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Experiences in Architecture Education Learning and Teaching Methodologies Topic: Teaching - Sharing or Enhancing the Learning

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Abstract Different lines of thought process and experimentation is the requirement of today's teaching. Black board teaching is one of the conventional systems of education. A challenge is to keep up the interest of the young learners, and making the learning more enjoyable process than just a submission. The short span of attention period of the pupil needs to be put up with work using rational thinking and hands on experiences. In order to succeed in the increasingly complex and rapidly growing techniques in the world, teachers need to equip themselves with effective thinking skills and update their knowledge to the present growing technology. Teaching strategies need mode of the process of critical thinking that would engage students in an active learning process i.e; the students are to be directly involved in the learning process through practical methods. This paper discusses the teaching and learning through different methods depending on the subject and also throws light on the effectiveness of the methods. Apart from the usual formal teacher-centered approaches, such as the fifty minute lecture, the active teaching and learning creates opportunities for interaction between teachers and students, discussions among students themselves, as well as between students and the subject materials. The visual and other methods of learning will create a strong bond to relate between the theoretical subjects taught to the practical design studios. This leads to promising opportunity for teacher to explore new methods and pedagogies for updating the learning and teaching strategies and also for further research to those educators who wish to pursue a deeper understanding of the process of learning to teach.

Keywords Conventional Method, New Method & Pedagogies, Practical Method- Active Learning, Active Teaching and Learning, Effective Teaching Skills

1. Introduction

Conventionally the lecture method is the most widely used instructional strategy for higher education; in colleges and universities. With the technology development and emergence of new teaching methodologies and strategies in the current day, the lecture still remains an important communication to students in different ways like: class room lecture, guest lecture, power point presentation, day long seminars, etc.

The conventional method had the usage of the black board. The composition of the board while lecturing was also to be in concern. The one hour of lecture session had to be compartmented in such a way that the whole hour would be divided for delivery of lecture, discussions ,question and answer session and ending up finally with the summary of the session taken during that particular hour.

In combination with active learning and teaching strategies, the conventional lecture is an effective method of communication. The advantages of the lecture approach is that it provides a way to communicate a large amount of information to many listeners (mass instruction)but the disadvantages being minimal feedback from students, assuming a minimal level of student understanding and often disengages the students (distraction) from the learning process causing information to be forgotten before the next lecture hour.

Faculty prefers the pressure for fewer lectures and to make the learning and teaching environments more interactive, to integrate technology into the learning experience and to use collaborative learning strategies when appropriate.

2. Methodology

Generally the lecture begins with general principles and eventually goes into detail with its applications. Instead, if the instruction begins with observations, book reviews, literature studies, site visits (on site instruction), case studies, etc. Solving of a live example, giving solutions , would be a preferable alternative in the teaching and learning process.

Apart from the usual formal teacher-centered approaches, such as the fifty minute/one hour lecture, the active teaching and learning creates opportunities for interaction between teachers and students, discussions among students themselves, as well as between students and the subject materials. The visual and other methods of learning will create a strong bond to relate between the theoretical subjects taught to the practical design studios.

These methods are learner centered; that they impose more responsibility on students for self-learning than the conventional lecture based approach. The students do more of research (research oriented projects) and their findings through the research are included into the existing information. They construct their own version of reality rather than just absorbing the versions presented by the faculty.

The following tips can make the lecture approach more effective

1. Focus on specific topic
2. Organize the points for clarity
3. Relation to exiting examples, illustrations/sketches to be shown.
4. Present more than one side of an issue and be sensitive to other perspectives
5. Be aware of the audience's reaction.
6. Enjoy ones presentation.

The methods would have more of student's involvement, discussions, questions and solutions (more than one). This would also lead to students working in groups (collaborative or cooperative learning).

The students are exposed to Case study based leaning, where they require to visit an existing project, document (take photographs, measurements ,sketches) the whole , observe, study the facts, critically analyze the advantages and disadvantages and finally incorporate it into their own design solution. This helps them to finally arrive on a design solution that is more functional and also aesthetical.

The case study approach works well as it acts as an extra support to the environmentally based design solution and it also stimulates critical thinking and awareness of multiple perspectives.

The exposure to site visits (factories, construction sites, etc) the students are practically aware of what's happening in the real world, more than just the theoretical approach. A hands-on workshop in the construction yard would create awareness for the students to real life applications.

Teaching method

Teaching Methods can be described as the way of achieving learning results. The selection of teaching methods is dependent on the students and the physiognomies of the learning condition. The selected teaching methods should support the completion of learning results.

Criteria's for an Appropriate Teaching method

Dynamic: Involve the students during learning hours i.e, they should be attentive and active by participating in the learning process. Listening to a lecture (passive learning) is often not the only and, perhaps not the best, way to attain the end product of learning, i.e. ; presentations, work well as a teaching method to get an outcomes of the type knowledge but for skill and competence learning your active portions for the learners should be incorporated in the teaching methods. Therefore, encouragement to the learners to participate in active learning rather than passive learning

Substantial: Teaching and Learning process are better achieved by linking the learning to a concrete application where knowledge, skills and competence are to be used. This way, learning is improved i.e.; the student is able to remember the information for a longer period and is able to apply the knowledge, skills and competence practically.

Support: support students in their learning process.

- Special lectures with demonstration.
- Preparation of check lists so that students can use during their active learning.
- Frequent one to one discussion with the students would help the students and it would lead to meaningful and enhanced learning. Discussions can happen as a group or personal depending on the exercise involved.

Social: a part of active learning. Engage the student's in more of social activities as part of the subject study. To learn with others is motivating and nurtures not only the learning process but also the students self-confidence and self-efficacy.

Technology and techniques should be used with care in the process. The use of technology should be in line with the instructional method which leads to the learning results.

3. Discussion

Student's discussion

There are a various ways that stimulates a discussion: Faculty can commence on a chapter with a group discussion to refresh the students' memories about the subject matter. Faculty makes the students list critical points or emerging issues or they generate a set of questions focused on the specific subject. These strategies can also be used to help focus large and small group discussions.

Therefore a successful class discussion involves the faculty and students, where the faculty plans and also there is preparation on the part of the students. Faculty should communicate it very clearly to the students at the beginning of the session regarding the course expectations. As the faculty carefully plans the learning experience, the students also must comprehend to the subject taught.

Students usually find such activities energizing and are likely to engage more with the subject matter as a result. All students have previous experiences and knowledge of some kind and active strategies offer them the opportunity to make informal connections with things they have already learned.

Active teaching and learning approaches will often yield unanticipated outcomes; there will be some learning that

takes place, in other words, that has not been (and could not have been) planned for and this can be rewarding for both students and teachers.

Group work/discussions provide students with opportunities to learn from and support each other rather than mere formal, teacher-centered approaches.

By sharing knowledge and experiences, by encouraging students to think in different perspectives would make them react more critically.

Interactive teaching and learning sessions would encourage the students to become more self-directed and self-motivated.

4. Result

Benefits for students

Group projects/Group discussions can help students improve their skills that are increasingly important in the professional world. Properly structured group projects can reinforce skills that would enable the students to

- Breakdown the tasks into parts and steps
- Time management
- Refining the topic into simpler versions
- Development of communication skills.
- Face more complex problems.
- Share every individual perspective.
- Relate knowledge and skills.
- Risk management
- Develop new methods /approaches
- Develop one's own perspectives.
- oneself to get update their knowledge

This promotes meaningful teamwork and deep collaboration.

Benefits for faculty

Faculty can often assign complex, authentic problems to groups of students rather than individuals. Group work also introduces an unpredictable nature in teaching, since group work would solve problems in more diversified and interesting ways. Additionally, group assignments also would be appropriate so as to get more brain storming discussion and followed by diversified results in it.

5. Conclusions

The methods of instruction offer a promising opportunity for faculty to explore new methods, content, and pedagogies for teaching methodologies. The growing interest in faculty, the research about the methods, gives a deeper understanding of the process of learning to teach.

Faculty should first acquaint themselves with best practices such as providing extensive support and guidance when students are first introduced to the method and then further down withdraw the support as the students improve and get more experience and are confident of the usage of the new methods

The goal should be to facilitate the students to become self- learners rather than them to depend on faculty as key source of information.

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