

Digital Literation: Case Study Library Science Students

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Abstract

Digital literacy can be used as a means of learning because the millennial era currently has digital sources of information that are liked by the public. Universitas Terbuka which organizes an education system remotely, teaching materials which are the main learning materials apart from being provided in printed form, is also developed in digital form. The spread of information in digital form requires knowledge or the ability to find or use these digital information sources. Researchers raised problems about digital literacy in distance learning, especially students of the Library Science Study Program, FHSIP-UT. The purpose of this research is to examine the application of digital literacy to UT students. The research method used is quantitative with the addition of qualitative data. The results showed that the Open University students, especially the Library Science students of FHSIP-UT, already have the ability to terms of digital literacy. Because we often and always use a PC / Laptop at home or office, use a cellphone/smartphone/tablet, and use the internet.

Keywords: literacy; digital literacy; distance learning

Abstrak

Literasi digital dimungkinkan untuk digunakan sebagai sarana pembelajaran, karena jaman millennial saat ini tersebar sumber-sumber informasi yang berbentuk digital dan disukai oleh masyarakat. Universitas Terbuka yang menyelenggarakan sistem pendidikan secara jarak jauh, bahan ajar yang merupakan bahan pembelajaran utama selain disediakan dalam bentuk tercetak, juga dikembangkan dalam bentuk digital. Dengan tersebarnya informasi dalam bentuk digital ini, maka diperlukan pengetahuan atau kemampuan dalam mencari atau menggunakan sumber informasi digital tersebut. Peneliti mengangkat permasalahan tentang literasi digital dalam pembelajaran jarak jauh khususnya mahasiswa Program Studi S1 Ilmu Perpustakaan FHSIP-UT. Tujuan penelitian adalah mengkaji penerapan literasi digital pada mahasiswa UT. Metode penelitian yang digunakan adalah kuantitatif dengan tambahan data kualitatif. Hasil penelitian bahwa mahasiswa Universitas Terbuka khususnya mahasiswa Ilmu Peprustakaan FHSIP-UT sudah mempunyai kemampuan dalam hal lierasi digital. Karena sudah sering dan selalu menggunakan PC/Laptop di rumah maupun kantor, menggunakan Ponsel/smartphone/tablet, dan menggunakan internet.

Kata Kunci: literasi; literasi digital; pembelajaran jarak jauh

INTRODUCTION

Minister of Education and Culture Muhadjir Effendy, in 2019, in Jakarta, stated: "As a large nation, Indonesia must be able to develop a literacy culture as a prerequisite for 21st-century life skills. This literacy culture is built in an integrated manner between families, schools, and communities. There are at least 6 types The basic literacy that must be mastered by someone is literacy, numeracy, science, digital, financial and culture, and citizenship," said the Minister of Education and Culture.

With the statement of the Minister of Education and Culture above, it is hoped that the community will have the ability to understand various basic literacy skills, one of which is digital literacy. In the digital era that is currently growing, digital literacy skills must be owned by the community, because a lot of information is spread in digital form. The community here is the wider community, from students to students and adults. Digital abilities and skills are not only in terms of finding and rediscovering what is needed but also being able to select and sort out digital information that is needed and be able to analyze it.

Universitas Terbuka (UT) is a university with a distance learning system. With this learning system, UT students do not study face-to-face but learn remotely. Distance learning is bridged by the existence of media and distance communication facilities. Technological sophistication helps UT in bridging the meeting between learning materials, lecturers, and students. Learning using technology can be done easily and can reach various regional conditions in Indonesia.

UT students are familiar with the distance learning system and are also accustomed to using various communication media that are applied. Because in distance education a lot of learning materials are in digital form, and access is also using the internet network. However, it is necessary to know how skilled they are in using the facilities and infrastructure or technology needed for learning and searching for information in digital form. To find out these skills, it is necessary to conduct research, which aims to examine the application of digital literacy in learning.

Literacy

Literacy is not just an activity related to reading and writing. According to Nurhadi (2016) stating that with the development of human needs and intelligence, the scope of literacy activities is wider, namely relating to communication with the community, and social relations as well as related to knowledge, language

and culture. By the UNESCO declaration (2003) literacy is related to the ability to identify, determine, find, evaluate, create effectively and organize, use and communicate information to solve problems.

In 2017 the Minister of Education and Culture Muhadjir Effendi launched the National Literacy Movement (GLN), he stated that a developed nation was not built solely by relying on abundant natural wealth and a large population. A great nation is characterized by a literate society, has a high civilization, and is actively advancing the world community. Literacy in this context is not only a matter of how a nation is free from illiteracy but more importantly, how citizens of the nation have the life skills to be able to compete and co-exist with other nations to create world welfare. In other words, a nation with a high literacy culture shows the nation's ability to collaborate, think critically, be creative, and communicative so that it can win the global competition. So that a great nation, Indonesia must be able to develop a literacy culture as a prerequisite for 21st-century life skills through integrated education, starting from family, school, to the community. (Article uploaded by Rokhman, with the kompasiana.com page)

Setyawan (2018), states the importance of literacy in human life, especially for humans who live in an era characterized by current technological sophistication. This literacy is very necessary for all lines of human life because this literacy ability can be the key for humans to proceed to become more knowledgeable and civilized human beings. Literacy activities are a form of everyone's right to learn throughout his life, where the hope is that with increased literacy skills, the quality of people's lives can also increase.

Digital Literacy

Before entering the concept of digital literacy, the definition of the word digital is given. According to the online KBBI, digital understanding relates to numbers for certain calculation systems; related to numbering. In his writings, Hutahaean (2019), digital is a picture of a number consisting of the numbers 1 and 0 or Off and On (binary number system), which is also known as Bit (Binary Digit). All computer systems use a digital system as their database. So that this digital understanding is closely related to information and communication technology, computers, computerization.

From the definition of digital and literacy that has been described above, then the notion of digital literacy is a literacy that utilizes computer systems and information and communication technology. This

means that digital literacy is an instrument that must be applied to educate people's lives in their interactions in the digital world. Thus digital literacy leads to the effectiveness and efficiency of the use of information and communication technology on aspects of life.

Digital literacy is as important as reading, writing, arithmetic, and other disciplines. The generation that grew up with unlimited access to digital technology has a different mindset from the previous generation. Everyone should be responsible for how to use technology to interact with the surrounding environment. Digital technology allows people to interact and communicate with family and friends in everyday life. However, it is also written in the book that information literacy only spread widely in the 1990s when information became easier to organize, access, and disseminate through networked information technology. Thus, referring to Bawden's opinion in the book *Digital Literacy Support Materials*, digital literacy is more associated with technical skills in accessing, compiling, understanding, and disseminating information.

The approach that can be taken in digital literacy includes two aspects, namely conceptual and operational approaches. The conceptual approach focuses on aspects of cognitive and social-emotional development, while the operational approach focuses on the technical abilities to use the media itself which cannot be ignored. The principle of digital literacy development according to Mayes and Fowler (2006) is tiered. There are three levels of digital literacy. First, digital competence includes skills, concepts, approaches, and behaviors. Second, the use of digital refers to the application of digital competencies related to certain contexts. Third, digital transformation requires creativity and innovation in the digital world.

Distance Learning

Learning activities are the most basic activities in the whole educational process. The utilization of information and communication technology (ICT), especially the internet as a medium of learning is an innovation in education at this time. Distance learning always uses technology for the implementation of learning, starting from the simplest technology to the latest. (Belawati, 2019).

According to Munir (2009), the notion of distance learning is when the learning process does not occur in direct face-to-face contact between the teacher and the learner. Communication takes place in two directions which are bridged by media such as computers, television, radio, telephone, internet, video, and so on.

The difference between conventional learning and distance learning lies in the form of interaction between teachers and learners, characteristics of learners, types of programs, the role of human resources, management, technology, and so on. However, these differences are not an obstacle to developing distance learning towards enlightening education and improving its quality.

Learning is not only conveying information or knowledge but also conditioning learners to learn because the main purpose of learning is that learners learn. The success of the teacher in providing effective learning is marked by the existence of a learning process for the learner. Learning should be oriented towards learners as individuals who have potential, abilities, interests, motivations, which can be explored and developed through the learning process. Learning resources are not only centered on the teacher but also a wide environment (setting).

The utilization of technology in the learning system gives rise to electronic-based learning as a result of technology. One application of technology is information and communication technology. This information and communication technology-based learning has changed the conventional pattern learning system into a media pattern, including computer media with the internet which gave rise to e-learning.

METHOD

The research method used to collect data is the quantitative description method, by distributing questionnaires to library science students. Dissemination of questionnaires by uploading questionnaires on the online tutorial classes page. A total of 10 tutorial classes were given a questionnaire with a total of \pm 500 students, 338 questionnaires were entered. The incoming data is separated by variable and then analyzed.

RESULTS AND DISCUSSION

The results of data collection are then described according to the variables needed to indicate the level of digital literacy of the respondents. Discussion of data collection, starting from the respondent's identity, technology, and the UT website. Respondents are library science students, FHISIP-UT. The results of data collection indicate that 76% have worked, and work under the science being studied, namely the library, the data can be seen in the following figure/graph.

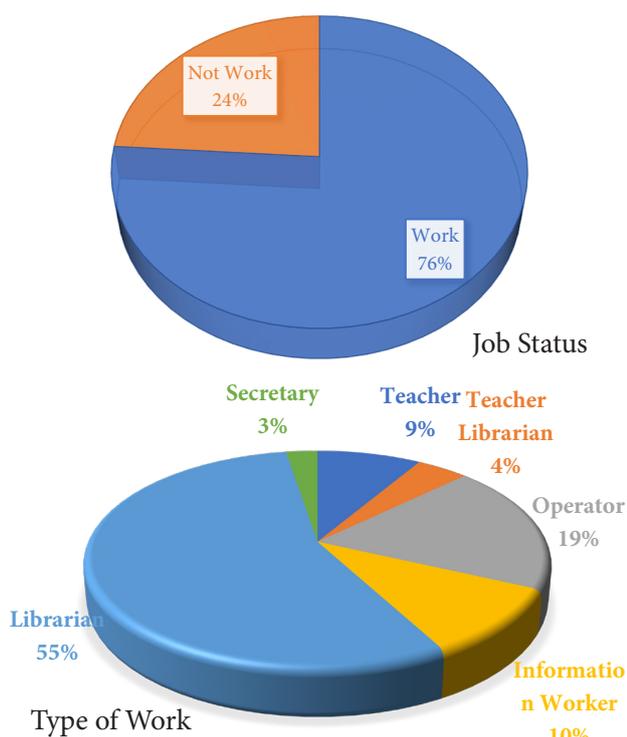


Figure 1. Graph of Job Status and Type of Work

Technology

Technology is the basis of digital literacy. Because digital literacy is mostly associated with techniques for accessing, compiling, understanding, and disseminating information in digital form. Digital form is closely related to technology because digital information is created or developed using computer equipment and is not printed in paper form.

Technologies related to digital literacy are PC/Laptop, Cellphone/Smartphone/Tablet, and internet network. The following are the results of the data collected on the use of the three devices related to respondents' digital literacy.

a) PC/Laptop Usage

PC/Laptop is the main tool in digital literacy, the results obtained from respondents regarding the use of these devices are that they always use them at home or in the office for those who work, and some answer that sometimes at home they also use these devices. Although respondents answered that they sometimes use PC/Laptop devices at home, it can be assumed that respondents are used to using these devices as their daily activities. However, there are also those who never even have a PC/laptop available, this is because UT students are very diverse in terms of their economy. PC/Laptop usage data as shown below:

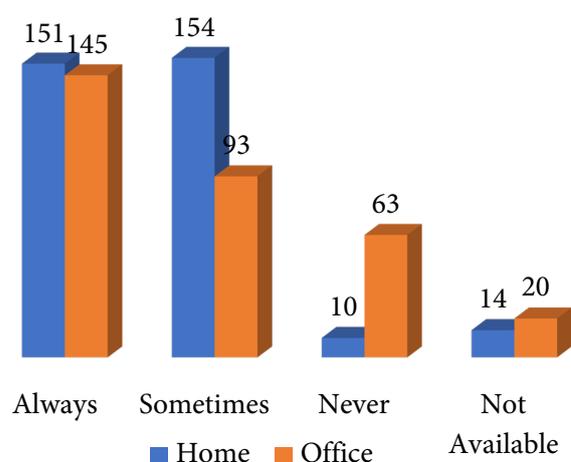


Figure 2. PC/Laptop Usage

b) Cellphone/Smartphone/Tablet

Cellphones/Smartphones/Tablets are not a luxury anymore because almost everyone has a cell phone. When you look at the current mobile phone market, there are many smartphones offered, whose uses are very diverse and very sophisticated. The results of data collection show that 91% of respondents are already using mobile phones/smartphones/tablets, as shown in Figure 3.

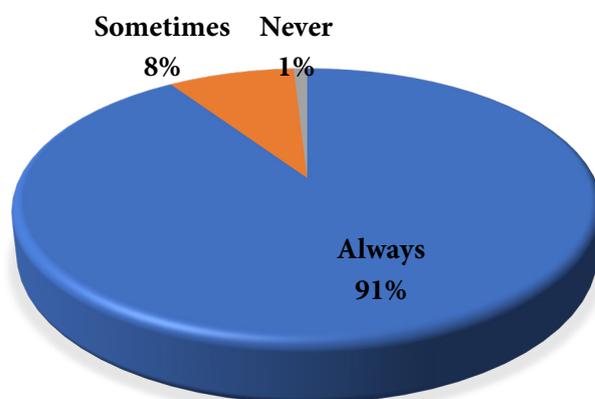


Figure 3. Use of Smartphone

Utilization of mobile phones/smartphones/tablets if sorted from the highest as follows: the first is Whatsapp (WA), internet access, social networking, telephone, application downloads, reminders, watching videos, taking photos, listening to music, maps/GPS and the last SMS. From this data, the highest utilization is Whatsapp (WA), internet access, and social networks. With the current millennial era, the Whatsapp application is very helpful in terms of digital literacy and communication to various groups. The application is not only used to communicate, it can also be used to send documents, pictures,

sounds, movies or videos, and others. However, the Whatsapp application cannot be used without an internet network, ordinary people call packages from telephone sim card providers. The following is the data on the utilization of cellphones/smartphones/tablets, as shown in Figure 4.

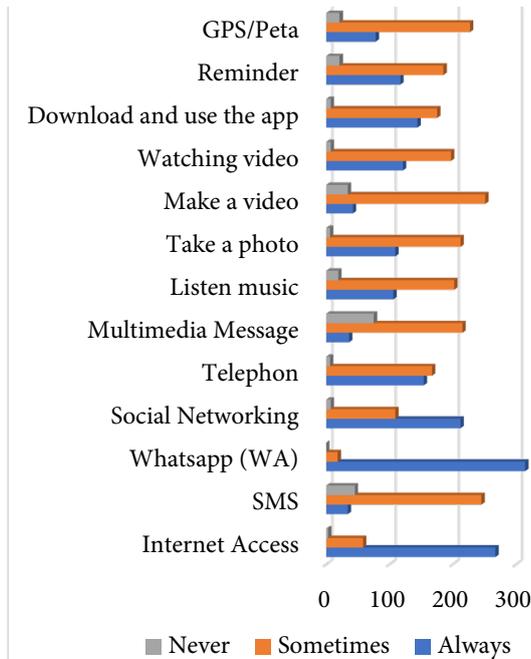


Figure 4. Phone Use

c) Internet Network

Internet or internet network is a vital tool in digital literacy. Because this network is used for various things related to digital literacy and communication. Without being connected to the internet network, people will not be able to access digital information from various places. The results of data collection related to the use or utilization of the internet by respondents stated that the order of use was as follows: online learning, browsing/searching for information, and social networking, while e-books were at the bottom. The following is data on the use of the internet network as shown in Figure 5.

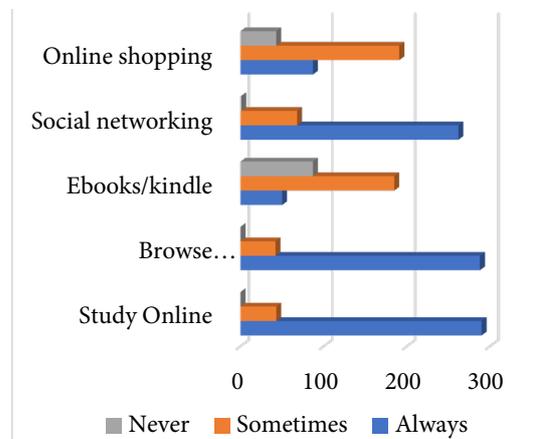


Figure 5. Internet Usage

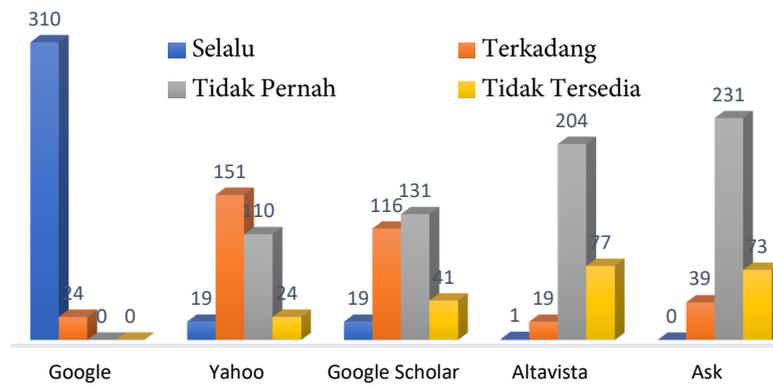


Figure 6. Visited Search Engine

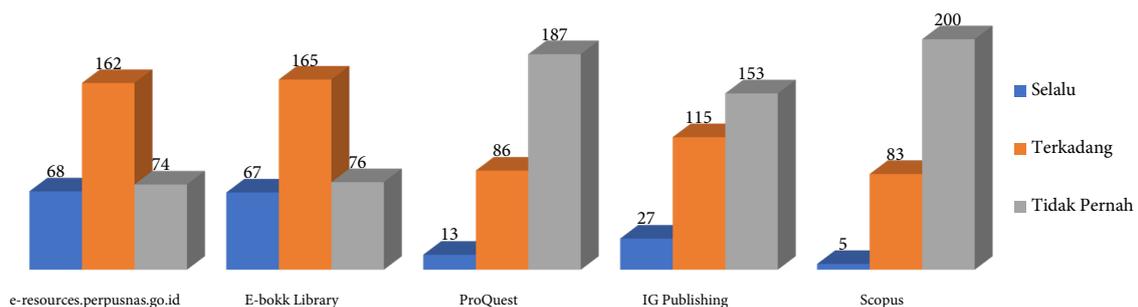


Figure 7. Database Online

In the picture above, one of the benefits of the internet is the search for information or materials. To search for information/materials that are closely related to pages or search engines and online databases. The results of data collection can be seen that the search engine that is often visited is google.com, as shown in Figure 6 And the online databases that are frequently visited are the National Library and e-book library, as shown in Figure 7.

In internet usage, the location that is often used for the highest internet connection is from home and the second is from the office. Both places show that UT library science students at home and in the office are already using an internet connection. From the description of the use of smartphones above, that 91% of students use smartphones as an internet connection. The following is presented data on the location of internet usage, in figure 8.

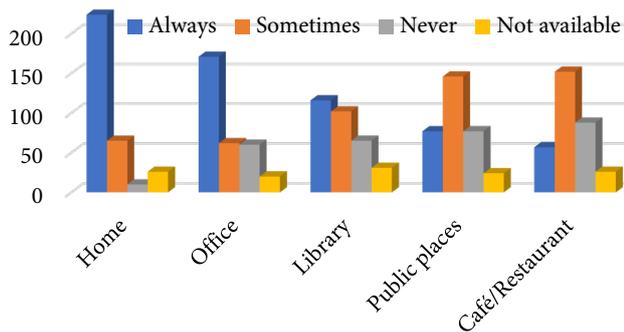


Figure 8. Internet Usage Location

With an internet network that is easily obtained and accessed using a laptop/PC or smartphone, it turns out that from the respondent's data the length

of time to search or internet connection is 2-3 hours, some even > 3 hours, as shown in Figure 9.

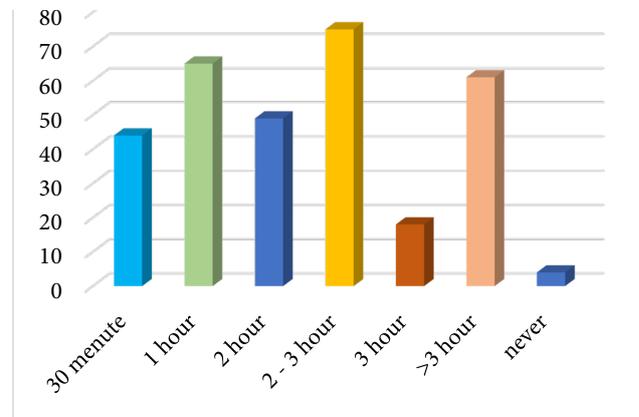


Figure 9. Long Time Searching Information

3. UT home page

Respondents are UT students, so it is necessary to know what pages are accessed by students. UT has many pages that provide various information, from general to academic learning, which can be accessed by students and the general public from various places. The results of data collection, it can be seen that there are 5 UT pages accessed by students, namely: e-learning is the highest accessed learning page, then the www.ut.ac.id page as a general information page about UT, all information for students, general and also UT policies, then *sia.ut.ac.id* to find registration information, and student grades, a digital library to find information on teaching materials and other materials related to learning materials and the *fhisip.ut.ac.id* page to look for information relating specifically to faculty information. The following is data about UT page access, figure 10.

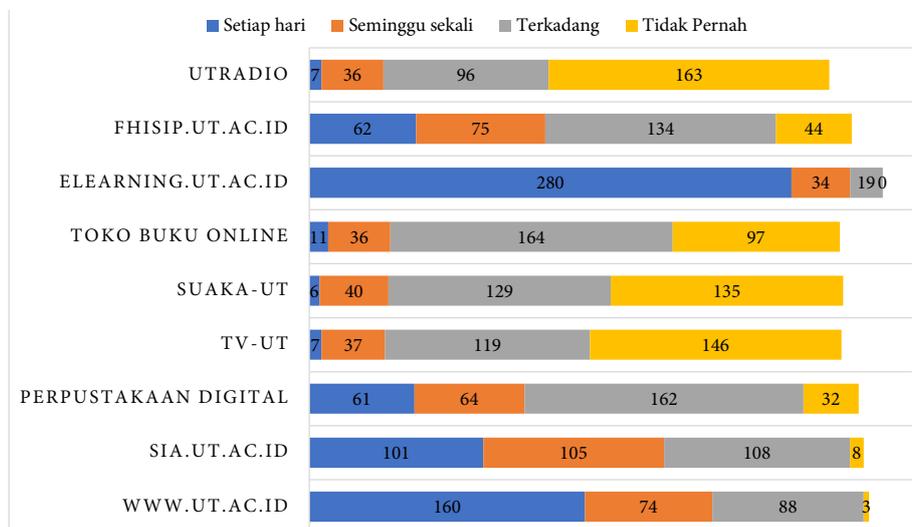


Figure 10. Home Page UT

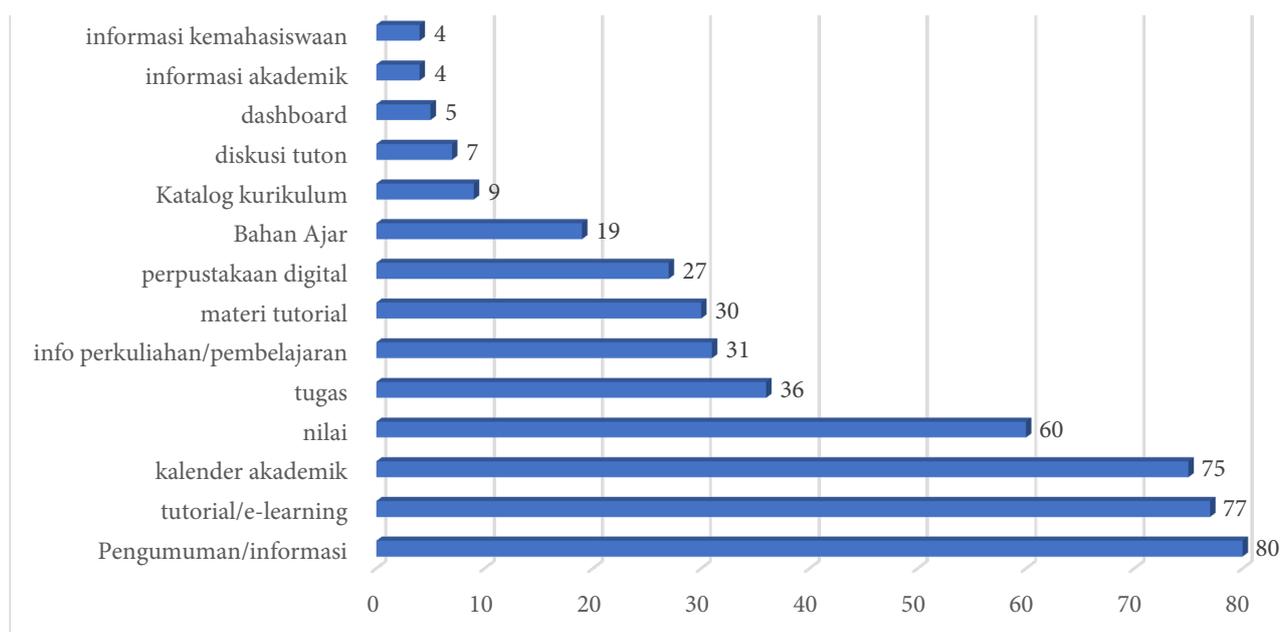


Figure 11. UT Home Page Information

There is 4 information sought on the UT page, the highest information that is often sought is announcements/general information, e-learning, academic calendar, and grades. However, there is still a lot of other information to be sought as well. The four information is favorite, here is the information data on the UT page that students often look for, as shown in Figure 11.

Overall the incoming data can be analyzed that respondents who are undergraduate students in Library Science already have the ability in terms of digital literacy. Because respondents can use technological devices such as PCs/Laptops, Smartphones/Tablets/Mobile phones, and always look for internet networks for learning activities, browsing/searching information sources on Google pages, accessing the information on UT pages and social networks.

CONCLUSION

The conclusions that can be drawn from the data and discussion in the research are: digital literacy for UT students, especially library science students, already have the ability or skills in terms of digital literacy.

It is proven by the use of devices such as PC/Laptop and smartphone/cellphone/tablet which is quite high >50%, moreover, the use of smartphones/tablets is almost 100%, respondents use smartphones. In addition to smartphones, internet network access is also high. From the data on the main infrastructure related to digital literacy, it can be seen that respondents

always and often use the three infrastructures.

The activity of searching for information every day is quite long, namely 2-3 hours, the search is carried out using the Google search engine. Also used for online learning by accessing online tutorials every day, looking for general information on the UT page. Respondents also provide knowledge about digital literacy to the surrounding community. The obstacle faced in this digital literacy is the internet network which is less stable, sometimes slow.

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