EVALUATING THE INFORMATION LITERACY TEACHING USING CLASS ACTION RESEARCH APPROACH: A CASE STUDY AT THE DEPARTMENT OF ISLAMIC HISTORY UIN SUNAN KALIJAGA YOGYAKARTA, INDONESIA

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ABSTRACT:

This research aims to find out how the course of Information Literacy enables the first-year students of the Department of Islamic Culture and History to acquire information literacy competence, and how it can help them be prepared for the on-line learning. This research is a class action research, in which the component of information literacy competence is used as material for class action involving 34 first-year students of the Department of Islamic Culture and History. Data collecting is done in 4 steps, they are: 1) planning, which is a step for developing a learning plan functioning as the research instrument; 2) acting, this is when the learning plan is implemented and the components of information literacy are taught; 3) observing, which is a step when we observe the teaching of information literacy in the class; 4) reflecting, which is to evaluate the learning of information literacy based on the results of assignments and observation. The research result shows that the teaching of information literacy in the class enables the students of the Department of Islamic Culture and History to improve their competence on information literacy, although some other aspects such as information source evaluation, particularly concerning information source from the webs and the use of information need more attention.

Key words*: Information literacy, higher education, class action research*

1. INTRODUCTION

The purpose of higher education as stated in the Indonesian Higher Education Constitution No 12 2012 article 5 is to develop the potential of students to become faithful believers of God, people with great characters, healthy, capable, creative, independent, skilled, competent, and cultured for the benefit of the nation (Republic of Indonesia, 2012). In addition, the purpose of higher education is to create graduates who master branches of science and/or technology to fulfil the nationø interest and raise the nationø competitive value. Therefore, higher education becomes a means to prepare for the future. Through attending university, students are expected to be able to improve and have a higher level of learning ability. The different learning process and method of secondary school compared to higher education will provide their own kind of challenge to students, especially new students. The ability to reflect on existing knowledge by connecting with new knowledge is one of the characteristics of learning in university (Lokse et al., 2017, p. 3). The inability to elaborate on these two types of knowledge can prevent students from efficiently participating in the learning process within university, especially in producing scientific papers related to lecture assignments. According to (Dochartaigh, 2007, p. 1), the 2004 survey shows the fact that 42% of professors in the US agree that the quality of studentø assignments has decreased because of the internet. This means that students have yet to gain the ability to choose the correct source of information from the internet and use them effectively. Moreover, there are currently various types of information on the web and have been the mainstay of students during the pandemic. According to data from the APJII, there has been an increase in internet usage during the COVID pandemic and the majority of its usage is to access educational content as a result of online learning during the pandemic (voi.id, 2020).

Therefore, students need to be equipped with the ability to search for information appropriately, choose relevant and reliable information and sources of information as well as use information ethically and responsibly as these are important elements of information literacy.

On the other hand, Owusu-Ansah said that education in universities is designed not only for students to acquire knowledge but also to ensure that students learn the process of generating new knowledge and accept various ways and means for lifelong learning (Lokse et al., 2017, p. 3).. Therefore, students must be equipped with the ability for lifelong learning through information literacy. Information literacy creates individual awareness concerning effective information search in all aspects of life such as personal life, politics, and business (Derakhshan et al., 2017, p. 571). Information literacy is a basic and vital element of general education requirements (Freeman & Lynd-Balta, 2010, p. 109). Therefore, information literacy is very commonly applied in teaching and learning activities in universities, especially for new students who have not yet gained basic knowledge in using libraries and the information sources they have as well as skills in searching for information, especially online information sources. Even according to Wakimoto in Huang et.al. (2016, p. 287) without having and using information literacy skills appropriately, a person cannot achieve educational and professional goals/targets. Huang further stated that with the increasing awareness and importance of information literacy, information literacy is widely included in the curriculum structure at both undergraduate and postgraduate levels in universities in the world. In some countries, this program was implemented successfully. For example, the University of Washington provides course-embedded information literacy instructions including course material guidelines and collaborative assignments. Further examples can be seen at the University of North Carolina Chapel Hill which provides literacy information class to introduce learning tools for information literacy (Huang et al., 2016).

In the State Islamic University Sunan Kalijaga Yogyakarta (UIN Sunan Kalijaga Yogyakarta), information literacy is a compulsory subject for the Library Science program which studies the different aspects that relates to information access. However, since 2016 information literacy has been included as a compulsory subject for the History of Islamic Culture program. This subject is given in the second semester with the expectations that it will equip students with literacy skills that will support their studies in university as well as help them become independent lifelong learners. The History of Islamic Culture program is the only program that has included information literacy in its curriculum. The History of Islamic Culture students also have distinctive characters, namely the diversity of students who come from various regions (villages, cities, and big cities), and from various types of schools (Highschool, Vocational School, Islamic School, Islamic Boarding School). Based on this background, evaluation is necessary to find out the extent to which this course can assist students in preparing themselves to take part in the learning process.

2. THEORIES
2.1. Information Literacy
In a traditional sense, literacy refers to the ability to read or to understand a certain word (Thompson & Henley, 2000, p. 1). In its development, literacy not only refers to the ability to read but to also write or convey an idea as a result of the ability to understand the meaning of words or even information. If the meaning of literacy is related to information literacy, then it can simply mean the ability to understand information. Certainly, the meaning of literacy is not as simple as this because before we can understand information then there must be information first. Therefore, the more detailed meaning of information literacy covers the ability to access information, evaluate and use information from different sources (American Library Association, 2000, p. 2). Information literacy is related to the ability to show awareness on how to collect, use, manage, synthesize dan create information and data ethically, and also have the informational skill to do it effectively (SCONUL Working Group on Information Literacy, 2011, p. 13).

2.2. The Importance of Information Literacy in Learning

Information holds an important role in people's lives. Even at the beginning of the 20th century, the information age emerged where information became the key in business development (Perdew, 2017) to the point where information became a valuable asset in the business world which then has an impact on the use of information technology. Currently, the dissemination of information through the web allows everyone including students to access information easily. And to know how to find, understand, manage, and use information is covered in the scope of skills of information literacy, which will lead students to success in the academic field and the professional field. The importance of information literacy is also stated by UNESCO as followed:

> *Information literacy enables people to interpret and make informed judgments as users of information sources, as well as to become producers of information in their own right. Information literate people are able to access information about their health, their environment, their education, and work, empowering them to make critical decisions about their lives, e.g. in taking more responsibility for their own health and education (UNESCO, 2017).*

Information literacy skills will increase the chances of independent learning where students are expected to be able to use different sources of information to extend their knowledge, convey questions, and sharpen their critical thinking (American Library Association, 2000, p. 2). Therefore, teaching information literacy is important. In some developed countries, they even develop regulations that encourage the promotion of information literacy, either in the form of formal regulations or policies or in the form of developing information literacy standards or guidelines to support their national education goals (Thompson & Henley, 2000). Information literacy is also integrated into the curriculum through coordination with libraries (Freeman & Lynd-Balta, 2010) therefore students will have the skill in collecting and critically analyzing to ascertain the depth of content used to support learning.

2.3. Information Literacy Competency Standards

Information literacy builds the foundations of lifelong learning that apply to all disciplines of science, all learning environments, and all levels of education that enable people to learn independently (Sales & Pinto, 2016, p. 69). Therefore, to be competent in information literacy is important to support learning. Thus, several standards of information literacy skills were developed by several institutions. In the year 2000, the American Library Association through the division of the Association of College and Research Libraries (ACRL) published a standard competency in information literacy for higher education. In the standard it is stated that an individual who is information literate is an individual that is able to:

1) Determine the required information needed
2) Effectively and efficiently access the information needed
3) Evaluate the information and the sources of information critically
4) Combine selected information with pre-existing basic knowledge
5) Use information effectively to accomplish a specific goal
6) Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally (American Library Association, 2000).

Then the SCONUL Working Group on information literacy also issued the Seven Pillar of Information Literacy Core Model standard which includes skills for:

1) Able to identify a personal need for information identify Identify)
2) Can assess current knowledge and identify gaps (scope)
3) Can construct strategies for locating information and data (plan)
4) Can locate and access the information and data they need (gather)

5) Can review the research process and compare and evaluate information and data (evaluate)
6) Can organize information professionally and ethically (manage)
7) Can apply the knowledge gained: presenting the results of their research, synthesizing new and old information and data to create new knowledge and disseminating it in a variety of ways (Present)

The research on information literacy focuses on 3 main skills, namely: being able to identify information needs which are then expressed in terms of search, the ability to search and find information effectively and efficiently, and use the information found ethically and responsibly.

3. METHODS

This research aims to assess the level of literacy skills and efforts to see changes in students' information literacy skills during the learning process. And because this research will conduct trials in the learning process, the research here uses class action research. Classroom action research is practical research that aims to improve learning practices in the classroom by taking several actions (Purrohman, 2011). (Sudaryono, 2009, p. 65) adds that class action research is research that is conducted in a class to know the effect of an action that is applied to a research subject in that class. This research refers three important components, namely (Arikunto et al., 2021).

1) This research refers to an activity of observing an object by using certain methodological rules to obtain useful data or information. In this study, it is related to the act of researching students in improving their literacy skills
2) Action refers to an activity that is intentionally carried out with a specific purpose. Actions in this study emphasize activities to improve literacy skills by using information literacy standards.
3) Class which means classroom in a more specific sense. In this study, the class is limited to one information literacy course class.

The subjects of this research are 34 students of the History of Islamic Culture program (SKI) class of 2020. Whereas the role of the researcher is also as the facilitator because according to MacDonald (2012, p. 39), participatory research allows researchers to act as participants, facilitators, and learners during the research process.

Table 1: History of Islamic Culture Students' Profile

No	Category	Sub-Category	Total	Percentage
1	Gender	Female	18	53%
		Male	16	47%
2	Area	Village	16	47%
		Town	13	38%
		City	5	15%
4	Former School	Highschool& Vocational School	14	41%
		Islamic School	17	50%
		Islamic Boarding School	3	9%

3.1. Data Collection Procedures

The research procedure used in this research is Kemmis & Taggart's theoretical model which includes four components, namely:

a. Planning

In this stage, the researcher prepares several things that are needed in carrying out the action research class, namely the lesson plan for the *Information Literacy* course which contains learning

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objectives, learning outcomes, lecture materials, learning methods, task descriptions, and assessment indicators as well as the weight of the assessment for each task. The course material uses a combination of AASL and ACRL standards that focus on information literacy skills, namely the ability to find information, evaluate the information found and use information ethically and responsibly. The three standards are then elaborated into several more specific materials as contained in the lesson plan. The lesson plan is then used as an instrument in this action research. Lecture materials, teaching methods, and forms of learning can be seen in the table below:

Whereas the task descriptions and assessment indicators that will be used as an instrument are as follows:

Table 2: Task Description and Assessment Indicator

No	Topic	Task Description	Criteria-Indicators Assessment
1	Overview Lesson Plans and Pre-test	1. Lecture material description and evaluation 2. Pre-test	
2	Searching for information on Google	Do an information search on Google	1. Accuracy of search terms 2. Accuracy of strategy use
3	Searching for information on OPAC	Searching on OPAC: 1. Determining a topic (information need) 2. Searching book titles on the chosen topic 3. Evaluate search results	1. Accuracy of Search terms 2. Accuracy of strategy use 3. Choosing a relevant result
4	Looking for information using the e-journal database of UIN Sunan Kalijaga Library	Students do a presentation on how they searched: 1. Choosing the database subscribed by UIN Sunan Kalijaga library 2. Determining search term 3. Using an appropriate search strategy	1. The use of search terms 2. Use of search strategy 3. Search evaluation: search result evaluation, search refining if needed
5	Evaluate the information and use information ethically	Compile a short paper (4-5 pages) on specific topics	1. Writing citations 2. Use of referencing 3. Using valid sources of information

b. Execution of actions (Acting)

This stage is the implementation of all the plans that have been made. In this research, during the lecture course of fourteen meetings, the action is carried out in five (5) sessions according to the information literacy material contained in the lesson plan (see table 2). However, before it is carried out, students are given a simple pre-test to determine the baseline of their literacy skills.

The stages of implementation, are as follows:

1) Pre-test as a baseline to determine students' initial information literacy skills.
2) Teach both electronic and printed sources of information.

3) Introducing search strategies that are used in the informational retrieval facility, followed by an assignment to measure the ability to search by conducting searches in 3 types of information retrieval facilities, namely: Google, OPAC, and e-journal databases.

4) Introduction to citation styles and referencing using APA style. The assignment for this material is to write papers using valid and authoritative sources and use these sources ethically through citation and referencing.

c. Observation of actions (observing)

This activity is carried out simultaneously with action implementation. The data collected at this stage contains the action implementation based on the plans that have been made and their impact on the process and instructional results collected with the help of observation instruments. Observational data can be obtained or collected regularly from students as part of the daily administration of the school and normal processes in the classroom (Baumfield et al., 2011, p. 87).

In this research, observations were made according to the type of assignment given to students. For written and take-home assignments, observations were made by looking at the assignment results such as searching reports (OPAC and Google) and preparing short papers. As for the search task, the researcher observed students who practiced searching in electronic journal databases to assess students' searching abilities.

d. Reflection of actions (Reflecting)

In this research, reflection on actions was carried out by using student assignments results and observations to then see changes in student literacy abilities that occurred during the learning process and to find problems faced by students in the process of improving their information literacy skills. From this, it is hoped to identify the gaps that occur, parts that have not been mastered by students, and the learning strategies that may have to be maintained, and ones that must be modified.

Data analysis in classroom action research is the same as data analysis for field research. However, the analysis process is carried out from the start using available data such as observations. According to Daryono (2014, 214-220), the analytical steps carried out in the study are as follows: data editing, data coding (descriptive code), categorization, and data reduction. This process is then carried out from the observation of the first task to the last task.

4. RESULTS
4.1. Baseline/Pre-test

1) Internet Usage

In this stage, the researcher emphasizes two aspects namely internet accessibility and internet usage intention by students. According to the result of the pretest, a majority of the students (97%) have devices to access internet through cellphones, laptops, or personal computers, and only one person does not have access to the internet, therefore, having to use public facilities to access it. Meanwhile, internet usage also varies, but most students use the internet for entertainment purposes such as games, YouTube, and chatting (41% (14), and 38% for using the internet for communication via email. Whereas, only 9% of students use the internet to search for information. While the remaining 12% accesses the internet for different purposes. This shows that the History of Islamic Culture students is already familiar with accessing the internet, however, only a small percentage of students use the internet to find information and this is an important focus in evaluating the ability to search for information on the internet.

2) Sources of Information and Use of Retrieval Tools to Find Information

Three things are emphasized in this aspect, namely the use of OPAC to search for book titles, search engines, which in this case is Google, to search for general information (books, scientific articles from various sources and domains, and general information) and scientific articles through e-journal databases. In general, students (73%) understand that information sources are used to support scientific writing and scientific journals. However, students still use Google to find various kinds of information, both general information, and to find book titles in the library. Only 44% use OPAC. Essentially, students understand that to find the latest information they have to use information sources from the internet. A majority of the students (77%) also understand that using scientific information sources has to be supported by a clear reference source.

3) Use of Search Terms and Search Strategies

One failure in finding books on OPAC is the use of inaccurate keywords. The result of the pre-test shows that only 23% of students understand the importance of using search terms in searching. A majority of students still use natural language in finding information (85%) and only 14% use accurate phrases as search terms.

For search strategies, the researcher focuses on the strategies that are usually provided in the retrieval tools, namely exact phrases, Boolean AND, OR and NOT, and truncation. For phrase searches, 32% of students have used the exact phrase strategy with quotation marks (õí ö). For the Boolean operator, 53% of students understand the use of AND well but only 23% of students understand the use of OR and NOT. As for the use of truncation, no students are familiar with this facility. This shows the need to teach searching strategies.

4) Use of Information

Ethically using the information found is the last basic competency in information literacy. Three things that the researcher uses as competency standards in this study are citing, referencing, and the use of authoritative sources. The result of the pre-test shows that 65% of students know how to quote direct statements from writers, namely by using quotation marks on the direct statement. As many as 73% of students also understand the reasons for using citations when using works or ideas from others. However, students still do not understand bibliographic writing, especially writing article titles and journal titles. Only 59% of students understand how to reference correctly.

4.2. Implementation of Actions and Observations

Based on the results of the pre-test, the researcher then provided information literacy material and continued by providing training to students through independent assignments. The result of the pre-test shows that their searching abilities are still unsatisfactory, with a score below 50% except for the Boolean strategy. Therefore, materials and assignments for searching cover 3 retrieval tools, namely Google, OPAC, and database e-journals. From the result of the assignments, the researcher can then see the development that the students experience after attending this lecture.

1) Searching in Google

The next assessment of literacy skills is the ability to find and evaluate information by using various information retrieval tools. In this section, we will start with Googling skills as a means of information retrieval (retrieval tools), the search engine that is most widely used by the public. From baseline findings, many students use Google to search for information, some even use Google to search for various information such as books and articles. This shows that students do not know a lot about Google, both its search facilities and how to use them. Therefore, in the early stages of lectures, students are introduced to the types of searches (simple and advanced searches) and various facilities owned by Google by showing the Google search help menu. The next step is to give assignments to students to search for information on Google with the following assessment criteria:

a) The ability to use the appropriate keywords
b) The ability to use the right strategy
c) Evaluating search results

Next, students are given the task to search for information (about the chosen topic) through Google. And the results of the searching task via Google can be seen in the table below:

Table 2: Google Search Results

...	...	...	Total	Percentage
Search Term	Type of search term	Broad terms	24	71%
		Phrase	8	23%
		Factual search	2	6%
	Synonym	Relevant	6	18%
		Not relevant	12	35%
Strategy	Truncation	Accurate	0	0
		Inaccurate	4	12%
	Exact Phrase	Accurate	3	9%
		Inaccurate	2	6%
	Boolean	Accurate	6	18%
		Inaccurate	10	30%
	Advanced search		2	6%
	Without strategy		9	27%

a) Use of search terms
Searching on Google, many students (71%) still separate search terms and then set single words as search terms such as: History, Occurrence, War, World. In the search process, the search term will be combined with the Boolean operator AND (History of AND occurrence of AND world AND wars). The search is ineffective because a search term in the form of natural language will automatically be processed by Google with Boolean AND. Furthermore, in searching for information through Google, the researcher found that several students used synonyms as alternative search terms. However, 35% of students use synonyms incorrectly, namely synonyms that are less relevant which in turn generates a lot of irrelevant search results. Even so, 23% of students used the search term correctly by using phrases, such as "Child development" and "early childhood." By looking at the comparison between students who use the correct search terms and the incorrect ones, it appears that the students' ability to search for information on Google is not optimal.

b) Searching Strategies
Searching on Google can be done through simple and advanced searches. The simple search menu also allows using various search strategies such as Boolean operators, phrase search, and some limitations (year of publication, document format, domain, etc.). According to the table above, only 6% of students use advanced search whereas 94% of students use the simple search menu.

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Students who used simple search also haven¢t optimally used the available facilities, in fact 27% of students don¢t use any strategies at all. This means students searched by only using natural language such as the practice of press freedom in Indonesia. Meanwhile, the strategies that are generally used are only phrase searches (15%) and Boolean operators (48%) which are not all done properly. For example, in the Boolean operator, students use OR to connect unequal search terms. Generally, the Boolean OR is used to search for search terms that contain synonyms or quasi-synonyms. Furthermore, students also use the strategy AND to combine single search terms such as History AND Civilization AND Dynasty AND Utsmaniyah.

For the use of phrases, only 15% of students used phrase searches (õí ö). This possibly happened because students mostly use single search terms which are broad terms that are then combined using Boolean AND. From those 5 students, only 9% of students used it correctly, for example, õchild developmentö and õearly childhood.ö Meanwhile, 6% of students still use it incorrectly, for example by putting quotation marks on search terms such as "politics".

2) Searching on OPAC

Next, the students practiced searching for information through OPAC. In this search practice on OPAC, there has been a general increase in the studentsø search skills both in the use of search terms and in the strategies used, as can be seen in the table below. The use of the strategy is of course adapted to the facilities owned by OPAC.

Table 3: Searching on OPAC

...	...	...	Total	Percentage
Search Term	Type of search term	Broad terms	10	29%
		Phrase	17	50%
		Natural language	5	15%
	Synonym	Relevant		
		irrelevant	2	6%
Strategy	Truncation	Correct		
		Incorrect	0	0%
	Exact Phrase	Correct	17	50%
		Incorrect	2	6%
	Boolean	Correct	10	29%
		Incorrect	2	6%
	Select Field		10	29%
	Limit		3	9%
	Without strategy		9	26%

a) Use of search terms

Searching on OPAC, students are starting to use accurate search terms, namely by using phrases for specific searches. As much as 50% of students use phrases as search terms such as õIslamic civilizationö and õIndonesiaö. Only 29% of students still use broad terms as a search term such as typography, psychology, and reforestation. Broad terms are generally used to produce a lot of

results. Therefore, it is incorrect to use it in specific searches. Furthermore, 15% of students use natural language as a search term, however, the search terms used are more specific than before, for example, õthe history of Islam in Indonesiaö (still including the stop word in). Fewer students also do not force synonyms in search terms. Only 2 students or 6% of students still use inaccurate synonyms. Whereas, 26% of students do not use any strategies and these are students who use broad terms in their searches.

b) Searching Strategies

The studentsø ability in using the correct search strategy has also experienced an increase shown by the specific searches they made according to the available facilities. The search using phrases has been done by 50% of students by using quotation marks (õí ö). As much as 29% of students also use Boolean operators correctly in the advanced search menu, for example: biograph AND (Sultan Muhammad al-Fatih). Some students even do more specific searches by using the limit facility. To limit search results, 29% of students also use search terms with a certain category like writer, subject, and title. In addition, students limit the search for information based on certain types of collections, for example, books, monographs. This shows an increase in the studentsø searching ability.

3) Searching in the Database

Searching in an e-journal database is the last material for information searching. In this search, a lot of students use the JSTOR database because this database provides the most articles and book parts about history and the like. Students did better in searching for information in this e-journal database compared to their searches in Google and OPAC, both in determining search words and using search strategies. Students even do a lot of refine searches when they have not found the appropriate results as shown in the table below.

Table 4: Searching on JSTOR Database

...	...	...	Total	Percentage
Search Terms	*Type of search terms*	*Broad terms*	7	21%
		Phrase	22	65%
		Natural language	5	15%
Types of searching and strategies	*Basic Search*	*Boolean*	12	35%
		Exact Phrase	17	50%
		Truncation	0	
	Refine search	*Limit*	34	100%
		New search	0	
	Advanced Search	*Truncation*		
		Exact Phrase	8	24%
		Boolean	30	88%
		Specific field (authors, etc.)	6	18%
		Limit/ narrow result	33	97%

a) Use of search terms

In this JSTOR search, only a few students (18%) used broad terms such as: arts, education, terrorism. Usually, students start their search with broad terms but continue to narrow the search, for example limiting it to certain disciplines such as arts and music so that the search results obtained are more specific. Meanwhile, a majority of the students (70%) have done their search using a more standard search term, using phrases such as: õhistory of Islamic civilizationö, history of Islam in Europe (history of Islam, Europe), and õhistory of the Umayyads.ö The use of natural language has also been reduced to only 12%. One example of natural language use is õthe history of the development of Islam in Americaö in a simple search. When using natural language, students will evaluate the search results, and almost all students will do a refine search to limit the search results so that the results obtained are more specific.

b) Searching Strategies

Simple search

This search strategy facility is available in 2 search menus, namely basic search, and advanced search menus. Essentially, almost all students use search strategies in both simple and advanced searches. In a simple search, there are 3 search models carried out by students, namely:

1) Search using more than one strategy, namely Boolean and phrase. Students use more than one search term concept, both single words and phrases which are then combined with Boolean AND, for example: õIslamic historyö AND Europe.

2) Students break phrases into several search words which are then combined with Boolean AND, for example, the history AND development of AND Islam AND America

3) Students that donøt use any strategy use broad terms which are common search words (15%). However, they then do a refine search by limiting certain fields such as access type, year of publication, type of work, language, and disciplines.

Refine search is carried out by all students, both those who use the searching strategy and those who do not.

Advanced Search

In this search, students use the Boolean AND operator to combine search words in different search fields. There were even some who chose certain search fields, namely keywords (18%). In addition, students also used the limit search facility, namely: type of access (only access I have), type of publication (a majority chose books and journals), year of publication, and document language. There were also 3 students who limited their searches to certain disciplines or subjects as well, for example, the discipline "history of music" because they happen to be looking for the history of music in the Middle East.

From the data above, it shows that students can perform specific searches using the available search facilities.

4) Scientific Writing: Citing and Referencing

Writing short scientific papers is one indicator to see the students' ability to ethically use the information found based on three important aspects, namely: accuracy in citing sources used to support their writings following citation standards, accuracy in writing references following the standard, and the use of valid or authoritative sources of information. APA style is the citation and reference standard used in this assignment. The general result of the assignment can be seen in the table below.

Table 5: Citation & Referencing

...	...	Total	Percentage
Citation	According to standard	22	65%
	Inaccurate	12	35%
Referencing	According to standard	17	50%
	Inaccurate	17	50%
Information source	valid	28	82%
	Invalid	6	18%

For the first aspect, specifically citation, 65% of students did the citation correctly. Some students are even able to use automatic citations from Microsoft Word. However, some students have not written citations and paraphrasing properly, specifically by not including the sources used to support their writings. For reference writing, half of the students have written correctly, especially those using the automatic citation system. Writing references manually has the potential to cause errors in writing. There are three types of errors in writing references, namely:
a) Writing journal articles as sources of information. Some students write the title of the article in italics, even though it should be the title of the journal.
b) Writing from sources taken from the web and not including the time of access to the web.
c) The list of titles is not sorted alphabetically

The last aspect is the selection of information sources used to support the students' works. Most students use information sources from books and scientific journal articles. Therefore, the usage level of authoritative information sources is as high as 82%. Sources of information that are not authoritative are sources taken from websites that do not meet standards, for example, websites that have no author name (anonymous) in their articles and websites that are unscientific or even biased.

DISCUSSION

This section is a reflection of the observation result which is the last step in this class action research. According to the pre-test, students are familiar with accessing the internet, however, only a small percent (23%) use it to search for information. As a result, this affects the students' abilities to search for information on the internet. From the pre-test done at the start of the class in which students have not attended the action class, it shows that the History of Islamic Culture students is not information literate enough, both in understanding sources of information and in using information retrieval as tools to find accurate information such as using OPAC to find book titles. Google is a place to find all kinds of information, both general and academic information. The introduction of information sources and sources of information in the action class has a fairly good impact, as shown from the post-test results in table 6.

Table 6: Comparison of Pre-test and Post-test Results

No	Standard	Elements	Percentage	
			Pre-test	post-test
1	Information sources and retrieval tools	Source of scientific information	73%	81%
		OPAC	44%	83%
		Google	85%	100%
2	Search Term	Importance of Search term	23%	94%
		Use of phrases	14%	100%
3	Search Strategy	Boolean AND	32%	100%
		Boolean NOT	23%	100%
		Boolean AND, OR, NOT	53%	84%
		Phrase ("í ")	32%	100%
		Truncation	0%	16%
4	Use of information	Direct quote	65%	100%
		Citation	73%	88%
		Referencing	59%	67%

Likewise, in comparison to the pre-test and post-test results when searching for information, there was a very significant increase. However, this result was achieved through the class action process in quite a large portion, namely by searching on Google, OPAC, and e-journal databases. Searching on Google becomes the most difficult search for students even though many people rely on Google as a source of information. However, searching for scientific papers requires the right strategy and search terms. Observation results show that students use Google like they are looking for general information and are quite satisfied with the many and mostly irrelevant search results. This becomes an important note for the researcher to put more emphasis on Google searches, considering that Google is the most widely used tool for students and the general public in searching for various types of information. However, students have already experienced a significant increase in searching on OPAC and database e-journal. The insufficient searching exercises and materials that were given on Google becomes the basis to provide a larger portion of searching exercises on Google and OPAC. This in turn gives better results. The only searching strategy that needs to be improved is truncation because students still don't understand this operation well. However, this strategy is not always needed in the search.

Another aspect that needs to be emphasized is the citation and referencing skills. In terms of technical citation skills, some students are excellent at using Microsoft, thus the error or inaccuracy rate of their citations was very small. While some students who still use the manual method often do not follow the standard and still need more practice. More importantly, there are still students who have not paraphrased theories from other works, increasing the potential for plagiarism. This also highlights the need for more paraphrasing and citation exercises. A similar pattern also occurred with referencing, especially for students who still use manual methods for their citations.

The evaluation aspect in this study includes two things, namely evaluating search results and evaluating the information sources used to support the student's writing. Evaluation of in-depth search results was not done by many students. Usually, students will see too many results, indicating that their search has not been successful. Thus, refining is necessary even though some students have evaluated the search results in the e-journal database. Searches in OPAC and e-journal databases did not have a significant impact on the inaccuracy of search results. However, searching on Google requires higher evaluation capabilities, to evaluate the reliability and authoritativeness of the website used. This can be seen in the result of the last assignment, where 3 students used unreliable sources because they did not evaluate their information source for their short papers.

CONCLUSION

Information literacy skills are very important in supporting learning activities and therefore need to be taught to new students. This study shows that teaching information literacy impacts the students' information literacy skills. Although there are still aspects that need to be improved, specifically in evaluating information sources, especially information sources from websites. Likewise, it is also necessary to strengthen the aspect of using information to avoid the issue of plagiarism.

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