RESEARCH ARTICLE

INNOVATIVE TEACHING - LEARNING PRACTICES: AN INTEGRATIVE APPROACH OF FACILITATING CHANGE

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Manuscript Info	*Abstract*
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	In this transforming universe, the whole ball of wax, materialistic and non-materialistic, is changing their original forms. The attitude of the human beings is also changed. Attitude is one of the aspects of identifying people by observing the behavior, action, and the way of looking the things in a different way. Every human being has their own point of view towards any person, thing, and event. Like that teachers also have the different viewpoints regarding any noun. There are standard changes seen in teaching-learning process, the ideal change from the traditional classroom teaching to modern Information and Communication Technology (ICT) based teaching. For joyful learning, effective teaching, and to achieve the set objectives there are vivid innovative ideas are adopted. The teacher educators use those practices to teach students in teacher education institutions to produce competent, skilled, efficient, and proficient teachers. Role play, team teaching, individualized learning, mobile learning, flipped learning, blended learning etc. are some of the examples of innovative practices. But there are various factors that constitute problems in implementing these new ideas. It is very much needed to overcome from all these problems and issues and keep going with the emerging trends in the field of education.

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Introduction:-
In this era of artificial intelligence everything is changed, change in the field of technology, machinery etc. that leads human life in a smooth way. The technology adopted in the field of education is a paradigm shift from the traditional teaching-learning process to modern technology-based teaching-learning process. With the help of technology there are number of techniques used to make teaching-learning process interesting that motivate students to learn something new, it generates and accelerates curiosity among learners. Techniques and innovative ideas are used to involve students in learning process.

Innovation, creativity, new ideas, different view of looking the things or objects, all are similar in meaning that goes to the direction of change which is new in nature. As everyone know that change is the law of nature, but people need to understand that the originality of anything should not be changed. There can be modification of things or

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any object but that should not be completely changed. For instance, mobile phones applications are updated time to time and various changes come under that updates, but the basic features of mobile phones do not change. Like that innovation is the process of modifying something, it can be cultural change, it can be social change, behavioral change, change in standard of living, technological change or change in the field of education. New change in any field is known as innovation and the various ideas, methods, techniques etc. are adopted in the field of education is referred as innovative practices.

The alternative ideas are taken place because of alternative thinking process and the reason behind it the change in attitude. Attitude is a settle way of thinking that represents an individual's point of view towards any items, objects, subject etc. It can be positive or negative. The attitude involves three parties (tripartite view), it means there are three components of attitude:
i. Affective Attitude.
ii. Behavioral Attitude.
Iii. Cognitive Attitude

Like every human, teacher educators also have different attitude towards teaching and the adoption of technological and non-technological instructions are based on the individual perception. The abundant of innovative ideas are taken up in the educational field which can be used for classroom teaching. The modern curriculum is child-centered; the focus is given to the learners and their learning. The child-centered curriculum describes that every child is important, they must participate actively in the teaching-learning process and for that numerous innovative practices are adopted to involve them. Active involvement of children is helpful in conceptual learning which retains for longer duration of time in the learner's mind, learners can use it wherever needed or can use it to teach their future generations.

Objectives:-
The sole objective of this paper is _
i.   To catch the drift of the context of Innovative Teaching Learning Practices and their inclusion in the curriculum.
ii. To explore the use of innovative techniques of teaching in classroom situations.
iii. To examine the difficulties they observe in its implementation.
iv. This triple intention would help in understanding the teacher educator's readiness to use these innovative approaches and assess the gap between their practice and the intended change pursued in education.

Rationale of the Study:-
New ideas, innovative practices, new technologies in teacher education institutions can rejuvenate teacher educators from inside and accelerate their interest of teaching. To keep pace with the changing trends, there is a need for a sound teacher education program with modern innovative ideas. Innovation in teacher education program replaces old methods with new practices. The intention behind the involvement of innovative practices in teacher education institutions are
i.   At the time of admission innovative practice is needed to know whether the students have the teaching aptitude or not by taking test or interview.
ii. To make curriculum transaction easy, interesting, and effective there is need of innovative practices.
iii. It makes student teachers familiar with new technologies, techniques, strategies, and methods of teaching for future use.
iv. It provides knowledge about the different types of teaching aids and teaching materials to the student teachers that they can apply this knowledge when they become teachers.
v.   New ideas keep the pre-service as well as in-service teachers updated which is possible through seminars, orientation programs and refresher courses.
vi. Internship is also an innovative practice which is very much helpful in acquiring teaching skills that cannot be taken place overnight.

Innovative Practices: A Paradigm Shift
In the field of education, it is regarded as something new or original experiment to make teaching-learning process effective, to make classroom environment interesting and active and to involve learners in the learning process. There are various innovative practices which teachers can use to make their class interesting. Those are:

a)   Blended Learning
b)   Use of smart boards while teaching
c)   Creative teaching
d)   Flipped classroom
e)   Team teaching
f)   Role play
g)   Individualized learning
h)   Teaching through virtual reality
i)   Mobile learning etc.

Blended Learning:
Blended learning is the integration of traditional face-to-face classroom learning i.e., offline learning and the technology based online learning which is very much helpful in improving the ability and potential for individual progress. It also helps the students in greater retention of content. Blended learning is an approach that provides opportunity to take the benefit of both the learning modes i.e., online as well as offline mode. For example, students attended offline class to gain learning experience on any subject matter but they are unable to understand that topic at that moment so there is the provision of online class for completing the coursework in a better way. And again, they can attend the class for more clarification on any doubts for further discussion if required. It was **Sir Isaac Pitman** who introduced first the distance education course in 1940's and after that the concept of blended learning comes into existence.

Smart Board:
"David Martin and **Nancy Knowlton"** were the persons who invented the first interactive whiteboard in their company named "**SMART Technologies"** in "**1991"** with the feature of touch screen. This technological product functions with the coexistence of a projector and a computer. Smart boards are very much helpful in power point presentation and has an interactive whiteboard and provides the users a large version of their computer screen. It enhances the learning experience in distance education that stimulate learning among individuals.

The large screen of the smart board in beneficial for the partially visual impaired students who do not have access to the small board. And the most important thing is that the learners have increasing interest towards learning through this modern technology as the modern generation have very much intended towards technology. There are various advantages of using smart board like, Educational videos on smart board make subject alive. Students-teacher interaction helps learner to gain more knowledge and smart board helps in two-way communication. It can be easily connected through projector and computers.

Creative Teaching:
The very word creative means different way of doing things. When the way of learning is changed then teachers need to change the way of teaching. Creative teaching is very much feasible for the learners of this new generation. Children want fun in everything either in eating, sleeping, playing, or learning, they want something new in every atmosphere of their life. All the innovative practices come under creative teaching. It does not mean that creative teaching is done only by using the technology, it can also be possible without the use of technology. Role play, storytelling, small workshop in classroom etc. are all examples of creative teaching without the use of technology.

Flipped Classroom:
It is a pedagogical approach where the traditional classroom situation is reversed. The credits of invention of flipped learning were goes to "**Jonathan Bergmann** and **Aaron Sams".** They were the high school Chemistry teachers in Colorado and made a software which can record the PowerPoint Presentation. It was started using from **2006.** Students introduced the subject matter at home or watch recorded short video related to lecture before the class session starts and the classroom timing is utilized through various activities like; discussion between students and teacher, problem-solving activities, workshop situation given by teacher for conceptual understanding.

The main perception behind flipped learning is individual participation, active learning, and student's engagement in the learning process. In this learning process the classroom timing is utilized for other activities. The teacher creates the situations for workshop where students can apply learnt knowledge, discuss, and collaborate with each other and get the hands-on experience through activities. Teachers be a mentor present there to guide the learners, motivate the students and accelerate the collaborative efforts. But teacher need to decide the proper timing to flip the class that

when and where the class should be flipped, and the suitable activity which can be design for the classroom only, no need to go outside, and enhance students' learning.

Team Teaching:
Team teaching was originated in **Harvard University, USA (1954). J. Ereeman** used this concept in **1960** in **Britain**. According to "**J.T. Shaplin (1964),**" "Team teaching is a type of instructional organization involving teaching personnel and the students assigned to team in two or more teachers are given responsibility, looking together, for all or a significant part of the instruction for some group students." In team teaching there are 2-3 professionals present in the class to deal with the group of students. These professionals are experts in their field like special education teachers, general teachers, and work as a team and cooperate with each other, so it is also known as cooperative teaching. They plan together the lesson, teach, monitor students' progress, and manage the class. The main objective of this innovative practice of team teaching is to improve the standard of instruction. To utilize the available school resources and to recognize the importance of cooperation and group work among teachers, team teaching is the best way. It also enhances the sense of shared responsibility.

The notion of team teaching is flexible, the entire responsibility does not fall on one teacher, they split the work among them and work accordingly. Teachers also have the freedom to decide the activities perform in classroom instructions. In team teaching one teacher is teaching whilst the other one is taking care about the difficulties of the students regarding conceptual understanding of the students.

Role Play:
Role play is a method of teaching the content in which students itself are the participants. The learners are involved in the procedure of learning. The pioneer of this technique was **"J.L. Moreno"** who introduced this technique of learning by playing in **2010**. Teacher and few other students are the audience in this method. For instance, if a teacher wants to teach the constitutional articles to the students, then teacher can create a courtroom in the classroom where students can be the artist and play the role of judge, lawyer, and the criminal. It is very much helpful for longer retention of content.

Individualized Learning:
Personalized System of Instruction (PSI), individualized instruction or individualized learning all are same in terms of learning which is made for the individual learner. This personalized learning system was drawn into the existence by **"Professor Fred S. Keller"** in **1974**. It is also known as **Keller Plan.** The content and material instructions are arranged according to the ability of the learner. It follows a systematic procedure of content delivery and assessment, students learn in their own pace because it is made for every kind of learner (above average, average, and below average) by keeping in the mind.

Virtual Reality:
It is an innovation of technology which is used to make people feel that everything is happening in front of them. "**Jaron Lanier**" was involved in it to make it popular, and it had been famous by **1980s**. **VPL Research** is a company, founded by him in **1985,** produced many VR devices like EyePhone, AudioSphere, DataGlove. Through digital representation, the educator and learners put together in the same classroom at distance mode. By using the device (HMD), individuals can feel the aura of real world in the classroom.

Virtual reality (VR) provides 3-dimention view to the learner and improve realistic interactive ability. The 360-degree experience of real world makes content easy to understand. It has a VR-headset or Head Mounted Display (HMD) which is extremely accessible to the learners. Samsung Gear, Shinecon VR, Oculus All-in -one VR, Google Cardboard, Epson Moverio are some of the VR gadgets used for 3-dimention view in the field of education. The use of VR satisfies individual needs, enhance the creativity of learners, and provide the power supply to their imagination.

Mobile Learning:
By seeing its name people can understand the whole concept. Mobile is an audio-visual device which is used for various functions, learning is one of that functions. This function is known as M-Learning. Ubiquitous leaning or U-learning (anywhere, anytime) can be possible through mobile device because it is portable, cost effective and convenient to everyone. It was commenced by the **Alen Kay (1972).** Alen joined a research center named Xerox Corporation's Palo Alto Research Center and created a group who were involved in the development of 'Dynabook',

a portable, hands-on personal computer. The notion of this computer was to provide children the access to digital world as it is a hands-on personal computer.

Issues and Challenges:-

1. Innovation needs experts who have creative thinking ability and competent enough to deal with new technologies. Flipped classroom, blended learning, individualized learning etc. are based on Information and Communication Technology (ICT) and it need experts to operate. Role play, creative teaching, team teaching etc. are based on creativity.
2. Lack of teachers' interest towards new change, as old age teachers do not want to go with modern way of teaching. Without their interest the administration of innovative and modern ideas cannot be taken place.
3. Lack of infrastructure for technology and machinery is also an issue. Technological equipment and other non-technological activities need space and without proper infrastructure it is not possible to implement.
4. There are teachers in teacher education institutions who do not have attitude as well as aptitude towards teaching and they are less interested in developing creative ideas. Without being motivated to do something new the chances are reduced to enforce the innovative ideas.
5. Scarcity of human and non-human resources kick off the new changes from teacher education institutions and go with the old and repetitive one.
6. Paucity of training to the teacher educators separate them from the renovated world of education which effect the students directly and unaware about the new exercises of teaching.

Suggestions to Implement:-

1. First and foremost, the infrastructure of teacher education institutions must be made appropriate according to the technological and non-technological based instructions.
2. Seminars, workshops, refresher courses make teachers aware about the new technologies, methods, strategies, and techniques that can be supportive to administer the innovative practices.
3. Faculty development programs at regular intervals also motivates and generates interest among teachers. With that interest the application of new ideas will be uncomplicated.
4. Proper availability of human and non-human resources in teacher education institutions open the path for the desirable enforcement of inventiveness.
5. Good number of experts as human resources must be appointed in teacher education institutions who are specialists to deal with the ICT and Non-ICT based instructions.
6. The administrative department must take initiative to adopt all the above suggestions and create friendly environment that teachers can think in a different way and recommend advanced ideas to administer in teacher education institutions.

Conclusion:-

Early and traditional teaching methods were developed from a framework that was solely theoretical and textbook driven with a focus on singular skills in a narrow stovepipe fashion that was narrow and only engaged in a singular discipline.

The main hurdle on this topsy-turvy land is how to enable these teachers not only to overcome the technology barriers but also to empower them to integrate appropriate technology into the learning process. It is therefore suggested that all the different stakeholders in the field of ICT in education, such as policymakers, planners, teacher educators, teachers and private sectors be actively involved in building teacher capacity for the effective integration of innovative techniques in classroom practices

It is necessary to shift to more powerful learning paradigms, such as, linear to hypermedia learning, instruction to discovery and construction, teacher-centred to learner-centred education, absorbing material to learning. It is of utmost importance and need of an hour to bridge the gaps between 'to have' and 'to be'. It is intended to bridge the gaps between Teaching Styles and Learning Styles providing differentiated learning experiences to learners of all the learning styles- Audio, Video and Kinaesthetic; Cognitivist, Behaviouristic and Constructivist; Accommodators, Diverges, Converges and Assimilators using these above-quoted innovative techniques.

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