



UMT Education Review (UER)

Volume 4 Issue 2, Fall 2021

ISSN(P): 2616-9738 ISSN(E): 2616-9746

Journal DOI: <https://doi.org/10.32350/uer>

Issue DOI: <https://doi.org/10.32350/uer.42>

Homepage: <https://journals.umt.edu.pk/index.php/uer>

Article: **Measuring the Information Literacy Skills of Secondary School Students of Bhimber, Azad Jammu and Kashmir (AJK)**


Author(s): Muhammad Waqas¹, Farkhunda Rasheed Choudhary²

Affiliation: ¹Government Inter Science College, Bhimber, Pakistan
²Allama Iqbal Open University, Islamabad, Pakistan

Article DOI: <https://doi.org/10.32350/uer.42.01>

Article History: Received: September 7, 2021
Revised: December 8, 2021
Accepted: December 15, 2021
Available: December 31, 2021

Citation: Waqas, M., & Choudhary, F. R. (2021). Measuring the information literacy skills of Secondary School Students of Bhimber, Azad Jammu and Kashmir (AJK). *UMT Education Review*, 4(2), 01–16.

Copyright Information:  This article is open access and is distributed under the terms of [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

Journal QR



Article QR



Muhammad Waqas

Indexing



A publication of the
Department of Education, School of Social Sciences and Humanities,
University of Management and Technology, Lahore, Pakistan

Measuring the Information Literacy Skills of Secondary School Students of Bhimber, Azad Jammu and Kashmir (AJK)

Muhammad Waqas¹ and Farkhunda Rasheed Choudhary^{2*}

¹Government Inter Science College, Bhimber, Pakistan

²Allama Iqbal Open University, Islamabad, Pakistan

Abstract

Information literacy is defined as a set of skills required to find, retrieve, analyze, and use information. Due to the knowledge explosion and the availability of a vast amount of information resources, this era is known as the “information era”. In the 21st century, mere replication of knowledge is not enough rather the survival of the personnel is contingent with the practice specific information literacy skills. Information literacy skills empower individuals by allowing them to develop their critical thinking skills, enabling them to become independent lifelong learners. This study was conducted to measure the information literacy skills of secondary school students. The sample comprised 125 secondary school students of Bhimber, Azad Jammu and Kashmir (AJK). An online test was used to measure the level of information literacy of students. The test comprised 32 items. The time limit of the test was 60 minutes. The data was analyzed using descriptive statistics. It is important to mention that out of 125 students, only 5 students attained a high score ranging between 80.6 and 90.5. These students finished their test within 41-50 minutes. Whereas the rest of the students scored less than 50%. It was concluded that the selected secondary school students could not use technology in their day-to-day activities. It is recommended that students should be provided with opportunities to use technology in their day-to-day life at school level. Moreover, it is suggested here that a comprehensive course on information literacy skills and their practical applications should be mandatory at secondary level.

Keywords: critical thinking skills, information literacy skills, lifelong learning

*Corresponding Author: farkhunda.rasheed@aiou.edu.pk

Introduction

Every aspect of life is influenced by far-reaching progress in information. There are numerous ways to spot need, assessment, and utilization of required information. Several researchers and organizations have put forward different definitions, roles and models of information literacy. For example, a person equipped with various skills of information literacy can easily describe the significance of information, select applicable terminologies, identify authentic sources of information, and analyze relevancy and quality of different pieces of information (Zeeshan, [2020](#); Annet, [2007](#)). Being an essential skill, information literacy plays its core role in building modern societies. Different terminologies like research skills, information skills, digital literacy and information fluency have been adopted to explain information literacy (Jabeen et al., [2014](#)). Students can achieve their desired goals by utilizing these skills successfully. Information literacy skills being a core part of teaching learning process are of high importance for students and teachers. These skills are useful for fulfilling their research needs and manage assessment and use of information (Bruce, [2003](#)). According to Naveed ([2018](#)) information literacy is a set of skills which enable individuals to decide which piece of information is needed, locate desired piece of information, assess its authenticity, and then use it for decision-making process. In other words, it depends upon the knowledge of individuals to locate, assess, and interpret need and use of information (Rafiq, et al., [2020](#)). With the passage of time these skills are getting more advanced and reformed. According to Batool ([2016](#)) proper training can foster likely usage of these skills. When focus our attention on District Bhimber which is one of leading districts in education, every year, a large number of students from this district secure top positions in different boards and university exams. District Bhimber being rich of the most talented students of Azad Kashmir, might be thought as a hub of skilled students at secondary level of education. Thus, our present work was designed to assess information literacy skills of students of this district.

The Literature Review

We live in the era of information and globalization (Tai, et al., [2017](#)). Curiosity and revolution of information is the major phenomenon of the 21st century after revolution in industry. Zurkowski ([1974](#)) was the first person

to introduce the term “information literacy” (IL) in [1974](#). According to him information literacy is a set of skills with which people can apply different technologies to identify, select and analyze the piece of information needed (Marcus, [2019](#)). People can have access to the required information by plenty of sources and because of abundance of these sources and methods to access the information, information literacy has become a prerequisite. Information is placed under the umbrella of digital literacy like other forms of literacy such as media literacy, computer literacy and internet literacy. Principally, it describes ways through which by using new technologies one can make easy access to information and can deal with information in novel forms (Marcus, [2019](#)). Bent and Stubbing ([2011](#)), while discussing seven pillars of information literacy, stated that information literacy being a general term consists of different skills of audiovisual media techniques to get and manage information. Rehman ([2009](#)) differentiated the terms, library instruction, bibliographic assistance, and user education from information literacy as it has been used in a wider framework of information identification and uncovering interrelated sources to fulfill one’s information need so that individuals may become an informed citizen. According to Boekhorst ([2004](#)) information resourcing, information processing and information and communication technology are the main operating concepts of information literacy. There must be a proficient use of technology in information resourcing and digital media can play a very significant role in this context (Marcus, [2019](#)). Fresh college students need different skills of information literacy and many of them seem to have no such type of skills for a successful college life. High school librarians do their best to develop information literacy skills among students (Scott & Jill, [2017](#)). They constantly engage themselves with those teachers who show no interest in raising information literacy skills of their students and with those students who don’t try to evaluate sources of information which they find on the internet (Varlejs & Stec, [2014](#)). This level of confidence fades for many fresh students and library anxiety triggered by a lack of information literacy skills. Whereas, there are many students who willingly opt out of attending training sessions of information literacy skills. The students who keep more experience of skills of library research are supposed to successfully utilize the library databases but in actual it has been disproven (McPherson, [2015](#)). This attitude of new students for

utilization of library databases remains active throughout their undergraduate classes serving as an indicator of stunted information literacy skills (Scoyoc & Cason, [2006](#)).

Thus, it is mandatory to teach students these skills. Those students who have a little bit of these skills first turn to Google and then Wikipedia in search of their desired pieces of information without knowing limitations associated with these search engines. Even students of Ph.D. level before using library resources first use these unreliable information sources and cannot differentiate among these electronic resources (Williamson, et al., [2008](#)). They have lack of experience of Boolean and other advanced search strategies which may improve their search results. Similarly, those students who come to library just because they receive service and are familiar with electronic gadgets, have no idea what type of search tools exist and they reject these tools because of the difficulty they face while using these tools (Bloom & Deyrup, [2012](#)). They might feel easy when using internet, but this familiarity cannot turn into necessary information literacy skills. They struggle in deciding the point where they start searching something about a particular topic, narrowing comprehensive topic hunting and determining the reliability of internet sources. This problem is intensified by faculty when they believe that students will develop these skills even though they cannot judge how their students will get this knowledge (Scott & Jill, [2017](#)). At the start of the age of digital information, it was noticed that students of undergraduate level started use of library for research purposes and sought guidance from those who felt comfortable and used some familiar information resources like newspapers and encyclopedia ignoring their disadvantages. This decreased the skill of students to locate, analyze and synthesize and proper usage of the required information (Fitzgerald, [2004](#)). At the time when faculty believed that students would show keen interest in developing information literacy skills independently, students demonstrated that if these skills are not part of their assignment, then they have no interest in their development. Faculty must encourage students to attend information literacy skills training sessions because these skills can improve their academic performance (Wong & Webb, [2011](#)).

Some risks, which the internet encompasses for its users having low level of information literacy skills, are their failure to endorse the

genuineness of the content, the articles which are published by anonymous publication house. These students accept fabricated and unfair information as true. So, information literacy skills become a multidimensional factor which defines ways to of search of information, its evaluation and use in academic and daily life (Ahmet et al., [2017](#)).

Information literacy embodies an inclusive conception and comprises of four domains. These are 1) defining need of information 2) access to the desired piece of information, 3) using that information 4) and its moral and authorized usage (Adiguzel, [2011](#)). The defining need of information dimension symbolizes features of the necessary information. Second dimension explains how the desired piece of information can be searched and obtained in the best possible way. Third dimension includes different and effective tactics to utilize information in a proper way. Last dimension explains legal usage of different pieces of information covering awareness of copyright to avoid any legal action (Demiraslan, [2015](#); Tsai et al., [2012](#)). A strand which is dominant about information literacy in academic literature is that it is an absolute social and personal skill. Research highlights that information literacy skills bring multidimensional benefits for students and these benefits may be at macro-level to transform societies. Information literacy serves as a catalyst or a promoter for transforming today's society into the learning society of future (Batool & Mahmood, [2016](#)).

Statement of Problem

Information literacy makes student to realize their objectives, expand their knowledge and capability and play multi-disciplinary role in the diverse society. Students equipped with information literacy can approach the required information, accurately and timely. They can evaluate information competently and use information precisely and productively. To enhance the research quality and growth of student knowledge, information literacy is very necessary. No such type of study has been carried out to assess and to develop the information literacy skills among the students of Kashmir. Condition of Government institutions throughout the state of Azad Jammu and Kashmir is worst because of lack of enrolment of the most talented students. Thus, our target was to assess information literacy skills of students at government institutions of district Bhimber, State of Azad

Jammu and Kashmir. Such type of programs for assessing and evaluating the skills of students about information literacy are required to be designed and formulated until the required skill and proficiency is achieved. This study will play a significant role in determining the level as well as factors affecting information literacy skills of students.

Objectives

Following were the objectives of the study:

- 1.To assess information literacy skills of secondary students at Government institutions of Azad Kashmir
- 2.Identify factors influencing information literacy skills of secondary students at Government institutions of Azad Kashmir

Research Questions

- 1.What are the information literacy skills of secondary students at Government institute of Azad Kashmir?
- 2.What are the factors influencing information literacy skills of secondary students at Government institutions of Azad Kashmir?

Methodology

The researchers decided to use quantitative research methods because they wanted to quantify the level of student's information literacy skills. Therefore, it was decided to use survey method for our data collection because it could give current situation of the problem.

Instrument

Data about information literacy was collected from the participants using an online information literacy tool available at www.digitalliteracyassessment.org. It is an online standardized tool and has been used in many studies across the world. There were 32 items regarding information literacy. Students were allowed to attempt the questions within 60 minutes.

Due to Covid-19, there was uncertain situation about the opening of educational institutions. Therefore, convenient sampling was used to select

the participants. Moreover, due to availability of limited computers, only one college was conveniently selected.

Sample

Prior to sample selection, the availability of computers was ensured. For this study, the students of Government Inter College Dhandar Kalan District Bhimber were considered as the population of our work. Owing to the limitations of computers, a sample of 125 students of science and arts from Government Inter College Dhandar Kalan District Bhimber was randomly selected for the present study.

Data Analysis

Students were asked to attempt the online test regarding information literacy. The scores were also obtained online. The student's scores along with time to attempt the online questionnaire were recorded manually and data were analyzed using SPSS. For data analysis, frequencies, percentages and descriptive statistics were used.

Section-A

Table 1

Overall Analysis of Test Scores

	N	Range	Minimum	Maximum	Mean	Std. Deviation
score	125	83.10	.00	83.10	27.2480	20.18527
time	125	41.00	14.00	55.00	34.9600	9.69902
Valid N (listwise)	125					

Table 1 shows the range of scores in percentages. It shows that there was minimum 0.00 and maximum 83.10 percentage score obtained by the students. The mean value of score percentages was $M=27.24$ with standard deviation $SD=20.185$.

Table 2*Range of Time to Attempt the Information Literacy Tool*

Variable	Time Range(minutes)	Frequency	Percent
Time Range	11-20	15	12.0
	21-30	15	12.0
	31-40	55	44.0
	41-50	35	28.0
	51-60	5	4.0
	Total	125	100.0

Table 2 shows the range of time taken by students to attempt the given information literacy tool. It is apparent that 44% students attempted it with 31-40 minutes.

Table 3*Score Range to Attempt the Information Literacy Tool*

Variable	Score Range (in %)	Frequency	Percent
Score Range	0-10.5	15	12.0
	10.6-20.5	55	44.0
	20.6-30.5	5	4.0
	30.6-40.5	25	20.0
	40.6-50.5	10	8.0
	50.6-60.5	5	4.0
	60.6-70.5	5	4.0
	80.6-90.5	5	4.0
	Total	125	100.0

Table 3 shows the obtained score range of students after attempting the information literacy tool. It shows that 55 students obtained within 10.6-20.5%, whereas only 5 students could get scores between 80.5-90.5 percent. However, no student could score between 70.5-80.5 percent score range.

Table 4
Cross Tabulation of Range of Time and Score

Variable	Score Range (%)								Total	
	0-10.5 20.5	10.6- 20.5	20.6- 30.5	30.6- 40.5	40.6- 50.5	50.6- 60.5	60.6- 70.5	80.6- 90.5		
TimeRange (Minutes)	11-20	10	5	0	0	0	0	0	0	15
	21-30	5	5	0	5	0	0	0	0	15
	31-40	0	30	5	5	5	5	5	0	55
	41-50	0	15	0	15	0	0	0	5	35
	51-60	0	0	0	0	5	0	0	0	5
Total		15	55	5	25	10	5	5	5	125

Table 4 shows the cross tabulation of time range and score range. It shows that most of the students could complete their test within 31-40 minutes with scores ranging from 10.6%-70.5%. However, 05 students could get high score between 80.6-90.5 within 41-50 minutes. It shows that the higher scorers took more time to solve the items.

Section-B

Table 5
Economic Status of Parents of Students

Variable	Income Range	Frequency	Percent
Economic Status	1000-10000	56	44.8
	11000-20000	53	42.4
	21000-30000	13	10.4
	31,000-40,000	3	2.4
	Total	125	100.0

Table 5 shows the economic status of students' families. It shows that maximum students had low economic background in the government school, AJK.

Table 6*Factors Affecting the Level of Information Literacy*

Factors	Responses	Frequency	Percent
Laptop	Yes	12	9.6
	No	113	90.4
	Total	125	100.0
Computer	Yes	18	14.4
	No	107	85.6
	Total	125	100.0
Smart Phone	Yes	45	36.0
	No	80	64.0
	Total	125	100.0
Educated Father	Yes	91	72.8
	No	34	27.2
	Total	125	100.0
Educated Mother	Yes	62	49.6
	No	63	50.4
	Total	125	100.0
Internet	Yes	18	14.4
	No	107	85.6
	Total	125	100.0
Comfortable in English Language	Yes	12	9.6
	No	113	90.4
	Total	125	100.0
Interest in Information Browsing	Yes	65	52.0
	No	60	48.0
	Total	125	100.0

Table 6 shows factors that could affect the information literacy level of the students. It shows that 9.6% students had laptop in their homes, only 14.4 % had a personal computer in their homes, 36% students had smart phones in their homes. 72.8% students had educated father, mothers of 50.4% students were either less educated or not educated. Only 14.4% students had internet at their homes while 90.4% students were not

comfortable in English language while exploring information from digital media. Interestingly, 52% students said that they were interested to browse information from digital media.

Discussion

In this study, the information literacy skills of secondary school science and arts students were measured. The results show that students took more time in attempting the inventory. Most of the students got low scores. Morrison and Barton (2018) also found limited digital literacy among middle school students. Cooper (2002) also observed that students had limited online navigation skills. Cooper (2002) recommended that teachers must teach students to skim through online reading material. The second part of the analysis was done after administering the researchers made questionnaire regarding factors affecting information literacy skills. It was found that the poor economic status of students could be one of the factors that hinders acquisition of information literacy skills. Similarly, the lack of computing devices such as personal computer, laptop and smart phone were also other factors affecting information literacy skill. Mark (2016) stated that students must be encouraged to embrace digital tools, such as touch screen as these are the “tools of their culture, these are tools that will be critical for their school readiness and success” (Marks, 2016). The results show that although students had interest to browse information from digital media. However, owing to less fluency in English language was found as one of the main factorsto hinder them in acquiring information literacy skills. This finding is in line with Hutchinson et al. as cited by Laretive (2019) that difficulties such as limited knowledge of spelling, problems with typing and putting together search queries and navigating sites.

Conclusion

Since we are living in the digital era, information literacy skills are the need of the hour. To make informed decisions and produce digital content, students must have information literacy skills. However, poor economic background, less command on the English language, and non-availability of digital gadgets hinder students from acquiring information literacy skills despite their overarching interest in usingdigital media to improve these skills.

Recommendations

It is recommended that the students are provided with digital gadgets so that they can acquire information literacy skills. There is also a need to improve the English language skills of the students. They should be provided a computer laboratory so they can improve their information literacy. It will enable them to engage in active and self-directed learning.

References

- Adiguzel, A. (2011). The development of the scale of information literacy. *Dicle University Journal of Ziya Gokalp Education Faculty*, 17, 15-28.
- Ahmet, N. C., Nihal, D. Y., & Isil, K. Y. (2017). Information literacy and digital nativity as determinants of online information search strategies. *Computers in Human Behavior*, 70, 1-9. <https://doi.org/10.1016/j.chb.2016.12.050>
- Annet, K. (2007). The effect of information literacy on the utilization of electronic information resources in selected academic and research institutions in Uganda. *The Electronic Library*, 25(3), 328-341. <https://doi.org/10.1108/02640470710754832>
- Batool, S. H., & Mahmood, K. (2016). Teachers'conception about information literacy skills of school children. *Pakistan Journal of Information Management and Libraries*, 13, 1-6.
- Bent, M., & Stubbings, R. (2011). The SCONUL seven pillars of information literacy. In M. Bent, & R. Stubbings, *The SCONUL seven pillars of information literacy* (pp. 1-14). SCONUL working group on information literacy.
- Bloom, B. S., & Deyrup, M. (2012). The truth is out: how students really search. *Proceedings of the charleston library conference* (p. 7). Purdue e-pubs.
- Boekhorst, A. K., & Britz, J. J. (2004). Information literacy at school level: A comparative study between the Netherlands and South Africa. *South African Journal of Library and Information Science*, 70(2), 63-71. <https://hdl.handle.net/10520/EJC61168>

- Bruce, C. (2003). Information literacy as a catalyst for educational change: A background paper. *International Information Literacy Conferences and Meetings*, 1-17. <https://eprints.qut.edu.au/4977/>
- Cooper, L. (2002). A case study of information-seeking behavior in 7-year-old children in a semistructured situation. *Journal of the American Society for Information Science and Technology*, 53(11), 904–922. <https://doi.org/10.1002/asi.10130>
- Demiraslan, C. Y. (2015). Predicting college students'online information searching strategies based on epistemological, motivational, decision-related, and demographic variables. *Computers & Education*, 90, 54-63.
- Fitzgerald, M. A. (2004). Making the leap from high school to college . *knowledge Quest*, 32(4), 19-24.
- Jabeen, M., Yun, L., Rafique, M., & Tahir, M. A. (2014). Information literacy in academic and research libraries of Beijing, China: Practices, methods and problems. *Information Development*, 32(3),1-13. <https://doi.org/10.1177/0266666914562845>
- Laretive, J. (2019). Information literacy, young learners and the role of the teacher librarian, *Journal of the Australian Library and Information Association*, 68(3), 225-235. <https://doi.org/10.1080/24750158.2019.1649795>
- Marcus, L. (2019). An approach to digital literacy through the integration of media and information literacy. *Media and Communication*, 7(2), 4-13. <https://doi.org/10.17645/mac.v7i2.1931>
- Marks, L. (2016). Teachers, parents urged to encourage young children with digital devices. *ABC News*. <http://www.abc.net.au/news/2016-10-06/parents-teachers-urged-to-engage-children-digital-technology/7911044>
- McPherson, M. A. (2015). Library anxiety among university students: A survey. *International Federation of Library Associations and Institutions*, 41(4), 317-325.
- Morrison, R., & Barton, G. (2018). Search engine use as a literacy in the middle years: The need for explicit instruction and active learners. *Literacy Learning: The Middle Years*, 26(3), 37–47.

- Naveed, M. A., & Rafique, F. (2018). Information literacy in the workplace: A case of scientists from Pakistan. *Libri*, 68(3), 247-257. <https://doi.org/10.1515/libri-2018-0019>
- Rafiq, M., Ali, S., & Khan, M. T. (2020). Information literacy instructions in university libraries of Lahore, Pakistan: Practices and Methods. *Library Philosophy and Practice*, 4511, 1-25.
- Rehman, S., & Alfaresi, S. (2009). Information literacy skills among female students in Kuwaiti high schools. *Library Review*, 58(8), 607-616. <https://doi.org/10.1108/00242530910987091>
- Scott, L., & Jill, M. (2017). Factors influencing information literacy competency of college students. *The Journal of Academic Librarianship*, 43(5), 443-450. <https://doi.org/10.1016/j.acalib.2017.07.005>
- Scoyoc, A. M., & Cason, C. (2006). The electronic academic library: Undergraduate research behavior in a library without books. *Libraries and the Academy*, 6(1), 47-58. <https://doi.org/10.1353/pla.2006.0012>
- Tai, K. Y., Mei, L. L., & Ying, K. L. (2017). Understanding factors influencing information communication technology adoption behavior: The moderators of information literacy and digital skills. *Computers in Human Behavior*, 71, 196-208. <https://doi.org/10.1016/j.chb.2017.02.005>
- Tsai, M. J., Liang, J. C., Hou, H. T., & Tsai, C. C. (2012). University students' online information searching strategies in different search contexts. *Australasian Journal of Educational Technology*, 28(5), 881-895.
- Varlejs, J., & Stec, E. (2014). Factors affecting students information literacy as they transition from high school to college. *School Library Research*, 17, 1-23.
- Williamson, K., Bernath, V., Wright, S., & Sullivan, J. (2008). Research students in the electronic age: Impact of changing information behavior on information literacy needs. *Communications in Information Literacy*, 1(2), 47-63. <https://doi.org/10.15760/comminfolit.2008.1.2.9>
- Wong, S. H., & Webb, T. D. (2011). Uncovering meaningful correlation between student academic performance and library material usage.

College & Research Libraries, 72(4), 361-370. <https://doi.org/10.5860/crl-129>

Zeeshan, M., Idrees, H., & Siddique, N. (2020). Information literacy skills among students of Lahore University of Management Sciences (LUMS). *Library Philosophy and Practice*, , 1-15.

Zurkowski, P. G. (1974). *The Information Service Environment Relationships and Priorities* [Related Paper No. 5]. <https://files.eric.ed.gov/fulltext/ED100391.pdf>