



Strategies for Solving Contemporary Issues in the Work Environment :Increasing Lecturer's Interest in Scientific Publications

Agris Setiawan^{1*}, Yasmina Amalia², Zahna Allya³, Nafira Kartika⁴

*Corresponding author email: agrissetiawan@upnyk.ac.id

^{1,2,3,4}Metallurgical Engineering Study Program, Faculty of Mineral Technology, Yogyakarta "Veteran" National Development University, Indonesia

Abstract. As educators, lecturers are required to always be responsive, actual, and creative towards the development of their disciplines. Through this, lecturers can simultaneously develop the world of education and the profession through research activities and scientific publications. However, research conducted at the UPN "Veteran" Yogyakarta Metallurgical Engineering Study Program found that lecturers' interest in scientific publications was low. This will affect various things, including the knowledge and insights of lecturers on metallurgy that are not up-to-date. This study uses the AKPL method (Actual, Problematic, Habitability, and Feasibility) for identification and analysis, followed by the USG (Urgency, Seriousness, Growth) method for further analysis, and described by the fishbone diagram method. From the results of this study, several things can be done to overcome this issue, namely the need to make changes in the development of the study program journal system through FGD (Forum Group Discussion) and journal review webinars. This research is expected to overcome the problems raised in this study.

Keywords: Lecturer, Interest, Scientific Publication

1 Introduction

Lecturers are professional educators with various tasks, namely educating, teaching, guiding, directing, training, assessing, and evaluating. As a higher education institution which is part of the government, all elements in the university are obliged to carry out their duties as policy executors, public servants, glue and unifier of the nation, as well as the Tridharma of Higher Education, by implementing Pancasila values and having Characteristics.[1]. Therefore, indirectly as a lecturer, one is expected to be responsive, fast, precise, accurate, efficient, effective, innovative and accountable in carrying out innovations or updates, optimization, development and changes in accordance with laws and regulations. as well as the current conditions and circumstances in carrying out its role.

Every professional teacher must carry out activities in carrying out their duties and responsibilities, including carrying out professional development activities [2]. The development of the teaching profession is a teaching activity in the context of the practice of science, technology and skills[3] . Some of the professional development activities are research with students, writing scientific articles, and making teaching materials[4]

© The Author(s) 2024

B. Sobirov et al. (eds.), *Proceedings of the 2nd International Conference on Advanced Research in Social and Economic Science (ICARSE 2023)*, Advances in Social Science, Education and Humanities Research 842,

https://doi.org/10.2991/978-2-38476-247-7_52

Scientific journals are a strategic tool in developing the competence of lecturers and researchers in Indonesia who can demonstrate the reputation of an academician's expertise at the national and international levels[5]. Scientific publications can be the output of a lecturer's research which is part of the Tri Dharma of higher education, besides that it is also the main requirement for promotion to functional positions. According to[6] regarding Lecturer Functional Positions it is clearly stated that in carrying out professional duties, lecturers are obliged to continuously improve and develop academic qualifications and competencies in line with science, technology and art. Thus it can be explained that in addition to carrying out the routine of carrying out daily learning a lecturer is also required to develop his academic qualifications through research activities and community service in order to develop and improve competence in a sustainable manner [7].

Metallurgical Engineering Study Program, Department of Mining Engineering, Faculty of Mineral Technology, Yogyakarta "Veteran" National Development University has a scientific journal called Journal of Metallurgical Engineering and Processing Technology and has appeared in the open journal system of Yogyakarta "Veteran" National Development University. It's just that the journal of the Metallurgical Engineering Study Program has not yet been accredited nationally, so it cannot provide more benefits. In addition, the low interest of lecturers in Scientific publications result in the development of a study program.

Thus, certain strategies are needed to be able to increase mLecturer interest in Scientific Publications. Serious and sustainable management of journals must also be considered, so that they can publish scientific articles regularly and become publishers of accredited scientific journals [8]. Publishing periodic journals is important because it can be a benchmark for science and technology development, a means for disseminating knowledge and also a promotional media for the Metallurgical Engineering Study Program, UPN "Veteran" Yogyakarta.

2 Research Methods

These issues were identified and analyzed using qualitative methods[9]. Furthermore, testing is carried out with APKL (Actual, Problematic, Habitability, and Feasibility) to determine the issues that meet[4]. The APKL method is a method that considers whether an issue is actual, problematic, feasible, and feasibility[10]. The three issues resulting from the APKL analysis were then analyzed further using the USG (Urgency, Seriousness, Growth) method so that one priority issue could be selected to be resolved or a solution sought. After getting the priority issues raised, it is necessary to determine the causes and effects of these issues. One way is by using a fishbone diagram. The fishbone diagram technique is used to describe the existing problems so that it is expected to be able to solve the problems contained in the issues raised [11].

3 Results and Discussion

Contemporary issues in the work environment must be analyzed, addressed and resolved properly. This is in accordance with the commitment to quality and relevant public services, which means that public servants must be responsive and prioritize the public interest. During

approximately ten years of working at UPN "Veteran" Yogyakarta, the author found several potential issues related to duties and responsibilities as a lecturer.

Based on the results of observations at the Metallurgical Engineering UPN "Veteran" Yogyakarta, there are several interesting issues to raise. The author identifies several issues or problems related to learning and life on campus. Identification of this issue is carried out through environmental scanning, namely the ability based on a sense of care and identifying problems within the organization and then mapping causal relationships. The following are the issues and impacts that have been identified in table 1.

Table 1. Contemporary issues and their impacts selection of issues with APKL

No	Problem Issues	Impact Issues Problems
1	Education and Teaching Not optimal teaching and learning activities with the online system	Coordination is needed between students, lecturers, and University managers in developing learning systems, practicums, and guidance during online activities.
2	Education and Teaching Implementation of the thesis is not optimal	Affects the quality of students, learning outcomes, and the quality of supervising lecturers.
3	Research and development Low student interest in the Student Creativity Program (PKM).	The fighting power and creativity of students is less developed.
4	Research and development The low interest of lecturers in conducting research publications.	Lecturers' knowledge and insights about metallurgy are less updated
5	Research and development Lack of student involvement in competition	The fighting power and experience of students is reduced.
6	Community service Lack of implementation of the results of community service.	The community did not get a significant impact on the results of the lecturer's service.
7	Community service Lack of collaboration between lecturers and students in community service	Lecturers sometimes do community service on their own without inviting students along

Based on the actual issues that have been identified, then a process of selecting issues is carried out with an analysis of the Actual, Problematic, Predictability and Feasibility (APKL) criteria. The APKL technique made is a technique used to determine the feasibility of a problem by taking into account four factors (table 2), namely:

- a) Actual (A), namely the issue is still being discussed or has not been resolved to the present and the issue is actually occurring and is being hotly discussed at UPN "Veteran" Yogyakarta;
- b) Problematic (P), namely issues that deviate from standard expectations, conditions that need to be immediately sought for causes and solutions. the issue has a complex problem dimension so that a solution needs to be found immediately;
- c) Audience (K), namely issues raised directly concerning the livelihoods of many people at UPN "Veteran" Yogyakarta and not only for the benefit of a person or a small group of people;
- d) Eligible (L), namely issues that make sense (logical), appropriate, realistic and can be discussed according to duties and responsibilities until finally raised as a priority issue.

Table 2. AKPL matrix

Problem Issues	APKL criteria				Information
	A	P	K	L	
Not optimal teaching and learning activities with the online system	v	v	v	x	<p>Not eligible</p> <ul style="list-style-type: none"> a. Actual: this issue is actual to be raised because teaching activities are very closely related to the success of the learning system. b. Problems: not yet optimal learning activities c. Audience: if online learning activities are not optimal, it will reduce the success of the learning system for students, lecturers, and study programs d. Eligible: this issue is not really worth putting forward because currently college activities are actually hybrid.
Implementation of the thesis is not optimal	v	x	v	x	<p>Not eligible</p> <ul style="list-style-type: none"> a. Actual: this issue is actual because it always occurs every time students carry out their thesis b. Problematic: this issue is not too problematic because there is already monitoring of lecturers and students who are able to carry out their thesis c. Audience: this issue affects all academic elements, including students, lecturers, and study programs d. Eligible: this issue is not yet worthy of being put forward because currently there is FKI Metallurgy and thesis guidelines are in place
Low student interest in the	v	v	v	v	<p>Not eligible</p> <ul style="list-style-type: none"> a. Actual: this issue is actual to be raised because of the importance of PKM activities

Student Creativity Program (PKM).

- b. Problem: there is no system that records student PKM tracks in study programs
- c. Audience: the lower the number of students participating in the PKM, the lower the chance of winning in the PKM
- d. Eligible: This is something that deserves to be raised because by making PKM, students are trained to make scientific work.

Lack of student involvement in competitions

v v v x

Not eligible

- a. Actual: this issue is currently developing because student involvement in national and international competitions can increase study program accreditation
- b. Problem: there is still a lack of information about the competition, so that student involvement in the event is still lacking.
- c. Audience: when students take part in competitions it will affect the success of students, supervisors, and study programs
- d. Eligible: this issue is not yet worthy to be raised because it is necessary to maximize potential before participating in the competition.

The low interest of lecturers in conducting research publications.

v v v v

Qualify

- a. Actual: this issue is currently developing due to the low interest of lecturers in publishing
- b. Problem: there is no publication space that meets the standards at the study program level
- c. Audience: when the lecturer's interest in publishing is lacking, students also follow it, and study program accreditation is not good
- d. Eligible: this issue deserves to be raised because it is very important to be followed up

Lack of implementation of the results of community service.

v v v v

Qualify

- a. Actual: this issue is currently developing due to the lack of implementation of the results of community service
- b. Problems: lack of communication between lecturers and society/industry
- c. Audience: when there is a lack of implementation of the results of community service, there is a lack of feedback from industry/community for study programs and students.
- d. Eligible: this issue deserves to be raised because it is very important to be followed up

					Qualify
Lack of collaboration between lecturers and students in community service	v	v	v	x	a. Actual: this issue is currently developing due to a lack of collaboration between lecturers and students
					b. Problems: lecturers are less interested in community service and students are less interested in being involved in lecturer activities
					c. Audience: when there is a lack of collaboration between lecturers and students, there is less output achieved, thus affecting the accreditation of study programs
					d. Eligible: this issue is not feasible because there are already practical work programs and Community Service Programs that can be used for collaboration between lecturers and students in community service.

Because three important issues were obtained, the weighting was carried out using USG analysis. The author created a google form to find out the priority issues in the Metallurgical Engineering Study Program. This use will identify which issues are the most priority that need to be resolved. More details about USG as follows:

- a) Urgency: Means how urgent the problem is to be resolved related to the time dimension;
- b) Seriousness: Refers to solving problems associated with consequences, can cause new problems; And
- c) Growth: Related to the possibility of developing worse if not resolved.

Based on the priority of problem issues, an USG matrix can be made as shown in table 3.

Table 3. USG matrix

USG criteria			Problem Issues	Amount	Rating
u	S	G			
3	3	3	Lack of implementation of the results of community service.	9	Priority 2
5	5	5	The low interest of lecturers in conducting research publications.	15	Priority 1
4	4	4	Low student interest in the Student Creativity Program (PKM)	12	Priority 3

Description Priority setting interval:
 Number 1: not very urgent/emergency and impact;
 Number 2: not urgent/emergency and impact;
 Number 3: quite urgent/emergency and impact;
 Number 4: urgent/emergency and impact;

Number 5: very urgent/emergency and impact.

The cause-and-effect analysis using the fishbone method shown in Figure 1 shows the fish head as a result and the bones are the descriptions that cause the fish head issue. In this problem, there are several causes originating from the environment, the stakeholders involved, materials, and methods.

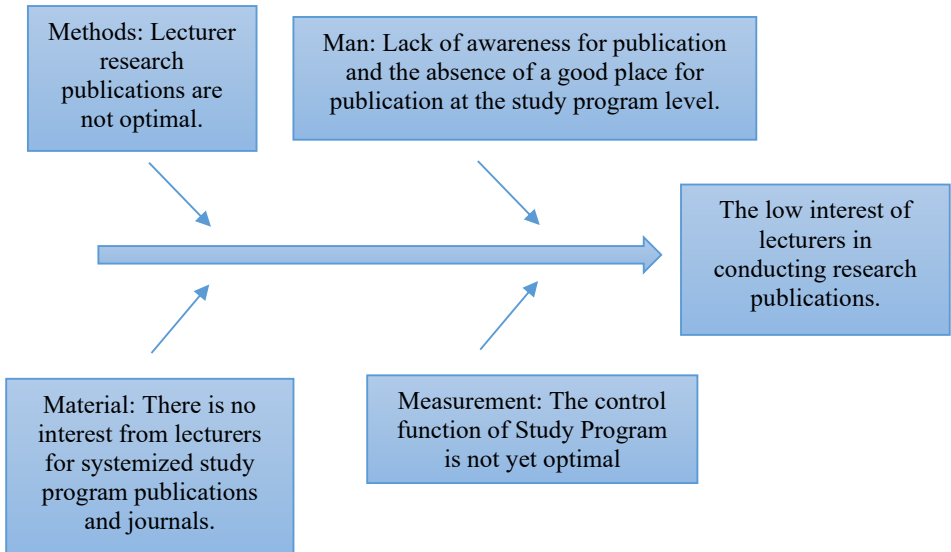


Fig. 1. Fishbone diagram

An explanation of each cause is as follows:

3.1 Man

Which is the cause is the lack of awareness of lecturers for publication and the absence of a good place for publication at the Study Program level. Metallurgy is a rare and needed science in the field of energy and resources, so it is very important to develop research and scientific publications for lecturers.

3.2 Material

Until now there is still no interest from lecturers for publication and there is no place for systematic publication in the Metallurgy Study Program. So it is necessary to improve the place of publication at the study program level, so that lecturers have a place to carry out scientific publications.

3.3 Method

Lecturer research publications that are not yet optimal have an impact on students' lack of knowledge and awareness of the importance of scientific publications. Therefore it is necessary

to hold discussions with lecturers and educate students so they have awareness of the importance of scientific publications.

3.4 Measurements

The control function of the Study Program which is not yet optimal regarding scientific publications also reduces the awareness of lecturers to publish. This naturally happens because the Metallurgical Engineering Study Program is a new study program so there are many things that need to be developed.

From the results of the identification and selection of selected issues, then the idea is carried out creative solutions to resolve selected issues namely "low lecturer interest in conducting research publications" so it is necessary to make changes in the development of the Open Journal System (OJS) through Forum Group Discussions (FGD) with Lecturers and Journal Review Webinar with Students in Metallurgical Engineering, UPN "Veteran Yogyakarta.

4 Conclusions

The conclusions of this study are as follows:

1. The issue raised by the author in the actualization activities that have been carried out is "The low interest of lecturers in conducting research publications." This issue is related to the role and position of lecturers as civil servants as public servants. This issue has gone through an issue screening analysis using APKL and USG techniques.
2. Based on the results of the issue analysis using a fishbone diagram, it is known that there are four root causes of the four factors. The ideas for solving problems on the issues raised are FGDs with related lecturers, Journal Reviews with students, and Optimization of the OJS Journal Study Program.

References

- [1] "Law 14-2005 Teachers and Lecturers." 2020.
- [2] L. Poltak, S. Teacher, and B. School, "Lecturer Professionalism and Higher Education Quality," 2021.
- [3] M. Hatip, A. Sanosra, and, and N. Qomariah, "Lecturer Competence," *Lecturer Professionalism and Spiritual Intelligence: Impact on Student Learning Motivation and Competence*, vol. 8, no. ue 1), 2018.
- [4] H. Mochamad, A. Sanosra, N. Qomariah, C. Author, and M., "Competence, Professionalism, and Spiritual Intelligence: Impact on Learning Motivation," *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, vol. 24, p. , 2019, doi: 10.9790/0837-2401108491.
- [5] D. T. Nugrahadi, M. Muliadi, and R. Herteno, "Training and Assistance on the Use of Open Journal Systems (OJS) for Teachers at SMPN 8 Banjarbaru," *High Ridge Journal of Community Service*, vol. 4, no. 2, p. 452, 2022, doi: 10.20527/btjpm.v4i2.4788.
- [6] "PANRB Regulation Number 1 of 2023." 2022.
- [7] S. Alifah, P. Research, and E. Education, No Title. *Improving the Quality of Education in Indonesia to Catch Up with Other Countries: Advantages and Lacks of Education in Indonesia Abroad*, vol. 5, no. ue 1), 2021.
- [8] I. Arief and Handoko, "Implementasi Internet Protocol Versi 6 Pada Jaringan VoIP Berbasis

- Session Initiation Protocol.” Online Journal with OJS, 2020.
- [9] Z. Abdussamad, Book of Qualitative Research Methods, 2023.
- [10] D. Kushardiyanti, Aan, M. Burhanudin, I. Syekh, and N. Cirebon, No Title, vol. 3, no. 2. p. 198, 2021.
- [11] F. Kurnia, Analysis of the Root Causes of the Lack of Interest in Higher Education Lecturers to Continue Studying Doctoral Degrees, Journal of Applied Industrial Technology and Management (JTMIT), vol. 1, no. 4, pp. 296–301, 2022.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

