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#### TECHNOLOGY BASED LEARNIG

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# **Abstract**

Technology based learning is a learning which has a base of learning process. At the time of learning, learner uses different strategies or theories i.e. learning by doing, self learning strategy, programmed learning strategy, learning by imitation etc. TBL is student centered pedagogy. There is learning through solving problems. The learner does different individual activities. They are related to larner's own experiences. Every learner has his own wish to learn. He / She fix self instructional strategy. Learner has many options or ways to solve his / her own problems. The learner is aware about a problem, it's nature, options, his own limitations and strengths. Some time he/she asks solutions to somebody. According to his own capacity and environment, he / she develop his own strategy. For solving the problems (own or society) learner's previous knowledge is useful. New platforms are formed on old platform. Different skills are developed by students through the experiences.

Technology, now a day is useful for society upliftment. Everybody is using it. Most of the Families became hi-tech now. Teenagers are using technology mostly. Modern gurus upload their teachings on websites, blogs, wikis, YouTube, face book, internet forums. But there is 80-20 ratio every where.80 percent people are unable to use technology. For Technology based learning five phases should be followed i.e. Judgment phase Research phase Planning phase Action phase Recognition phase.

Self instructional strategy and its purposeful use will be apt for solving every problem about Technology. Technology based strategy is an individual strategy. It has a base of learning theories & constructivism. Learning by doing, learning by solving problems,

learning by using previous knowledge, learning by in sight and imitation etc all these strategies are used in problem based learning.

Technology based learning is useful for all pupil teacher for teacher training programmes. In India the syllabus of university of Pune was framed on this learning strategy. Teachers / teacher educator's role is important factor to implement this strategy.

90% pupil teacher in my college face the problems related to Technology, communication, physical, economical problems, limited time for B.Ed. activities. 80% students have problem of speaking English. Self instructional strategy is more useful than other strategies to solve every problem of every.

Technology affects the spiritual life of person in society .Meditation i.e. color meditation, sound meditation, who am I meditation plays vital role to solve own problems.

What exact work I want to do? This question must be asked for using Technology. That will save the time, money and labour. It will be helpful to all for to stop moral degradation Self awareness is necessary for all citizens. Learner learns according to his own leisure with this strategy.

Framework work about technology based learning should be prepared by teacher-educators, teachers, religious gurus, eminent persons in society. In it SWOT analysis technique is useful. Pre-test &post test for every programme is useful.

**Keyword:** Social awareness, self awareness, spirituality, ethics, hi-tech family, teen-age effect, 80-20 ratio, technology based learning

#### **PROLOGUE**

Learning is an activity of individual learner. Every insect tries to learn to adopt or adjust new environmental conditions. Every learner learns through learning experiences, communication, training, test and examination. Thinking, rethinking and fine thinking is being used by all human beings. Technology and religion is helpful for learning.

In teacher training colleges, in India there are different learning experiences. They are related to the syllabus of respected universities. University of Pune developed it's own syllabus by considering the society of India, the demand of community. The faculty of education studied the nature of society, religious values and core elements of that society. It included ICT strategies, instructional strategies, technology based teaching, problem based learning, and project based learning.

Let's know what Technology based learning is? What is it's nature? Why do we use it in own life? How can it be used in teacher- training colleges? (NCTE- India) has farmed teacher education programs in India. It was implemented by the respected universities in India.

In every sector of teacher education, the pupil-teacher faces lots of problems .They are aware about their problems. But they don't have proper direction.The training about it, should be organized. Teacher educators should be trained..Afterwards they will train their students. They must think about Technology based learning.5W&1Hstrategy

(5 wh-Questions –What, why, when. where. when, who & 1H-question –How) is useful for it.

#### CONSTRUCTIVISM

Jean Piaget (1970) introduced the theory of constructivism. He suggested that through processes of accommodation and assimilation, individuals construct new knowledge from their experiences. Constructivism is based on the belief that learners actively create, interpret and recognize knowledge in individual way. Learning is an active process in which learners construct new ideas or concepts based upon their current or past knowledge.

Learning is process of acquiring knowledge, skills and beliefs through study, education and experience. Knowledge especially developed by scholarly research. One learns from every reaction with the environment. He/she modifies himself according to the environment and where possible tires to modify the environment itself. So we may say that learning is modification through experience. Learning is change. It is an adjustment device. Spirituality (self awareness) is necessary for self learning.

To learn is to modify behavior and experience. According to B.F. skinner, "Learning is a process of progressive behavior adaptation." Learning methods & Problems Education has to face many problems in connection with learning e.g.

- 1) Memorizing of educational material in the least possible time with the mist durable effects.
- 2) Fatigue and boredom during the process of education.
- 3) Controlling the attention of the pupils and their motivation in learning.
- 4) Plateaus in learning.

#### **OBJECTIVE**

1-To develop a Technology based learning strategy for Teacher Education.

2- To correlate technology to spirituality.

#### CONCEPT - TECHNOLOGY BASED LEARNING

Technology based learning is an individual or social activity in which every learner learns by insight and by self instructional strategy. The tools i.eradio ,tape recorder ,computer ,over head projector, film projector, k yans, lcd, plasma, internet etc areuseful for TBL.

ICT supported strategies e.g computer assisted learning (cal) project based learning (pbl) collaborative learning (cl) technology aided learning (tal) should be used for peace in society. TBL is learning in which student solves their problems in different ways and have more than one solution.

A learning in which we learn through awareness, action and communication. A strategy that may be used to apply all previously acquired knowledge and experience to new situations and challenges. Education increasingly focuses on the teaching and reinforcement of individual problem. Solving skills as a priority area separate from the imparting of accumulated knowledge.

### Present status of Technology based strategy and spirituality

TBL is student centered pedagogy. There is learning through solving problems. The learner does different individual activities. They are related to larner's own experiences. Every learner has his own wish to learn. He / She fix self instructional strategy. Learner has many options or ways to solve his / her own problems. The learner is aware about a problem, it's nature, options, his own limitations and strengths. Some time he/she asks solutions to somebody. According to his own capacity and environment, he / she develop his own strategy. For solving the problems (own or society) learner's previous knowledge is useful. New platforms are formed on old platform. Different skills are developed by students through the experiences.

Technology, nowa day is useful for society upliftment. Everybody is using it. Most of the Families became hi-tech now. Teenagers are using technology mostly. Modern gurus upload their teachings on websites, E-MAIL, CHATTING, ONLINE CONFERENCING, E-LIBRARY, WEBSITES N SEARCH ENGINES, BLOGS, WIKIS N WIKIPEDIA, INTERNET FORUM, YOU TUBE, NEWS GROUPS, PERSONAL WEBSITE

But there is 80-20 ratio every where 80 percent people are unable to use technology.

## GOALS OF TECHNOLOGY BASED LEARNING

1) To help student to develop flexible knowledge.

- 2) To develop the effective problem solving skills.
- 3) To develop students for self directed learning.
- 4) To develop effective collaborative skills.
- 5) To help students to develop communication skills, problem solving and planning skills, time management skills.
- 6) To enable students to use learning theories to solve their problems (individual or group)
- 7) To enable students to solve their problem through selection and gradation of options / methods / ways.
- 8) To enable students to define their own ways / methods / strategy to solve problems.

#### FEATURES OF TBL

Technology based learning has following features.

- Technology based learning Consists of student centered learning.
- Leaning through solving the problem.
- Teacher's role as facilitators.
- Problems stimulate the learners for the development & use of problems solving skills.
- New knowledge is obtained through means of self directed learning.
- Encourage students to take responsibility.
- Selection and gradation method / strategy is used to solve the problems.
- Teacher has a freedom to select learning theories, methodology, strategy to solve the problem of students.

## PHASES OF TECHNOLOGYBASED LEARNING



## A) Phase 1-Judgement phase –

In this first phase, student faces problems .He/she judges the problems .He she aware about them. They notice the exact nature of problem.5W&1H strategy is useful for them.

5W—What, why, when, where, who

1H—How

The learner asks himself/herself what is the exact nature of problem? Why this problem is there? When is it occurred first? Where do we face this problem? Who is sufferer? Who will help me? Who will be benefitted? How can I solve this problem?

So in judge phase the judges' different angles of problems by asking questions with 5W&1H strategy.

#### **B) Phase 2-Research Phase**

In this phase, the learner thinks about the problem. Pre-thinking, Re-thinking, & fine thinking is use full for this phase. In it the learner takes guide line about this problem.

# C) Phase-3 Planning Phase

In this phase, the learner plans with the ideas, solutions, opinions, guidance which is got in previous phases. Strategy, Devine plan, support system, is developed in this phase.

## D) Phase 3—Action phase

The plan, the strategy, support system is implemented in this phase. The Learner/his or her own group/whole class do different activities related to problem. Through selection & gradation method/process specific plan is implemented.

### E) Phase-4- Recognition phase-

In this phase the learner recognizes the solution. He/she knew the way to solve the problem. Every learner learns through experiences. He/she decides his / her own way /method/strategy to solve problem.

# APPLICATION OF TECHNOLOGY BASED LEARNING IN TEACHER EDUCATION

Technology based learning is helpful for all levels of education i.e. pre-primary, primary, secondary, higher secondary, higher education (Kothari Commission 1964-66) recommended these stages in India)

In teacher training colleges also this strategy is useful for teacher who faces many problems in training college.

They may be categorized as follows.

- Problems related to admission process.
- Economical problems. i.e. fees, food, accommodation, traveling etc.
- Academic problems.
- Teaching skill problems.
- Planning problems.
- Practical writing problems.
- Study problems.
- Problems related co-curricular and extra curricular activities.
- Problem related to practice lessons, internship programmes.
- Communication problems.
- Examination related problems.
- Employment problem
- Post training problems.

To solve all these problems, teacher training colleges in India follow following methods and strategies. Technology based strategy and its support is needed for it. Religious views, teachings are useful for solving problems.

Orientation programs, demo lessons, guidance and counseling cell, internal quality assurance cell, annual planning, practice, learning by doing, learning by imitation, remedial teaching programme, annual social gathering, project method, field trips, interview programmes, technology based teaching activities, recording of the incidents and teaching, examinations, tutorial etc. all these programmes and strategies are used in these colleges.

In these colleges, learning by doing, learning by imitation, learning by trial and error, learning by insight, learning by conditioning etc. these theories are being implemented.

In all above activities, a learner learns to solve their own problems.

#### ADVANTAGES OF TECHNOLOGY BASED LEARNING

- Greater recall of knowledge, retention of learner.
- Integration of knowledge.
- Self assessment of learner.
- Self awareness through the process of solving problem learner knows themselves.
- Development of life skills.
- Increase motivation, interest in subject areas.
- Student takes interest through decisions.

• Decrease the problem of class control.

#### **TEACHER'S ROLE**

Technology based learning is a learning in which; teacher firstly recognizes the problem of students. He / she help them to know them their own problems. He suggests ways/ options to find out / recognize their own problems. Sometime, a teacher works / does activities in groups of students.

After recognition of problem, teacher helps/ guides them to solve their problems. He / she is facilitators to solve their problems. He plays roles of provider, facilitator, guide, counselor, instructor, planner, researcher, producer, developer, creator, analyzer, director.

### **DISCUSSION & CONCLUSION**

Technologybased strategy is an individual strategy. It has a base of learning theories & constructivism. Learning by doing, learning by solving problems, learning by using previous knowledge, learning by in sight and imitation etc all these strategies are used in Technologybased learning.

Technology based learning is useful for all pupil teacher for teacher training programmes. In India the syllabus of university of Pune was framed on this learning strategy. Teachers / teacher educator's role is important factor to implement this strategy.

90% pupil teacher in my college face the problems related to commination physical, economical problems, limited time for B.Ed. activities. 80% students have problem of speaking English. Self instructional strategy is more useful than other strategies to solve every problem of every.

Meditation i.e. color meditation, sound meditation, who am I meditation plays vital role to solve own problems.

This strategy is useful for every faculty. For this strategy, first of all professors must know the problems of their students. Forthat Pre test or diagnostic test should implement. Self awareness will be there in all faculty members. Learner learns according to his own leisure with this strategy.

Framework work about problem based learning should be prepared by teacher-educators. In it SWOT analysis technic is useful. Pre-test &post test for every programme is useful.

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