



REDESIGNING LEARNING EXPERIENCE IN THE AGE OF TECHNOLOGY – ‘ASSET’ MODEL OF BLENDED LEARNING TECHNIQUE (BLT)

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Abstract: In the sixty odd years after independence, Indian education system has seen remarkable transition from colonial root- elite system to an egalitarian or mass system committed to society needs. To accelerate the sectoral growth, Universities were started in each state of the country. New professional courses, technical and skill based curriculum were also introduced. At the moment, there are 567 Universities on national level and Tamil Nadu being the state having most number of universities, counting 55 in total. The multi -cultural study atmosphere, multinational work environment, fiercing competition to secure good jobs warrants every student either in school or college to be more informative for every minute. The age old system of learning within the walls of the class room will not be sufficient to face the emerging challenges in knowledge based society. The electronic revolution stated from seventies now turns every one computer centric. Hence it is imperative to keep our students tune with new learning techniques through latest web based communication gadgets. In this context combination of the instructional methods in other words blended learning techniques should be used at college level teaching so as to make the Teaching –learning process effective and purposeful.

Key words: Information explosion, Web based communication gadgets, Blended learning, Teaching – learning process

I. Introduction

Learning is a process by which a person tends to attain change in his behaviour through self-activity. Learning is an active process to the part of the learner. A learning experience is not attained by mere physical presence in a class room. In recent past ICT based instruction brings about changes in teacher rolessshift from knowledge transmitter, primary source of information into learning facilitator, knowledge navigator and co-learner. In the same way student roles are also shift from passive recipient of information into active participant in the learning process, producing knowledge, learning collaboratively with others [5]. Students in learning environment, where ICT facilities are regularly available, search the web for information to complete individual or group projects of academic interest. They are likely to participate in virtual debates and virtual surveys. They communicate via email, blogs and social networking websites with students and teachers in other schools. At the same time factors like e –readiness of the learners, teachers orientation towards the use of ICT tools, integration of ICT tools are also important to complete the learning process.

Digital literacy

We are living in the world of information explosion era. The complex life and work environments in the globally competitive situation requires students to pay rigorous attention to develop necessary Digital skills. Digital literacy , e-literacy, new literacies, screen literacy, multimedia literacy, information literacy, ICT literacies are the terms to describe skills that students need to possess in the digital age of the 21st century. The Digital literacy includes the abilities to search, site, scan, sort information, navigate through, screens of information, use of ICT tools to create and share information, use ICT to research and solve problems, organize, manage and create information, make multimedia presentations, surf internet and text, keyboard, mail etc.,

The first revolution of knowledge came with the invention of written language; the people could store information and retrieve it without relying on memory. The palm leaves manuscripts of ancient Tamil Nadu are the example for the same. The second revolution that occurred in the middle of the fifteenth century came with the invention of the printing press. With this revolution, information in books and pamphlets could be disseminated much more widely and quickly. The third revolution brought about by ICT is accelerating the dissemination of information and knowledge. At the same time all the material available in net may not be relevant to all. And nearly 70 percent of the world’s web sites are in English, a times crowding out local voices and views [1].

The digital divide

The term *digital divide* refers to the gap between the “haves” and the “have nots” in society: between those who have access to ICT and those whose access is limited or non –existent.

Levels of ICT integration

The ICT utility has many advantages over other present day teaching and learning techniques. To generate, store, transmit, retrieve and process information at quicker time span for a larger masses is not at all possible by conventional teaching aids. For a learner, learning continues even after the formal education is over. The major challenges are not only bridging the digital gap but also proper utilization of information available in World Wide Web [6]. Pertaining to Education sector, the students should impart with the necessary skills for the new global environment is the emerging challenge.

The integration of ICT tools should be done in the academic institutes before providing e- courses. The various levels of integrations are 1. Curricular integration — the extent to which, an ICT activity relates directly to appropriate curriculum goals or complementary curriculum content or skills activities in a given unit of work or sequence of lessons. 2. Spatial integration — the extent to which the use of computers or ICT is separate in place or location from other learning activities in a unit of work. 3. Pedagogical integration — the extent to which the choice of particular ICT, and the ways in which they are used in classes, are consistent with and between the pedagogical philosophies, orientations and intentions of the teacher, and the learning styles, abilities and motivations of the students. [2]

Information, media and technology skills

Apart from academic caliber, soft skills and ICT skills are needed for a student for getting a job. In particular, ICT skills make an individual to surpass others in the learning and work environment [3]. A student can learn any subject in net at a distance of mouse click. E-learning, or electronic learning, is a widely used term in business, industry and education. The ICT as a medium enable learners to connect to information repositories. There are online courses, computer aided instructions, and instructions with little human interactions are available for the purpose of self-learning.

Blended Learning Technique (BLT)

It's a universal fact that a single teaching approach is not fits for all the learning situations. Hence a combination of the instructional technology which is suitable to the learners need should be planned. Therefore the integration of technology with the pedagogical content knowledge is needed [4]. Thus Blended Learning Technique is a term to describe learning that combines different learning environments. It comprises of web instructional tools or online courses and traditional teaching methods such as class room lectures, Group Discussions and Seminars. In a Blended Learning Technique, teacher's role is important so as to choose the instructional medium for teaching.

Blended Learning Technique is a learner centered instructional method in which the instructor uses combination of learning aids so as to make the subject/ context reach effectively to the learners.

Characteristics of BLT

i) Combination of audio visual aids, lectures, field trips, group discussion and self-learning ii) Teacher transformed into facilitators iii) Blend of learning aids differs from place to place based on the nature of audience and situation (group, mass, heterogeneity, availability of resources etc.,) iv) Ensures participation of the audience and v) Encourages self-learning activity among the learners.

By BLT, learning is driven by open ended, flexible and mutual sharing environment. The learners are stimulated to real world scenario which involve policy, process and ethical procedures that need to be understood and resolved. By effective solving of a problem, the nature of the problem, outcome of the issues are need to be addressed. By Blended Learning Technique (BLT), the student understood that different viewpoints of the players, complex socio economic factors involved in the context. The clear exposure of the issues, context will lead to better insight of the learners about the complexity and effective decision making skills. Apart from the support resource systems which include audio visual aids, documentaries, films, videos, field trips, group discussions, subject expert talks, a feedback from the learners on the learning is the essential component of the Blended Learning Technique (BLT). The multi-dimensional instructional strategy makes the learner to understand the subject matter as well as resolve the conflicts effectively.

Strengths of BLT:

- * Reaps the complete attention of the students.
- * Student / learners have the freedom to interact.
- * Exposed to both theoretical and practical orientation towards the subject.
- * It encourages instructor creativity to facilitate effective learning.
- * Makes the student to seek their own personal learning style.

Weakness of BLT:

- * Needs precise planning and arranging the learning resources.
- * Student attention may be diverted in multiple learning situations.
- * Time constraints in preparation of combination of Audio Visual aids.
- * The teacher should understand and perform the role of facilitators.

II. ASSET model of Blended learning technique

The five stages in 'ASSET' model of Blended Learning Technique are conceptualized and presented as follows;

Stage: 1 A - Addressing the issue

The facilitator spells out the subject/ issue to be studied. The facilitator also explains the fact and figures associated with the topic.

Stage: 2 S - Storming of ideas

The factors contributing the issues, solution for the problems confronted are to be discussed during the brainstorming session. By conducting Brainstorming, the collective thoughts on the subject were arrived out. The instructor should ensure the uniform participation of the audience. The silent spectators should be encouraged to contribute more. The repeat speakers should be moderated to give chance for others to speak.

Stage:3 S - Setting of hypothesis

A sequential cause and effect of the subject is created in this stage. The possible association of factors and their relationship will be formulated as a hypothesis.

Stage: 4 E - Environment construction

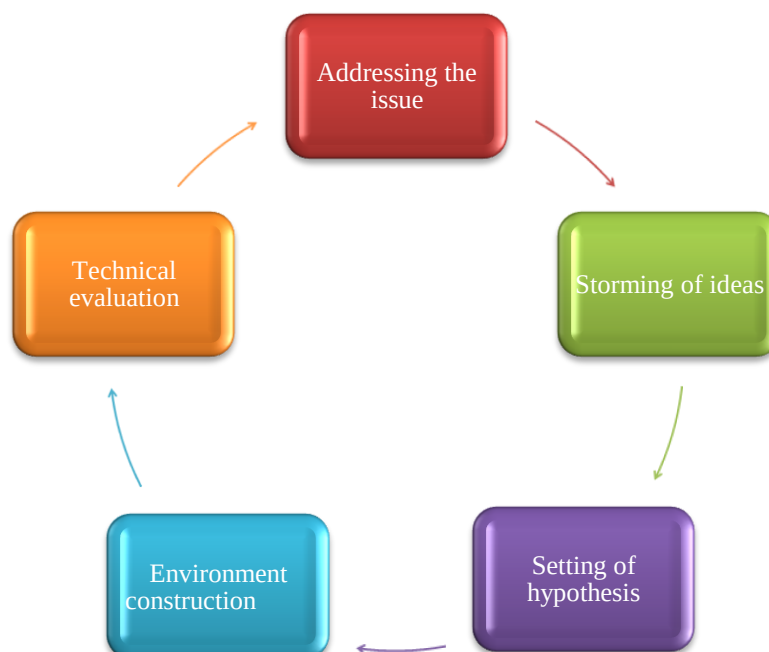
Starting with an introduction about the subject, ICT enabled instruction viz., power point lectures, Educational videos, documentaries along with video conferences, exposure visits, expert discussions have to be carried based on the nature of audience, availability of resources and time constraints etc.,

Stage : 5 T - Technical evaluation

The learners are encouraged to study / review the learning objectives, problem situation, subject content and exposure gained. The decoding of cause and effect, relationship between factors are to be plotted either graphically or as a report in a learner activity. The testing of hypothesis was done with a self-learning effort from the learners' side.

The graphical representation of stages of BLT is presented in [Fig .1]

Fig .1 Stages in 'ASSET' model in Blended Learning Technique (BLT)



The lead for the new issues , outcome of the learning session , expected obstacles , new information will be discussed by the facilitator before going for the another topic. Though academic activities are time bound, precise planning and execution can enable BLS which results in better performance of the learners. In India, Agriculture undergraduate curriculum is 8 semester programme comprising 105 days for a semester. Hence combined activities for possible cluster of subjects have to be planned. If an exposure visit is

arranged for the students, the objectives of the visit should be planned not for a single subject but for possible combination of subjects undergoing. For example if the students are visiting the agro entrepreneurial ventures, they have to meet the bankers also for knowing the procedures for getting an industrial loan.

III. Conclusion

The new and advanced Information and Communication Technology (ICT) tools such as Computers, Internet and Mobile phones have tremendous potential to facilitate learning activity to student community. For harnessing the potential of ICT tools, national level plan for use of ICT in education and integration of ICT tools is needed. At the institution level, adequate infrastructure facilities such as Wi-Fi connectivity, computers etc., should be provided. The complex life and work environments in the globally competitive situation requires students to pay rigorous attention to develop necessary Digital skills [7]. Hence the curriculum of the college level education should be suitably modified with ICT integration. The teachers are the real key persons in transforming the students. Hence a proper orientation and training should be given for the tutors to teach students with latest, modern communication gadgets. The execution of 'ASSET' model of BLT requires meticulous planning and coordinated efforts of the individuals in the work environment. The precise mind mapping of tools to be used and proper execution of the tools usage will surely change the learning atmosphere and imparts remarkable changes on the learners.

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