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# DIGITAL LITERACY OF STUDENTS IN HIGHER EDUCATION: A SURVEY

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**ABSTRACT:**

The present scenario of the classroom is ever changing. There is a technological gap between the progress of the society and instructional activities of the teacher in the classroom. It has great potential for quality improvement of education. Hence, teachers of digital era should not have only content and pedagogical knowledge but they should have pedagogic as well as technological knowledge so that they can transact knowledge to students in an advanced way. In present era student is active learner. Mostly higher education students learns to self pacing and self motivating, students are use various digital component like laptop, desktop, computer, smart phone, for use teaching learning purpose. Whereas UGC also provide smart classroom for better education.

**KEYWORDS:**

**DIGITAL LITERACY, HIGHER EDUCATION, ICT.**

## CONCEPTUALIZATION OF THE PROBLEM

Digital literacy is an umbrella concept for important skill clusters whose names are often used as synonyms; their content, however, is not exactly the same. ICT literacy refers to a set of user skills that enable active participation in a society where services and cultural offerings are computer-supported and distributed on the internet. Technological literacy (previously called computer literacy) entails a deeper understanding of digital technology and comprises both user and technical computing skills. Information literacy focuses on one of the key aspects of our Knowledge Society: the ability to locate, identify, retrieve, process and use digital information optimally. In this paper, we will employ the term digital literacy because it retains a close connection with other basic literacy's (e.g. reading and writing, mathematical competence) that are integral parts of education.

Digital literacy is the combination of the two terms – Digital and Literacy. Digital Information is a symbolic representation of data, and literacy refers to the ability to ready for knowledge, write coherently, and think critically about the written world. Digital literacy researchers explore a wide variety of topics, digital technologies. Research also encompasses a variety of hardware platforms, such as computer hardware, cell phones and other mobile devices and software or applications, including web search or Internet applications more broadly. Literacy means the ability to read and write. International Journal of Managerial Studies and Research (IJMSR) stated that literacy is to refer to set of skills required to identify information sources, access information, evaluate it, and use it effectively, efficiently, and ethically. Digital Information is becoming essential to almost every aspect of modern life which means that there is a need as never before, for learners and teachers who are information literate in a digital context. User community require digital information literacy, and a skill to use computers and the Internet for many aspects of academic and research which resulting them with digital information capability in a knowledge based society.

## RATIONALE OF THE STUDY

The present scenario of the classroom is ever changing. There is a technological gap between the progress of the society and instructional activities of the teacher in the classroom. It has great potential for quality improvement of education of in school. Hence, teachers of digital era should not have only content and pedagogical knowledge but they should have pedagogic as well as technological knowledge so that they can transact knowledge to students in an advanced way. In present era student is active learner. Mostly higher education students learns to self pacing and self motivating, students are use various digital component like laptop, desktop, computer, smart phone, for use teaching learning purpose. Whereas UGC also provide smart classroom for better education. Recently many researchers have taken interest on uses of digital devices and applications in higher educations. Some of the relevant studies are discussed in the following paragraph.

Snge (2015)found the motivation factor for digital literacy has a significant effect on material access, skill access and usage access. Policies that take into account motivations factors in digital literacy need to be strengthened. **Saxena** (2017) find out the factors that helps in enhancing accessibility of digital education in India along with the challenges involved. **John** (2016) this study found is digital and ICT literacy is considered an important competence for full participation in a knowledge economy and an information society. **Noh** (2016) this paper found that level of digital literacy of students, level of technical

literacy , level of virtual community literacy of college students. **Spengler** (2015) this paper found that the research involving the requirements and demands of living and working in the 21st century would provide valuable direction for the evaluation for future research. **Salem and Batcha** (2014) this paper found that the digital competence of arts and science college students, to identify the importance of digital literacy, to access the amount. **Eric and Meyers** (2013) this study reveals that new technologies and developments in media are transforming the way that individuals, groups and societies communicate, learn, work and govern. **Koltay** (2011) this study reveals that media literacy, information literacy and digital literacy are the three most prevailing concepts that focus on a critical approach towards media messages.

The above discussion reveals that attempt has been made by the researcher to examine the use of digital technology and devices in schools, colleges and teacher education institutions by the teachers and students. Mostly researcher where conducted in abroad. Few studies were conducted on digital literacy of higher education students in West Bengal. In this context, study on digital literacy of higher education of students in West Bengal is relevant.

## STATEMENT OF THE PROBLEM

So, in order to seek seeks answers of the above research questions the investigator is intended to investigate the present problem entitled "**DIGITAL LITERACY OF STUDENTS IN HIGHER EDUCATION: A SURVEY".**

## OPERATIONAL DEFINITIONS OF THE TERM USED

**DIGITAL LITERACY:** For this study digital literacy refers to the awareness students of higher education about different types of digital devices like smart phone, tablet, computer, laptop, scanner, printer, and software and applications. Further, it covers the use in personal and teaching learning.

**HIGHER EDUCATION:** It refers to under-graduate and post-graduate students of West Bengal State University, West Bengal. Its aims is to produce quality education

## DELIMITATION OF THE STUDY

- All the government college and universities of the West Bengal.
- All the sample are selected only three departments of Arts, Science And Commerce from West Bengal State University.
- The sample of the study was non-randomly selected from 69 Arts students 39 Science students and 22 Commerce students while 45 is male and 85 is female students of west Bengal state university.

## OBJECTIVES OF THE STUDY

1. To study the availability of digital devices and gadgets with students at home.

2. To examine the level of digital literacy of college students.

3. To compare the level of digital literacy of students with reference to sex and stream (Arts. Commerce and Science)

4. To study the barriers of uses digital devices and awareness about digital learning by the students.

## METHODOLOGY

The survey method was used in the present study. Survey research is a quantitative research method used for collecting data from a set of panel or respondents.

**SAMPLE OF THE STUDY:** Total sample of he study was selected 130, randomly selected all the sample for the study.

**TOOLS OF THE STUDY:** self- developed questionnaire was used for the data collection.

## DISCUSSION

### AVAILABILITY OF DIGITAL DEVICES OF THE COLLEGE STUDENTS AT HOME

The first objective of the study is to find out the availability of digital devices and gadgets with students. The collected data are analysed using frequency and percentage and presented in following paragraph.

| Sl.No. | Digital Devices | Yes % |
|---|---|---|
| 1 | Laptop | 17% |
| 2 | Desktop | 60.67% |
| 3 | Laptop & Desktop Both | 20.22% |
| 4 | Smartphone | 91.66% |
| 5 | Others Digital Gadgets | 8.33% |

The table indicates that 17 % of college students have laptop in home. Further, the table reveals that 60.67% of college students have desktop computer and using to personal and teaching learning purpose a long three years. 20.22% of college students have desktop computer and laptop both, all the devices is use male and female both to a three years long. 91.66 % of college students have smart phone , 8.33 %of college students use electronic dictionary with tablet computer and Microsoft surface.

### LEVEL OF DIGITAL LITERACY OF HIGHER EDUCATION STUDENTS

The third objective of the study is to find out examine the level of digital literacy of college students. & fourth objective of the study is to find out compare the level of digital literacy of students with reference to sex and

stream (Arts. Commerce and Science). The collected data are analysed using frequency and percentage and presented in following paragraph

| Sl. No. | Items | Very Poor % | Acceptable % | Very Good % | Poor % | Good % |
|---|---|---|---|---|---|---|
| 1 | Typing Skills | 3.14 | 38.58 | 7.87 | 12.59 | 37.79 |
| 2 | Web-search skills | 0.8 | 30.8 | 20 | 3.1 | 41.5 |
| 3 | Computer Literacy | 4.76 | 33.33 | 10.31 | 9.52 | 42.06 |
| 4 | Internet Literacy | 0 | 31.49 | 18.11 | 3.14 | 47.24 |
| 5 | Digital Literacy | 1.5 | 30.8 | 10 | 10 | 44.6 |

The table indicates that 37.79% of students typing skill (M.S Word) is good, 12.59% of students typing skills is poor, 7.87% of students typing skills is very good, 38.58% of students typing skills is acceptable, 3.14% of students typing skills is very poor. 41.5% of students web search skills is good, 3.1% of students web search skills is poor, 20% of students web search skills is very good, 30.8% of students web search skills is acceptable, 0.8% of students web search skills is very poor. 42.06% of students computer literacy is good, 9.52% of students computer literacy is poor, 10.31% of students computer literacy is 24 very good, 33.33% of students computer literacy is acceptable, 4.76% of students computer literacy is very poor. 47.24% of students internet literacy is good, 3.14% of students internet literacy is poor, 18.11% of students internet literacy is very good, 31.49% of students internet literacy is acceptable, no (0%) students of internet literacy is very poor. 44.6% of students of digital literacy is good, 10% of students of digital literacy is poor, 10% of students of digital literacy is very good, 30.8% of students of digital literacy is acceptable, 1.5% of students of digital literacy is very poor.

**COMPARE THE DIGITAL LITERACY OF STUDENTS WITH REFERENCE TO GENDER AND STREAM**

| Items | Total Yes % | Male % | Female % | Arts % | Commerce % | Science % |
|---|---|---|---|---|---|---|
| Basic functions of computer hardware component | 75 | 34.41 | 65.59 | 48.38 | 22.58 | 29.03 |
| Personal homepage or a personal portfolio on the web | 16.66 | 7.5 | 9.11 | 9.16 | 3.33 | 4.16 |
| Keyboard shortcuts | 80.15 | 26.19 | 53.96 | 41.26 | 16.66 | 22.22 |
| Use the computer for learning purposes | 77.6 | 26.4 | 51.2 | 36 | 16.8 | 24.8 |
| Learn something by reading it on the computer screen | 77.6 | 24 | 53.6 | 40.8 | 16.8 | 20 |

The table indicates that 75% of college students have understanding of the basic functions of computer, 16.66% of students have a personal homepage or personal portfolio, 80.15% of students use keyboard shortcuts, 77.6% of students use the computer for learning purpose, 77.6% of students learn something by reading it on the computer screen . Therefore it can be said that 34.40% of male students have understanding of the basic functions of the computer and 65.59% of female students have understanding of the basic functions of computers it includes with 48.38% of arts students, 29.03% of science students and 22.58% of commerce students have understanding of the basic functions of the computer. 7.5% of male students and 9.16% of female students have a personal homepage. 9.16% of arts, 4.16% of science students and 3.33% of commerce students have a personal homepage or personal port folios. 26.9% of male students and 53.96% of female students use keyboard shortcuts, it includes 41.26% of arts students 22.22% of science students and 16.66% of commerce students use shortcuts. 26.6% of male and 51.2% female with 36% of arts students, 24.8% of science students and 16.8% of commerce students use the computer for learning purpose. 24% of male and 53.6% of female students learn something by reading it on the computer screen. 40.8% of arts students, 20% of science students and 16.8% of commerce students learn something by reading it on the

computer screen.

**BARRIERS FOR USING DIGITAL TECHNOLOGY FOR LEARNING**

| Sl. No. | Items | Yes % |
|---|---|---|
| 1 | Lack of time | 38.5 |
| 2 | Lack of knowledge of teachers | 19.2 |
| 3 | Lack of skills of teachers | 19.9 |
| 4 | Lack of interest of teachers | 20 |
| 5 | Lack of training | 21.5 |
| 6 | Lack of supporting resources | 23.2 |
| 7 | Lack of budge | 26.2 |
| 8 | Lack of knowledge of students | 18.5 |
| 9 | Lack of interest of students | 22.3 |
| 10 | Lack of skills of students | 26.2 |
| 11 | Lack of learning materials | 21.5 |
| 12 | Lack of facilities | 22.5 |
| 13 | Other | 1.5 |

The table indicates that 38.5% of students respondent insufficient time, 19.2% of students responded lack of skills,19.9% of students responded lack of skills of teachers, 20% of students responded lack of interest of teachers, 20% of students responded lack of training, 21.5% of students responded lack of supporting resources, 23.1% of students responded that lack of budget, 26.2% of students responded that lack of knowledge, 18.5% of students responded that lack of skills of students, 22.3% of students responded that lack of interest of students, 26.2% of students responded that lack of learning materials, 21.5% of students responded that lack of facilities, 1.5% of students responded that barriers for using digital technology of teaching learning to other reasons.

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