Digitally Literate: New identity of the student of 21st century

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Abstract

In today's digital age, we are living a tech-focused life. Technological advancement have expanded into different parts of human life including education. Teaching and learning are becoming more digitalised in today's world. The word 'Digital education' is now familiar in India. Digital literacy is increasingly recognized as a major and important element of the skills a child requires for his/her education, work and life. Digital literacy means the ability of an individual to find, evaluate, and clearly communicate information through typing and other media on various digital platforms. The purpose of this paper to discuss the findings on the using pattern, purpose and utilization of digital resources, and digital skills possessed by the students. A survey was administered to 100 Honours students of different subjects from two colleges under the University of Calcutta and West Bengal State University. A questionnaire has been prepared by the researcher using Google form. The findings of this study indicate that most (95%) of the students use digital resources. Among the different digital information resources, Websites is seen to be mostly used by the students (86.1%). Majority of the students (71.3%) are using digital resources for preparing study material. Most of the students (52.5%) are able to communicate with others through various digital tools. Findings also reveal that a significant portion of the students of this study have the knowledge to use various tools like computer (72.3%), tablet and cell phone app (62.4%), laptop (53.5%).

Keywords:- *Technology, education, student, digital literacy, digital skills.*

Introduction :-

In today's digital age, we are living a tech-focused life. Technological advancement have expanded into different parts of human life including education. Teaching and learning are becoming more digitalised in today's world. The meaning of the term 'literate' has changed drastically in the past few years. In the past time literate person means a person who were capable of reading and writing at basic level. But Now literacy has evolved into digital literacy due to the advancement of technology, especially Information and Communication technology (ICT). Digital literacy is increasingly recognized as a major and important element of the skills a child requires for his/her education, work and life.

The term "Digital Literacy" was popularised by Paul Glister in his book "Digital Literacy", in the year 1997. He said it is the "Literacy of Digital Age". It refers to the knowledge, skills and attitudes which allow children to be both safe and empowered in an increasingly digital world. Digital literacy means the ability of an individual to find, evaluate, and clearly communicate information through typing and other media on various digital platforms. It is evaluated through the grammar, composition, typing skills and ability of an individual to produce text, images, audio and designs using technology. The American Library Association

(ALA) defines digital literacy as "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.

Review of related literature:

Shopova, T. (2014) found in his study that most of the respondents used without difficulty some search tools to find and retrieve information (98%). The study revealed that most students were able to analyse and synthesize information (71%), compare information obtained from different sources (73%) and know how to interpret and present information (52%). The findings of the study of Nwabueze, A. U. and Urhiewhu, L. O. (2015) revealed that students make use of Digital Information Resources (DIR) to a low extent. The constraints encountered by students towards the accessibility of DIRs in the four libraries are epileptic power supply, none availability of online databases, lack of formal training in internet skills among students, slow bandwidth, network problems and server slowness.

Ukwoma, S. C, Iwundu, N.E and Iwundu, I. E (2016) conducted a study on Digital literacy skills possessed by students of UNN, implications for effective learning and performance. They found that some of the students possess digital literacy skills; they use these digital literacy skills daily. Majority of the respondents indicated that digital literacy has affected their academic performance to a high extent. The major challenges of acquiring digital literacy skills include electricity failure, low internet bandwidth, ICT facilities, lack of development of digital literacy programme and standard. Vijay, P. R. and Singh, K. (2018) reported that 86.67% of respondents use digital resources daily and 49.57% respondents are using digital resources to update their subject knowledge in the field.

The major findings of the study of Krishnamurthy, C. and Shettappanavar, L (2019) highlight that Google search engine is the most preferred search engine as indicated by the students. The majority (68.83%) of the respondents are aware of Google scholar followed by Research gate, Twitter, Slideshare, Academic.edu. and LinkedIn, SciSpace, Research ID are least used among the academic social networking sites. It is also found that there is a lack of awareness among students regarding the use of various search strategies for efficient information retrieval and only 55.84% respondents have awareness of copyrights issues. Rahman, Ariawan, V, A, N and Pratiyi, I, M (2020) reported that the digital literacy abilities of students are in the medium category. Students do not pay attention to aspects related to the writing code of ethics such as including valid references and very rarely access the journal as a source of literature.

The findings of the study of Nguyun. LAT and Habok, A. (2021) revealed that most Vietnamese students can access digital technologies at home and in their institutions. Students achieve an adequate level of knowledge regarding digital literacy, and their technological skills range from low to average. Comparisons show that males have better digital knowledge and skills than their female peers. Although female students are more aware of the digital integration benefits of learning than their male peers, males tend to use technologies more extensively than females.

From the review of different research studies it is clear that the use of digital literacy, knowledge regarding digital literacy and the digital skills of the students have been studied, but not so many work on this area (as a whole) was found in West Bengal as well as in India. For this reason researcher choose to study the using pattern of digital resources, purpose and utilization of it and digital skills possessed by the students.

Objective:

1. To study the using pattern of digital resources by the students.
2. To find the purpose and utilization of digital resources.
3. To identify digital skills possessed by the students.

Methodology:

The survey method was used for the conduct of the present study.

Population of the Study

The population of the study is comprised of the students studying at the undergraduate level of two colleges.

Sample

In order to select the sample, the researcher has adopted Random Sampling technique. The present sample included 100 Honours students of different subjects from two colleges under the University of Calcutta and West Bengal State University.

Tools

A questionnaire has been prepared by the researcher using Google form. First part of which consists of the questions related name of the student (optional), age, gender, caste, subject, class, stream and name of the college. In the second part questions were given regarding using pattern, purpose and utilization of digital resources by the respondents and various digital skills of them.

Validity of the tools used

Content Validity was done by expert rating of items by 3 experts. Initially 12 items were taken. Those items which were rated as good and very good items were selected. For final selection of 9 items were taken. The interrater agreement model was used (Gregory, 2005) to see the reliability of the raters. The coefficient of content validity was 0.78.

Dlimitations

1. The study was limited to two colleges of two universities in West Bengal.
2. The sample of the study was restricted to 100 students only.
3. Only content validity was determined.

Analysis

In order to interpret and analyse the data the researcher used percentage calculation as the main technique. Narrative description was also done. Analysis was done for the study in two parts. In the first section it was the demographic information like age, gender, stream etc. In the second portion it was different questions regarding using pattern, purpose and utilization of digital resources by the respondents and various digital skills of them.

Findings and Discussion:-

Demographic information of the sample

In this study the age of the sample ranged between 18-23 years. Most of the respondents (87.1%) were between 18 to 20 years old and remaining 12.9% were 21 to 23 years old. 89.3% of the sample were female and rest of the sample were male. Most of the respondents were from Arts stream and rest of them were from science and commerce.

Findings

Digital resources are the materials that have been conceived and created digitally. These resources creates new ways to teach and learn in and outside of the classroom. Various digital resources are there like e-books, e-notes, e- journal, DVD, websites, models, graphics, animation etc. which makes the learning accessible, engaging and contextualized. Digital resources are popular among the students. Majority (95%) of the students were use digital resource and rest of them were not.

It was found from the study that students spend varying amounts of time for using digital resources. Most (74%) of the students spend 1 to 5 hours per week to use digital resources, 20% of the students use it for about 6 to 10 hours per week, and only 6% of use it for about 11 to 15 hours per week. It means that most of the students of this study spend 1 hour to 5 hours in a week to use digital resources.

Digital information resources are the sources and services of information produced and accessible via ICT. Majority of the students used different digital information resources like E-books, Websites, E-journals, E-databases, E-newspapers, social media etc. Among the different digital information resources, Websites is seen to be mostly used by the students (86.1%). This is followed by E-books with 47.5%, E-Newspapers with 26.7% respondents, E-journals with 17.8% respondents, E-databases with 12.9% respondents and so on. This also shows that Websites and E-books are the popular digital information resources mostly used by students of two colleges while E-databases and social media (3%) was the least favourite.

Students of this study used multiple search tools for collecting information such as Digital library, Search engines, Subject gateways and Web portals. Most of the students (59.4%) used Digital library as search tool, whereas Web portal are used by 44.6% of the students and 42.6% of the students used Search engines to collect information. Only 16.8% of the students used Subject Gateways for collecting information.

This study has shown that students had multiple preferences (like home, college, cyber cafe, private computer institution, hostels, library etc.) for accessing digital resources. Majority of the students (77.2%) preferred home to access digital resource. Only 14.9% of the students go to cyber cafe for accessing digital resources.

Findings of the study showed that students have more than one reasons to use digital resources. Most of the students (71.3%) are using digital resources for preparing study material. To update their subject knowledge 65.3% of the students are using digital resources. 55.4% of

the students are also using digital resources to prepare their project work. Only1% of the students are using digital resources to watch movies and read comics.

The students of this study stated different impact of digital resources on their academic activities. 64.4% of the students said that they get an access to an updated information by using digital resources where as 47.5% of the student feel that with the help of digital resources they can easily get the access to information. On the other hand, 44.6% of the sample think that digital resources are very helpful to get the access to information very quickly. 41. 6% of the sample opined that through digital resources they get wide range of information.

The digital skill is the need of the hour. By having digital skills, students can improve their self as well as their education. Students with digital skills will be more comfortable and confident in digital environment. It empowers students for lifelong learning. It was found from the study that students have more than one digital skills. Most of the students (52.5%) are able to communicate with others through various digital tools, where as 47.5% of the sample are able to use social networking sites. Many (42.6%) students of this study know how to use and handle devices properly. 24.8% students have the knowledge about creation and editing. But only 18.8% students are able to evaluate the information and 13.9% of the students have the knowledge about the cyber security.

Nowadays we see various tools (like iPods, iPads, computer, laptop, scanner, tablet, smartphone etc.) which can apply for digital literacy. Students should have skills which are needed to use the tools appropriately. Majority (72.3%) of the students have the knowledge to use computer in this study, whereas 62.4% of the students have the knowledge about tablet and cell phone app. 53.5% of the sample of this study were familiar with laptop and can easily handle this. But only 23.8% and 18.8% respondents have the idea of using printer and scanner.

Conclusion:-

The foremost necessity of this digital age is Digital literacy. Now we see and feel the contribution of internet, various search engines, email, blogs, online video, you tube, social networking sites etc. to our knowledge and capabilities. The demand for digital technologies in the classroom increases rapidly along with the innovation of technology, especially ICT. Use of iPods, iPads, Smart Boards, computers, tablet etc. are needed to meet the changing demand. That why there is a need to become digitally literate to keep up with the changing pattern of education. At the same time digital literacy is also important for their success in workplace and in society.

References :-

Krishnamurthy, C., & Shettappanavar, L. (2019). Digital literacy among female postgraduate students of Karnatak University, Dharwad, Karnataka, India: A study. *Library Philosophy and Practice (e-journal)*. 2934.

Nguyun. L., & Habok, A. (2021). *Digital literacy of EFL students: An empirical study in Vietnamese Universities.* Retrieved March 17, 2022 from https://doi.org/10.1515/libri-2020-0165.

Nwabueze, A. U., & Urhiewhu, L. O. (2015). Availability and use of digital information resources by undergraduates of universities in Delta and Edo States, Nigeria. *International Journal of Digital Library Services, 5*(2), 1-12.

Rahman, A, V, A, N., & Pratiyi, I. M. (2020). *Digital literacy abilities of students in distance learning*. Proceedings of the 4th International conference on language, literature, culture and education (ICOLLITE 2020). Retrieved March 17, 2022 from http://creativecommons.org/licenses/by-nc/4.0/ .

Shopova, T. (2014). Digital literacy of students and its improvement at the university. *Journal on Efficiency and Responsibility in Education and Science,7* (2), pp. 26-32.

Ukwoma, S. C, Iwundu, N.E. & Iwundu, I. E. (2016). Digital literacy skills possessed by students of UNN, implications for effective learning and performance. *New Library World, 117* (11/12), 702-720.

Vijay, P. R. and Singh, K. (2018). *Digital literacy skills among students and research scholars of the law school, Banaras Hindu University, Varanasi, India: A study*. Retrieved from https://www.researchgate.net.

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