

Redefining the Learning Paradigm – An Analytical Study on Impact of Globalization on Educational Technology

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Abstract: Educational technology is the application of scientific principles to education. It includes the progress of modern methods and techniques towards effective teaching learning process at various levels. Educational technology emphasizes that each institute / organization involved in imparting education in any form should focus on quality of delivery and effective realization of the goals of education. Educational technology covers two aspects in teaching learning process i.e. technology as a thing and technology as a social process.

Today globalization is directing the economy towards new opportunities and challenges. Globalization and the advancement in information technology is creating new challenges for education in terms of how to integrate technologies to support learning experiences towards the achievement of the ultimate and immediate goals of education. Integration is essential as the world shifting towards a new economic order which places much emphasis on knowledge, ability to engage in lifelong learning based on technology-based processes, human creative ability with the focus on intellectual capital as a key to economic advancement. In traditional days the teachers imparted knowledge through direct and indirect forms in classrooms. But the change because of globalization in educational technology is in the form of e-learning, video conference, web based learning, on-line sessions, voice chats, video calls, blogs, discussion groups with the technology based communications using mobile devices, cell phones, smart phones, tablet PC etc. All these have created a shift towards flexibility and adaptableness of different structure in people.

The current paper attempts to discuss the role of advanced educational technology its needs and usefulness in today's global environment. It also discusses about the status of emerging trends of educational technology with integration of globalization.

Keywords: Educational Technology, Globalization, Learning Process, Learning resources

1. INTRODUCTION

Educational technology is the considered implementation of appropriate tools, techniques, or processes that facilitate the

application of senses, memory, and cognition to enhance teaching practices and improve learning outcomes.

Educational technology has a multi-faceted nature comprising a cyclical process, an arsenal of tools (both physical and conceptual), and a multiple-node relationship between learners and facilitators of instruction, as well as between learners themselves. This nature makes it somewhat difficult to provide a specific definition based on particular technologies (despite that "technology" is embedded in the term) at any given point in time.

Educational Technology includes cinema, gramophone, radio tape-recorder, projector, computer, closed circuit television (CCTV) and electronic video-tape etc., all the teaching machines the use of which makes the teaching more and more effective in order to achieve the teaching objectives. It has already been mentioned that the human knowledge has three aspects. These are—(1) Preservation (2) Transmission, and (3) Development.

In view of advancing educational technologies and need for better teacher education for the good of mass education in all the nations of the world, U.N. and international efforts are on for the good of the educants in every part of the world. India is trying its best to keep pace with the best of educational technologies in the world.

In the 20th century, as the privileges of education were extended throughout the world, the International Bureau of Education and later the United Nations Educational, Scientific, and Cultural Organization (UNESCO) actively promoted international exchange of information and the systematic gathering of educational data.

The following diagram explains the wide accessibility of students to the globalized world of educational technology.

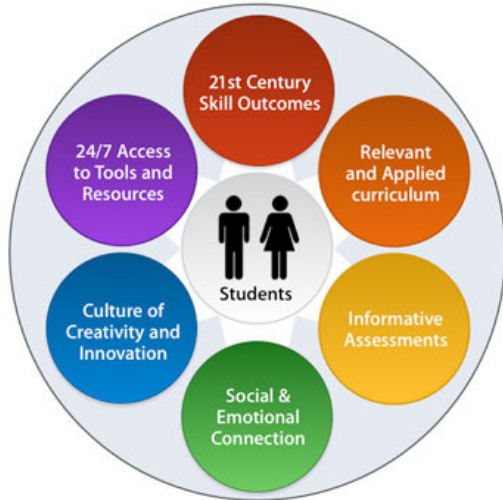


Fig. :1: Outcomes of Globalized Impact

With one global world, the aspiring students who are left out and failed to secure their seats in India's premiere Institutions can now go abroad to fulfill their aspirations. With the fast growing Information and communication technology the availability and flow of academic resource materials is providing input to the academicians to compete with their counterparts any where in the world.

It assists in avoiding of duplicacy in research and inspires the Indian academicians for research and publications on issues that are of international importance in order to make their mark in their respective disciplines. The envisioned policy reform has facilitated in opening up space for establishment of private universities, easing and eliminating research restrictions, entry of graduate students, encouragement for "foreign collaboration" in the university sector and joint ventures in an academic activities as it now exists in private industries.

It has been realized the role of Internet, is as interactive medium with potential global reach. It has the capacity to bring knowledge and prosperity to isolated and marginalized individuals and nations. But Unequal access to the Internet, the "digital divide," creates inequity that exacerbates other inequities. No developing country has benefited more from the digital revolution than India, and in no country is the digital divide wider or deeper.

On the other side of the digital divide are the 45 percent of the population who cannot read or write (57 percent of the female population), the 44 percent who survive on less than Rs. 50 per day, and those who live in the 370, 000 villages where there is no telephone connections.

In India, during this period of globalization, much of the contemporary thought has gone into the issues of programmed

learning, multimedia teaching, macro-micro-teaching, distance learning and other problems related to curriculum. No subject has been so much

neglected as has been done to the development of humanistic values, creativity, cultural, moral and spiritual dimensions in the teaching-learning process.

The threat is for the erosion of rich and old culture of human values. The ideologies of the states and of multinational agencies brought the technological revolution. The process has been promoted by the transport system, communication network, and it has increased the Economic activity, but Globalization does not necessarily result in homogenizations; on the contrary, it is leading to the strengthening of the ethnic identities both at local & regional levels (Edward, 1994). - The threat is to the Nations Integrity

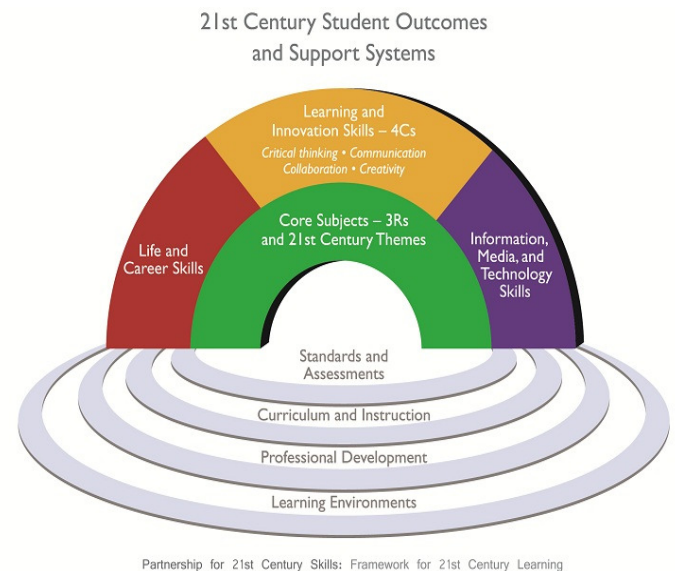


Fig. :2 Framework for 21st Century Learning

2. OBJECTIVES

The paper focuses on the following objectives :

- To study the impact of globalization on educational technology
- To understand the concept of integration of education and technology in the era of economic development
- To analyze the contribution of integrating technologies towards the achievement of the ultimate and immediate goals of education of quality and effectiveness..

3. METHODOLOGY

The study is priary as well as secondary in nature . The primary data has been collected by collecting the responses

from the students of post graduate level. Their responses have been measured on a 6 point Likert Scale. The responses have been analysed by doing percentage analysis. The content of the research paper has been collected through various sources as, journals, books and various website from the internet.

Scope of the Study

This study explores current areas including:

- The current existing principles of educational technology.
- Issues and challenges faced by institutes to implement the advanced educational technologies
- The usefulness of successful and effective educational technology in the various teaching pedagogies.
- The avoidance of common pitfalls in the advanced teaching and educational technologies.

4. LITERATURE REVIEW

Educational technologies have increased the scale of transnational education by allowing institutions to more easily coordinate operations in different countries, however, there is no evidence that this has resulted in greater localisation of teaching approaches. Some writers on online education have argued that the opposite is the case. Jae-Eun Joo (1999), for example, suggests that 'the Internet tends to reinforce the World Information Order, i.e. the flow of information from industrialised to developing countries, and fails to ensure mutual respect and the protection of the diversity of information, languages, and cultures' (p.247). This tendency, Joo observes, is caused both by ethnocentrism on the part of educational exporters, and by the ease of adoption of electronically reproduced materials. There is a strong temptation, he believes, for teachers and administrators in developing countries 'to simply copy or translate existing materials on the Internet, to save money and time, without considering their own social, cultural, historical, and educational contexts' (p.247). This tends to be a one-way flow of materials. Because of the power of Western mass media, people around the world are more receptive to online materials originating from Western countries than from other parts of the world, 'in the same way an Indian child can more easily enjoy a Disneyland movie than an American child can enjoy an Indian cartoon' (p.248). In order to bring about such changes, the author explains, 'IT-supported learning must be exploratory and it must promote discovery, with students constantly engaged in finding, organising, analysing and applying information in creative and novel ways to solve problems' (Gan, 2000, 2). In practice, he observes, this transformative potential of educational technology is rarely being realised. Existing patterns of teaching, learning and interacting are proving resilient, even as the medium of instruction changes.

The applications of IT in higher education are still based on the old models of teaching, mostly a case of reception-based learning migrating to a computer screen. Most of the times, students still read and memorise information. Video-conferencing and certain Web applications still tend to be used primarily for information transmission in a didactic style, no different from the classroom lecture model (Gan, 2000, 2).

J.K. Galbraith, in his book *The New Industrial State*, has given two main characteristics of every technology. These are:

- (1) systematic application of scientific knowledge to the practical tasks, and (2) the division of the practical tasks into sections and sub-sections.
- In the field of education, any subject which meets these two norms of the characteristics is called educational technology.

5. OBSERVATIONS & FINDINGS

The impact of educational technology on students are:

- Students learn more in less time when they receive computer based instruction.
- Students like their class more and develop more positive attitudes when their classes include computer based instruction.
- Students in technology rich environment experienced positive effects on achievement in all major subject areas. Students in such an environment showed increased achievement in pre-school through high education for both regular and special needs children.
- Students' attitudes toward learning and their own self-concept improved consistently when computers were used for instruction.

E-learning presents a number of advantages which have presented below in the tabular form.

Table-1: Advantages of E- Learning

	Major	Important	Moderate	Minor	None	No response
Greater efficiency in teaching	18,3%	39,2%	23,3%	10,0%	3,3	5,8%
Saving on premises and resources	10,8%	30,0%	25,8%	11,7%	15,0%	6,7%
professor ratio	5,0%	29,2%	23,3%	18,3%	17,5%	6,7%
A way of removing "the time and time-table" constraint	38,3%	35,0%	13,3%	8,3%	1,7%	3,3%
A way of providing courses which place more onus on learners	19,2%	45,0%	20,0%	6,7%	2,5%	6,7%
A way to reach "audiences" difficult to access	26,7%	42,5%	10,8%	6,7%	7,5%	5,8%
A way to reach "audiences" difficult to access	21,7%	35,0%	19,2%	10,0%	9,2%	5,0%

6. RECOMMENDATIONS & SUGGESTIONS

Educational technology does not determine the educational objectives. It is, the function of political thinkers and philosophers. This function is carried out keeping in view the wider aspects of society and values. It defines teaching-objectives in behavioral terms. It is that science on the basis of which various methods and techniques are developed and constructed in order to achieve pre-determined teaching objectives.

Thus, when the teaching objectives got determined, then educational technology comes into existence to achieve them.

First of all, it creates conditions by interpreting the input during the teaching process. It selects and applies the appropriate strategy for achieving the teaching objectives.

In the end, looking at the output or abilities of the students, it is evaluated whether the teaching objectives have been achieved or not. If not, then what changes should be brought about in the teaching strategy or strategies so that the teaching objectives may be achieved. Hence, educational technology includes three processes. These are :

1. Functional analysis of teaching-learning process in which the teacher observes all those components which are applied as input and these come to light through output.
2. Separate or combined search and analysis of those components which are used in the teaching-learning process during input and output.
3. Presenting the acquired learning experiences in the form of research-outcomes.

It is clear from the above account that the educational technology is that behavioral technology which presents the art of -teaching in a new fashion and it controls educational influences with the help of those factors which are used for achieving teaching objectives.

Most of the countries in the Asia Pacific Region (Malaysia, Singapore, Hong Kong, etc.) already adopted their own policies and had created an educational technology environment in their institutes. They equipped them with facilities and venue for the facilitation of learning to students and even to teachers. Teachers are given trainings in the use of these facilities as well as with the core skills and competencies in the use of ICT in their classroom discussions. The state policies for these technologies differ from one country to another depending from their culture and geographical locations or as the need for it may arise and/or the usefulness of which in the capacity building of their nation. But generally, most of the countries around Asia Pacific find it a need to really institutionalize the use of technology in their respective countries as evident to their state provisions and

policies. In other words, they find it crucial to infuse technology in the minds of the people so that they can compete with other countries around the Pacific and the world. They know they can boom their industries through the use of technology.

7. CHALLENGES & PITFALLS

ICTs as artefacts and social processes are already inscribed with gendered assumptions and the accumulation strategies of their purveyors. Moreover, the conditions under which e-learning is being introduced into education are shaped by managerialist agendas. Placing pedagogy at the forefront has therefore to struggle over the terms and shape of the media adopted.

As we have seen that globalization is both an opportunity and a threat. The issue still remains with regard to:

- (i) The quality of the Indian universities when the cream of students and staff opts for Global choices;
- (ii) The choice that universities will make towards the poor who cannot afford the global choices;
- (iii) the standards of universities and the capacity to compete with the world market. Our universities will raise standards and employ all those business tricks to attract foreign students to our universities.
- (iv) The political complexities impinging on the higher education system and the possibilities under given circumstances;
- (v) The state of the art resource condition and its impact on the infrastructural, library and laboratory conditions;
- (vi) The computer facilities and Internet access etc. are only a few to be mentioned.

Under these circumstances the so-called India's elite institutions and their capacity to attract and retain world-class faculty and students in the face of attractive offers from foreign universities, research institutes and multi-national corporations is the main issue. The cream of students hitherto the prerogative of these elite institutions might have to choose amongst the second and third level. The apprehension that haunts the Indian mind is that universities and students in India might be the losers in the game of global higher education.

8. CONCLUSION

What are the implications of these observations for educational exporters? The common experience described above is of emergent international approaches challenging local traditions. Contemporary globalisation rarely involves a simple 'introduction' of novel techniques from one country into another; instead local traditions in all parts of the globe come under pressure from globalised innovative practices

(Evans, 1995). One possible path is to follow Biggs, who suggests that transnational educators should not focus too closely on the perceived historical differences between Asian and Western learners (Biggs, 1996; Volet, 1999), but instead use newer strategies are universally effective and transcend local cultures. To follow this line is to acknowledge that modernisation is also a process of detraditionalisation (Heelas et al., 1996), in which the entrenched expectations produced by existing practices must be undone. If education is conceived as a way of changing students, then educators should accept that they cannot be culturally benign, but invariably promote certain ways of being over others.

Alternatively, one can resist educational globalisation by tailoring teaching and learning strategies to the local context, and by employing empowered local lecturers and tutors (Ziguras, 1999). What the above discussion shows, however, is that there is not a clear separation between local and foreign practices, and transnational educators must still decide which of the local approaches they will embrace. Educators need to be aware of their role in social change and be able to justify to themselves the role they play. Innovation involves the erosion of older practices, wherever it takes place, and educators should be sure that they want to erode these traditions before they encourage change. This means coming to understand the way things are done locally before seeking to change them. Western educators can make such decisions about the local practices they understand, but to dismiss local practices in other parts of the world without understanding them is fraught with danger. But at the same time, they should understand local dynamics affect how their actions are interpreted and perceived by students and teachers abroad.

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