ABSTRACT

A study of the history and of mankind to the present position reveals that change and innovation is essential for expansion and greater adaptation to life and environment where education has been the key source. Information and communication technologies have made extemporization in the field of teaching learning process and a drastic change from the old example of teaching-learning process. Nowadays, there is equalization of knowledge. Therefore, we need to have interactive teaching and this changing role of education is unavoidable with the introduction of multimedia and spawning of technology acumen generation of youth. Problem-based learning is an innovative measure to encourage students to learn via real life problems. Teaching-learning activities can be improved by introducing the concept of Mind Map. Many other new approaches like Z to A approach, Mnemonics, Word to Word approach, Collaborative Learning, Role playing etc are rapidly bringing innovations in modern education.

KEYWORDS: Improvisations, democratization, multimedia, Collaborative Learning, Mnemonics.

INTRODUCTION

Teaching as a whole, is aimed to bring changes in the behaviour of pupils. It is a professional activity involving the teacher and the student, and result in the development of the student. Learning occupies a significant role in one’s life and is essentially a focal point of the teaching –learning process. A teacher plays a vital role in molding & shaping the personalities of students (Paul, 1999). Teaching have a major element which is information and has two formed, one is receiving another is sending. In the new paradigm of learning, the role of a student is more important than teachers. At present students have major role than the teacher in learning process. Pen less and paper less classroom is modern concept which replaced the old teaching learning process. Now a day’s due to equalize of knowledge role of a teacher is facilitator. Ultimately the teaching people are satisfied when he could reach the students community with his ideas and views. So, teaching depends upon successful mode of communication and innovation though proper improvisation of teaching-learning processes and activities. Using modern multimedia technologies like extensive use of computers or making some advance mode of teaching can make highly effective in teaching learning scenario. Teacher imparts knowledge that shows the mankind the right direction to surge. The purpose of education is not just making a student literate but adds rational thinking, knowledge ability and self-sufficiency. So an attempt has been made in this paper to study the awareness among upper-primary school teachers related to innovative strategies.
INNOVATIVE STRATEGIES:
USE OF MULTIPLE INTELLIGENCE BASED TEACHING FOR EASY AND QUICK LEARNING

Gardner’s theory of Multiple Intelligence proposes a means to understand the many ways in which human beings are intelligent that is how we process, learn and remember information. Various improved activities can be arranged in any session based on these intelligences so that children can learn in stress free environment. The theory argues that intelligence, particularly as it is traditionally defined, does not sufficiently encompass the wide variety of abilities human display. Gardner said that a child who masters multiplication easily is not necessarily more intelligent than a child who struggles to do so. The second child may be stronger in another kind of intelligence, and therefore may best learn the given material through a different approach. Following the theory various activities can be taken up in schools.

Activities based on linguistic intelligence
- Reading, writing, narrating stories, poems, drama, jokes.
- Conducting mock interviews, chat shows.
- Preparing and giving presentations and creating slogans.

Activities based on logical-mathematical intelligence
- Provide scope for calculation.
- Use puzzles in teaching.
- Practice sequential step by step thinking.
- Use computers for spreadsheets, graphs and calculations.

Activities based on Visual-Spatial intelligence
- Do mind mapping
- Practice orienting with maps
- Highlight information with colour
- Use computer aided graphics

Activities based on Musical Intelligence
- Subject related songs, chants, poems sung in tune by teacher, recorded or sung by students as it is required.

Activities based on Bodily-Kinaesthetic intelligence
- Include movements in lessons.
- Provide scope for student movement during teaching.
- Organize street plays, role plays, drama etc.

Activities based on Interpersonal-social intelligence
- Conduct group discussions, brainstorming.
- Work in team.
- Include learning sessions where you pair off and share.

Activities based on intrapersonal intelligence
- Provide material for self-learning of content.
- Ask though provoking questions.
- Connecting the content to students’ personal experiences.
Activities based on Naturalistic intelligence

- Organizing field trips for observing nature.
- Provide enough scope for careful observation.
- Enrich learning environment with plants.

Thus, the multiple intelligence based teaching has given a broad vision to education as the current teaching learning process where all students are compelled to progress at the same rate along the path of traditional curriculum is leading to the stress full situation among the students.

GAMIFICATION

In elementary and play school education, an alternative education method can be implemented. It is the process when learning can be done in spite of role memorisation various gaming techniques can be used and the process is named by gamification. Gamification can induce motivation and initiates effective training.

Gamification focuses on the activities on the basis of student’s age, precious knowledge and learning experiences. The process can also incorporate online quiz and games that increases their motivation and attention. The hurdles and challenges of the games for obtaining higher scores impart competitive tendencies and leadership among students.

COLLABORATIVE LEARNING

It is an educational approach to teaching and learning that involves groups of learners working together to solve a problem, complete a task, or create a product. Collaborative learning is based on the idea that learning is a naturally social act in which the participants talk among themselves. It is through the talk that learning occurs. Bisht (2001) discussed the role of teachers in changing the objectives of higher education. The two distinct roles were highlighted in that study. One was to transform the educational system through participation and second was to strive for inculcation of the changing values.

MIND MAP

Mind maps were developed in the late 1960s by Tony Buzan. Using mind maps are useful technique for self learning process. Mind mapping is a visual form of note taking that offers an overview of a topic and its complex information, allowing students to comprehend, create new ideas and build connections. Through the use of colours, images and words, mind mapping encourages students to begin with a central idea and expand outward to more in-depth sub-topics. Mind map helps the students to give freedom in developing innovative ideas. For example focusing on human body learners may create mind map on limbs, Skelton which are involve on human body. Later learners would be assessed a following to the mind maps they have and could compared with each other to improve one another’s mind maps and arrive more intelligible understanding of human body.

Z TO A APPROACH

Z to A approach is kind of a new concept in Education whereas the teacher provides explanation of some parts of any particular concept. In the end the implication and effects are to be provided by teachers (Chennappa.D, 2012). As example it can be said that promotion and awards from the institutions instigates motivation among students and later on teacher can carry on the concepts and motivational theories. Thus, this approach helps to make any concept clear for the students by creating interests and long term memories for correlation.

MNEMONICS- WORD TO WORD APPROACH

Mnemonics is an approach where the teacher does not express direct views or approaches about any particular topic. First associated word meanings as cues to be provided and once the students receive
the clear understanding of or the meaning of the specific concepts, then the teacher can start explaining properly. In case of language teaching, mnemonics is one very effective method to develop vocabulary and fluency.

**ICT IN MODERNIZING TEACHING-LEARNING ACTIVITIES**

ICT is often categorized into two broad categories (i) the traditional computer-based technologies and (ii) the most recent fast growing range of digital communication technologies (which allow people and organisations to communicate and share information digitally) such as Oracle, Sage etc. When used appropriately, ICTs-especially computers and internets technologies-enable new ways of teaching and learning rather than simply allow teachers and students to do what they have done before in a better way. These new ways of teaching and learning are underpinned by constructivist theories of learning and constitute a shift from a teacher-centred pedagogy to learner-centred. The role of ICT in the debate for creativity and improvisation in teaching-learning process has become an important one over the past decade. The rapid development of technology, mainly as a result of the Internet has brought about an upsurge of technological tools which young people are appropriating in their everyday lives.

**PROBLEM BASED LEARNING**

It helps students to solve problems and reflect on their experiences. The teacher presents a problem to the student’s. The content is not taught, but students work with the content, are active and discover the solution to the problem. Problem-based learning is seen as an innovative measure to encourage students to learn how to learn via real-life problems. Research conducted by Dutt Sunil (1991) reveals that the strategy of problem solving significantly affect the problem solving ability of students.

**PEER TUTORING**

Peer tutoring is a teaching strategy that uses students as tutors. The student pairs might work on academic, social, behavioural, functional or even social skills. There are many different ways to pair students, such as by ability level, skills mastered, or age. The following model descriptions will assist you in selecting the correct model based on certain criteria. The interesting aspect of peer teaching is that students tend to respond more actively when one of them dons the mantle of the teacher. The class becomes attentive and interactive in a bid to challenge each other in a constructive manner. There are many different ways you can group students to tutor each other. It is important that you, the teacher, make sure that any material being reviewed by tutor groups is accurately assessed in these groups. Peer tutoring is not meant for introducing new materials or concepts. You need to monitor for understanding on both ends.

**Class Wide Peer Tutoring (CWPT):** In this model, the whole class would be divided into pairs, or small groups no larger than five. The groups should include students with different ability levels. For example, you would use this model if the whole class were preparing for a school-wide spelling bee.

**Cross-Age Peer Tutoring:** Younger students are paired with an older student. The older student is there to model good behaviour, functional, adaptive or social skills. For example, a second grader could be paired with a kindergarten student to show them how to walk to the cafeteria, get a lunch tray, select foods, and find a place to sit.

**Peer Assisted Learning Strategies (PALS):** Students are paired with students around the same ability level. The tutee and tutor roles can change based on which student needs help on a particular skill. For example, one student may help his partner with science vocabulary words, and then the partner may change roles and help the other student with multiplication facts.

**TEAM TEACHING**

Team teaching involves a group of instructors working purposefully, regularly, and cooperatively to help a group of students of any age learn. Teachers together set goals for a course, design a syllabus,
prepare individual lesson plans, teach students, and evaluate the results. They share insights, argue with one another, and perhaps even challenge students to decide which approach is better.

The team-teaching approach allows for more interaction between teachers and students. Faculty evaluates students on their achievement of the learning goals; students evaluate faculty members on their teaching proficiency. Emphasis is on student and faculty growth, balancing initiative and shared responsibility, specialization and broadening horizons, the clear and interesting presentation of content and student development, democratic participation and common expectations, and cognitive, affective, and behavioral outcomes. This combination of analysis, synthesis, critical thinking, and practical applications can be done on all levels of education, from kindergarten through graduate school.

Working as a team, teachers model respect for differences, interdependence, and conflict-resolution skills. Team members together set the course goals and content, select common materials such as texts and films, and develop tests and final examinations for all students. They set the sequence of topics and supplemental materials. They also give their own interpretations of the materials and use their own teaching styles. The greater the agreement on common objectives and interests, the more likely that teaching will be interdependent and coordinated.

Teaching periods can be scheduled side by side or consecutively. For example, teachers of two similar classes may team up during the same or adjacent periods so that each teacher may focus on that phase of the course that he or she can best handle. Students can sometimes meet all together, sometimes in small groups supervised by individual teachers or teaching assistants, or they can work singly or together on projects in the library, laboratory, or fieldwork. Teachers can be at different sites, linked by video-conferencing, satellites, or the Internet.

**NEED AND SIGNIFICANCE OF THE STUDY:**

Educational system is Teacher centred. Many teachers take the shelter of lecture method in the classroom teaching and give more stress on memorization. Students use memorization as a supreme method of learning. Today teaching is topic oriented. Therefore it is bookish, which lays emphasis on the acquisition of knowledge rather than its application to daily life. So naturally creativity gets hampered. A teacher continues to teach the way he was taught. Teachers have a prejudice towards adopting new strategies and are reluctant to accept new trends and strategies. Hence it is a need to change with the changing world for the teachers.

**OBJECTIVES:**

- To study the extent of awareness of innovative teaching strategies adopted by upper- primary school teachers.
- To identify the barriers faced by the teachers during implementation of innovative strategies.
- To suggest remedies to overcome the barriers faced by the teachers during implementation of innovative strategies.

**LIMITATIONS:**

- The study is limited only to Bengali Medium schools of DumDum Municipality.
- The study is limited only to the upper primary level.
- Some innovative strategies are included in the study.

**METHOD:**

A normal survey method was applied for this study.
POPULATION:-
All the upper-primary school teachers of DumDum Municipality were taken as the target population. A total number of 200 teachers were found in 11 Bengali medium schools.

SAMPLE:-
For the present study 50 teachers were selected randomly from 11 Bengali medium schools of DumDum Municipality.

TOOLS AND TECHNIQUES:
- For the present study, data was collected with the help of questionnaire.
- The data collected was analyzed using graphical representation.

DATA ANALYSIS AND FINDINGS:

Q.1) According to you which approach would you prefer for teaching in the era of globalization?

<table>
<thead>
<tr>
<th>Preference</th>
<th>No. of Teachers (50)</th>
<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional approaches</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Innovative approaches</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Both Traditional &amp; Innovative</td>
<td>10</td>
<td>20</td>
</tr>
</tbody>
</table>


Q.2) Do you feel that teachers need training in new innovative strategies?

<table>
<thead>
<tr>
<th>Preference</th>
<th>Total No. of Teachers (50)</th>
<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Opinion

<table>
<thead>
<tr>
<th>Preference</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>It will be easy for teachers and student to understand the new topic easily. Exposure to new technique is essential. To make teaching and learning effective and interesting. By updating ourselves we can help the students to be at par with the new world of learning.</td>
</tr>
</tbody>
</table>

Q.3) Has your school organize any workshop or in-service training related to innovative practices?

<table>
<thead>
<tr>
<th>Preference</th>
<th>Total No. of Teachers (50)</th>
<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>No</td>
<td>38</td>
<td>76</td>
</tr>
</tbody>
</table>

Opinion

<table>
<thead>
<tr>
<th>Preference</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Very few teachers have undergone training through the institution and individually only on communication skills</td>
</tr>
<tr>
<td>No</td>
<td>Most of the teachers have not got the opportunity to attend workshops or in service programmes on innovative practices.</td>
</tr>
</tbody>
</table>
Q.4) Which of the following innovative strategies are you aware of?

<table>
<thead>
<tr>
<th>Method</th>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson based on Multiple Intelligence</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Collaborative Learning</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Peer Tutoring</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Problem based learning</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Mind Mapping</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Team Teaching</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Gaming techniques</td>
<td>42</td>
<td>84</td>
</tr>
<tr>
<td>ICT based learning</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

**Interpretation:**

The above table shows that the maximum teachers are aware of 'Gaming technique' and 'ICT based learning' as compared to other innovative strategies.

Q.5) How are these above innovative strategies used in your classroom?

- Team Teaching is used for problem children.
- Gaming technique is used for mathematics and geography.
- ICT based activities and peer tutoring are conducted.

Q.6) Do you face any problem while implementing these innovative strategies?

<table>
<thead>
<tr>
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<tr>
<td>No</td>
<td>38</td>
<td>76</td>
</tr>
</tbody>
</table>

**Opinion:**

<table>
<thead>
<tr>
<th>Problems faced by the teachers</th>
<th>Faulty school management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lack of parental support in providing materials for innovative</td>
</tr>
<tr>
<td></td>
<td>strategies.</td>
</tr>
<tr>
<td></td>
<td>Lack of training provided to the teachers.</td>
</tr>
</tbody>
</table>
Q. 7. Do you feel that it is possible to apply these innovative strategies in present school system?

<table>
<thead>
<tr>
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<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Interpretation:**
This graph clearly states that all teachers opined the possibility of applying the innovative strategies in present school system.

**CONCLUSION:**
- Teachers are just aware of the teaching strategies superficially but not acquainted to its application to its application to classroom teaching.
- Few teachers focused on blended use of traditional and innovative methods.
- Teachers felt the dire need for training in new trends and strategies.
- Most of the schools should arrange workshops or in-service training related to innovative practices for their teachers.
- Teachers felt that the students, parents, teachers and school should have positive attitude and acceptance for innovations in education.
- It is a need that schools should provide financial and infrastructural facilities for bringing changes in present system.

**SUGGESTIONS:**
- Curriculum can be revised keeping in mind the new trends.
- Action research can be undertaken by teachers to test the effectiveness of the innovative strategies in isolation.
- Innovative model comprised of strategies can be developed as per the school system.
- Schools should take the initiative of arranging workshops or in-service training related to innovative practices for their teachers.
- School should also encourage the use of innovative strategies for effective teaching learning process.
- Eminent educationists should be invited to make teachers aware about the changing trends in education.
- Visits to the schools adopting such innovative strategies should be arranged.
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