



A Study on the Influence of Internet Information Literacy on the Learning Behaviors of Senior High School Students

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Abstract

This study explored the attitudes of Senior High School students toward using the Internet as a tool for information literacy. It aimed to examine how students utilize the Internet in their education and daily lives, focusing on the extent, purpose, and location of its use. The Internet has revolutionized access to information, offering opportunities to enhance learning and improve critical thinking skills. A descriptive research design was employed, and data were gathered through a self-constructed questionnaire administered to 85 respondents selected via stratified random sampling. The questionnaire included demographic profiles and indicators to assess students' attitudes toward Internet Information Literacy (IIL). Key findings revealed that the Internet plays a crucial role in providing diverse information sources and fostering learning opportunities beyond traditional classroom methods. The results underscored the significance of equipping students with critical evaluation skills to optimize their Internet use in education. Furthermore, the study highlighted the Internet's potential to empower students by offering personalized and flexible learning experiences. These findings suggest that fostering Internet Information Literacy among students is essential to lifelong learning and effective education in the digital age.

Keywords: Internet Information Literacy, student attitudes, lifelong learning, education, information skills, technology in education, digital literacy

Acknowledgments: The researcher extends heartfelt gratitude to the administration of Rufo de la Cruz Integrated School for their unwavering support and cooperation throughout this study. Sincere appreciation is also given to the selected Senior High School respondents for their valuable time, participation, and insights, which significantly contributed to the success of this research.

For citation:

Daud, K., D. (2024). A Study on the Influence of Internet Information Literacy on the Learning Behaviors of Senior High School Students. *Journal of Digital Learning and Distance Education*, 3(7), 1190-1198. <https://doi.org/10.56778/jdlde.v3i7.374>.

Introduction

The Internet has fundamentally transformed the way individuals' access and use information, evolving into an essential tool for virtually every purpose tied to communication and data exchange. As a globally accessible network, the Internet connects users to an extensive range of resources and facilitates diverse forms of interaction, including social media, email, chat rooms, newsgroups, and multimedia communication like audio and video sharing. It also enables seamless collaboration across geographical boundaries and provides access to digital information through platforms such as the World Wide Web. This transformative capability has reshaped educational practices, professional workflows, and personal lifestyles, making it a cornerstone of modern living. Despite its remarkable benefits, the rapid pace of technological advancements associated with the Internet has introduced significant challenges, particularly for the youth. These changes often create cultural and social tensions, as individuals attempt to balance the complexities of modern communication with deeply ingrained moral values. Such tensions have profound implications for beliefs, values, and behaviors. Understanding attitudes toward the Internet is therefore crucial, as "attitudes are significant indications of people's behaviors in situations that involve these things or topics."

In the realm of education, the Internet has emerged as a vital platform for teaching and learning. Internet Information Literacy (IIL), defined as the ability to critically evaluate the content, structure, and type of online information, plays a critical role in empowering students to use digital resources effectively. This skill is essential for enabling students to meet their information needs through critical thinking and informed application. Moreover, fostering information literacy equips learners for lifelong learning, preparing them to thrive in an ever-evolving digital environment. Understanding how students perceive and utilize the Internet is pivotal to improving information literacy education. Such insights inform strategies for addressing motivational factors, optimizing human-computer interactions, and overcoming age-related challenges in digital learning. The Internet has expanded the boundaries of literacy, offering tools far beyond traditional books to engage students in reading, writing, and research for varied purposes (Mhlongo et al., 2023); (Wei, 2023). This study seeks to contribute to the field of Internet Information Literacy by identifying essential components needed to guide students in critically navigating digital information. In doing so, it underscores the Internet's transformative potential to foster personalized learning experiences, enhance critical thinking, and prepare students for the demands of an increasingly interconnected world (Ruiz-Rojas et al., 2024); (Al-Zahrani, 2024); (Jaramillo & Chiappe, 2024).

These findings align with the theoretical assumptions that social media and online media consumption, if unchecked, can disrupt academic priorities. Based on the theoretical frameworks and objectives of this study, the following hypotheses are proposed to evaluate the attitudes of education students toward utilizing internet information literacy, as perceived by Senior High School students at Rufo de la Cruz Integrated School in Tubod, Lanao del Norte: H_0 : The use of the internet for academic purposes positively correlates with students' academic performance by enhancing access to information and learning resources. This hypothesis is supported by (Apuke & Iyendo, 2018); (L. Sun & Pan, 2021); (Haleem et al., 2022), who demonstrated the positive effects of internet use on research capabilities and academic outcomes, particularly through platforms like e-journals and e-books. H_1 : Higher exposure to social media negatively affects students' academic performance by reducing study time and focus on academic tasks. This hypothesis aligns with the findings of (Sümen & Evgin, 2021); (Zhuang et al., 2023), who reported that excessive social media use disrupts academic routines and leads to poorer grades.

Methodology

Study site and Sample

The respondents of this study were Senior High School students from the Humanities and Social Sciences (HUMSS) and General Academic Strand (GAS) in Grades 11 and 12 at Rufo de la Cruz Integrated School.

Table 1. Demographic characteristics of elementary teacher respondents ($\% = f/n \times 100$)

Profile	Characteristics	f	%
According to Age	19 years old below	32	37.60%
	16-18 years old	50	58.80%
	14-15 years old	3	3.50%
	Total	85	100
According to Gender	Male	11	12.90%
	Female	74	87.10%
	Total	85	100

Table 1 The demographic profile included age, sex, and grade level. Of the 85 respondents, 3 (3.5%) were aged 14-15, 32 (37.6%) were 16-18, and 50 (58.8%) were 19-20 years old. The majority (58.8%) were aged 16-18, suggesting that most started using the internet at this age. In terms of sex, 11 (12.9%) were male and 74 (87.1%) were female, with a significantly higher proportion of female respondents, which supports findings from other studies that women tend to use the internet more frequently.

Research design

The study utilized a descriptive research design to examine the attitudes of Senior High School students toward using the Internet for information literacy at Rufo de la Cruz Integrated School during the 2024-2025 school year. This design was chosen as it is particularly effective in assessing students' attitudes regarding their use of the Internet for information literacy.

Data measures

This study utilized a self-constructed questionnaire as its data measurement tool. The first section gathered the respondents' demographic profile, while the second section included statements designed to assess the attitudes of Senior High School students regarding the use of the Internet for information literacy.

Data gathering procedure

The researcher first sought validation and reliability of the questionnaire from the School Research Coordinator before administering it. A letter of permission was then submitted to the School Head to request approval for conducting the survey. Upon receiving approval, the questionnaire was distributed to the respondents for completion. Afterward, the completed questionnaires were collected, tallied, tabulated, and analyzed to draw conclusions and present the study's results.

Data analysis and ethical consideration

The researcher employed descriptive statistical methods to analyze the collected responses. The data from the questionnaires were organized and tallied based on the respondents' profiles and their attitudes toward internet information literacy. Frequency counts and percentages were calculated to examine the distribution of demographic variables such as age, sex, and grade level. The responses to the attitude indicators were then analyzed to identify overall trends and patterns in the students' perceptions. This approach allowed for a comprehensive interpretation of the findings, providing valuable insights into how internet information literacy is perceived by Senior High School students at Rufo de la Cruz Integrated School. Additionally, this study complies with the Data Privacy Act.

Informed consent was obtained from parents and students, and all data will be kept confidential and used solely for the study's results.

Results and Discussion

Respondent's Response on Universal Digital literacy is:

Table 2. Respondent's Response on the Universal Digital literacy

Statement Indicators	N	Mean	Std. Deviation	Descriptive
1. I understand the basic functions of computer hardware components.	85	3.8235	0.77423	Seldom
2. I find it easy to learn something by watching it on the computer screen.	85	3.9294	0.96100	Seldom
3. I feel competent in using digital learning resources.	85	3.5059	1.08697	Seldom
4. I have enough knowledge on what digital literacy is?	84	3.5119	0.95051	Seldom
5. I use the computer for learning purposes only.	85	3.5412	1.05281	Seldom

Table 2 shows the mean and standard deviation of respondents' responses on Universal Digital Literacy. The first statement, "I understand the basic functions of computer hardware components," had a mean of 3.8235, indicating respondents "seldom" understand hardware functions, suggesting some knowledge of computers. The second statement, "I find it easy to learn something by watching it on the computer screen," had a mean of 3.9294, indicating respondents "seldom" learn by watching, though they use computers for information. The third, "I feel competent in using digital learning resources," had a mean of 3.5059, showing moderate competence. The fourth, "I have enough knowledge of what digital literacy is," with a mean of 3.5119, suggests sufficient awareness but limited full knowledge. The fifth, "I use the computer for learning purposes only," showed a mean of 3.5412, indicating that computers are used for more than just learning. Overall, respondents show familiarity with digital literacy, but their usage is more varied.

Table 3. Response on the Fastest Way to Reach Knowledge

Statement Indicators	N	Mean	Std. Deviation	Descriptive
1. I can find a website that has visited before.	85	3.6588	0.94558	Seldom
2. I know how to use advance search function in website program.	85	3.6000	0.92839	Seldom
3. I know how to figure out if a website can be trusted.	85	3.5000	0.87123	Sometimes
4. The first search result is always the best information source.	84	3.3176	1.12559	Seldom
5. Internet is always the best options in finding information.	85	3.6118	1.16593	Seldom

Table 3 data on respondents' views on the fastest way to reach knowledge revealed that they "seldom" find previously visited websites (mean: 3.6588), use advanced search functions (mean: 3.6000), or trust the first search result (mean: 3.3176). They are "sometimes" aware of website trustworthiness (mean: 3.5000) and generally consider the internet a valuable but not always the best option for finding information (mean: 3.6118). This suggests that while respondents use the internet for learning, they approach online sources with caution and awareness.

Table 4. Respondent's Response on the Potential to be An Effective Tool

Statement Indicators	N	Mean	Std. Deviation	Descriptive
1. .Removing people from contact list is not a challenge to me.	85	3.6471	1.26966	Seldom
2. I know how to change the content that I have share with (e.g., just friends, friends of friends or make it public)	85	4.1176	1.05121	Seldom
3. I report content and groups that I think are inappropriate to the public.	85	3.5059	1.18144	Seldom
4. I know how to make my comments and behaviors appropriate to the online situation.	84	4.1176	1.06247	Seldom
5. I share only the content from a reliable sources.	85	3.9294	1.26966	Seldom

Table 4 data on respondents' potential to be an effective tool revealed that they "seldom" remove people from their contact list (mean: 3.6471), change the content they share (mean: 4.1176), or report inappropriate groups (mean: 3.5059). However, they are more likely to make their online comments appropriate (mean: 4.1176) and share content from reliable sources (mean: 3.9294). This suggests that respondents tend to manage their online presence with caution, focusing on sharing trustworthy information and maintaining appropriate interactions.

Table 5. Respondent's Response on Enhancing Exchange Culture

Statement Indicators	N	Mean	Std. Deviation	Descriptive
1. Internet makes the society more civilized.	85	4.2588	0.86124	Never
2. Spreading news through internet is faster rather than the traditional news.	85	4.4118	0.91670	Never
3. Internet news are fast from the newspaper.	85	4.3529	0.89584	Never
4. Internet help me access the book faster than what the library can offer.	84	4.2353	0.92127	Never
5. Internet made me visit places that I cannot visit in person.	85	4.8353	3.19913	Never

Table 5 data on respondents' perspectives regarding the enhancement of exchange culture revealed several insights. The statement "The internet makes society more civilized" had a mean of 4.2588, indicating that respondents "Never" believed the internet contributes to a more civilized society. Likewise, with a mean of 4.4118, respondents "Never" agreed that news spreads faster through the internet than traditional methods, and the statement "Internet news is faster than newspapers" also received a similar response (mean: 4.3529), showing a preference for traditional news sources. The statement "The internet helps me access books faster than the library" had a mean of 4.2353, with respondents "Never" viewing the internet as a faster means of accessing books than a physical library. Interestingly, the statement "The internet has allowed me to visit places I cannot visit in person" had a higher mean of 4.8353, but respondents still "Never" considered the internet a viable substitute for physical travel or visits. Overall, the data suggest that while respondents acknowledge the internet's role in information dissemination, they do not perceive it as a replacement for traditional sources or experiences.

Table 6. Respondent's Response on the Endless Freedom to People

Statement Indicators	N	Mean	Std. Deviation	Descriptive
1. I can share whatever I want to in internet.	85	3.7412	1.01363	Seldom
2. I can download books or movies on the internet without paying anything.	85	3.5765	1.25714	Seldom
3. I can order food and do shopping online.	85	4.1882	0.91929	Seldom
4. I can search for information that no one can limit me.	85	3.8235	1.11458	Seldom
5. I can communicate using internet anytime.	85	4.1294	0.93590	Seldom

Table 6 The data on respondents' perceptions of the internet as a source of "endless freedom" revealed interesting patterns. The statement "I can share whatever I want on the internet" had a mean of 3.7412, indicating that respondents "Seldom" felt free to share any information online. Similarly, the statement "I can download books or movies on the internet without paying" received a mean of 3.5765, suggesting that respondents "Seldom" used the internet for downloading content for free, yet saw its potential as a cost-saving tool. The statement "I can order food and shop online" had a higher mean of 4.1882, indicating that respondents occasionally used the internet for shopping and food orders. The statement "I can search information with no limits" received a mean of 3.8235, with respondents "Seldom" feeling restricted in their ability to search online. Lastly, the statement "I can communicate using the internet anytime" had a mean of 4.1294, suggesting that respondents "Seldom" had any limitations in their ability to communicate online, highlighting the internet's role in maintaining connectivity with others. Overall, the data suggest that while respondents perceive some freedom in using the internet, they are aware of certain limitations.

This study draws upon two primary theories: Social Information Processing Theory and the Theory of Equations Media, to explore the impact of social media exposure on students' academic performance. These theories provide a robust foundation for understanding how digital interactions influence learning outcomes and interpersonal behavior in academic contexts. (Kreijns et al., 2024). Social Information Processing Theory (SIP) underscores the development of online interpersonal relationships. The theory posits that while online communication lacks the nonverbal cues of face-to-face interactions, it compensates by utilizing written and visual content to build meaningful

relationships over time. Walther emphasized that the richness and quality of online communication can eventually match face-to-face interactions if given sufficient time. Recent studies support this, demonstrating that students frequently engaging in social media platforms develop unique communicative skills. However, this extended engagement often detracts from academic priorities, as the time spent on these platforms reduces the focus on academic tasks (Dwivedi et al., 2021). (R.-Q. Sun et al., 2023), observed that extended internet use, while beneficial for information access, can result in addiction, disrupting study routines and academic discipline. Thus, SIP theory is instrumental in understanding the balance between the constructive and disruptive aspects of social media usage among students (Singh & Hong, 2023).

Byron Reeves and Clifford Nass's Theory of Equations Media proposes that people respond to media as if it were alive. This theory suggests that electronic media often elicits emotional and cognitive reactions similar to real-life interactions. The personification of digital platforms, particularly social media, amplifies students' engagement, leading them to prioritize online interactions over academic responsibilities (Jitsaeng et al., 2024); (Ansari & Khan, 2020). Supporting research reveals that this phenomenon explains why platforms like Facebook significantly impact academic performance, particularly among extroverted students prone to distraction (Koessmeier & Büttner, 2021). Meanwhile, (Sivakumar et al., 2023) found that, while media use can foster connectivity and group learning, excessive reliance on non-academic content often leads to declining academic achievements. The Theory of Equations Media, therefore, provides insight into students' behavioral tendencies in response to social media's immersive nature. Moreover, Studies reveal a dual role of social media and online platforms in academic performance. While Sampath (Fabriz et al., 2021), highlight the positive impacts of internet use in facilitating research and access to educational materials, overuse of social media, especially for non-educational purposes, has been consistently linked to poorer academic outcomes. Similarly, (Ahmed et al., 2020) demonstrated that while smartphones are vital tools for academic purposes, their predominant use for social networking adversely affects focus and performance.

Conclusion

The study revealed that the majority of respondents were aged 16-18 years and female, with a strong engagement in digital technology. Their familiarity with digital tools and online platforms significantly shapes their understanding of computer usage. The findings emphasize the critical role of universal digital literacy in fostering an understanding of computers as valuable sources of information. Among the various digital tools, the internet, particularly websites, was identified as the fastest and most effective means of accessing knowledge. The study also highlighted the importance of familiarizing oneself with websites and critically evaluating their reliability to ensure the accuracy of the information encountered online. Furthermore, the internet was recognized as a powerful tool for information retrieval, offering users the ability to modify, share, and manage content, as well as communicate freely. It also facilitates global cultural exchange, enabling the swift spread of information, connecting people worldwide, and supporting the exploration of diverse cultures and civilizations. With its vast capabilities, the internet provides users with endless freedom to engage in activities such as shopping, downloading content, and connecting with others, revolutionizing how people access and interact with knowledge. To optimize their academic use of the internet, students should prioritize online sources for educational purposes and ensure their internet usage aligns with their academic goals. It is crucial that students critically assess the credibility of the information they find online, avoiding dependence on a single source. They should consult multiple trusted websites to cross-check information, prioritizing reliable and authoritative sources. Moreover, students should effectively utilize search engines like Google or Bing to expand their research and gain varied perspectives. To safeguard their privacy and improve their browsing experience, it is essential to clear browsing history, cookies, and cache regularly. Students should also remain cautious of their search

activities, as search engines may collect data on their online behavior. Finally, it is recommended that a follow-up study be conducted with a larger and more diverse sample of respondents to further validate and enrich the insights gained from this research.

Conflicts of Interest

The authors declare no conflict of interest.

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