

ACTIVE TEACHING-LEARNING SYSTEM AND CHALLENGES IN THE PROFESSIONAL EDUCATION

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ABSTRACT:

Now-a-days, the ways to develop professional educator have been changed. Students benefit more from teachers who are not only qualified and experienced but at the same time always have updated outcome base. Often need enrichment programmers to update the teachers and consequently to the students they teach. Even if a profession has people with the required qualifications and experience to stay in the job but no opportunities to improve, update knowledge base with changing time and growing needs, it affects their and also the students' performance adversely. Based on this, only active teaching and learning system will give better development for upliftment of new comers.

Keywords: *Professional Education, Outcome based Education, Active Learning System, Learning Model and Industry Relation.*

1. INTRODUCTION:

In today's ultra-competitive work environment, the organization that trains in the most effective and efficient manner possible will always gains the upper hand. With emphasis on process, performance, and employee motivation as the keys to success, there is no denying the fact that learning has become a barometer of an organization's competitiveness.

However, the passive approaches employed for the past generation of learners are now obsolete. Classrooms and lectures are now slowly becoming a thing of the past. The preferred learning approach has now turned the way of active learning methods.

Now, put technology into the mix and things get a little complicated. First, there is a definite need to adapt active learning activities. On top of that, there's also a necessity to address trainees who are highly dependent on

tech. Utilizing active training methods in the classroom is already a challenge in itself; but now, active online learning has also become part of the equation.

This puts learning managers and professionals in a bit of a bind. Today's learning environment is more dynamic than ever. Adapting to and getting informed on the latest effective methods have become almost impossible tasks. Technology will keep on evolving; and so, will the learners and learning methodologies.

It has now become an integral part of a learning professional's job to keep up with everything that's going on.

Keeping all that in mind, the learning professional's biggest challenge is effectively addressing the learning needs of this new generation of learners. Doing so will require them to use technology while simultaneously fostering an active learning environment and staying updated on modern learning approaches.

2. METHODOLOGY OF PROFESSIONAL EDUCATION-

The concept of active learning has been around since the early '90s. Although the term covers a broad spectrum of different approaches, its main point is 'learner-centricity.' Active learning's main drive is to put the responsibility of learning at the hands of the learners themselves.

It is also the exact opposite of passive learning – where the relationship between learner and instructor somehow resembles that of an apprentice and master. In this instance, the instructor lectures while the student merely memorizes and assimilates.

Active learning methods, on the other hand, designate the role of facilitator to the teacher. Instead of merely a lecturer, the teacher acts as a guide. The facilitator's task is to let the learners learn on their own through the use of different active training activities.



Fig- Role of Teacher

2.1. ADVANTAGES OF ACTIVE LEARNING-

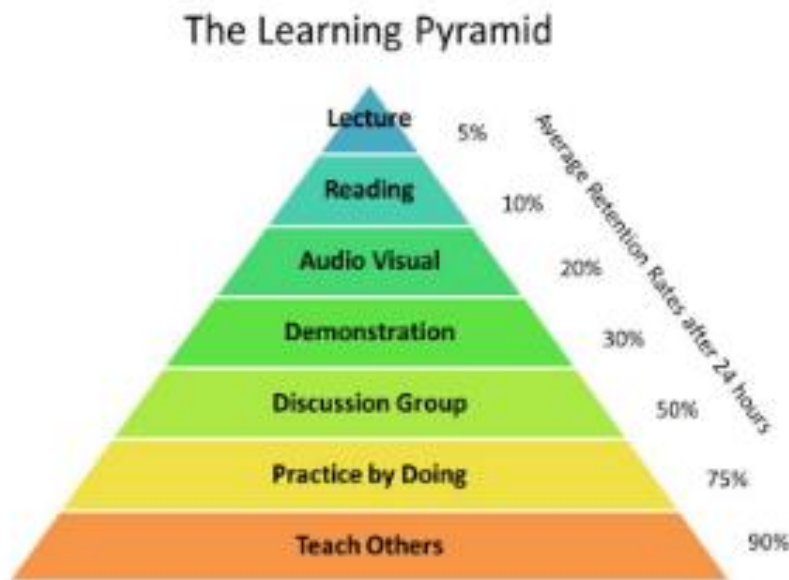
There are a plethora of studies on the benefits of active learning. Research has proven that there is increased content knowledge for participants of the approach. In addition, development of critical thinking and problem-solving are two other benefits. Creative thinking, collaborative, and interpersonal skills also show great improvement when active learning methods are implemented.

The most important benefits, though, have something to do with learner motivation. This then leads us to the next important question concerning active learning methods.

2.2. HOW TO PROMOTE ACTIVE LEARNING?

The most important element of success when setting up a proactive learning environment is motivation. Studies have shown that active learning results in increased enthusiasm for both learners and facilitators. What’s more, active learning also improves learners’ perception and attitude towards information literacy. These are all critical attitudes in establishing an active learning environment.

Moreover, fostering an environment that values active learning methods is not only the responsibility of a select few (like the training department, for example); but it needs to involve the active participation of the entire community as well – from the Chairman to the mid-management, to the rank and file.



2.3. ACTIVE LEARNING IDEAS THAT INVOLVE TECHNOLOGY-

2.3.1 COLLABORATIVE VIRTUAL CLASSROOMS:

Collaborative virtual classrooms make online learning more engaging. Aside from the usual audio-video conferencing and chat features, virtual classrooms also provide synchronous and asynchronous annotation, communication, and resource sharing for facilitators and participants. It's a definite must-have for any eLearning platform!

2.3.2 MIND MAPPING / BRAINSTORMING:

These two are approaches that can also be classified under active learning methods. Mind mapping and brainstorming are staple methodologies for any problem-solving activity. In these sessions, learners come up with ideas and post them on a board. As a group, the students then select the best ones and use those to come up with a solution. For these methods, there are available apps that allow learners to use their own device and collaborate with others in coming up with a mind-map or idea tree.

2.3.3 SCAVENGER HUNTS:

Here is another fun and engaging activity that involves the use of the institute knowledge base. Scavenger hunts start off with a stakeholder concern. The learner's task is to use the system and find the appropriate resource to address the issue. Not only does it familiarize the learners with the system, but it also prepares them to handle real-life stakeholder scenarios.

2.3.4 DATA AND TOOLS FOR PROBLEM-SOLVING:

A combination of a scavenger hunt and role-playing activity, this exercise is one of the more effective active learning strategies for adults. The facilitator assigns a case-study (preferably taken from common stakeholder scenarios) to a learner. The learner, in turn, makes sense of the data and uses the available resources to solve the case.

2.3.5 ONLINE DISCUSSION BOARDS:

Online discussion boards are also one of many proven active participation strategies. Online boards are virtual boards where students can learn collaboratively. They post questions and answer queries. Most of the time, there is very little facilitator or subject matter expert intervention involved, with most answers usually coming from the other participants who are more knowledgeable on the topic.

2.3.6 LEARNING BY TEACHING:

In a nutshell, learning by teaching means that you allow learners to prepare and teach the lessons (or part of them) to their fellow students. Although it may look like the facilitator is taking a very hands-off approach in this method, it actually involves a very elaborate process where the facilitator is both moderator and subject matter expert.

Do take note that learning by teaching does not simply mean a presentation or a lecture presented by the learners. In this particular approach, the learners are the ones who are facilitating the session by engaging with fellow students. The facilitator ensures that the learning gets processed correctly and also lends a hand to the student-hosts. Webinars and online discussion boards are the usual media used for this methodology.

2.3.7 THE FLIPPED CLASSROOM:

The flipped classroom is a fairly new term in the learning and EdTech industry. Lessons are ‘flipped;’ meaning that most of the work like reading and research are all done outside of class. This goes in contrast to the traditional approach where most of the class time is used for lectures, and activities are assigned as homework.

Flipping a classroom leaves more time for the facilitator to implement active learning methods during class time. This concept works on making efficient use of class time with less (or no) lectures, and more time for activities.

2.3.8 THE EVER-EVOLVING RELATIONSHIP BETWEEN TECH AND LEARNING METHODS:

There are still multitudes of activities for active learning methods out there. With the help of technology, learning managers and professionals have been presented more options on how to better engage today’s tech-dependent students. Nevertheless, it will now only be a matter of time before tech advances again and learning methodologies evolve with it. Learning professionals just have to either keep up and adapt or get connected to their learners.

3. CHALLENGES IN THE PROFESSIONAL EDUCATION IN THE STATE-

The major challenges for the state, due to the policy, many students of the state is unable to take go through in higher education within the state. So, new policy can be incorporated due to which student can take admission in their native state. Finally, this will give maximum benefit for the state in the view of revenue and academic arena.

4. ROLE OF UNIVERSITY-

Generally, the function of universities is as follows,

- ✓ To repositories and generators of knowledge.
- ✓ To equip graduates so that they can obtain viable employment.
- ✓ To provide Technical and Vocational education so that students will make them to be productive entrepreneurs as it engenders creative and innovative ideas, then enlarges the economic pie and increases personal freedom.
- ✓ To offer rational and timely criticism in areas of social and economic life and public policy.
- ✓ To conduct semester examinations within time.

- ✓ To offer semester mark sheets within time. Based on the mark sheet, students are eligible to get scholarships from different organizations.
- ✓ To conduct university level sports.

5. CONCLUSION-

The learning professional's biggest challenge is effectively addressing the learning needs of this new generation of learners. Doing so will require them to use technology while simultaneously fostering an active learning environment and staying updated on modern learning approaches.

References-

- i) <https://www.ieagreements.org/accords/washington/>
- ii) <https://www.nbaind.org/>
- iii) <https://www.google.com/>
- iv) <http://naac.gov.in/>