Information Technology Literacy Impact on Research Results Publication

by M. Ichsan Ali

Information Technology Literacy Impact on Research Results Publication

Muhammad Ichsan Ali [a], Andi Anto Patak [b,*], Bakhrani Rauf [a], Amirullah Abduh [b], Muhammad Tahir [b]
Yasdin [a], Samuel Akpan Bassey [c], Zainuddin Hassan [d], Nurwahidah [e], Nonny Basalama [f]

[a] *Faculty of Engineering, Universitas Negeri Makassar, Makassar, 90221, Indonesia*
[b] *English Department, Faculty of Languages and Literature, Universitas Negeri Makassar, Makassar, 90221, Indonesia*
[c] *Department of Philosophy, University of Calabar, Cross River State, Nigeria*
[d] *Faculty of Social Sciences & Humanities, Universiti Teknologi Malaysia (UTM), 81310, Skudai, Johor, Malaysia*
[e] *Faculty of Arts and Design, Universitas Negeri Makassar, Makassar, 90221, Indonesia*
[f] *Faculty of Literature and Culture, Universitas Negeri Gorontalo, Gorontalo, Indonesia*
Corresponding author: *andiantopatak@unm.ac.id

Abstract—Information technology literacy highpoints the individual reputation in adaptation to searching and accessing information effectively. A lecturer needs to find the required information, evaluate and use information literacy wisely. This research applied a case study using online questionnaire. The main instrument in this study was based on the Association of College & Research Libraries (ACRL) standard entails that research subjects are expected to find out more than just how to obtain information. Research subjects also understand the limitations of data usage, and they know how to organize the information. This study explores the impact of lecturers' literacy on information technology and research results in the International Journal. The lecturers' literacy on information technology was described and interpreted by finding out the highest frequency linked with the publication of research results conducted through previous literature studies. Lecturers' literacy on information technology in this study is concluded as good. Informants can determine the nature and scope of the information needed. Research subjects have sufficient skills in accessing the required information effectively and efficiently. Research subjects understand the importance of critically evaluating information and its sources and incorporating selected information into a knowledge base and value system. Individually or as members of a group, informants can use information effectively to fulfill certain objectives. The researchers recommend that senior lecturers investigate and build stronger information literacy skills in order to improve the amount and quality of research results published.

I. INTRODUCTION

Lecturers' literacy on information technology highlights the importance of a lecturer being adept at searching and accessing information effectively [1]–[3]. Although lecturers know how to find the information they need, they must also learn to evaluate it and use it wisely [4]. Information literacy is an essential set of knowledge and skills that must be had in a work environment that is always struggling with information every day. The rapid development of technology and a large amount of information available make information literacy a critical skill. The variety of media used to contain information is a challenge for evaluating, filtering, understanding, and determining the information needed.

Information literacy should be considered a significant part of a learning character and a key performance characteristic for an organization [5]. However, it should be noted that according to Breivik [6], current university graduates are less prepared to face the world of information than students from previous generations. With the convenience obtained through computers, the internet, and the ability to use information retrieval tools, many college graduates are too quickly satisfied with the information they get at once without considering the accuracy, reliability, and relevance of the information they find.

Likewise, Oman [7] stated that information literacy taught in an academic environment is insufficient for applying the work world. There is a growing awareness among company leaders of the importance of hiring employees who can

manage information effectively. Ironically, the information explosion is not directly proportional to the information literacy knowledge of existing graduates. The ease of information can impact traditional models of information-seeking attitudes, emphasizing the importance of evaluating search results' relevance [8]. Lecturers become too dependent on the internet to meet information needs, regardless of the accuracy of the information obtained. The main attraction for someone finding information is search tools like Google, which save time. After a few minutes of searching the internet, all the required information for a task can be fulfilled. Breivik, Oman, and Thompson mentioned that information literacy is more widely known for finding, evaluating, and using information effectively.

A popular definition of this concept comes from the American Library Association which described information literate people as experts at knowing when they need information, recognizing the information needed to address a specific problem, locating the information needed, evaluating the information, organizing the information, and successfully using the information to solve the situation at hand [9]. This concept is widely recognized in the library community as a must-have ability today. Information literacy programs are developed and implemented by college librarians to nurture these critical skills in students. Information literacy initiatives typically include in-class teaching programs, library workshops, integration of an information literacy part in curricula, and in some cases, entry into college credit programs, which are aimed at developing information literacy and lifelong learning.

The explosion of information facing society today raises whether lecturers' information literacy as part of the academic community is proper. If information literacy can give a lecturer a competitive advantage in research, this can encourage to succeed in the future [10]. Information literacy will make it easier for a lecturer to independently conduct research or study activities wherever they are and are currently interacting with various information. This ability will affect scientific writing as a form of publication of research results because of information literacy skills [11]. A lecturer can think critically and logically and does not easily believe the information obtained, so it is necessary to evaluate it before using it.

Information literacy encompasses the ability to act effectively as part of an information society [12]–[14]. If lecturers have an adequate information literacy level, they will know more than just how to obtain information. A lecturer must also understand limitations and needs, such as learning how to use data and how to organize and communicate their data. It involves critical thinking processes, personal and professional ethical awareness, evaluating information, conceptualizing information needs, collecting data, interacting with professionals [15], and using existing knowledge to solve decision-making and research. This information-based process is also essential in shaping learning character that needs to be supported by an information technology infrastructure.

Human resources as academic staff in Higher Education need serious attention so that a lecturer can work excellently and professionally for sustainable education [16]. Lecturers as teacher educators are required to continue developing

expertise and skills in line with the development of science and technology [17], [18]. Lecturers, as potential resources, are necessary to continue developing knowledge and skills following changes in science and technology. Information literacy is needed to publish research results that can increase and quality and develop information and communication technology. The rate of lecturers as part of potential human resources is decided by how they can improve their abilities, skills in performance through experience, training, and motivation from the leadership. The performance appraisal carried out for lecturers is necessary to monitor the training success and motivation provision. Performance appraisal systems usually refer to formal and structured measures used as instruments to assess job-related traits, behavior, attendance levels, and work outcomes.

Individual success is defined by Bandura [19] as people can control and carry out the required programs or actions to achieve goals. The skills needed are considered insufficient for success, but trust is also required to use skills effectively. Although individual achievements do not reflect actual skill levels, they do influence the task execution process. Individuals who are often more successful are more likely to succeed in an activity, whereas individuals with low success are more likely to give up easily in challenging activities [20]. In this case, having a high sense of success is just as crucial as having information literacy skills [21]. Thus, factors supporting individual success, such as Education, length of work, and rank, are also considered in looking at the relationship to lecturers' information literacy and their ability to find the criteria required by an accredited journal as a means of publishing research results in this paper.

Lecturers are dealing with a lack of supporting literature for research activities, and only a few publish the research results. If information literacy can give lecturers an edge in a particular research area, it could further develop these skills throughout their lives. Experts also recognize that information literacy is essential for success in today's workplace, but research in this field is relatively sparse [5]. Information literacy levels affect lecturers' performance, whose accumulation will affect the institution's ability to utilize research results. All lecturers need this information literacy competency needs to be internalized by all lecturers to realize that lecturers should have research skills for the institution's progress.

This study was designed to explore the impact of lecturers' information literacy and research results. The research subjects in this study are lecturers who already have a functional level as senior lecturers. This study aims to figure out the level of information literacy that needs to be owned and whether this ability affects the published research publications produced. The most critical investment that an institution may make is human resource development with increased skills and knowledge. The term "information literacy" was first used in the context of the work environment. Zurkowski first introduced information literacy on The National Commission on Libraries and Information Science (NCLIS) in the United States [22]. Zurkowski used the term for private sector service activities that emphasize the need for skills in dealing with the complexities and information problems in the workplace. Zurkowski used the expression information literacy to describe "techniques and

abilities" to utilize various primary information tools and sources to solve their problems [23].

Zurkowski stated that information sources are used in the work environment and the skills required to use primary sources and tools and solve problems [24]. Information literacy is essential in various environments, including within the home [8], corporate research laboratories, and educational institutions [25]. On the one hand, in Education, information literacy is seen as the acquisition and development of a skill set closely related to library literacy and learning methods in a formal context [26]. Information literacy is a strength that is expected to enrich human resource knowledge to suit the needs of the world of work and science development. Information literacy is intended to increase the quality and number of research publications, which have an effect on the nation's progress.

II. MATERIALS AND METHOD

A. Materials

1) Information Technology Literacy of Lecturers: Lecturers are expected to know more than just how to obtain information. They also understand the limitations and need to know how they use data, and they understand how to organize the information. The main questions observed include some indicators created by ACRL. The analyses were measured through a questionnaire. Informants were asked to choose the answer according to the knowledge they had. There is also the respondent's answer is given a score of 4 if the answer is A, a score of 3 if answer B, score 2 if answer C and score 1 if the answer is D. Data measurement was done based on the total score obtained by each respondent per group of research variables.

2) Publication of Research Results: Publications resulting from research activities are means of delivering research results in Education, which is usually published in a use journal used by the community. The Lecturer's knowledge of the international journal reputation is defined as the respondent's interpretation of the publication of research results. The main questions include:

- The suitability of the name with specialization in the field of Education
- Systematics and consistency of writing
- Involving peer reviewers
- Publications are aimed at the scientific community
- Originality in the advancement of Education

Informants were asked to state whether the criteria mentioned above are necessary or not contained in the publication of research results. The informant's answer gave a score of 1 if the answer does not know, a score of 2 if not necessary, a score of 3 if required, and a 4 if necessary. Data measurements were carried out based on the total number of scores obtained by each informant.

B. Method

This research applied a case study design. The researchers describe the findings data obtained to be further interpreted. The main instrument in this study was based on the ACRL standard [27]. The researchers made some modifications based on the characteristics of the informants and the aim of

this study. The instrument was validated in the Publication Center of Universitas Negeri Makassar. Data was collected through online questionnaire. Primary data collection is an essential process in this research. Two phases of data collection were carried out, including a literature study and online questionnaire. The data obtained have been designed for descriptive data and has previously been tested on respondents. This research was conducted to receive relevant information in line with the objectives of the study.

III. RESULTS AND DISCUSSION

This study explores the impact of lecturers' literacy on information technology and research results in an international journal. The lecturers' information literacy collected from the online questionnaire was described and interpreted by finding the highest frequency. Then, it was linked to the publication of research results conducted through previous literature studies.

A. Information Technology Literacy

1) Attitude and scope of information required: The following items measure the lecturers' attitude and the scope of information required:

- Defines required information
- Identify various types, formats, and potential sources of information
- Consider the costs and benefits of seeking the required information
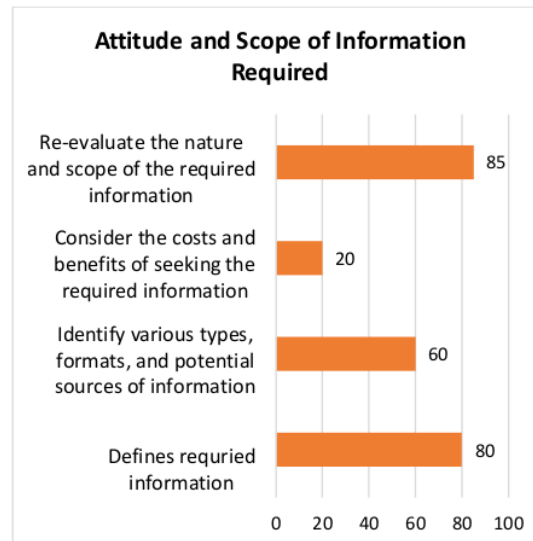- Re-evaluate the nature and scope of the required information

Fig. 1. Attitude and scope of information required

Lecturers have the ability to re-evaluate the nature and scope of the information needed. As many as sixty percent of informants can identify various types, formats, and potential information sources. Fig. 1 shows that eighty-five percent of informants can first formulate their information needs and the rest state that they directly search for information. Informants

determine their information needs then make details about the topics or subjects required so that the right source of data can be determined according to requirements. This method is included in the activity of formulating the required information criteria. Lecturers identify the types and formats of information by knowing how knowledge is produced formally and informally, then processed and disseminated. These activities include understanding the types, knowing how suitable information sources can be found in both printed and electronic forms, and choosing the appropriate format. However, Fig. 1 shows that only twenty percent of informants can consider the costs and benefits of seeking information. This happens because lecturers rarely believe the cost of the information carried out. Initially, when looking for information, the cost in the search process is not a significant consideration. According to the informants, the cost required to find information is not a major consideration.

According to ACRL [27], a person is said to have useful information literacy if he continuously re-evaluates the nature and scope of the information he needs. Re-evaluating the boundaries of knowledge means that the lecturer reassesses his knowledge needs to clarify, correct or redefine the real required questions. This can also be interpreted as describing the criteria used when making choices, such as identifying subjects, keywords, selecting and understanding the form of presentation needed, and determining the location of information sources that match the topic. Thinking critically and adapting to new situations is an essential skill for people who are aware of information literacy.

2) Access the required information: This theme is subject to explore the lecturers' ability in accessing required information effectively that can be measured by the items below:

- Select the most appropriate information retrieval method
- Develop and implement an effective search strategy
- Rediscover information online
- Change the search strategy if necessary
- Quoting, recording, and processing information and its sources

As many as ninety percent of informants can change their search strategy if necessary. Fig. 2 shows that informants stated they would change their search strategy when finding the library's information by asking the librarian. Independence in obtaining information is indeed the focus of information literacy. Still, the tendency to find appropriate information is also needed, so lecturers need to change their search strategy when finding the required information. As many as eighty-five percent of informants could quote, record, and process information and its sources. The necessary process of a person's literacy can be seen through accessing and consuming media content or information source. Hobbs [28] describes the ability to find and organize information concerning information and communication technology development.

Fig. 2 shows that as many as eighty percent of informants could build and implement an effective tracking strategy. To find an appropriate source of information, many informants could develop and implement an effective search strategy. The data in Fig. 2 shows that informants could select the most

relevant search method to find and rediscover the online information needed. This can be seen because seventy-five percent of informants chose indicators using the most appropriate retrieval methods and rediscovering information online.
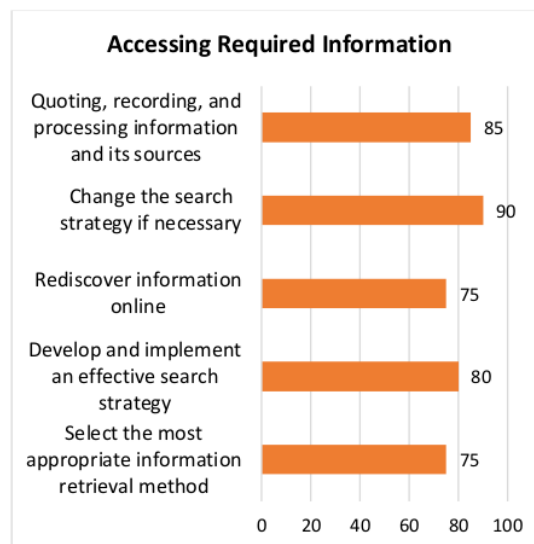

Fig. 2 Accessing required information

3) Evaluate Information Critically and Its Sources

- The ability of lecturers in evaluating the information critically was measure as follows:
- Summarize the main ideas information gathered to be cited
- Use full-text criteria for evaluating information
- Build new knowledge based on previous knowledge
- Determine the impact of new knowledge to reconcile differences
- Proving the truth by expert confirmation

Fig. 3 shows that eighty percent of informants can summarize the main ideas, this can be seen through the use of information sources needed to find out the complete address. Fig. 3 above shows that ninety percent of informants stated that articles in the full-text form are criteria for evaluating information. This answer can be concluded that most informants are responsible for accessing information technology and avoiding misinterpretation in evaluation ideas. The following indicator is constructing new knowledge by comparing it to previous knowledge, which is eighty-five percent to determine differences or contradictions or other unique information, which is also in the same percentage.

Fig. 3 shows that eighty percent of informants conducted discussion activities with experts to evaluate the previous knowledge and compare it with the latest one in the process of evaluating information. Someone who has good information literacy can evaluate the information and its sources by comparing the information obtained with other information to see the information obtained suitability. In addition, it is a means of support and discussion with experts and experts in their fields.
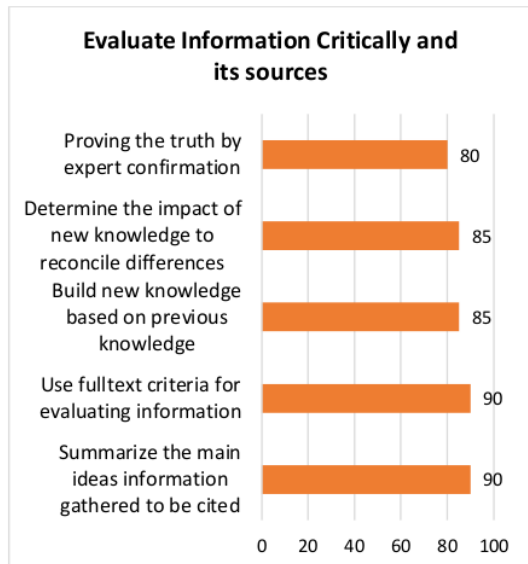
Evaluate Information Critically and its sources

Proving the truth by expert confirmation — 80
Determine the impact of new knowledge to reconcile differences — 85
Build new knowledge based on previous knowledge — 85
Use fulltext criteria for evaluating information — 90
Summarize the main ideas information gathered to be cited — 90

(0 20 40 60 80 100)

Fig. 3 Evaluate Information Critically

4) Individually or as a group member use information effectively to fulfil certain objectives: Information literacy can be measured through the fourth ACRL standard, namely, lecturers' ability to use information effectively. The seventeenth indicator is implied from question number twenty. Informants' answers can be seen in Table 4 below:

Use information effectively to fulfill specific purposes

Communicate performance effectively to others — 85
Uses new and previous information to plan and create special results — 70
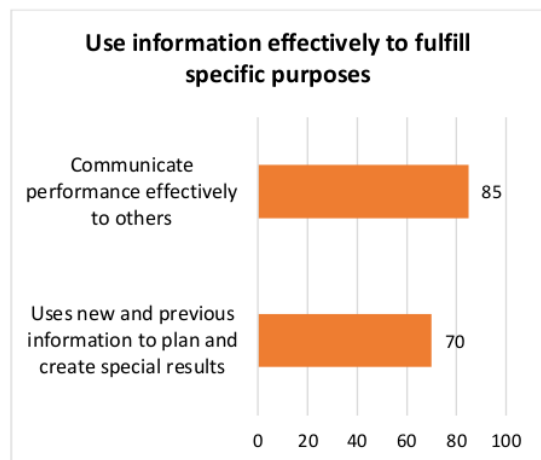
(0 20 40 60 80 100)

Fig. 4 Use information effectively to fulfill specific purposes

The data in Fig. 4 above shows that eighty-five percent of informants said they chose the most appropriate media to communicate their work to others. This is in line with the requirements for someone to be said to be professional, namely being able to communicate effectively, both orally and in writing, good at hearing, having an attractive personality. Hobbs [28] states that the ability to communicate information is the essence of literacy, both in giving and receiving messages. Someone who has information literacy

will effectively communicate his work to others. This can be seen through the selection of media and the format of communication that supports the achievement of the intended objectives. The data in Fig. 4 shows that seventy percent of informants can use information effectively to plan, create, and produce better performance. Information that can be said to be good or accurate can be seen from the source of information. A complete and clear source of information will affect the quality of the information obtained. From Fig. 4 above, it can be seen that the majority of informants chose the closest source in order to obtain the appropriate information. This implies that the lecturer's information literacy is good enough.

5) Respect the publication ethics: The summary of the answers can be seen in the following Fig. 5: The data in Fig. 5 shows that ninety percent of informants choose ResearchGate, Academia, and LinkedIn to publish their preprint publications. This choice is considered appropriate considering that by distributing the preprints, many people can access the work from various places. The above

Respect the Publication Ethics

Value the use of information sources — 90
Follow the ethical policy information sources — 85
Understand the business issues on information technology — 25
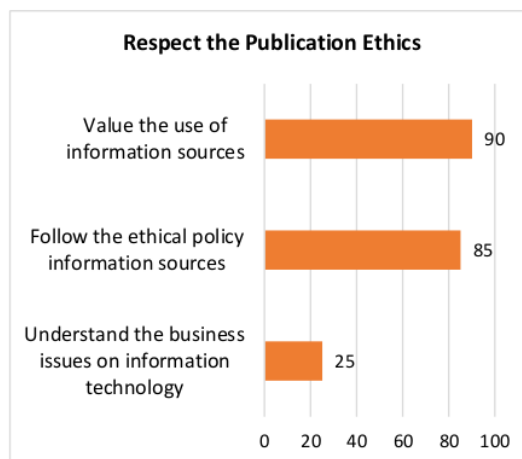
(0 20 40 60 80 100)

Fig. 5 Understand the Publication Ethics

Fig. 5 indicates that lecturers' ability to comply with regulations/laws and institutional and ethical policies related to access to and use of information sources. The informants seem to include the author's name and reference in each work cited. The lecturers show that it is better to include data that refers to where the idea came from. However, lecturers ignore the business aspects of the use of reading sources. This may be due to a lack of legal access that the government waives. Thus, the strong urge to access important information tempts lecturers to access information by downloading articles or books from prohibited websites.

B. Publication of Research Results

The publication of research results in the form of scientific papers is published in journals and can be published in the form of section books or proceedings. This research shows some implicit similarities between the ACRL information literacy standard and the criteria for international publication. The data obtained is presented in Fig. 6 below:

Publication of Research Results

Category	Value
Originality in the knowledge development	75
Publications for global scientific community purpose	55
Peer reviewer engagement	30
Systematic and consistency of writing	35
Determine the type and limits of required information	85

Fig. 6 Publication of research results

Fig. 6 above shows that most lecturers indicated the ability to determine the types and limits of information required to produce originality in knowledge development. However, only half of them could be published in the global scientific community due to a lack of systematic and consistent writing. Besides, only thirty percent of informants involve peer review before sending their work to an international journal.

1) Originality in the knowledge development: The originality demanded by the academic world is not the result of plagiarism or recycling of other people's work [29]–[32]. Recycling other people's work is identical to not acknowledging and respecting academics' goals, and if they are not dealt with firmly, the goal will be distorted, not to develop a science for the benefit of society, but quite the opposite. This plagiarism includes violations of law and ethics, as a sanction for violating the law will not be criminalized or fined, while ethical violations are given social sanctions that are no less severe[33]. Ethics is very important to have a university because it is the heart of the university itself. However, in order to detect uniqueness in writing, an instructor should undertake self-evaluation of creative writing [34].

2) Publication for global scientific community purpose: All research activities of these academics are required to be published in scientific journals. In this case, scientific publications are proof that academics are working. The demands faced by academics in all parts of the world are the globalization of scientific publications. It feels very that the globalization of scientific publications has hit the entire campus in the country. All academics in Indonesia must conduct scientific publications. We have equality in education [35]. It has become an intense pressure. Inevitably, like not like, academics must practice writing scientific papers. The campus must conduct effective training. Encouraging academics to carry out scientific publications becomes a necessity [36]. Academics must be leveraged to be productive

scientific publications. Research should be improved, collaboration should be pursued, international conferences should be encouraged, and publications in scientific journals should be a necessity. Every academic should be led to write papers for the improvement of scientific publications. The campus will be seen from its productivity in scientific research and publications. Campuses in the country cannot be separated from the orientation among academics of a global audience in advancing scientific publications.

3) Peer reviewer engagement: The publication of scientific papers in the journal applies peer review[37]. The management or manager of the journal sets the flow of paper acceptance; namely, the author sends the paper to the journal which then the journal editor submits the paper to peer reviewers. Journal editors are tasked with assessing the feasibility of the paper, whether rejected or forwarded to reviewers of the field of expertise, to provide reviews based on the development of knowledge. This is an ongoing activity among the world's academics.

4) Systematic and consistency of writing: Consistent in terms of systematic writing, in this case, the author is consistent in terms of technical matters. For example, if at the beginning of the article, the author uses the term "academic dishonesty" for the term "plagiarism," then until the end of the article, the author must be consistent. Also, consistency is essential in writing certain words such as place names, and using appropriate language for task and topic [38].The author must consistently build ideas from the introduction, methods, results, discussion to conclusions that reflect the title. The author must be consistent in using reasoning, terms, points of view, controlling variables, problems, objectives, using theoretical foundations, discussions, up to conclusions and suggestions.

5) Determine the type and limits of required information: The ability to determine the type and limits of information required is the primary standard of information literacy listed in the Information Literacy Standard for Higher Education [27]. The ability to determine the types and limits of information according to these standards has four indicators: (1) define and clearly state the need for information; (2) identify different types and forms of potential information sources; (3) estimate the costs and benefits that are required by the information needed; and (4) evaluate the types and limits of information required.

IV. CONCLUSION

Lecturers' information literacy in this study is concluded as good. Informants can determine the nature and scope of the information needed. Informants have sufficient skills in accessing the required information effectively and efficiently. Informants understand the importance of critically evaluating information and its sources and incorporating selected information into a knowledge base and value system. Individually or as members of a group, informants can use information effectively to fulfill specific objectives. This study explores informants' sufficient understanding of economic, legal, and socio-economic issues regarding the ethical and legal use and access to information. This research shows that the publication of research results is not only

limited to writing published in scientific journals but can also be in the form of books and proceedings. The researchers suggest exploring and developing more information literacy skills so that senior lectures can produce a better publication of research results in both quantity and quality.

REFERENCES

[1] M. Muhayyang, S. Limbong, and A. Ariyani, "Students' Attitudes on Blended Learning-Based Instruction in Indonesian EFL Classroom," *GNOSI An Interdiscip. J. Hum. Theory Prax.*, vol. 4, no. 2, pp. 146–162, 2021.

[2] G. Falloon, "From digital literacy to digital competence: the teacher digital competency (TDC) framework," *Educ. Technol. Res. Dev.*, vol. 68, no. 5, pp. 2449–2472, 2020.

[3] H. Liu, C.-H. Lin, and D. Zhang, "Pedagogical beliefs and attitudes toward information and communication technology: a survey of teachers of English as a foreign language in China," *Comput. Assist. Lang. Learn.*, vol. 30, no. 8, pp. 745–765, 2017.

[4] D. Uerz, M. Volman, and M. Kral, "Teacher educators' competences in fostering student teachers' proficiency in teaching and learning with technology: An overview of relevant research literature," *Teach. Teach. Educ.*, vol. 70, pp. 12–23, 2018.

[5] C. S. Bruce, "Workplace experiences of information literacy," *Int. J. Inf. Manage.*, vol. 19, no. 1, pp. 33–47, Feb. 1999, doi: 10.1016/S0268-4012(98)00045-0.

[6] P. S. Breivik, "21st century learning and information literacy," *Chang. Mag. High. Learn.*, vol. 37, no. 2, pp. 21–27, Mar. 2005, doi: 10.3200/CHNG.37.2.21-27.

[7] J. N. Oman, "Information Literacy in the Workplace," vol. 5, no. 6. 2001, [Online]. Available: https://eric.ed.gov/?id=EJ633100.

[8] S. Y. Rieh, "Judgment of information quality and cognitive authority in the Web," *J. Am. Soc. Inf. Sci. Technol.*, vol. 53, no. 2, pp. 145–161, 2002, doi: 10.1002/asi.10017.

[9] A. for C. and R. L. (ACRL) American Library Association (ALA), "Presidential committee on information literacy," *http//www. ala. org/ala/acrl/acrlpubs/whitepapers/presidential. cfm*, 2008.

[10] M. Spante, S. S. Hashemi, M. Lundin, and A. Algers, "Digital competence and digital literacy in higher education research: Systematic review of concept use," *Cogent Educ.*, vol. 5, no. 1, p. 1519143, 2018.

[11] L. P. Nygaard, "Publishing and perishing: An academic literacies framework for investigating research productivity," *Stud. High. Educ.*, vol. 42, no. 3, pp. 519–532, 2017.

[12] F. Ahmad, G. Widen, and I. Huvila, "The impact of workplace information literacy on organizational innovation: An empirical study," *Int. J. Inf. Manage.*, vol. 51, p. 102041, 2020.

[13] M. L. Khan and I. K. Idris, "Recognise misinformation and verify before sharing: a reasoned action and information literacy perspective," *Behav. Inf. Technol.*, vol. 38, no. 12, pp. 1194–1212, 2019.

[14] S. M. Jones-Jang, T. Mortensen, and J. Liu, "Does media literacy help identification of fake news? Information literacy helps, but other literacies don't," *Am. Behav. Sci.*, vol. 65, no. 2, pp. 371–388, 2021.

[15] A. M. Idkhan, H. Syam, S. Sunardi, and A. H. Hasim, "The Employability Skills of Engineering Students': Assessment at the University," *Int. J. Instr.*, vol. 14, no. 4, pp. 119–134, 2021.

[16] M. I. Ali, S. A. Rachman, and A. H. Hasim, "Sustainable environmental education for pro-environmental engineering students: the assessment of a measurement model," *Glob. J. Eng. Educ.*, vol. 23,

no. 2, pp. 156–162, 2021.

[17] M. Taimalu and P. Luik, "The impact of beliefs and knowledge on the integration of technology among teacher educators: A path analysis," *Teach. Teach. Educ.*, vol. 79, pp. 101–110, 2019.

[18] M. J. Nelson, R. Voithofer, and S.-L. Cheng, "Mediating factors that influence the technology integration practices of teacher educators," *Comput. Educ.*, vol. 128, pp. 330–344, 2019.

[19] A. Bandura, "Self-Efficacy," in *The Corsini Encyclopedia of Psychology*, Hoboken, NJ, USA: John Wiley & Sons, Inc., 2010.

[20] S. Serap Kurbanoglu, "Self-efficacy: a concept closely linked to information literacy and lifelong learning," *J. Doc.*, vol. 59, no. 6, pp. 635–646, Dec. 2003, doi: 10.1108/00220410310506295.

[21] S. Serap Kurbanoglu, B. Akkoyunlu, and A. Umay, "Developing the information literacy self-efficacy scale," *J. Doc.*, vol. 62, no. 6, pp. 730–743, Nov. 2006, doi: 10.1108/00220410610714949.

[22] W. Badke, "Foundations of information literacy: Learning from Paul Zurkowski," *Online*, vol. 34, no. 1, pp. 48–50, 2010.

[23] M. B. Eisenberg, "Information literacy: Essential skills for the information age," *DESIDOC J. Libr. Inf. Technol.*, vol. 28, no. 2, p. 39, 2008.

[24] S. J. Behrens, "A conceptual analysis and historical overview of information literacy," 1994.

[25] G. J. Leckie, K. E. Pettigrew, and C. Sylvain, "Modeling the information seeking of professionals: A general model derived from research on engineers, health care professionals, and lawyers," *Libr. Q.*, vol. 66, no. 2, pp. 161–193, 1996.

[26] A. Lloyd, "Learning to put out the red stuff: Becoming information literate through discursive practice," *Libr. Q.*, vol. 77, no. 2, pp. 181–198, 2007.

[27] A. Emmett and J. Emde, "Assessing information literacy skills using the ACRL standards as a guide," *Ref. Serv. Rev.*, 2007.

[28] R. Hobbs, "Expanding the concept of literacy," in *Media Literacy Around the World*, Routledge, 2018, pp. 163–183.

[29] A. A. Patak, H. Wirawan, A. Abduh, R. Hidayat, I. Iskandar, and G. D. Dirawan, "Teaching English as a Foreign Language in Indonesia: University Lecturers' Views on Plagiarism," *J. Acad. Ethics*, Nov. 2020, doi: 10.1007/s10805-020-09385-y.

[30] J. Geraldi, "Self-plagiarism in project studies: A call for action and reflection." SAGE Publications Sage CA: Los Angeles, CA, 2021.

[31] J. Geraldi, "Plagiarism in project studies." SAGE Publications Sage CA: Los Angeles, CA, 2021.

[32] J. M. Egbai, "Evaluation of Sex and Age Influence on Plagiarism as Academic Dishonest Behaviour among Postgraduate Students of Federal Universities in South-South Zone of Nigeria," *Int. J. Educ. Adm. Manag. Leadersh.*, pp. 15–26, Apr. 2021, doi: 10.51629/ijeamal.v2i1.24.

[33] B. Jann, J. Jerke, and I. Krumpal, "Asking sensitive questions using the crosswise model: an experimental survey measuring plagiarism," *Public Opin. Q.*, vol. 76, no. 1, pp. 32–49, 2012.

[34] S. Sumarni, M. M. Fauzan, S. A. M. Mofreh, and A. A. Patak, "Investigating students' reflection toward self-assessment on creative writing achievement in ESP course," *Int. J. Humanit. Innov.*, vol. 1, no. 1, pp. 8–16, Mar. 2018, doi: 10.33750/ijhi.v1i1.3.

[35] A. Abduh, M. Basri, S. Shafa, A. A. Patak, and R. Rosmaladewi, "Voices of English Department Students on Multicultural Values in an Indonesian Islamic Higher Education," *Int. J. Lang. Educ.*, vol. 4, no. 3, pp. 459–468, 2020.

[36] F. Salager-Meyer, "Scientific publishing in developing countries: Challenges for the future," *J. English Acad. Purp.*, vol. 7, no. 2, pp. 121–132, 2008.

[37] J. P. Tennant, "The state of the art in peer review," *FEMS Microbiol. Lett.*, vol. 365, no. 19, p. fny204, 2018.

[38] G. T. L. Brown, K. Glasswell, and D. Harland, "Accuracy in the scoring of writing: Studies of reliability and validity using a New Zealand writing assessment system," *Assess. Writ.*, vol. 9, no. 2, pp. 105–121, 2004.

Information Technology Literacy Impact on Research Results Publication

Information Technology Literacy Impact on Research Results Publication

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7