the defining feature of active learning.

Is active learning is suitable for large class? Active learning is more essential for large class room sessions. It is virtually impossible to keep an eye on each and every student activity during traditional lecture in a class room having more than 75 students. Frequent question and answer session also not suitable, because it kills more time. Here teacher may periodically give some activity to students in groups of three or four. Norman and Schmidt (2000) point out that having students work in small teams has a
positive effect on academic achievement while self-directed learning has a slight negative effect on academic achievement.

During activity noise is more in big classes compared to small classes, but that can be ignored. The key factor to make active learning work in large classes is to stop the activity after the prescribed time interval and call on individual students or teams to state their results. Calling only volunteers increases nonparticipation percentage, so call the student randomly to provide responses after a group exercise. Richard M Felder & Rebecca Brent from North Carolina State University found that 90% of student involvement in activity in large class and this percentage increased and become close to 100% after regular activity in the class. Teachers should not get irritated if few students are not participated, think positively, active learning is working - more percentage is actively involved in the activity. In traditional lecture the percentage of students understanding the topic is very less particularly in large class room session.

It is true that in a large class the noise level can make it more difficult to bring the students attention back to teacher, which makes it important to establish a signal like handclap or buzzer for them to finish their sentence and stop the discussion. After the first few exercises, class become quiet within 10 seconds (R.M. Felder & R. Brent 1999).

Whether it takes lot of time to plan the activities? In traditional lecturing also lot of preparation is required for lesson plan. Adding activity to a lesson plan is matter of time, doesn't cost much of time. While preparing the lesson plan teacher can note down the activity intended to do in the class.

Whether all students like to work in the class? What teacher should do when some students refuse to get into groups? If some students resist to part in group activities in class room, the teacher has to persuade students by saying activities what they do will help in the examination. Also convince the students that active learning in class helps students to become engaged in the learning process, it promises to create classroom environments where students can not only obtain knowledge but also apply that knowledge in ways similar to those they will face in their career (John R Drake 2012). Here teacher's posture and facial expression plays an important role in creating comfortable environment to indulge students in group activity. Being very strict and military rule doesn't serve the purpose. Teacher should not expect that students will immediately agree and indulged in activities in class, but it definitely starts working in second or third time.

Summary:

In summary, considerable support exists for the core elements of active learning. Introducing activity into lectures can significantly improve recall of information while extensive evidence supports the benefits of student engagement. While active learning offers some hope for increasing conceptual understanding, its lack of appropriate focus, faults during implementations leaves it suffering from mixed findings.

References:

3. <www.ncsu.edu/felder-public/Columns/FAQs-2.html>. Responses to the questions “Can I use active learning exercises in my classes and still cover the syllabus?” and “Do active learning methods work in large classes?”