

Model Project Base Service Learning (PjBSL) on Information Literacy Course in Higher Education

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ABSTRACT

This paper aims to discuss the information literacy learning model for students of the Library and Information Science Study Program, Universitas Negeri Padang (PS-PII-UNP). One of the information literacy learning models that can be used is the Project Based Service Learning (PjBSL) learning model in facing the challenges of the 21st century. The challenges of student learning mastery, especially in information literacy courses, are having the ability to access, evaluate, organize and use information in the learning process, problem solving, making formal and informal decisions in the context of learning, homework or in education. Information literacy for university students is an advantage that is recommended in the process of education and their life skills with insight into humanity, nationality, and civilization related to visible phenomena and events. Project Based Service Learning is a learning model that uses projects as the main activity in the learning process and this activity is under the direction or guidance of the lecturer. The PjBSL learning model places students as the center of learning (student centered). This model is one of the experiential learning that provides a learning experience in the form of providing service tasks to the community. The hallmark of this model is the learning process that is integrated with field experience and a process of reflection. To improve student learning outcomes, it is necessary to develop an interesting, impressive and meaningful information literacy learning concept. Through interesting, impressive and meaningful learning, students no longer consider information literacy as a boring subject so that students' information literacy skills can be improved, and thus student learning achievement can also increase.

Keywords: *Information Literacy, Project Base Learning, Service Learning*

1. INTRODUCTION

According to [1], that information literacy ability is intended to be a person who is trained to use various tools and also the main sources of information in completing tasks and solving problems. Information literacy according to the educational perspective of [2], shows an ability to access, evaluate, organize and use issues in the learning process, solving dilemmas, making formal and informal decisions in the context of learning, homework or in education. Information literacy skills are needed in teaching and learning activities in the classroom. The research of [3] and [4] found that the lack of information literacy skills of students in classrooms demands an urgent need for change in the academic community that is very enthusiastic about the use of the internet in education. Information literacy skills play an important role when processing information to complete tasks successfully.

They need to select information and formulate key questions and know how to find, evaluate and use information from many sources including online sources. They also need to be aware of problems related

to the ethical use of information, such as copyright and plagiarism. In this regard, [5] also argue that students who have been taught how to use models or frameworks when carrying out such tasks will almost always be more successful than those who do not have guidance. Those who have not been taught skills or provided with a framework for their learning or research often use copy-pasted material.

In relation to learning, information literacy skills are also an important part of lifelong learning, critical thinking and acting ethically. based on [6] that information literacy skills allow individuals to learn the knowledge and skills needed independently at every stage of their lives. Teach him to be skilled in accessing information, evaluating and using it effectively according to his needs to improve the quality of personal, social and community life. For example, in a social context, information literacy skills in the midst of rapid changes in media and information technology can encourage individuals and people to be information literate in the lifelong learning process. In the context of the world of work, these skills can be used to create

various kinds of innovations needed for themselves and the company.

Information literacy skills in learning can also support the formation of students' critical thinking and ethical behavior. In essence, the ability to think critically and act ethically is an important outcome of higher education. In lectures, information literacy helps in critically analyzing information in balanced decision making, as a result paving the way for knowledge creation, learning and discovery [7], [8], [9], [10] that in the element of information literacy, namely finding, evaluating and using this information in lectures, it can add and include critical thinking learning. Both have a relationship as an important component of metaliteracy that promotes students consciously to become consumers and producers of information.

In the classroom, the learning achievement of information literacy courses is not only the competence of interest and culture of reading and information search. According to [11], the competencies expected of students in information literacy courses are: (1) develop the ability to understand the text and relate it to personal experience, (2) improve critical thinking skills, and (3) develop creative communication (verbal, written, visual, digital) through activities responding to reading texts. The information literacy competency standards refer to the *Association college and research libraries* (ACRL), namely (1) the ability to determine the type and nature of the information needed, (2) the ability to access information needs effectively and efficiently, (3) the ability to evaluate information and sources critically and make the selected information the basis of knowledge, (4) the ability to use and communicate information effectively and efficiently, and (5) the ability to understand economic, legal, and social issues in using and accessing information ethically and legally. The study of information literacy skills is important in the education and teaching system of students in universities today.

2. BACKGROUND

2.1 Proses Pembelajaran Literasi Informasi Mahasiswa Program Studi Perpustakaan dan Ilmu Informasi Universitas Negeri Padang

In fact, there are still relatively many students who do not understand the concept of information literacy. They have not been able to access the information needed through the right ways and procedures effectively. The results of the 2020 National Digital Literacy survey conducted by the Ministry of Communication and Informatics in 34 provinces showed that the information literacy and data literacy sub-index was the lowest with a score of 3.17.

Meanwhile, other sub-index measurements, namely technological ability, the score is 3.66, communication and collaboration skills show a score of 3.38. The result of this score of 3 according to the framework that refers to "*A Global Framework of Reference on Digital Literacy Skills*" (UNESCO 2018) is moderate. Information literacy index and data literacy have not yet achieved a good score (4.00), only slightly above moderate (3.00).

Based on observations made in 2021, the information literacy ability of the students of the Library and Information Science Study Program at Universitas Negeri Padang (PS-PII-UNP) was quite low, at 64.7% when compared to 65.17% technology literacy and media literacy. 71.96%. The measurements were carried out on 118 PS-PII-UNP students. Information literacy ability data shows that they are able to find and access information. However, the ability to identify and filter information according to the required scope is still not as expected. Students are still relatively weak in planning, evaluating, organizing and directing information more effectively to present new knowledge.

Furthermore, the data also shows that 60.7% of PS-PII-UNP students still do not know the concept of information literacy. Not many PS-PII-UNP students seek their information needs through the right path and procedure. 59.3% of PS-PII-UNP students often look for information instantly, and only copy and paste without any review of the information or the source of the information. 60.3% of students only complete the given task without processing information optimally. These data indicate the importance of education and teaching in higher education institutions on students' information literacy skills, including the role of lecturers in classroom learning.

Although there is easy access for current students, information literacy skills are needed in finding content and the existence of information as needed and the ability to evaluate the search for information obtained. [12] States that the application of information literacy can create lifelong learning. However, today's young generation is referred to as the Google generation, where the abundance of information makes it very easy for them to use information from various sources with a process of copy *and paste*. The inaccuracy of the information as stated can occur because of the abundance of information (*smog data*), where it makes unnecessary or irrelevant information often accessible, and sometimes gets more attention than the information that is really needed.

[13] finds that today's students seem unprepared for the challenge and there is a need to institutionalize new methods in equipping students to enter the 21st century

knowledge society. Research by [14] also states that classrooms in the 21st century are faced with the reality of education with the challenge of accessing information (*unimaginable rates digital*). Without realizing it, lecturers and students face new challenges in learning with the development of information technology media.

[15], [16] expressed their view that if lecturers are not able and ready to internalize information literacy skills and use information technology media in learning, lecturers and students will suffer. This is because information literacy and ICT skills require students to be equipped with thinking in different dimensions, to take different perspectives, analyze images, visually design spaces, and gather meaning in various modes. Information literacy ability in the midst of the development of information technology is a required component in higher education, but in practice it is still rarely incorporated in classroom learning. The importance of combining them in a practical way can integrate students' off-campus digital literacy experiences into authentic literacy experiences in the classroom so as to increase learning opportunities. Although there is easy access for current students, literacy skills are needed in finding content and the existence of information as needed and evaluating the search for information obtained.

In addition, the lack of knowledge of PS-PII-UNP lecturers about the management of information literacy learning makes the learning process less effective. So far, lecturers have applied the models *Contextual Teaching Learning* and *Cooperative Learning* and their development with various methods such as the *system student active learning* and others. However, according to the acknowledgment of the PS-PII-UNP lecturer, the learning outcomes using this learning model did not show significant changes. Learning that exists today, is more likely to be competitive learning, and emphasizes purely cognitive aspects. So that students who get high course scores tend to have an individualistic nature. Smart only for himself without wanting to share his knowledge with other friends. As for students with medium and low abilities, they do not get part in group work and choose silence so that the learning process remains monotonous and students remain passive.

Contextual and collaborative learning paradigms need to be applied in the classroom. This means that the ability of lecturers is needed to be able to collaborate directly between the thoughts and knowledge of lecturers and students as well as between students and other students. With this learning pattern, it is hoped that students will not only master cognitive abilities, but also be able to develop other skills that exist within themselves.

2.2 Standards for Information Literacy in Learning at PS-PII-UNP

In the *Association of College and Research Libraries* [17], information literacy in higher education is useful in lifelong learning that will form the basis for future work and careers. According to [18], information literacy is needed in curriculum implementation, because it requires the competence of students to utilize information sources in various formats. Information literacy skills are effectively taught as an integral part of learning, because they can improve student learning situations by providing instruction at the point where it is needed and recognizing the real need to connect information literacy to the context of assignments or lecture materials. [19], [20].

The term information literacy was first introduced by Paul G Zurkowski in 1974, who expressed it as a technique and ability to utilize various information tools and primary sources to solve their problems. Information literacy is a set of abilities that require individuals to recognize when information is needed and have the ability to search for, evaluate, and use effectively the information needed [21]. According to Jonner, (2008), information literacy is a set of skills needed to find, analyze and utilize information. Information literacy based on the educational perspective of [22] shows an ability to access, evaluate, organize and use information in the learning process, problem solving, making formal and informal decisions in the context of learning, homework or in education. Information literacy learning is not just a competency of interest and reading culture and information search. According to [23], the competencies expected of students in information literacy courses are: (1) developing the ability to understand texts and relating them to personal experience, (2) improving critical thinking skills, and (3) developing creative communication (verbal, written, visual, digital) through activities responding to reading texts.

The information literacy competency standards refer to the *Association college and research libraries* (ACRL), namely (1) the ability to determine the type and nature of the information needed, (2) the ability to access information needs effectively and efficiently, (3) the ability to evaluate information and sources critically and make the selected information the basis of knowledge, (4) the ability to use and communicate information effectively and efficiently, and (5) the ability to understand economic, legal, and social issues in the use and access of information ethically and legally. The competency criteria for learning information literacy in higher education refer to the standards of the *Association College And Research Libraries* (ACRL).

ACRL through the task force on literacy competency standards in 2000 has set 5 (five) standards and 22 (twenty two) indicators of student information literacy competence [24]. Five standards of student information literacy achievement consist of *Know, Access, Evaluate, Use and Ethical/Legal*.

2.3 Information Literacy Learning Content Standards at PS-PII-UNP

Provisions in the Regulation of the Minister of Research, Technology, and Higher Education Number 44 of 2015 concerning National Higher Education Standards, learning content standards are standards regarding the curriculum imposed by an education provider. Content standard criteria also include materials and competencies so that learning content standards are closely related to other standards such as learning process standards, graduate competency standards, assessment standards, and others. The standard of learning content contained in the Quality Standards of the Padang State University is a minimum criterion for the level of depth and breadth of learning materials that are cumulative and integrative. The level of depth and breadth of learning materials as referred to in Article 8 paragraph (1) for each educational program, is formulated with reference to the description of the learning outcomes of graduates from the KKNI. The level of depth and breadth of learning material is outlined in study materials that are structured in the form of courses. The level of depth and breadth of learning materials for graduates of four diploma and undergraduate programs at least master the theoretical concepts of certain areas of knowledge and skills in general and the theoretical concepts of specific sections in these areas of knowledge and skills in depth.

This information literacy learning content standard (PS-PII-UNP) adopts the competency standard from ARCL (2000). In each activity, information literacy competencies that must be learned by PS-PII students at Padang State University, have themes and sub-themes which are detailed in the syllabus, lesson plans, and lecture contracts. Based on the KKNI, the information literacy learning achievement of PS-PII-UNP is explained in detail as follows;

Table 1 Learning Outcomes of Information Literacy PS-PII-UNP

KNOWLEDGE	SPECIAL SKILLS
And are able to formulate procedural problem solving.	KK1: Able to recognize information needs both for himself and for library users
P1: Able to apply their field of expertise and	KK2: Able to search and/or

utilize science, technology, and/or art in the field of Information Literacy, Teaching and Learning in solving problems and being able to adapt to the situation at hand.

P2: Mastering theoretical concepts in the field of knowledge in the field of Information Literacy, Teaching and Learning in general and theoretical concepts of special sections in the field of knowledge in depth, and able to formulate procedural problem solving

search for information using various available information sources, both printed and digital, appropriately

KK3 Able to find the information needed

KK4 Able to analyze and evaluate the information found

KK5 Able to use information ethically based on citation standards that are accepted at the international level

KK 6 Able to use various citation applications to ensure accuracy and consistency of citations in using information and producing information

KK7 Able to teach information skills to other people and/or library users.

From the explanation above, it can be concluded that learning information literacy is one of the compulsory subjects of the study program that must be taken by students. In the IQF-based curriculum, it has been detailed in detail about the content standards of information literacy learning as well as its distribution into knowledge competency standards and special competencies. To realize all of the above teaching materials, lecturers must have *skills* superior and personalities to be able to design creative, innovative and active learning, so as to produce students who are not only broad in knowledge but also able to apply it optimally in social life.

2.4 Information Literacy Competency Assessment Standards in Learning at PS-PII-UNP

The learning process occurs because it has certain goals and wants to be achieved. One of the goals can be in the form of learning outcomes. The results of this study must be able to show changes in behavior that are positive, permanent, conscious, and functional. The form of learning outcomes is related to assessment or evaluation activities. Therefore, it takes techniques and

procedures for assessment or evaluation of learning that is able to assess the overall learning activities effectively and efficiently so as to produce accurate scores in accordance with the truth of students' learning abilities. According to [25] learning outcomes can be seen from changes in behavior gradually or as a whole. This behavior change is an accumulation of learning outcomes that include three important aspects, namely cognitive, affective and psychomotor. The learning process which, if only produces a slight change or changes only one or two aspects of behavior is called a partial learning process and does not include complete or complete learning.

This is in line with Bloom's opinion [26] (in Susanto, 2013), that learning outcomes include cognitive, affective, and psychomotor abilities. These scopes have their respective roles such as cognitive domains related to *knowledge* (knowledge, memory), *comprehension* (understanding, explaining, summarizing, examples), *application* (applying), *analysis* (detailing, determining relationships, detailing), *synthesis* (organizing, planning, constructing new buildings) and *evaluation* (assessing). Next is affective which includes *receiving* (accepting, appreciating), *responding* (giving a response), *valuing* (assessment), *organization* (organization), *characterization* (characterization). While the psychomotor domain includes productive, technical, physical, social, managerial and intellectual skills. Learning outcomes are obtained from a good and systematic assessment process.

According to [27] assessment in information literacy, learning is an activity process to measure the extent to which students are able to determine their information needs, based on the information accessed and then evaluated critically and ethically. This assessment is an indicator of success that is formulated and seen in the behavior of students information *literate*. The results of the assessment of information literate students can be qualitative, namely describing their behavior, and in a quantitative way, namely in the form of values, even the assessment can be described with both methods. Like any form of assessment, it is one part that cannot be separated from the process of learning activities. Even then it must be able to have a positive impact on the development of the competencies that are the target or target. Therefore, assessment activities can be carried out continuously or throughout the learning process.

Information literacy standards according to ACRL are that competent individuals are expected to be able to (a) determine the extent of the information needed; (b) access the required information effectively and efficiently; (c) evaluate critical information and sources; (d) combine selected information into one's knowledge base, and use the information effectively to achieve

certain goals; (e) understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally [28], [29].

2.5 Learning Model PjBL and SL

Seeing the results that were not as expected, PS-PII-UNP lecturers applied other learning models, such as the Project-Based Learning (PjBL) model. Examples of project assignments given by PS-PII-UNP lecturers are assignments to serve visitors in the library, with the steps taken by students as follows; First, students are divided into groups. Second, students are asked to look for ideas in serving visitors in the library, for example through services to find books by subject, through OPAC, and through catalogs *online*. The three students were asked to make a "job list" for all members of the group *deadline* and a *timeline* to find books by subject, through OPAC, and through catalogs *online*. The four students provide services to library visitors according to the previous plan. Fifth, students report service results to lecturers through class presentations. However, according to the facts found above, the results of the application of this model have no significant impact on learning outcomes, as well as student learning activities and attitudes.

In general, the PjBL model is a learning model that uses projects as its main activity. This learning model will place students as the center of learning (*student centered*). In this learning model, students carry out exploratory activities, conduct individual and group assessments, interpretation of definitions or symbols, and synthesis in order to produce various forms of real learning outcomes. In this PjBL Model, there is a process *inquiry* which is marked by the emergence of a guiding question, then students will be involved in a group project to make products as learning outcomes. When students have answered questions, students can see firsthand the many aspects that are integrated in the project activities they are doing. In addition, PjBL is also an in-depth and intense investigation activity about a theme or topic that is close to their daily life, this will be very meaningful for students in the future.

Many studies have succeeded in improving student learning outcomes using this PjBL model, one by [30] which proves that the PjBL model can improve learning outcomes and student learning attitudes. Research by Capability et al., (2020), also showed significant results in increasing student learning activity and understanding students' learning concepts by applying the PjBL model. This proves that the PjBL model is one of the effective models to be used in the learning process. The application of the PjBL model in Information Literacy learning activities at PS-PII-UNP is presented in the

conventional form of course presentation which is dominated by the provision of concepts and theories, and has not introduced much real library practice in the library. The experience of library practice and the reality of the Study Program is only given once during the learning program, namely during the implementation of the Field Work Practice (PKL). So that the resulting prospective librarians do not get practical experience about the world of libraries. Therefore, the lecturer considered that this model was not suitable to be applied in PS-PII-UNP.

Theoretically, there are *gaps* in the application of the previous PjBL model, namely previous researchers tended to use Moursand's theory. Moursund's theory, [31] is considered easier to apply with the syntax offered. Meanwhile, Moursand is a PjBL expert who focuses on learning science, so it is not suitable if it is applied to information literacy research. Besides that, PS-PII-UNP lecturers also only focus on PjBL theory without acquainting with the condition of students so that there is a gap between the high demands of the PjBL model and the abilities of students in class. This is one of the causes of the failure to apply the PjBL model to PS-PII-UNP.

The PjBSL-based information literacy learning model in information literacy courses is a necessity for students of the Library and Information Science Study Program. Information literacy skills for students of the Library and Information Science Study Program can improve professional skills, managerial abilities and competencies to create a literate society. Organizing information sources and then packaging them in an easily accessible form and provided in a wide network. Then it can guarantee the benefits that will be obtained as much as possible by the user or the community of various groups. Librarians or communities empowered by librarians can freely access various forms of information packaging in a way that ultimately satisfies them. Information literacy includes the process of finding sources *reliable*, sorting and utilizing them as needed.

Based on the problems that have been described, it is necessary to develop an interesting, impressive and meaningful information literacy learning concept. Through interesting, impressive and meaningful learning, students no longer consider information literacy as a boring subject so that students' information literacy skills can be improved, and thus student learning achievement can also increase. To improve the conditions above, the researcher intends to develop a PjBL learning model by combining service learning (*service learning*) is a holistic model that aims to understand the meaning of the subject matter studied in the context of life. With this model *service learning*,

there will be a reciprocal relationship between students and the community. Researchers hope that the development of PjBL learning for PS-PII-UNP students can be easily applied to students on an ongoing basis, because in the statement expressed by [32] that this learning model is an approach that provides a practical application of developing knowledge and skills. new skills for needs in the community through projects and activities.

Various studies have revealed that-based learning models *service learning* can be applied in developing the learning competencies needed by students, [33], [34], [35], both for his scientific mastery or his personality and *life skill* concept. Based on this, the authors consider it important to conduct research with the title "Development of PjBSL-Based Information Literacy Learning Model for Padang State University Students" as a vehicle for creating innovative and communicative learning, so that the learning process becomes more interesting and fun, as well as beneficial for students.

3. CONCLUSION

The PjBSL learning model to improve student learning outcomes is very important to do, one of the urges is because the Information Literacy learning model applied by lecturers is still not optimal. One of the solutions to problems in learning activities is the application of the PjBSL model which is expected to help lecturers, so that learning becomes effective and can improve student learning outcomes. By applying the PjBSL model, it can be one of the choices of learning models that can be applied to information literacy courses. This PjBSL model will also enrich the scientific treasures of information literacy education, especially with regard to innovative models that refer to graduation standards for information literacy courses where students must have skills creative, effective and innovative.

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