



Integrated strategies towards technology teaching approach – prospective trends in Indian teaching mechanisms

Rekha Mathew, Assistant Professor, Department of English, Maharani Commerce and Management college for women, JLB Road, Mysore

Abstract: This paper examines the role of teachers as the catalysts of change & focuses on the imperative requirements for professional competency building among teachers in this globalized world. The globalization has opened up new & innovative strategies towards learning. The global learning strategies have changed towards digital literacy & competency. There is a need for continuous professional up-gradation by teachers in order to keep pace with the learner's continuous upward learning abilities. A teacher has to be competent enough to instruct his students in modern technical aided learning resources. Teacher's professional competencies have to be scheduled before introduction of ICT based curriculum. Teachers across the globe have been striving towards enhancing their capabilities through innovative mechanisms. In Indian context, there is a need for an integrated multi dimensional approach towards building teacher proficiency.

Key words: ICT aided teaching , changing teaching mechanisms , building teacher competency, need of multidimensional teaching approach.

Introduction : Modern education sector is under heavy pressure of adapting to global changes. Across the globe there is a great demand for restructuring educational scenario through technological applications. The higher education scene in India is under great pressure to streamline its educational curriculum to suit the global demands. There are several implications on inserting ICT application in higher educational institutions. As the global penetration towards digital technology is increasing, the traditional classroom teaching is becoming monotonous where a student will be unable to concentrate for five – six continuous hours of teaching. Students are exposed to technological devices outside the classroom such as smart phones, smart TVs, interactive gadgets etc. But their classroom learning is still traditional. Ever expanding global

demands for innovative technological applications in educational institutions. Learning levels of the students are increasing, hence a teacher needs to update himself with global knowledge. Internet has made easy accessibility for teachers to enhance their knowledge horizon by providing accurate information & data hence it is a reliable source of information. It is acclaimed as a time reduction technique to teach effectively in a time format. Besides it offers diversity of information & learning resources to both teachers &

National policy on ICT

National policy on ICT in education wants to create an environment to develop a community knowledgeable about ICT an ICT literate community which can deploy, utilize, benefit from ICT and contribute to nation building an



environment of collaboration, cooperation and sharing, conducive to the creation of a demand for optimal utilization of and optimum returns on the potentials of ICT in education. (National policy on ICT in school education department of school education and literacy ministry of human resource development government of India 2012).

Types of ICT tools

1. E- mail
2. Wikis
3. RSS feeds
4. News groups
5. Discussion groups
6. Discussion forums
7. Blogs personal /individual

The relevance of ICT for teachers - the application of ICT is being included in curriculum as there is an increasing necessity for understanding theoretical concepts in an innovative way. The application of practical models in teaching in these days globalization requires audio visual aids. A teacher has the sacred responsibility of making his student to

1. Assess power of expression ,
2. Develop logical reasoning & thinking power ,
3. Develop of precise judgment and decision making ability ,
4. Improve comprehension & vocabulary ,
5. Develop creative methods of concept building

ICT technology helps the teachers to improve academic relations with another fellow teacher , with students, with institution , with community, & with Nation's progress. ICT helps to develop analysis of teacher thus effectiveness in his own approaches of teaching enhances. He become expert in collection & presentation of a theoretical data. ICT Skills opening a file opening a folder , typing transferring data saving a data ,handling folders , processing software applications, use of browser , use of a search engine , using Internet access avenues, use of hyper text use of email, etc.

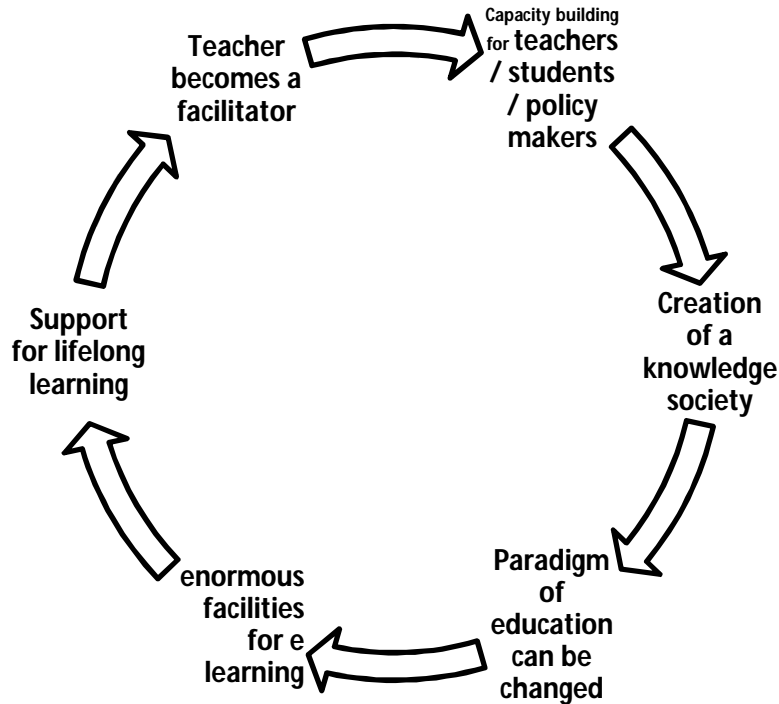
All these learner needs are being met with ICT based learning. But the question is how competent is our teaching faculty towards these new changes. Are they equipped to embrace these new technological learning tools? A teacher persistently has to question himself ' am I ready for comprehensive standards of teaching ?

1. Analyzing learning outcomes
2. Evaluating one's own study habits &
3. Reviewing the reflections on student learning outcomes such as final results
4. Developing entrepreneurial skills, risk taking capacity, scientific temper, etc

Thus increasing teacher's awareness & knowledge of intercultural competencies building their confidence preparing learning content is very necessary. (Chart-1)



Chart-1



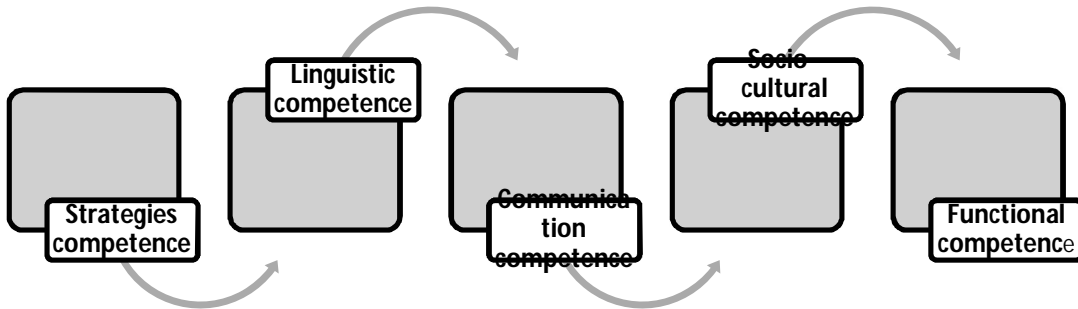
Indian higher education institutions are expanding with the influence of increased urbanization , rapid industrialization , optimal utilization of technology , structural changes in governance in Higher education Institutions is necessary because the development of economy & progress of a nation are co-related to each other. (Pawan Agarwal (Ed) - A Half Century Of Indian Higher Education Essays By Philip .G .Altbach Sage Publications 2013).

Competency building - As shown in chart -2 teachers have to build their competency levels through application of

1. Strategies competence
2. Linguistic competence
3. Communication competence
4. Socio -cultural competence
5. Functional competence



Chart -2



Requirements : A professional competencies building needs

1. Fundamental subject knowledge
2. Communication skills
3. Instructional practice
4. Evaluation
5. Problem solving
6. Moral responsibility
7. Professionalism

Dimensions of competency building- Teaching competency has various dimensions. A teacher needs to be adaptable & flexible.

1. Content knowledge,
2. Instructional planning,
3. Student motivation,
4. Presentation and communication skills,
5. Evaluation competencies and
6. Classroom management skills.

While the teacher would require all these dimensions to a reasonable extent, it is in

the manifestation of these in an integrated manner that makes him effective in the classroom context. (K. Balasubramanian, Willie Clarke-Kah, " ICTs for higher education. Background Paper From The Common Wealth Of Learning UNESCO," World Conference On Higher Education Paris, 2009.).

ICT Adaptation - A teacher can adapt to ICT through

1. Developing AV content online
2. Giving online assignments
3. Giving field visits as an online study work
4. Giving projects with online support tools
5. Mobile learning device operations
6. Prepare online questionnaires
7. Recording lectures
8. Restructuring old notes with new research data bases
9. Screen casting narration with voice on PPT



10. Understanding copy right issues
11. understanding the importance of intellectual property rights
12. Using smart phone apps
13. Writing articles for wikipedia content
14. Writing online discussion forums

Challenges for teachers -Teachers always grumble that there is no time to learn these new skills. They complain about

1. Lack of support services in colleges such as individual computers, WIFI ,
2. Lack of training to faculty ,
3. Lack of rewards for ICT learning ,
4. Lack of recognition for consistent ICT usage ,
5. Orientation of minor / major projects / Ph, D etc,
6. Ever expanding class room size
7. Over burden of extra –curricular work NSS / NCC / scouts / Red cross etc
8. Age factor / superannuation time / inconvenience / travel time / family pressures etc

Challenges for Institution - ICT based curriculum can be very effective only when all teachers are empowered to adopt to them. There are several challenges which need priority attention. Indian higher education institutions are suffering from outdated regulatory environment. There is very little room for professional development in this dogmatic atmosphere. Only selected institutions have been given

autonomy & these institutions are scheduling competency building training for faculty . Autonomy for academic institutions is very much necessary as Indian higher education institutions are suffering from enrolment & declining levels of academic output. Besides graduates are unemployable, their livelihood means do not expand with higher education .Only when teachers are given liberal room for developing their potentialities , they can attract the students in learning.

Indian higher education institutions are reeling under inflexible academic structure with stumpy levels of public funding. Faculty research activities are very low in higher education institutions. The affiliating system is unwieldy & cumbersome, higher education institutions are suffering because of this unmanageability. If these lacuna can be overcome then applications of ICT can become a success. Policy makers can think of a.

1. adding ICT infrastructure to colleges on priority
2. adequate training to students & teachers on ICT Usage
3. sponsorship to ICT applications by community stakeholders
4. deviating the reduced workload for teachers towards ICT content development
5. Funding through Private public partnerships on relevant ICT software
6. motivation to teachers

Conclusion : Thus a teacher has a role of preparing the student for global economy hence he has to be aware of his role as a



teacher. Digital competencies involve confident & critical use of ICT for learning self development & employment & participation in nation progress. A teacher as a catalyst of change has a great responsibility which he himself has to decide. A university's vision of education becomes a reality when all stake holders recognize their roles in global world.

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