

Sustainable Growth of Advanced Pedagogy for Effective Teaching and learning process

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ABSTRACT

The innovative teaching approach emerged in education industry for an effective performance of students in recent trend, many creative techniques adopted in coaching methods through electronic technologies in further to usual class room, a customized electronic gadgets aid in teaching and appraising the performance of the student with various qualitative parameters. The utilization of advanced pedagogy is crucial part in order to generate an attitude towards learning and to instigate interest of involvement. The purpose of teaching is to give a clear picture about the subject with examples and reasoning's in an understandable ways to students, which originate the knowledge about the varied cultural and fundamental backgrounds. Generally students cannot able to achieve their scores in subjects due to discrete reasons and usually that they are not having a knowledge about the expected performance for appraisal by lecturer. There are distinct distractions for students in current scenario through smart phones and social media, so deploying appropriate methods for teaching and learning process becoming essential in education system. This study is focused to identify the creative teaching methodology which also supports the students learning process.

Keywords: Teaching methods, Effective learning, advanced teaching pedagogy.

1. Introduction

Education is a global need that thrives with the aid of technology, the rapid growth of teaching techniques form the past few decades established a superior educational structure as it is equipped for coaching the students with feasible methodology to impart skills, abilities, values though advanced pedagogy [1]. There is a great challenge in teaching and learning process with changing technology and trend. The implementation of advanced pedagogy in an education system is to build an easy learning practice for students as well as a productive practice for teaching faculties [2]. There are teaching methods with a frequent Interactions by face to face and distance learning methods to distribute and share the knowledge between students of learning society, which can be integrated simultaneously with a technology based traditional teaching method or hybrid teaching. The combination of hybrid teaching and traditional teaching will be able to stimulate the student towards learning process effectively. This will help in reducing the distraction of students during teaching and the faculties have options to gather and share more information on the topics, In order to enhance the student learning process. The hybrid teaching describes the Students interactions with face to face, online, PPT, blended leaning with technology and flip learning between students on a particular subject or

topic [9]. This will engage the students by interaction with the faculty members and classmates towards the enhancement of skills on a topic as well as in problem solving. The systematic approach towards effective teaching and learning must be consistent for longer tenure, it is only possible with a proper teaching source or material and method of teaching for students of various categories [3].

2. Materials and Methods

The preliminary research procedure is adopted to analyse the data. The Data's has been collected from research articles, books, websites, in order to comprehend the effective teaching and learning criterion. This paper is prepared by referring to published research articles along with various websites.

3. Advanced Pedagogy with Technology

The methods of teaching with the aid of technology make the maximum participation of students through involvement on an active state by encouragement. The study material looks more interesting with technology based pedagogy, this approach assist in justifying from discrete comparison of distinct structures or arrangement on related topics, in order to arrive the conclusion based on the results with an additional technical facility in the classroom [3]. Integration of pedagogical approach with technology leads to hybrid education through productive multimedia presentation in class rooms with audio and video and PPT presentations. The audio threads connected with browsers acts as a bridge to access audios, videos, images and documents to conduct a discussion, this discussions will be carried out with the convenience of the participants. The evolution of smart gadgets with wireless communication and network connectivity, and the combination of advanced technologies provides an extreme level of teaching by creating a flexible study atmosphere for educators and listeners. These smart gadgets facilitate the educator and students with wireless enabled Internet in classroom for the maximum utilization of study material through books, articles and blogs. The technology based learning make students to participate actively in conversation by distinct approach on topics that makes the educator to evaluate and assess the performance of the student effectively, these approaches are classified as

- Blended Teaching and Learning Method
- Learning at Flipped Classroom
- Active Learning through classroom Technology

3.1 Blended Teaching and Learning process

This method is functioned with the most recent technologies that is connected with wireless and RFID using smart devices in education program, which facilitates the educators to obtain the maximum information regarding specific subject and facilitate learning of student [4]. The availability of GPS, RFID scanners, and other sensors gives an advanced data for higher education with a collective multimedia teaching and learning method. Furthermore, the ability of developing optimised learning through internet is driving towards the accomplishment of teaching purpose [5]. The blended teaching and learning are specify the mixed methods of teaching practices like activities related with events, hybrid teaching, face to face, audio visuals, WIFI internet, RFID, Smart Gadgets and face to face in class room, which enhance the pedagogy towards the effective teaching and learning. The student involvement in the specific topic is comparatively higher than normal teaching methodology through

the encouragement and motivation on accessing advanced technologies for studies [6]. This method of teaching provides additional information on the subjects and reduce the time consumption compared to a traditional method.

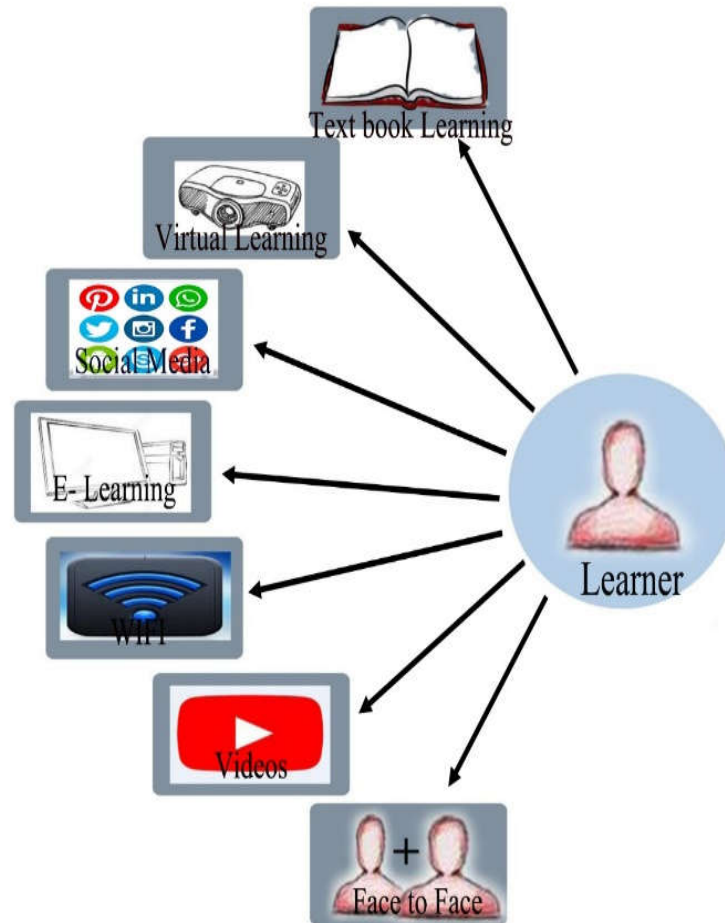


Figure 1. Blended Learning

In Fig.2 illustrates the learner can receive knowledge through multiple sources in blended learning

3.2 Learning at Flipped Classroom

Flipped classroom is a pedagogical method which contradict with the traditional method of teaching that is inverted in regard with regular classroom teaching and learning practice, This process initiated by sending study materials to the students through online source, videos, books, articles, blogs accessed using smart phone applications or other internet enabled devices, prior to their classes and instructed to prepare on the topics assigned to them before coming to class [7]. The student's involvement in their subject becomes deeper here, while preparing at home. During the class many discussion are carried out in small groups comprised with various study material, which is monitored by teacher, whereas in a traditional teaching students participation is confined. The role of a faculty in a traditional class room is to deliver the information on the specific topic and draws attention of the students and disseminate the information to all the students, were only a particular topic from one source is delivered to students. It assist in accomplishing hard assignment with innovative approach and promote the student's interest in achieving their goals as well as gives confidence by individual performance on their topics which simultaneously develops their personality.

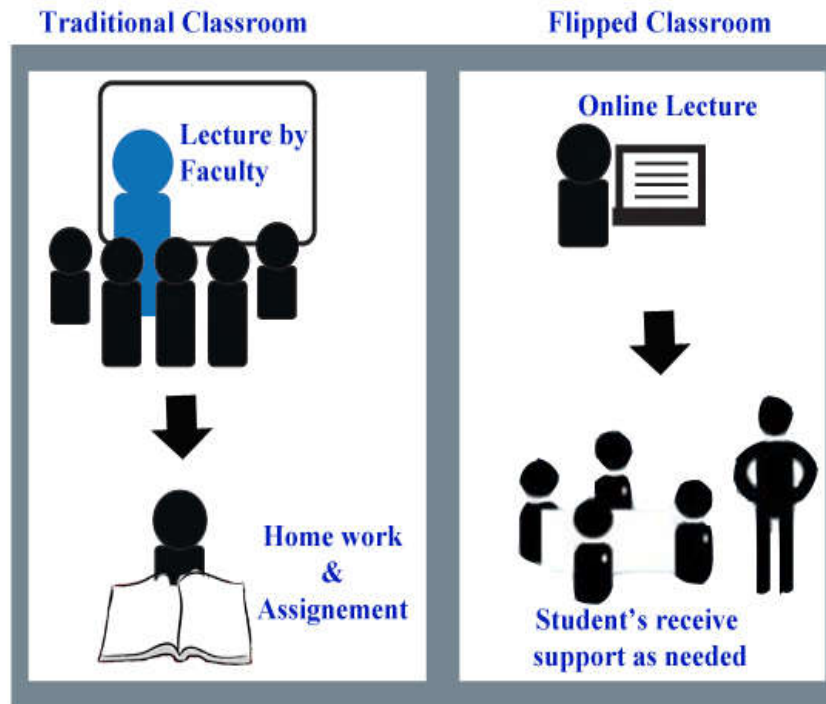


Figure 2 Flipped Classroom

In Fig.2. Shows that the instruction given by faculty in traditional classroom with the study material prepared by him and delivering in class, the notes are taken down with the information delivered in class later the assignments and home works are carried out by the understanding of the student. The Flipped classroom shows about the information and demonstration is provided through online lecture before their class, here the class time is committed to practiced learning activity with task assigned by the faculty, in order students will receive guidance and support whenever required. This method of teaching and learning process gives additional information with video demonstration before the class and their queries will be cleared by a faculty at flipped classroom.

3.3 Active Learning through classroom Technology

The demonstration and lectures given by faculties on topics will be difficult to understand by students in regard with connecting the facts, the information shared will be more organized when it is visualized using technical devices in order to understand the concepts more precisely that drives the students interest and enhance the ability to acquire the information to the depth in specific topic [10]. Students learning experience is enhanced by classroom technology that is enabled with information and communication technologies (ICT), a proper use of this technology by faculties can turn the regular classroom to a virtual classroom that facilitate the students to participate in online programs through interaction with other participants in particular media, the WIFI enabled classroom is ideal for the use of ICT [11]. Teaching with technology needs lots of expertise on a digital tool used by faculty after the initiation of class through digital tools, faculties must monitor the students to ensure that the devices are used properly. The use of RFID technology with WLAN in classroom for student's attendance spares more time on studies as well as, it gives more accessibility of academic attendance [8].

4. Conclusion

The teaching and learning process become more efficient with the application of advanced pedagogy and there is a huge growth in innovative teaching techniques being adopted in many educational institutions for better outcomes [1]. Blended and flipped teaching and learning process will obtain better results on students understanding towards the topics assigned to them, with the aid of technology inside and outside the classroom, the education institutions try to equip their faculties to meet requirements of virtual classroom, The flipped classroom has gathered convincing concentration of students in comparison with the traditional classrooms [7], however it may not be applicable in many disciplines, when there is much of practical oriented teaching in few areas, on the other hand the student outcomes of blended learning is satisfactory with the source of advancement in technology which assist in enhancing the communication of the student due to interactive multimedia sessions. The RFID technology enabled classroom can saves the time with automated attendance of students, the valuable time will be utilized completely in studies rather than taking manual attendance [8].

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