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# Utilization of the Internet as a Learning Resource; A Case Study of Students at State Senior High School 1 Tanjungpandan, Belitung Regency



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ABSTRACT: This study aims to determine the utilization of the internet as a learning resource. This type of research is descriptive quantitative. The population in this study were students at Tanjungpandan 1 Senior High School, Belitung Regency, totaling 238 students who were taken based on random sampling. The instrument used was a questionnaire which amounted to 27 items, and was divided into four factors, namely Browsing, Resourcing, Searching, Consulting and Communication. The data analysis technique uses descriptive statistics expressed in percentage form. The results showed that the utilization of the internet as a learning resource by students at Tanjungpandan 1 Senior High School, Belitung Regency was in the "very poor" category of 0.00% (0 students), "poor" 0.00% (0 students), "sufficient" 84.45% (201 students), "good" 15.55% (37 students), and "very good" 0.00% (0 students).

**KEYWORDS:** utilization, internet, learning resources.

#### **INTRODUCTION**

The globalization that is sweeping across the world has brought many changes to people's lives. Globalization, which has two sides of the coin (positive and negative), is also the cause of unstoppable cultural infiltration. Technology can also be likened to a double-edged sword. One side of the sword can be used for useful purposes and the other side can lead to negative things. The benefits of technology in information systems are undoubted because it has a role in helping organizations operate efficiently, effectively, and competitively (Khechine & Lakhal, 2018). At the same time, technology in today's globalized progress has impacted various aspects of life in the fields of economy, politics, culture, art, and even in the world of education.

Globalization can be defined as the process of spreading new elements, especially information, worldwide through print and electronic media (Siregar, 2022). To deal with the rapid advancement of technology, one does not have to be "hostile" and antipathetic towards it. Instead, we must be able to utilize the technology to improve the learning process which is expected to have a good impact on learning outcomes. One of the things that must be owned is technology literacy. One of the technologies that is developing so rapidly now is interconnection and networking (internet). All aspects of life cannot be separated from the internet. With the proliferation of providers that sell quota at low prices and the number of free WiFi (Wireless Fidelity) in public places, making the internet close and close to people's lives (Fraga-Lamas et al., 2017).

The internet and websites can be used as media as well as learning resources. The presence of the internet and websites will make it easier to access various information. The presence of internet facilities has helped support the activities of students and educators, especially in its use as a medium and learning resource to find references related to learning needs (Rapanta et al., 2020). Therefore, utilizing the internet and websites in learning will make it easier to browse information related to the subject matter needed. The internet used for learning will increase the ability to read, think critically, and integrate or associate reading sources with one another. The internet is a network that can connect many computers to send news, obtain information or transfer data. The internet can be used as a learning medium to access educational information (Salmerón et al., 2018).

The internet is one of the most sought-after, most accessible, and easiest media to find any information including learning information. The existence of the internet has brought enormous changes in various fields of life. There is no need to wait long if you want to find information on the internet, because finding information from various sources in a short time is very helpful for the general public (Shaheen et al., 2019). The internet today is no longer a new thing, but has been known to be "familiar" among the community (not least in the world of education) (Cheok et al., 2017). However, the use of the internet is still often

misused, so instead of having a positive impact, it has a negative impact. An understanding of the use of the internet and websites in learning needs to be socialized, especially in the world of education. Changes from libraries, books and other print media have made the internet an easy and up to date source of information. The increasing awareness of technology that can help learning can already be felt. The management of learning aids is very much needed. Metamorphosis or change from a library that emphasizes on providing demand and providing services quickly from the diverse abilities of individuals to absorb information, making the services provided must be varied and widely available.

The number of websites and applications about learning makes it easier for internet users, most of whom are students, to find sources and information related to school assignments. Students can deepen their knowledge on various topics, develop certain skills and talents and so on (Anshari et al., 2017). Students can easily access the internet as a source of learning from various references, not only as a source of learning but can function as a means of communication and entertainment, so there is free time for them to use the internet properly.

Students through the internet can access various literature and science references needed quickly, so as to facilitate their study process. The utilization of the internet as a learning medium conditions students to learn independently. The internet is used to obtain information, find information about things of interest, watch videos or entertaiment, and find information for learning needs (Purdy, 2017). The internet cannot replace the role of educators, but the internet only serves to complement it. Students at this time are required to be independent and active in finding various sources for their coursework and also add insight to their knowledge. Making it easier for students to access the internet requires supporting facilities, namely wifi services provided on campus and also other places, so that students can easily connect to the internet either via cellphones or laptops. Based on this, the researcher is interested in conducting a study entitled "Internet utilization as a learning resource; Case Study on Students at Tanjungpandan 1 Senior High School, Belitung Regency".

#### **METHOD**

This research is quantitative descriptive research. Descriptive research is used to describe or table the data that has been collected as it is. The method used in this research is survey. The data collection technique in this study used an instrument in the form of a closed questionnaire. The research population was students at Tanjungpandan 1 Senior High School, Belitung Regency, totaling 238 students who were taken based on random sampling. The lattice of instruments for internet utilization as a learning resource by students is presented in table 1 as follows:

**Table 1. Instrument Grid** 

Variable	Factors	Indicators	Item Numbers	
			+	-
Utilization of the	Browsing	Utilization of browsing facilities	1	2
internet as a learning		Devices used	3, 4, 5	
resource		A place to access the internet	6, 7	
	Resourcing	Utilisation of the internet as learning material	8, 9, 10, 11,	13
		learning	12	
	Searching	Utilisation of searching facilities	14, 15, 16, 17	18
		Devices used	19, 20	
	Consulting and	Consultation and Communication via E-Mail	21, 23	22
	Communication	Consultation and Communication via Chat	24, 25, 26, 27	
Total			27	

#### **RESULT**

Descriptive statistics of research data on the use of the internet as a learning resource by students obtained the lowest score (minimum) 64.00, the highest score (maximum) 83.00, the average (mean) 73.82, the median (median) 74.00, the value that often appears (mode) 73.00, standard deviation (SD) 2.96. Norms for assessing the use of the internet as a learning resource by students are presented in table 2 as follows:

Table 2. Norms for Assessment of Internet Utilisation as a Learning Resource by Students

No.	Intervals	Categories	Frequency	Persentage
1	92 < X	Very Good	0	0,00%
2	76 < X ≤ 92	Good	37	15,55%
3	60 < X ≤ 76	Sufficient	201	84,45%
4	44 < X ≤ 60	Poor	0	0,00%
5	X ≤ 44	Very Poor	0	0,00%
Total			238	100%

Based on table 1 above, it shows that the use of the internet as a learning resource by students is in the "very poor" category of 0.00% (0 students), "poor" 0.00% (0 students), "sufficient" 84.45% (201 students), "good" 15.55% (37 students), and "very good" 0.00% (0 students).

#### 1. Browsing Factors

Utilisation of the internet as a learning resource by students based on the Browsing factor in Table 3 as follows:

**Table 3. Browsing Factor Assessment Norms** 

No.	Intervals	Categories	Frequency	Persentage
1	24 < X	Very Good	0	0,00%
2	20 < X ≤ 24	Good	3	1,26%
3	16 < X ≤ 20	Sufficient	163	68,49%
4	12 < X ≤ 16	Poor	71	29,83%
5	X ≤ 12	Very Poor	1	0,42%
Total			238	100%

Based on Table 3, it shows that the use of the internet as a learning resource by students based on the Browsing factor in the "very poor" category is 0.00% (0 students), "poor" 29.83% (71 students), "sufficient" 68.49% (163 students), "good" 1.26% (3 students), and "very good" 0.00% (0 students).

### 2. Resourcing Factors

The utilization of the internet as a learning resource by students based on the Resourcing factor is shown in Table 4 below:

**Table 4. Resourcing Factor Assessment Norms** 

No.	Intervals	Categories	Frequency	Persentage
1	24 < X	Very Good	0	0,00%
2	19 < X ≤ 24	Good	0	0,00%
3	14 < X ≤ 19	Sufficient	114	47,90%
4	9 < X ≤ 14	Poor	124	52,10%
5	X ≤ 9	Very Poor	0	0,00%
Total			238	100%

Based on Table 4, it shows that the utilization of the internet as a learning resource by students based on the Resourcing factor is in the "very poor" category of 0.00% (0 students), "poor" 52.10% (124 students), "sufficient" 47.90% (114 students), "good" 0.00% (0 students), and "very good" 0.00% (0 students).

## 3. Searching Factors

Utilization of the internet as a learning resource by students based on the Searching factor in Table 5 below:

**Table 5. Searching Factor Assessment Norms** 

No.	Intervals	Categories	Frequency	Persentage
1	24 < X	Very Good	4	1,68%
2	20 < X ≤ 24	Good	178	74,79%
3	16 < X ≤ 20	Sufficient	56	23,53%
4	12 < X ≤ 16	Poor	0	0,00%
5	X ≤ 12	Very Poor	0	0,00%
Total			238	100%

Based on Table 5, it shows that the use of the internet as a learning resource by students based on the Searching factor in the "very poor" category is 0.00% (0 students), "poor" 0.00% (0 students), "sufficient" 23.53% (56 students), "good" 74.79% (178 students), and "very good" 1.68% (4 students).

#### 4. Consulting and Communication Factors

Utilization of the internet as a learning resource by students based on the Consulting and Communication factor in Table 6 below:

**Table 6. Consultation and Communication Factor Rating Norms** 

No.	Intervals	Categories	Frequency	Persentage
1	24 < X	Very Good	3	1,26%
2	20 < X ≤ 24	Good	121	50,84%
3	16 < X ≤ 20	Sufficient	114	47,90%
4	12 < X ≤ 16	Poor	0	0,00%
5	X ≤ 12	Very Poor	0	0,00%
Total	•	<u>.                                      </u>	238	100%

Based on Table 6, the utilization of the internet as a learning resource by students of the Consulting and Communication factor in the "very poor" category is 0.00% (0 students), "poor" 0.00% (0 students), "sufficient" 47.90% (114 students), "good" 50.84% (121 students), and "very good" 1.26% (3 students).

#### **DISCUSSION**

Based on the results of the study, it shows that the utilization of the internet as a learning resource by students is in the "sufficient" category 84.45% (201 students), "good" 15.55% (37 students). This means that students are good enough in utilizing the internet as a learning resource. Most students have used the internet according to their needs as browsing, resourcing, searching, e-mail, and mailing lists. Students who always utilize the internet for learning activities as one of the media in learning activities, will support the quality of education and the quality of learning. The internet has negative and positive impacts on its users. The internet is used properly, it will have a positive impact, while if it is used for the wrong thing it will have a negative impact. the use of the internet as a learning media conditions students to learn independently. The internet is used to obtain information, find information about things of interest, watch videos or entertainment, and find information for learning needs (Purdy, 2017). The internet is also used to search for data gaps through the news or on internet-based literature sources (Monetti et al., 2011).

Study conducted by (Walidaini & Arifin, 2018) with the aim of knowing the use of the internet in students majoring in Guidance and Counseling, Faculty of Education, State University of Padang, totaling 244 students. The results show that internet utilization is in the right category but of the seven indicators, four are in the quite right category, namely: (1) Looking for references in the form of e-books, e-journals, and so on; (2) Media discussions through social networks and so on; (3) The internet is considered easy, economical, and up-to-date, and; (4) The intensity of internet use is in the category of quite appropriate. In the indicator of finding references in the form of e-books, ejournals, and so on, it can be seen that students still do not master the internet to search for scientific e-journals or e-books, so that the references used by students are still less relevant..

Internet utilization will affect one's reading skills. Other skills besides reading are integration of different sources of information (e.g. linking information from different web pages) and evaluation of information by evaluating the credibility of recommendations on web pages. The internet can increase the ability to read, think critically, and integrate or associate reading

sources with one another (Salmerón et al., 2018). The results of the study by (Salmerón et al., 2018) shows linguistic ability predicts performance in searching for internet-based reading tasks, frequency of use of internet information tasks affects internet-based comprehension, effectiveness in using information & communication technology affects internet-based reading comprehension and efficiency of searching for reading sources and at the senior high school level needs to reach the level of critical comprehension.

Through the internet one can quickly and easily explore interests and find information beyond what can be accessed in schools and local communities. There are billions of sources of information that can be used continuously as needed, there are no geographical restrictions, place, time and very flexible. At least, there are three characteristics of the internet that can provide great benefits to the world of education. First, scope. The internet has a very broad scope and as a virtual library it offers a tremendous amount of material that can be accessed from anywhere. Second, topicality. The material is always updated and one can obtain information from any publication without having to buy, even material that is not available in printed form is available on the internet (Kaur & Gaur, 2017). There are a variety of news, journals, scientific articles, and other databases that make the internet an important source of information. Third, personalization. Textbooks often do not match the needs of the reader. The internet helps with this task, where the material is presented according to the level of difficulty and learners can adjust according to their abilities. The internet can thus be utilized as a learning resource. Teacher need to train, develop, and improve internet utilization for learning for students so that it can be used in supporting lecture activities, if improper internet utilization will have an impact on personal, learning, and social fields in students. Therefore, teacher can provide several services to students such as information services, content mastery services, group guidance services, and individual counseling services, although they must be supported by other types of services that are in accordance with the aim of increasing internet utilization.

#### 1. Browsing Factors

Based on the results of the study, it shows that the utilization of the internet as a learning resource by students based on the Browsing factor is "poor" 29.83% (71 students), "sufficient" 68.49% (163 students). These results indicate that students are good enough in utilizing the internet as a learning resource based on the Browsing factor. Browsing or surfing is a general term used when you want to explore cyberspace or the web. A very artistic web display displays text, tables and even animations that are displayed in such a way that it always makes visitors feel at home. To do this browsing using a facility called a browser or web browser, many types of browser software are available on the market, ranging from Mozilla, Google Chrome, Opera, and Internet Explorer. Any type of internet application that will be carried out cannot be separated from the browser, because the browser is a communication medium between the user and the internet service (Rahim et al., 2018).

As time goes by, the internet is the most frequently used tool to help students with various tasks in their campus. Students can access from anywhere, it can be sitting in a cafe with friends, waiting in line by looking at the internet and so on. There is no set time or place for students to use the internet. The internet is the main learning resource for students because it is fast, easy, effective and convenient. The internet cannot replace the role of educators, but the internet only functions to complement it. Students at this time are required to be independent and active in finding various sources for their coursework and also add insight to their knowledge. Making it easier for students to access the internet requires supporting facilities, namely wifi services provided on campus and also other places, so that they can easily connect to the internet either via cellphone or laptop.

#### 2. Resourcing Factors

Based on the results of the study, it shows that the utilization of the internet as a learning resource by students based on the Resourcing factor is "poor" 52.10% (124 students), "sufficient" 47.90% (114 students). These results indicate that students are good enough in utilizing the internet as a learning resource based on the Resourcing factor. Learning resources are a system consisting of a set of materials or situations that are created intentionally and made to enable students to learn individually. The existence of adequate learning resources will not only facilitate the understanding of subject matter by students, but will also complement, maintain, and enrich the knowledge of a student (Situmorang et al., 2020).

The resourcing referred to here is to make the internet a teaching resource, in the sense that the role of the internet as a repository of information is utilized to obtain information and data related to the teaching material presented, in this case information related to the site address to be visited as a source of teaching material has been known in advance through information provided in the teaching handbook or from other information. For example: in teaching the Computer Organization Course, a teacher uses a handbook by William Stalling, in order to support the function of the book as a teaching resource, he must visit the site information provided, http://williamstalling.com/, usually information about the address of this site is given in the introductory section of the book (Lingga et al., 2021).

#### 3. Searching Factors

Based on the results of the study, it shows that the utilization of the internet as a learning resource by students based on the Searching factor is in the "sufficient" category 23.53% (56 students), "good" 74.79% (178 students). These results show that students are good enough in utilizing the internet as a learning resource based on the Searching factor. Searching is the process of finding learning resources to complement the material that will be delivered to students. In this case, all information related to the source of information is not yet known, so by utilizing a search engine. Search engine is one of the facilities available in the application to find the desired information. Search engines host a database of sites from around the world totaling billions of web pages. Simply by entering the keyword, the search process will be carried out and the search engine will display several site links accompanied by a brief description. Many search engine applications are offered by certain sites on the internet, popular ones include google, yahoo, altavista and so on (Almukhtar et al., 2021).

The internet can also be used as an alternative source besides books to make it easier to find as much information as possible. The internet as a learning resource that can be utilized by educators and students in developing their abilities, because with the internet educators and students can increase knowledge, share information among peers, collaborate with someone outside the area, the opportunity to publish information directly, and organize communication. If students are able to maximize these scientific journal database portals, the learning resources accessed are not only more credible, but actually easier to access because most of these service providers have designed in such a way that the appearance and navigation of their pages are in accordance with the needs of their users, namely academics. Socialization and conditioning of the use of this facility needs to be improved among students.

#### 4. Consulting and Communication Factors

Based on the results of the study, it shows that the utilization of the internet as a learning resource by students in the Consulting and Communication factor is in the "sufficient" category 47.90% (114 students), "good" 50.84% (121 students). These results show that students are good enough in utilizing the internet as a learning resource based on the Consulting and Communication factor. Consulting and Communication is the role of the internet as consultation and communication. Communication between individuals in different locations has become easier since the internet. In addition, the cost for the communication process is also very cheap when using the internet. The internet here is then utilized by interconnecting between computer networks formed through means in the form of internet access providers (providers). Thus, the internet as an information medium can be an effective and efficient means of exchanging and disseminating information without being hindered by distance, time differences and also geographical factors for someone who wants to access information. The Internet is a global computer network consisting of millions of computers that are interconnected using the same protocol to share information together (Perwej et al., 2019).

Often learning materials from lecturers as well as materials obtained from sources are collaboratively shared by students and are often used for mutual reference in their learning. This content is often shared through social media groups such as Whatsapp or Facebook. The results of this study are not much different from the results of (Ajegbomogun & Oduwole, 2017) research on postgraduate students in Africa revealed that social media has made a significant influence on respondents' learning outcomes. (Howard et al., 2018) research also shows that students want learning content on social media, especially Facebook, Instagram, and Twitter.

#### **CONCLUSION**

Based on the results of data analysis and discussion, it can be seen that the use of the internet as a learning resource by students is in the "very poor" category of 0.00% (0 students), "poor" 0.00% (0 students), "enough" 84.45% (201 students), "good" 15.55% (37 students), and "very good" 0.00% (0 students). Students are expected to be more observant and careful in choosing learning resources on the internet so that the results obtained are in accordance with the needs and can be accounted for. Students can improve their learning through the use of the internet, where students must also have the ability or skills in using a good internet, especially in searching for scientific articles, discussing, and finding the latest learning information and increasing achievement motivation especially and innovative thinking.

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