Preliminary Study of Risk Management Policy in Higher Education: A Case Study

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ABSTRACT: *This study examines the risk management process that aims to describe the implementation of risk management policy determined by management and identify the levels of risk in two different service units at Politeknik Negeri Bandung; they are the Library and Language Center. This study used a qualitative descriptive method with a case study approach. Data processing related to risk impacts is carried out based on ISO 310000:2018 concerning Risk Management Standards. The results of this study found that there were 30 threats/risks found in the library unit. Prior to treatment, the risks (inherent risks) with a very high level was 4, a high level was 3, a medium level was 9, a low was 12, and a very low was 2. However, after treatment (residual risks), there was a decrease so that the risk with a high level was 1, a medium level was 6, a low level was 7, and a very low level was 16. On the other hand, 22 treats were found in the Language Centre unit. Before the treatment, the inherent risks with a low-level was10 and a very low level was 12. Conversely, after the treatment, the number of low-level risks becomes 10 and the number of very low-level risks becomes 20. It indicated that Politeknik Negeri Bandung through the Library and Language Center has successfully implemented risk management based on ISO 31000:2018. This can be seen from the decrease in the risk levels of each threat found in both units after risk treatment is carried out. In this case, the number of threats with very high, high, and medium risk levels changes to low and very low risk levels.*

KEYWORDS –ISO 31000:2018, risk management, risk level

I.INTRODUCTION

Higher education is not only required to implement applicable government policies but also to be agents of education and agents of the institute of research and development, agents of knowledge and technology transfer, and agents of economic development for the environment and the surrounding community. In addition, higher education as an educational institution is expected to be able to produce graduates who can compete and defend their country from the invasion of foreign academics and workers. This can be achieved if the institution has a standardization of world-class universities.

Education is a process of self-development and training that includes aspects of knowledge, skills, and personality, especially those carried out in the form of educational activities including the process of producing and transferring knowledge carried out by individuals and groups. Higher education as a continuation of secondary education is organized to prepare students to become members of society who have academic and professional skills that can apply, develop, and create science, technology, and arts.

In higher education management, the plan for structuring a higher education system is aimed to create higher education performance that can refer to the continuous improvement and development of the quality of

education. This can be achieved with the support of all parties who can help succeed in the implementation of higher education. The function of higher education in the community can be seen as a professional institution that provides services to meet the needs of the community. It must also direct all parties in the management to create a working atmosphere that can improve the quality of sustainable higher education because at the final stage the quality of higher education is determined by the quality of the performance of each member. In achieving the objectives, every organization will certainly face risks. Accordingly, risk management assists the organization in managing any risks that may occur and affect the achievement of organizational goals.

Politeknik Negeri Bandung as a vocational college certainly has a vision, mission, and objectives as well as the obligation to organize the Government's Internal Control System with the required maturity level. This condition requires Politeknik Negeri Bandung to implement a risk management process by determining the direction of the risk management policy so that its implementation in each unit/department will be based on this policy. Successful implementation of risk management is characterized by a decrease in the level of risk after risk control.

II. LITERATURE REVIEW

Risk management is the process of identifying, assessing, and controlling threats to an organization's resources. These risks come from a variety of sources including financial uncertainty, legal liabilities, technological issues, strategic mismanagement, accidents, and natural disasters. A successful risk management program helps an organization consider the various risks it faces. It also examines the relationship between risk and its tiered impact on the organization's strategic objectives. Risk management in educational organizations is a complex system for collecting, transmitting, and processing large amounts of information and then making appropriate management decisions [1].

Previous research on risk management was conducted mainly related to risk mapping. The results show that the preparation of risk mapping in an educational institution should be conducted by all department and unit levels. Then the entire academic community began to be thoughtful and careful in carrying out their duties and responsibilities to minimize risks that may arise. [2]

Another research was conducted regarding the risk management of library information systems at the University of Lampung with the NIST SP 800-30 method. The research identifies some risks that arise such as delays in book returns, lost books, no historical data on damaged books, data discrepancy in the system and the library, data falsification, data repetition, and expired membership cards. From the risk assessment, the University of Lampung library undertakes early risk treatment to reduce and eliminate the risk impacts. A factor that influences the risks is human resources who have the capability in the information technology to handle and take risks in every situation. [3]

2.1 Risk Management in Higher Education

Higher education is an organization that provides educational services to the community that may always face uncertainty related to various threats in achieving organizational goals. This uncertainty can lead to risks. Risk management is one of the critical ways to secure the existence and sustainable development of an institution. Furthermore, it can help predict, anticipate, and reduce various risks that may occur and interfere with the organization in achieving its goals.

Risk management is one of the pillars of Good University Governance (GUG) because its application in universities is purposed to create a new pattern of organization that causes risks early warning system tool. Besides, because the resources owned by universities are limited, the risk-focused mitigation process requires handling actions. The measured risks are classified into two; risks based on their type and risks based on their aspect. Risks based on their type cover strategic risk, managerial risk, and operational risk. However, risks based on their aspects include budget management, human resource management, infrastructure, Information Technology, and academics. Thus, risk management processes help organizations design and implement effective and proactive risk management plans.

1.2. Risk Management in government agencies

Risk management in Indonesian government agencies is regulated in Government Regulation Number 60 the Year 2008 concerning the Government's Internal Control System. Risk management is one of the five elements of the Government's Internal Control System, i.e. the element of risk assessment. Government Regulation No. 60 the Year 2008 set Finance and Development Supervisory Agency as an agent of internal supervisory over the state financial accountability and fostering the implementation of government internal control systems [4]. It encourages all government agencies to organize Government Internal Control Systems and Risk Management, one of which is state universities.

1.3. Risk Management Process: ISO 31000

ISO 3100; 2009 and ISO 31000; 2018 are international standards formed by The International Organization for Standardization which are used as a guideline to implement good risk management. If an organization can carry out the ISO 31000 risk management process, it indicates that the organization has a good risk management system. The implementation of risk management is a long-term, dynamic, interactive, and continuous process to maintain the sustainability of the organization [5].

Risk Management in higher education institutions is essential at present because management can predict and reduce risks that may occur and interfere with the achievement of the institution's goal. The main purpose of risk management is to ensure the achievement of organizational goals through risk treatments or mitigation so that a risk event that can affect the organization's goals does not occur and to measure the risks faced by departments and units as an early warning system in carrying out the institution vision and mission.

The risk management process is an activity of identifying, assessing, and prioritizing related risks, then minimizing, monitoring, and controlling the possibility and impact of unforeseen events [6]. Moreover, according to the concept of Integrated Corporate Risk Management based on ISO 31000, the term "risk assessment" includes three main activities namely identification, analysis, and evaluation [7] [8].

III.   METHODS

The method applied in this study was a descriptive qualitative method with a case study approach. The data analysis process was adapted to the risk management processes of ISO 31000: 2018 framework on the Standards of Risk Management. This research covers three main steps of the risk management process; the first is the establishment of the risk context, and the second is risk assessment which consists of risk identification, risk analysis, and risk evaluation. The last step is risk treatment. To determine the impact and probability, this research used risk management guidelines set by Politeknik Negeri Bandung. This study is limited to a series of risk assessment processes adapted to the Risk Management Standard ISO 31000:2018.

IV.   Results and Discussion

One indicator of the success of risk management implementation is a decrease in the levels of risk after conducting the risk treatment. Regarding the level of risk, it consists of inherent risk, residual risk, and secondary risk. In the risk management process, the most determining things in the success of risk management are risk assessment and risk treatment [9]. Risk assessment consists of risk identification, risk analysis, and risk evaluation.

4.1   Risk Identification

Risk identification is the process of finding, recognizing, and recording risks. In the risk management process, risk identification is the first step of the risk assessment process. The position of risk identification in the risk management process based on ISO 31000:2018 is as follows:
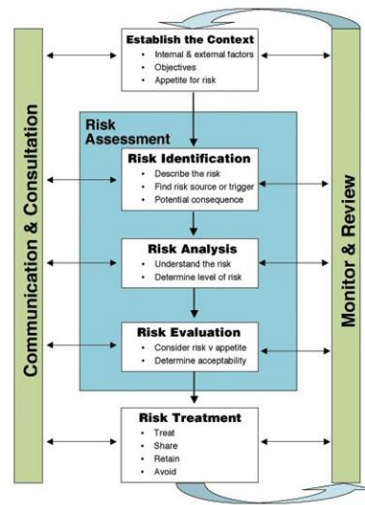
Figure 1 Risk Management Process Based on ISO 31000:2018

As can be seen in figure 1, the risk assessment begins with identifying the risks that exist within the organization. The purpose of risk identification is to identify things, events, or situations that may occur that can affect the achievement of organizational goals including the causes and sources of risk, description of risk events, and their impact on organizational goals. Once risks have been identified, the organization will identify the controls that have been put in place against those risks. Similarly, in Politeknik Negeri Bandung, risk identification is carried out based on activities that refer to the job descriptions of each unit/department. After identifying activities, the next step is to determine the risks that may arise following their activities.

4.2 Risk Analysis

Risk analysis aims to determine the level of risk based on impact and probability. In determining the impact and probability, risk analysis refers to the policies or guidelines that have been set by the management of Politeknik Negeri Bandung. Table 1 is the impact Scales and Table 2 is the probability criteria that have been determined by Politeknik Negeri Bandung as a reference in conducting risk analysis.

Table 1 Defined Condition for Impact Scales

No.	Impact Area	Impact Scale				
		Not Significant	Minor	Moderate	Significant	Very Significant
1.	Finance	≤ 0.01% of the total employee budget for risk owner units	> 0.01%-0.1% of the total employee budget for risk owner units	> 0.01%-1% of the total employee budget for risk owner units	> 1%-5% of the total employee budget for risk owner units	> 5% of the total employee budget for risk owner units
2.	Reputation	number of stakeholder complaints is < 10	number of stakeholder complaints is 10 to 20	number of stakeholder complaints is >20	negative coverage in local media and social media	negative coverage in social media and becoming a national and international

					trending topic
3.	Occupational Health and Safety	Not dangerous	minor health problems (able to continue working on the same day)	Moderate physical and mental health problems (disabled to work until 3 weeks)	Serious physical and mental health problems (disabled to work more than 3 weeks or caused permanent disability)	Fatal incident/Death
4.	Realization of Performance Achievement	100% > work achievement ≥ 97%	97% > work achievement ≥ 27%	92% > work achievement ≥ 87%	87% > work achievement ≥ 80%	80% > work achievement ≥ 70%
5.	Laws and Regulations	There are no findings of refunds to the state treasury and material deviations	There are findings of refunds to the state treasury and/or deviations up to 0.1% of the total budget	There are findings of refunds to the state treasury and/or deviations > 0.1% - 1% of the total budget	There are findings of refunds to the state treasury and/or deviations > 1% - 5% of the total budget	There are findings of refunds to the state treasury and/or deviations of 5% of the total budget
6.	Services	Interrupt the service for 1-2 hours	Interrupt the service for 2-4 hours	Interrupt the service for 1 day	Interrupt the service for 2 days but less than 1 week	Interrupt the service for more than 2 weeks
7.	Human Resources	Decrease the performance of >10% of employees	Decrease the performance of >30% of employees	Decrease the performance of >50% of employees	Decrease the performance of >65% of employees	Decrease the performance of >80% of employees

In table 1, it can be seen that if there is a risk, it is likely that the impact occurs in the financial domain/area, a decline in reputation, occupational health and safety, a realization of performance achievements, laws and regulations, services, and human resources. In each of these areas, the level of impact has been determined if there is a risk in the unit/department. The scale of impact ranges from not significant, minor, moderate, significant, and very significant. Furthermore, the following table shows the probability criteria of the predetermined risks.

Table 2 Probability Criteria

Probability Level	Probability Criteria		
	Percentage in 1 Year	Frequency in 1 Year	Low Tolerance Incidence
Rare	0% < X ≤ 5%	< 2 times	once in the last 5 years
Unlikely	5% < X ≤ 10%	2 -5 times	once in the last 4 years
Possible	10% < X ≤ 20%	6-9 times	once in the last 3 years
Likely	20% < X ≤ 50%	10-12 times	once in the last 2 years
Almost Certain	50% < X ≤ 100%	> 12 times	once in the last 1 year

Table 2 shows the probability level of possible risks which range from rare (1), unlikely (2), possible (3), likely (4), and almost certain (5). While the criteria of probability are divided into percentages in 1 year, the frequency in 1 year, and the incidence of low tolerance.

4.3 Risk Evaluation

Risk evaluation is a process of comparing the level of risk found during the analysis process with the risk criteria that have been set previously. At this stage, a risk matrix or a risk map is created. Based on the risk map, the number of risks ranging from very high, high, moderate, low, and very low levels will be identified as described in table 3.

Table 3 Risk Matrix

Risk Levels	Description
Very low	The current control is very good. Additional corrective actions are not necessary, but monitoring is required to ensure that controls are running effectively.
Low	The current controls are adequate. Additional corrective action is not necessary, but regular monitoring is required to ensure the control is running effectively
Moderate	Corrective actions and development plans are required which then need to be evaluated periodically. Corrective action taken is not more than 3 months.
High	Corrective actions and development plans are required which then need to be evaluated periodically. Corrective action taken is not more than 1 month.
Very high	Corrective actions and risk treatment are urgently required. Corrective action is taken not more than 15 days.

4.4 Risk Assessment Process in the Library and the Language Centre of Politeknik Negeri Bandung

This research focused on the risk assessment process conducted in the Library and the Language Centre of Politeknik Negeri Bandung. The process begins with understanding the vision, mission, goals, and targets of Politeknik Negeri Bandung as a vocational education institution. The following table shows the vision, mission, goals, and targets of Politeknik Negeri Bandung.

Table 4 Vision, Missions, Goals, and Targets of Politeknik Negeri Bandung

Vision	Becoming an excellent and leading institution in vocational higher education through innovation in applied science and technology
Mission	1. Providing education that produces graduates who are competent, enthusiastic, and have good morals, entrepreneurial spirit, and environmental awareness. 2. Conducting applied research and disseminating the results to develop science and technology. 3. Performing community service through the use of applied science and technology to support the improvement of quality of life.
Goals	1. Producing graduates with national and/or international standard competencies; 2. Building an entrepreneurial spirit among the Academic Community that will be able to develop the industrial sector; 3. Developing and disseminating science and technology through research activities and community service to support national development; 4. Expanding learning opportunities for Indonesian people based on equity and justice; and 5. Realizing institutional sustainability by developing partnership programs with industry, community, and government.
Targets	1. Improving the quality of learning and student affairs; 2. Improving the quality of institutions; 3. Improving the relevance, quality, and quantity of resources; 4. Improving the relevance and productivity of research and development 5. Increasing innovation

To determine the success of risk evaluation in each unit/department, a risk register must be made under the job description, risk category, activities, risks description, risk owner, risk causes (description and source), impacts, impact scores, and risk levels (inherent risk), evaluation and treatment plan, the treatment that has been carried out, and risks that occur after treatment.

The Library and Language Centre of Politeknik Negeri Bandung are the units that support the organizational goals. The two units have carried out the risk management process, and become examples for other Units/Departments in Politeknik Negeri Bandung.

a. The Library of Politeknik Negeri Bandung

According to Article 1 letter 1 of Law Number 43 the Year 2007 concerning Libraries, it is stated that a library is a unit that manages the collection of written works, printed works, and/or recorded works professionally with a standard system to meet the educational, research, preservation, information, and recreational needs of the users. While library users are individuals, groups of people, communities, or institutions that utilize library service facilities. A librarian is someone who has the competence obtained through librarianship education and/or training and has the duties and responsibilities to carry out library management and services [10].

For higher education institutions, the role of the library is as a technical service unit, which cooperates with other units in developing and preserving the Three Pillars of Higher Education. Technically, the roles of the library are related to first as a center for teaching and learning activities for the higher education community to produce quality graduates. Second, as a place for conducting research for the academic community of higher education so that science and technology can develop properly. Third, as a medium for cooperation and collaboration with outside parties in the activities of collecting, processing, and disseminating scientific and technological information. Fourth, as a means to access information both internally and externally, as well as abroad. Fifth, as a means to use collection facilities together with other libraries so as to facilitate access to search and dissemination of information [11] [12].

Given the importance of the role of libraries in higher education, it is essential to choose the library unit as the sample of this research to see the implementation of risk management for its various activities and the possible risks that arise in this unit.

After carrying out the risk management process, the next step is identifying threats that possibly occur in this unit. The threats are presented in table 5.

Table 5 Threat Identification in the Library

Number	Risks
1.	Work plans and programs are prepared beyond the set deadlines.
2.	Work plans and programs are incomplete
3.	The projection of the budget plan prepared is less than the needs.
4.	Budget plan projections are prepared beyond the needs.
5.	The preparation of the program from the library does not consider the needs of stakeholders.
6.	The list of submissions for book procurement exceeds the available budget.
7.	Books submitted are Out of Print (OOP) or Out Of Stock (OOS).
8.	The processing of book procurement is delayed.
9.	Determination of the classification and title of the subject of the book is not quite right
10.	The library service system error.
11.	The processing of new books (classification, subject headings, data input)is delayed.
12.	The books that the user needs are not available
13.	Books borrowed by users are returned late, lost, or damaged
14.	Borrowed books are not returned due to problems with students such as dropping out/resigning, changing home addresses, not responding to book bills from the library
15.	Repository collections are not accessible

16.	The Scientific Writing Data on the system and server are lost.
17.	Several policies are not in accordance with their implementation
18.	Some of the services are not in accordance with the Library Service Standards which refer to the Library Standard Operating Procedures, for example in the duration of service
19.	The user does not participate in socialization at the library
20.	Librarians must be ready to perform services as requested by users.
21.	Many books are withdrawn from the shelves
22.	Some tools are no longer working.
23.	Tools that support the implementation of library administration often crash.
24.	The library's operational needs cannot be fulfilled.
25.	Library collections can be accessed jointly by all academic communities
26.	The collection will be accessed or borrowed by users from other universities
27.	The librarian does double works
28.	The librarians often do not participate in activities/events carried out by FKP2TN or other forums
29.	Many documents/archives are not managed well.
30.	Incompatibility in planning activities with activities that have been carried out

Table 5 reveals that there are 30 types of threats that may occur in carrying out activities at the library of Politeknik Negeri Bandung. So, it is necessary to carry out risk analysis and evaluation. The results of the risk assessment process that has been carried out at the Library are presented below.

Table 6 Risk Assessment Process in the Library of Politeknik Negeri Bandung

Job Desc	Number of Activities	Number of Risks	Inherent Risks					Residual Risks				
			Very low	Low	moderate	High	Very high	Very low	Low	moderate	High	Very high
30	30	30	2	12	9	3	4	16	7	6	1	-

Table 6 above shows the risk conditions before and after risk treatment. The risk conditions before risk treatment are called inherent risks, while the risk conditions after risk treatment are called residual risks. The inherent risk with a very high-risk level was 4, a high-risk level was 3, a moderate-risk level was 9, a low-risk level was 12, and a very low-risk level was 2. However, the number of residual risks with a very high level becomes 0, a high-risk level was 1, a moderate-risk level was 6, a low-risk level was 7, and the risk with a very low level becomes 16. Thus, it can be concluded that the risk management carried out by the Bandung State Polytechnic Library is successful.

b. The Language Centre of Politeknik Negeri Bandung

The Language Centre of Politeknik Negeri Bandung is a technical unit established to support academic activities and the implementation of the Three Pillars of Higher Education. It provides language course services, especially in English and Mandarin, TOEFL preparation classes, TOEFL tests, TOEIC preparation classes, and TOEIC tests for the academic community in Politeknik Negeri Bandung and the general public. For this reason, the Language Centre of Politeknik Negeri Bandung is necessary to immediately carry out the risk management process.

In the initial process, the risk criteria and context are determined, then a risk assessment is carried out through risk identification, risk analysis, and risk evaluation. As a result, the threats that may occur in this unit are identified in table 7.

Table 7 Threat Identification of the Language Centre

Number	Risks
1.	Improper program/activity plans
2.	Plans and work programs exceed the deadline
3.	The budget plan projection is less than the needs of the unit
4.	Incomplete plans and work programs
5.	The budget plan/work program projection is not prepared based onthe needs
6.	The budget plan exceeds the budget limit
7.	The budget planning is hampered
8.	The budget plan is not adjusted to the needs of the activity
9.	The budget plan is not correctly done
10.	The delays in the input of the budget plan into the system
11.	Preparation of budget plans exceeds the time limit
12.	The programs do not match the stakeholder's needs
13.	The language facilitator's competence does not match the characteristics of the program
14.	The facilitator's honorarium exceeds the budget limit
15.	The coordination for the program is not regularly scheduled
16.	The coordination does not include all relevant parties
17.	The information is not properly delivered/conveyed
18.	Misunderstanding among stakeholders
29.	The activities do not meet the program's goal
20.	The activities are not conducted based on the schedule
21.	The activities do not meet the participants' expectation
22.	The activities are not conducted based on the standard operating procedures

Table 7 shows 22 threats that can interfere with the work process in the Language Centre of Politeknik Negeri Bandung. So, it is necessary to immediately conduct risk analysis and evaluation. The results of the risk assessment process that has been conducted at the Language Centre are presented below.

Table 8 Risk Assessment Process in the Language Centre of Politeknik Negeri Bandung

Job Desc	Number of Activities	Number of Risks	Inherent Risks					Residual Risks				
			Very low	Low	moderate	High	Very high	Very low	Low	moderate	High	Very high
22	22	22	0	10	12	0	0	12	10	0	0	0

Table 8 above shows the inherent risk with a very high-risk level and a high-risk level are not found, the inherent risks with a moderate-risk level was 12 and a low-risk level was 10. Conversely, the number of residual risks with a low-risk level was 12, and the risk with a very low level becomes 10. Based on the risk management process carried out at the Language Centre, it is stated that the risk management is quite successful as seen from the number of risks that have changed from moderate risk to low risk, and low risk to very low risk.

V. CONCLUSION

One of the indicators of success in implementing risk management is a decrease in the level of risk after the risk treatment, either in inherent risks, residual risks, or secondary risks. Other essential things in the success of the risk management process after determining the context are risk assessment and risk treatment.

Risk assessment consists of risk identification, risk analysis, and risk evaluation. The Library and the Language Centre of Politeknik Negeri Bandung have implemented risk management. These two units are considered adequate to represent the role of Politeknik Negeri Bandung as a vocational education institution that organizes the Three Pillars of Higher Education. From the risk management carried out in the Library, 30 types of threats were identified. Then after risk management was carried out, the threat/risk levels change from a very high-risk level to a high level to a moderate risk level, from a moderate risk level to a low-risk level, and from a low-risk to a very low-risk level. Similarly, the risk management carried out at the Language Centre has resulted in the same conditions. There are 22 threats were identified. Although the residual risks still exist, the threat levels have changed which indicated that the risk management process in Politeknik Negeri Bandung is successful.

REFERENCES

[1] Spichak, I. V., Kucheryavenko, S. A., Polevoy, I. N., & Nazarova, A. N, Implementation of Risk Management in the Quality Management System Of An Educational Organization, International Journal of Management, 11 (6), 2020, 1196-1204.

[2] I. Susanti, Sumiyati, and I. Tritjahjono, R,Tinjauan pemetaan risiko pada perguruantinggi negeri satuan kerja berdasarkan PP No. 60 tahun 2008 tentang sistem pengendalian intern pemerintah (studi kasus di Politeknik Negeri Bandung), J. Sebatik,24 (2),2020, 327–334.

[3] Velena, D. S., Prabowo, R., Irawati, A.R., Aristoteles,Analisis manajemen misiko sistem informasi perpustakaan Universitas Lampung menggunakan metode Nist SP 800-30, Jurnal Komputer Unila,7 (1),2019.1-10.

[4] Peraturan Pemerintah Nomor 60 Tahun 2008 tentang Sistem Pengendalian Intern Pemerintah, 2008.

[5] Di Serio, L. C., de Oliveira, L. H., & Siegert Schuch, L. M, Organizational risk management – acase study, Journal of Technology Management & Innovation, 6 (2), 2011,230-243.

[6] ISO 31000:2018 tentang Manajemen Risiko, 2018.

[7] Prabowo, W. S., Setiawan, N. A., Muslim, M. H., & Utama, Y. S, Manajemen risiko infrastruktur cloud pemerintah menggunakan nist framework studi kasus Lembaga Ilmu Pengetahuan Indonesia (LIPI), Jurnal Penelitian Pos dan Informatika, 7(1), 2017, 17-36.

[8] I. K. Widnya,Peran Perguruan Tinggi Menghadapi Disrupsi Peradaban, Widya Bhuwana Jurnal Pendidikan, Agama, dan Budaya, 2(1),2019, 1–6.

[9] Djohanputro, B., Manajemen risiko korporat terintegrasi, panduan penerapan dan pengembangan (Jakarta: PPM, 2013)

[10] Undang-undang No. 43 Tahun 2007 tentang Perpustakaan.

[11] Fa'atin, Samah, Meningkatkan Peran Perpustakaan Perguruan Tinggi dalam membentuk integritas mahasiswa menuju kampus peradaban, Libraria, 5 (2), 2017, 305-320.

[12] Ulaemy, Peran perpustakaan di perguruan tinggi saat ini, https://penerbitbuku.co.id/peran-perpustakaan-di-perguruan-tinggi, Accessed 13 October 2022.