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Examining Digital Literacy Skills Among Gen Z Students of Mizoram University: The Impact of the Internet in the Academic Environment

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ABSTRACT

This study examines Digital Literacy Skills (DLS) among Generation Z or "Gen Z" students and the impact of the Internet in the academic environment. The paper analyses the effects of the Internet on academics and shows how Gen Z students at Mizoram University use their overall proficiency and digital literacy abilities for their studies. A total of 250 Gen Z Students were targeted in the present study. The responders were chosen by using a non-probabilistic sample. A structured online questionnaire was distributed among students to gather the data. Further, the data was analyzed and scrutinised using SPSS version 26. The study reveals that digital literacy includes the capacity to utilise digital technologies for analysis, research, and communication, access online resources efficiently and critically assess information. However, the Internet emphasises the significance of digital literacy skills among Gen Z. The Internet has significantly impacted the academic environment by opening up access to a large amount of information and encouraging the growth of technological skills.

Keywords: Digital literacy; Digital skills; Digital generation; Generation Z/Gen Z; Internet

1. INTRODUCTION

The global landscape has witnessed a profound transformation after the COVID-19 outbreak, with technology assuming an increasingly universal role in connecting people. This paradigm shift, however, prompts a detailed examination of the evolving nature of technology rather than a definite declaration of its takeover. Particularly its impact on students in underdeveloped nations, altering the traditional dynamics of acquiring knowledge within physical classrooms. In light of these changes, there arises a pressing need for individuals worldwide not only to grasp the utilisation of technology but also to adapt to the dynamic landscape presented by these advancements. This imperative extends beyond a mere acknowledgment of "new technology" like artificial intelligence that has made personalise learning experiences, virtual reality allowing students to explore virtual environments, educational games, and gamified learning platforms that make the learning process more engaging and interactive, platforms like Zoom, Microsoft Teams and Google Meet which have become essential for remote and hybrid learning, enabling live virtual classes, collaboration, and communication, necessitating a comprehensive understanding of how technological innovations have reshaped communication and education paradigms globally. Being digitally literate is essential for every generation.

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In this study, the paper aims to examine digital literacy skills among Gen Z students of Mizoram University: The impact of the Internet in the academic environment. We are all aware that in the modern world, technological devices and technology rule every corner of the globe. Massive shifts in daily life impact a variety of facets of contemporary society, including how we learn, how we engage with one another, how we know, and the sorts of learning settings, from traditional classrooms to interesting online courses. Online and virtual learning has grown throughout educational institutions since the COVID-19 pandemic. In the present era, digital literacy is a vital skill that enables students to learn fast and efficiently, allowing them to continue their education for personal growth or professional improvement. "Students must adeptly access, evaluate, analyse, and ethically share online content for future success in digitally-driven workplaces, as educators generally perceive them as proficient digital natives[1]. One must possess digital literacy skills to learn, work, and function. Modern wireless technologies might be employed in educational settings to foster the growth of such skills. "This literacy element fosters a learning environment promoting students' decision-making, expression, and management skills crucial for effective collaboration in issue-solving, essential for democratic participation[2].

2. OBJECTIVES OF THE STUDY

1. To know the familiarity with the concept of digital literacy and internet resources among the Gen Z students.

2. To examine the efficient resources consulted by Gen Z students to find information related to any topic.
3. To analyse the impact and benefits of the internet among the Gen Z students in their education.
4. To identify the constraints faced by the Gen Z students while using the Internet.

3. SCOPE OF THE STUDY

The present study examines and analyses digital literacy skills and the impact of the internet on Gen Z students (Gen Z are those born between 1996-2020) at Mizoram University. Mizoram University (MZU) is ranked in the 76th position in NIRF 2023. The scope of the study is limited to 250 Gen Z students of Mizoram University.

4. LITERATURE REVIEW

Several literature reviews and research evaluations have been conducted to assess various aspects in the fields of Digital Literacy. A few studies were found related to research progress and trends analysis about Digital Literacy for Generation Z and the impact of the Internet in the academic environment. Dewi, Pahriah, and Purmadi[5] and Coklar & Tatli[6] highlighted that students in Generation Z require digital literacy to use the Internet as a tool that promises to make community connectedness simple, starting with understanding how to collaborate, interact, be innovative, fix issues, make choices, and acquire information. They found that the level of digital nativity increases as we move from the X generation to the Z generation. They have also observed a difference in the relationship between digital nativity levels of the X, Y, and Z generations and computer self-efficacy and the duration of computer and internet use. They reveal that there are priorities regarding digital nativity according to generation or age. Kassim[7], *et al.* mentioned that the differences in one's demographic background would affect one's capacity to use technology. Suwana[8,11], *et al.* and Datt, *et al.* reviewed that WhatsApp, Instagram, and YouTube are platforms that Gen Z uses in their everyday lives. They argue that those who took part spent more than four hours per day using digital media and less than an hour per day discovering and disseminating information on COVID-19 are considered heavy users in everyday life. They revealed that not all media platforms are equally well-liked by students, and we further found that YouTube is a very accessible and trustworthy media platform among students. Igwebuike[9] examined 'hate speech' as a threat to Nigeria's national unity and integration and discovered that most respondents needed to familiarise themselves with Media and Information Literacy (MIL). He concluded that people who would peacefully coexist with one another to build the country, Nigerians need to be made aware of the risks of hate speech and the solution offered by MIL. Logeswari[10], *et al.* examined the critical approach to literacy that enables individuals to evaluate what they have read critically, heard, and learned. They also discovered that most respondents used journals and papers, preferred 1-2 weeks of workshop-based instruction on MIL, and were generally aware of MIL projects outside India. As a result, they have advised UGC to take the necessary actions to carry out several significant projects for the benefit of society.

5. RESEARCH METHODOLOGY

The survey questionnaire was administered to Gen Z students at Mizoram University, Mizoram. The responders were chosen by using a non-probabilistic sample. A structured online questionnaire (Google form) was distributed among 250 students and out of which 177 questionnaires have been responded. The data was collected from 15th May 2023 to 15th June 2023. The respondents were contacted in a variety of ways, including personal contact, department visits, emails, and social networking sites like Facebook and WhatsApp. Further examination and analysis of the gathered data were performed using SPSS.

6. ANALYSIS AND RESULTS OF THE STUDY

6.1 Gender-wise Respondents

Table 1 shows 177 responses were received from the respondents, and the majority 93 (52.5 %) respondents were female, and the rest remaining 84 (47.5 %) were male. Here, the survey shows that female participation is higher than the male.

Table 1. Gender-wise respondents

S. No.	Gender	Responses frequency	(%)	Valid %
1	Male	84	47.5 %	47.5 %
2	Female	93	52.5 %	52.5 %
	Total	**177**	**100 %**	**100 %**

6.2 Familiarity with the Term Digital Literacy (DL)

Table 2 shows among all the responses, the majority of the respondents are familiar with the term175 (98.9 %), and only 2 (1.1 %) need to be more aware.

Table 2. Familiarity with the term dl

S. No.	Familiarity	Responses (frequency)	(%)	Valid %
1	Yes	175	98.9 %	98.9 %
2	No	2	1.1 %	1.1 %
	Total	**177**	**100 %**	**100 %**

6.3 Familiarity with Internet Resources

Table 3 depicts the majority 156 (21.6 %) respondents are familiar with search engines; more than half 131 (18.1 %) are familiar with open-access e-books/journals, 123 (17.0 %) are familiar with digital library archives, 82 (11.3 %) are familiar with web portals, 68 (9.4 %) are familiar with an online database, 60 (8.3 %) are familiar with web OPAC, 53 (7.3 %) are familiar with gateways, 26 (3.6 %) are familiar with directories, and only 24 (3.3 %) are familiar with meta-search engines.

Table 3. Familiarity with internet resources

S. No.	Familiarity	Responses		% of cases
		(N)	(%)	
1	Search engines	156	21.6 %	88.1 %
2	Web portals	82	11.3 %	46.3 %
3	Gateways	53	7.3 %	29.9%
4	Open-access ebooks/journals	131	18.1 %	74.0 %
5	Digital library archives	123	17.0 %	69.5 %
6	Meta search engines	24	3.3 %	13.6 %
7	Online database	68	9.4 %	38.4 %
8	Web OPAC	60	8.3 %	33.9 %
9	Directories	26	3.6 %	14.7 %
	Total	**723**	**100 %**	

6.4 Resources Consulted by Students to Find Information

Table 4 shows the majority 143 (24.4 %) responded that they consulted internet websites; 129 (22.1 %) answered that they consulted YouTube; 110 (18.8 %) consulted institutional repositories; 99 (16.9 %) consulted journals; 54 (9.2 %) consulted subject gateways; and only 50 (8.5 %) consulted databases to find the information.

Table 4. Resources consulted to find information

S. No.	Resources counsulted	Responses		% of cases
		(N)	(%)	
1	Internet websites	143	24.4 %	80.8 %
2	Databases	50	8.5 %	28.2 %
3	Journals	99	16.9 %	55.9 %
4	Institutional repositories	110	18.8 %	62.1 %
5	YouTube channels	129	22.1 %	72.9 %
6	Subject gateways	54	9.2 %	30.5 %
	Total	**585**	**100 %**	

6.5 Impact of the Internet in the Academics

Table 5 illustrates the majority 145 (23.6 %) responded that the Internet has the highest impact on their education for better productivity in academics; 129 (21.0 %) responded it helps in disseminating knowledge; 122 (19.9 %) responded it keeps updated with the latest information; more than half 91 (14.8 %) responded to access to online learning; less than half 65 (10.6 %) responded to a visual aid for better understanding of complex topics; and only 62 (10.1 %) responded to easy access to quality education.

6.6 Benefits of Internet in the Academics

Table 6 shows the majority 153 (25.8 %) responded that it helps in completing assignments and presentations; more than half 121 (20.4 %) responded that it enhances self-study; 97 (16.4 %) responded that it helps in developing communication and connectivity among the peers, 93 (15.7 %) responded that they get exposure to new ideas/ways to learn, 71 (12.0 %) has responded that helps in online education, and only 57 (9.6 %) responded that it helps to bridge the communication gap among the peers.

Table 5. Impact of the internet

S. No.	Impact of internet	Responses		% of cases
		(N)	(%)	
1	Keeps updated with the latest information	122	19.9 %	68.9 %
2	Access to online learning resources	91	14.8 %	51.4 %
3	Easy access to quality education	62	10.1 %	35.0 %
4	Helps in disseminating knowledge	129	21.0 %	72.9 %
5	Better productivity in academics	145	23.6 %	81.9 %
6	Visual aid for better understanding of complex topics	65	10.6 %	36.7 %
	Total	**614**	**100 %**	

Table 6. Benefits of Internet in the academics

S. No.	Benefits	Responses		% of cases
		(N)	(%)	
1	Online education through the internet	71	12.0 %	40.1 %
2	Developing communication and connectivity among the peers	97	16.4 %	54.8 %
3	Bridge the communication gap among the peers	57	9.6 %	32.2 %
4	Enhance self-study	121	20.4 %	68.4 %
5	Help in completing assignments and presentation	153	25.8 %	86.4 %
6	Exposure to new ideas/ways to learn	93	15.7 %	52.5 %
	Total	**592**	**100 %**	

6.7 Constraints Faced While Using the Internet

Table 7 depicts the majority 83 (34.9 %) have responded they faced slow internet connectivity, 68 (28.6 %) responded with safety and privacy concerns, less than half 57 (23.9 %) responded with limited access to the Internet facilities, and rest 30 (12.6 %) faced difficulty because of lack of technical knowledge.

Table 7. Constraints faced while using the internet

S. No.	Constraints	Responses		% of cases
		(N)	(%)	
1	Lack of technical knowledge	30	12.6 %	20.7 %
2	Slow internet connectivity	83	34.9 %	57.2 %
3	Limited access to Internet facilities	57	23.9 %	39.3 %
4	Safety and privacy concerns	68	28.6 %	46.9 %
	Total	**238**	**100 %**	

7. DISCUSSION

The proliferation of Internet utilisation in higher education has precipitated an escalating need for proficient digital literacy skills. To thrive in the knowledge-based economy, one must cultivate proficiency in utilising digital tools, critically evaluating information, and navigating online resources judiciously. This investigation, characterised by a notable 52.5 % participation from female respondents and the remaining 47.5 % from male participants (n=84), underscores the active engagement of female participants in the study compared to their male participants. Furthermore, the research reveals that an overwhelming 90 % of participants exhibit familiarity with the term 'Digital Literacy,' with a minute 1.1 % professing unawareness. This clearly reaffirms the study's assertion that Generation Z students exhibit a pronounced adaptability to technology. Particularly, the study identifies search engines as the most widely recognised internet tool, with 21.6 % (n=156) of respondents indicating familiarity. Equally, only 3.3 % of respondents acknowledged awareness of meta-search engines. This clarifies the necessity for awareness campaigns explaining the utilisation and advantages of unfamiliar tools such as meta-search engines, directories, and web OPACs, potentially enhancing information discovery and retrieval for academic pursuits.

The survey further discloses a preference among respondents for internet websites and YouTube, reflecting the universal dominance of online sources and multimedia materials in information retrieval. Simultaneously, it emphasises the crucial role of institutional repositories and journals in the information-seeking process. The visible underutilisation of subject gateways and databases among respondents signals prospective areas necessitating intensified promotion and utilisation in academic research and information acquisition. This study's outcomes emphasise the profound impact of the Internet on academic education, delineating its role in enhancing productivity, facilitating knowledge dissemination, keeping learners abreast of the latest information, providing access to online learning opportunities, supporting visual learning, and facilitating seamless access to quality education.

8. CONCLUSION

The study examines digital literacy skills among Gen Z students of Mizoram University: the impact of the Internet in the academic environment. To maximise the Internet's potential while avoiding disinformation, cyber risks, and privacy breaches, Gen Z students must gain skills such as information literacy, media literacy, online communication skills, and cyber security awareness.

Digitally literate students are better equipped to utilise the Internet wisely and fully participate in the academic digital environment. The internet has changed how students acquire information and participate in academic activities. It has given students access to massive resources, online libraries, and databases, breaking down knowledge boundaries and democratising education. Students may easily access relevant information using search engines and academic databases, increasing the efficiency and efficacy of their study. In conclusion, the Internet significantly influences the academic atmosphere at Mizoram University.

Gen Z students may benefit from the internet's extensive resources, online collaboration opportunities, and flexible learning alternatives. However, to fully realise these benefits, it is critical to prioritise and encourage digital literacy skills. Mizoram University can empower students to successfully traverse the online academic landscape, interact critically with digital information, and prosper in the digital era by providing them with the requisite digital capabilities.

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