

**OPPORTUNITIES AND CHALLENGES OF INTEGRATING ICT IN HIGHER EDUCATION: A CASE STUDY**

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Annasaheb Magar College Hadapsar**Abstract :**

*The Role of higher education in the economic development is inevitable. India has heritage of old tradition of higher education institution. There are many changes in the higher education system and methods also. Many challenges are faced by high education from pre independence and till today. The pandemic of COVID19 led educational institutional to close and compel to change in social interaction, organization, and the education sector. In the situation distance learning or Integration of ICT in education becomes demanding. The situation granted opportunities to education methods and systems to shift from traditional to online. As well as there are many challenges for teachers and students while adopting the system. This paper deals mainly with the study of opinion of the students and teachers about the challenges faced by them while adopting the ICT in education. As well as it narrated the opportunities received to education by this situation. The data collected by the non professional course students and teachers in the colleges of Pune city.*

**Key words :** Higher Education, ICT, Online Teaching, Traditional Method of Teaching,

**Introduction :**

Higher education institutions provide efficient manpower, increase efficiency as well as extend the field of knowledge, skill and technological advancement. Education plays a strategic role in helping achieve more than one goal of Human resource development. India has old tradition of higher education system which generated knowledge and learning right from the beginning of Indian civilization. The higher education learning centers were encouraged and Nalanda, Takshila, Ujjain, Vikramshila and Vallabhi came into existence. India became a renowned centre for higher studies by attracting scholars from all parts of India and from several foreign countries. Higher education since the British rule has made steady advances in the country. Thus during the British Rule India could claim its position as one of the leading countries providing quality higher education to its people as well as to students and scholars coming from countries all over the world. In the beginning of the 50's which marked a good

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beginning of investment in education, India witnessed fastest growth in the area of higher education. At the onset of the 21st century India was identified as an independent market for expansion of higher education which included professional education. The changes were seen from the pre dependence and measures were taken for quality improvement and modernization of syllabi, renewal of infrastructure, extra-budgetary resource mobilization and greater attention to issues in governance.

The use of ICT in the classroom has been adopted by educational system in this information age. In India there are problems faced by institutions in infrastructure, economic conditions, the costing while adopting ICT in education. In the rural areas it is difficult to adopt the ICT in education.

### **Aims and objectives :**

The study was undertaken with an aim to explore the general perceptions of non professional course students and faculties about the role of Information Communication Technology in higher education and to measure the student knowledge and information. Under the following objectives study is carried out.

1. To know the problems faced by students while using ICT
2. To know the problems faced by teachers while using ICT for teaching
3. To know the perception of student and teacher about the use of ICT in education as well as need of ICT in education
4. To consider opinion of faculty members in need of ICT in education.

### **Methodology :**

The study was conducted in 5 non professional educational institutions in Pune city. Study population included students (n=145) and teaching faculty (n=50) of all streams. Questionnaire with open ended questions are used to know attitudes of students and faculties respectively regarding the role and relevance of technology in higher education.

### **Discussion :**

There are significant changes in teaching styles over the years. The traditional way that education was delivered was through recitation and memorization techniques, whereas the modern way of doing things involves interactive methods. In the 2020 the COVID-19 pandemic led to the closure of universities and colleges around the world and face-to-face schooling is presented as a threat. Now it is necessary to provide personalized education online at scale at a much lower cost than that of conventional education. In those days educational institutions were forced to make major strategical shifts from traditional method of teaching to online teaching and learning. Traditional in-person classroom learning is likely not going away entirely, but the virtual classrooms are taking the place of traditional methods of education. To the perceptive of students and teachers study is carried out. Questions were asked through Google form and it included the questions related to awareness of the situation, necessity of ICT in Education, Difficulties in integrating ICT in education, Problems



regarding infrastructure, equipment, lack of knowledge, use of online study material. The information about the perception of importance of traditional as well as online method is collected through the questions. The sources of learning, the knowledge of learning platforms are included in the questions. The questions of teachers include the questions regarding easiness of creating E material, easiness of online evaluation of students work, Sources they using, the perceptions about traditional as well as online teaching is collected through the questionnaires.

**Students perception -**

The question about the awareness about the necessity of ICT integration in education 85% students responded yes. 86 % students of the respondent answered yes for using online material for study.

**1. Resources used for learning -**

Item	Google classroom	Moodle	Virtual Classroom	You tube	Edx	Webinar
%	50	53	59	86	54	68

The table shows that 86 % student uses You tube. 68% students participate in webinar. But the use of Google classroom, Moodle, Edx, Virtual classroom is comparatively low. Responses given by students for the frequently browsed resources are for Google and You tube. Email and Wikipedia are comparatively used less and online sites and Face book is browsed very less by respondents.

**2. Perception of students towards Online Teaching**

The student felt Online teaching method is good. Student preferred the easiness to handling and Availability on one click for the online learning from the options. No Attendance, No Travel, Easy to handle, Availability on one click, lower expenses, No Notebook. As per the responses online learning is easy for the students.

Item	Physical attendance	No Travel	Easy to handle	Availability on one click	Lowers expenses	No Notebook
%	57	67	77	77	71	71



### 3. Perception of students towards traditional methods of learning

Question was asked if the students feel traditional learning method is good. Students responded their perception towards satisfaction of learning, togetherness and adjustment, developing social life, Availability of resources, classroom flexibility, co-curricular activities and easy access to faculty. More than 80 % students like Traditional methods of learning.

Sr. No	satisfaction of learning	togetherness and adjustment	developing social life	Availability of resources,	classroom flexibility	co-curricular activities	easy access to faculty
%	87	86	86	84	87	85	84

### 4. Problems while using ICT-

Integration of ICT in education is hard due to the availability of infrastructure. In the rural areas internet connectivity is main problem. As well as using online resources the process is complex and it is hard to search for resources.

ITEM	Internet Availability	Lack of concentration	Hard to search resources	complexity
%	57	64	71	70

Above table shows that 57% students have problem with internet availability. Another options responded by the student is lack of concentration, hard to resources and complexity of using online resources.

### 5. Use of ICT in education

Response for the if the online learning is user friendly is yes. More that 80% students feel it is user friendly but only 43 % students like to read books online and 88 % students like to read the book physically.



Item	User-friendly	Knowledge Authentic Website	of Reading text books	Reading books online
%	86	66	88	43

93% students felt that learning with the help of internet and computers will be a preferred method in future due to availability of vast information, interactive and personalized media, environment and user friendliness which is more appealing for the current techno-savvy generation. 92 % students are favor in including technology training in curriculum. There was a mixed response about the awareness of authentic and reliable websites for information. 66% students agreed that they are aware of authentic and reliable websites for information. Preference for web over text books was agreed by 46% students whereas 48% preferred text books over web and preferred to Central library.

#### Teacher's perception –

As per teachers view it is opportunity for the teachers to adopt online teaching methods. Responses for the user friendly nature of online teaching, easiness to create E material and online evaluation of student's work given by teachers. It shows that 94 % teachers feels it user friendly, 84% teachers feels easy to create E material and 62 % teachers feels easy to evaluate of student's work online.

Problems faced while adopting ICT in education the reply by teachers was accessibility and availability of internet connection. 64 % teachers replied accessibility is the important problem.

ITEM	Agree	Disagree	Neutral	Strongly agree
Do you feel it is the best method of teaching, learning and to evaluate?	54	18	22	8
Do you feel traditional methods of teaching are necessary?	66	6	14	14
Do you feel this teaching & learning method should be used in future also	52	12	6	30
Traditional and online teaching methods should go hand in hand	26	6	12	30
Do you feel students are well prepared for the use of the technology	54	20	14	12
Online teaching method is useful for science subjects and practical	28	34	16	12



**Use of resources to create E material** - As per the teacher responses PPT is used by 90% teachers. Google form, google sites, You tube, Google classroom are used for creation of E material as well as to teach and to evaluate students work. The use of Face book live, E content development app, moodle is comparatively low.

### Conclusion:

The data shows that use of technology in education is need of our. The data shows the shifting of traditional education system towards online education methods. Teachers and students are familiar with the ICT but to integrate ICT in education system more efforts are necessary. But the social life, personality development, extracurricular activities are also import for personality development. And traditional education methods are also important. From the discussion it clearly indicates the insertion of ICT is necessary but traditional methods are also included in the education system. Now It becomes mandatory for the faculty to be well versed with technology so as to facilitate and guide learning through technology.

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