The Patterns of Student Coaching in Improving the Quality of Scientific Work Publications in the Era of Independent Learning

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Abstract. The Circular Letter of the Ministry of Research, Technology and Higher Education Number B/323/B.B1/SE/2019 provides an appeal for students to publish scientific publications. This policy provides opportunities for students to develop professional quality scientific writing. The publication of scientific articles by students can equip students with academic analytical skills and improve the academic reputation of study programs to universities. Therefore, there needs to be support from the university or study program to improve the quality of writing scientific articles. The Department of Indonesian Language and Literature, Faculty of Languages and Arts, Universitas Negeri Semarang in this case had carried out an integrated and continuous pattern of student development to improve the quality of scientific publications. The method in coaching and designed by using the CIPP model (Context, Input, Process, and Product). The pattern of coaching is in the form of mentoring in lectures, structured reviews, and integrated training. The result of this coaching is the completion of scientific articles that are ready to be submitted to various scientific journals. In addition, there are several student articles accepted in sinta accredited journals.

Keywords: coaching pattern, publication of student scientific works, and independent learning

1 Introduction

Students as the nation's next generation have an important role in community service. According to Siswoyo (in Martadinata, 2019) students have an understanding as someone who is studying at universities, both public and private or at the level of universities[1]. In connection with this understanding, the role of students is closely connected with agents of change. So, students need to have the ability to think critically and explore their minds. Wahyuni (2016) stated that the ability to understand reading, critical thinking, and self-regulation can be explored in students through the creation of scientific papers. One of the scientific works is a scientific article [2]. Article is a simple scientific work. Observing from the number of pages/ physical, articles have a minimum of 10-20 pages or usually no more than 5000 words. Articles have the potential to be published in journals as scientific publications. Scientific articles published in the form of journals have the definition as scientific writings that are prepared in a scientific manner and adapted to applicable scientific conventions (Septafi, 2021)[3]. In line with this, since 2012 the

government has required students to publish scientific articles. The basis for this publication is Circular Letter of the Directorate General of Higher Education, Ministry of Education and Culture of the Republic of Indonesia (Kemendikbud RI.) Number 152/E/T/2012 dated January 27, 2012 (Ananta et al., 2017)[4]. This is reinforced by the regulation of the ministry of research, technology and higher educationNumber 44 of 2015 which specifically regulates student publication obligations (Michael, 2020)[5]. Then, the obligation of student scientific publications was confirmed according to the Circular Letter of the Ministry of Research, Technology and Higher Education Number B/323/B.B1/SE/2019 (Astuti & Isharijadi, 2019 [6]; Purwanto et al., 2020)[7]. Publication of scientific articles by students is important because it equips students with academic analytical skills, in addition to improving the academic reputation of study programs to universities (Pratama et al., 2021)[8]. In this regard, according to the data from the Ministry of Research and Technology/BRIN (Astuti, 2019) in 2019, Indonesian scientific publications at the ASEAN level based on the data from Scopus Indonesia ranked second with a total of 28,374 publications[9]. The Deputy for Strengthening Research and Development of the Ministry of Research and Technology/ BRIN, Muhammad Dimyati said that in quantity, accredited journals in Indonesia have increased. However, in terms of the quality of accredited journals in Indonesia, there are still many who are ranked 3 to 6 (Astuti, 2019) [9]. This shows that there are still many authors of scientific papers who do not understand the systematics of writing scientific articles (Darmuki et al., 2021) [10]. As an illustration, on campus, students/scientific article writers publish scientific articles only as a requirement to complete their final project as a student. According to Nugroho (in Abbas & Herdi, 2022) when examined there are seven factors that can affect the quality of writing scientific articles, including (1) the presence of talent in writing, (2) the knowledge factor, (3) having self-confidence, (4) fear of criticism from others, (5) availability of time in writing, (6) knowledge of writing systematics and grammar, and (7) the publication process which does not require in a short time [11]. Meanwhile, based on research by Abbas & Herdi (2022) the quality of student writing is influenced by internal factors and external factors [11]. These internal factors include the lack of student confidence in their own writing, lack of ability in writing, lack of knowledge about vocabulary, grammar, and the mechanism of writing scientific articles. The external factors that affect students include activities outside of lectures that take time and energy, so that time for writing is limited. In this regard, the writing of scientific papers can be a simulation medium for documented innovation. Therefore, it is important to encourage training in writing scientific papers. Assistance by lecturers is a necessity so that students can write quality scientific papers. In this regard, lecturers are professional experts who substantively not only teach science, but also required to provide guidance and training (Tasbih, 2021) [12]. This role aims to guide students who can produce quality journal articles. In line with the Law Number 14 of 2005 concerning Teachers and Lecturers article 72 (Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers, 2005) that the main task of lecturers is not only to plan learning and carry out the learning process, but also to provide guidance and assistance of training for students [13]. In addition, lecturers also have an obligation to consult students if there are obstacles during the academic improvement process (Anidar, 2012) [14]. Therefore, there is a need for a pattern of student development to improve the quality of journal articles made by them. The pattern of coaching and mentoring is adjusted to the needs of students and majors. The assistance in the form of coaching should be conducted regularly and continuously. Several previous studies that are relevant to the pattern of fostering students in writing scientific papers include Dwiningsih, K., & Tukiran, T. (2019) [15]; Prime, F. J. (2020) [16]; Ma'ruf, M. H., & Fitria, T. N. (2021) [17]; and Ginting, S. D. B., & Basyir, M. (2021) [18]. In their research they analyze technical problems and analytical development carried out by students. Students

still need to learn a lot about grammar and explore the analytical possibilities of problem formulation which is the essence of writing scientific papers/articles. Therefore, this article will discuss the pattern of developing and fostering students in writing scientific papers (journal articles) that can overcome or at least minimize these two problems. The novelty of this research is the description of good practices in developing the quality of student publications.

2 Method

This study is evaluative in coaching and designed by using the CIPP model (Context, Input, Process, and Product) (Stufflebeam in Madaus 1983:117) [19]. Context analysis is used to determine the background related to the quality of student articles, which include: (a) the quality of the substance and b) the technical quality of writing. The input aspect in this study is the ability of students to write research articles. The process aspect in this study is the implementation of the idea processing process to include articles in journals. The product aspect is the quality of the scientific articles produced. The research instruments were observation, student scientific work quality assessment sheets, and questionnaires. The analysis used in this study was carried out by following the logic of a qualitative approach, namely through the collection of qualitative data to be presented and data reduction was carried out which was then drawn conclusions. The data analysis technique used is the interaction analysis model conducted by Strauss (in Martien, 2015), which connects categories with subcategories to then look for patterns [20]. The steps used in this analysis are data reduction, data presentation, and data verification (Sugiyono 2005:92) [21].

3 Results and Discussion

The pattern of fostering students in writing scientific articles can be conducted by opening writing classes namely the pattern of coaching in developed countries as expressed by Anderson, Bhakta, DiMaio, Gray & Hoyt, Hawks, North, Siemann, Wilder, Williams (2021) [22] in Darmalaksana, W. (2021) that all higher education in developed countries open effective training in writing scientific articles in the "Writing Center" forum [23]. We adopted this and at the same time we innovated into three coaching patterns, namely mentoring in lectures, structured reviews, and integrated training. This innovation is closely related to the goal of the curriculum in Indonesia today, namely the Independent Learning of Independent Campus curriculum. In genreral, Najela Shihab and the Learning Teacher community (2017) explained that there are seven components of the concept of independent learning that are carried out in the curriculum of the Ministry of Education and Culture [24]. The seven concepts are (1) internal learning motivation that avoids rewards and punishments, (2) involves students in planning learning goals that are adapted to their level of self-understanding, (3) explains the benefits related to the material that will be delivered to children according to their interests and children characteristics, (4) instilling discipline and responsibility along with the consequences for personal decisions, (5) instilling an understanding that in the learning process there are increasing challenges to continue to dare to take decisions and risks which are also a learning process, (6) provide opportunities to determine choices related to leadership, managing time,

and selecting groups according to their talents and interests, (7) involving self-assessment and daring to communicate it.

Assistance in Lectures
One of the effective steps to coach students to be active in writing scientific papers is to assign them to courses. Assignments refer to the topic in a lecture. This also directly makes the course have project-based learning. In accordance with the concept of the Independent Learning of Independent Campus curriculum, to foster internal motivation in learning, students are free to choose any topic to be raised, the easiest for them and the most mastered in the whole lesson. This is intended so that students are happy to work on the scientific work, because the selection of important topics is related to the subject but there is no theme limit. The assistance is carried out by means of online and offline consultations. This means that online consultations are carried out via scheduled zoom. Meanwhile, offline consultations are usually carried out during lectures. There are several ways to provide assistance.

First, to facilitate lecturer assistance, articles with similar themes are grouped into one group by the lecturers. Students are asked to send an email as well as bring a print out of the article. In the classroom, students group together according to the direction of the lecturer. Chairs are made in a circle and given space to rest with other groups. Lecturers will walk from one group to another in turn. Lecturers understand simple concepts related to their chosen theme. Lecturers open a question and answer session on things they doubt or do not understand. The question and answer applies to all discussion groups. This means that not only lecturers who explain but also students in discussion groups who can answer freely according to the references they have. In addition to open discussions, both students and lecturers can exchange references and encourage each other to complete references for the depth of the material written in the article.

Structured Review
This structured review consists of peer review and lecturer review. Colleagues have the right to criticize the content, organization of writing, and the grammar used. Likewise the lecturer. Lecturers are also entitled to provide input in the form of grammar, depth of content, references used both in number and novelty, relevant previous research, depth of writing, logical and coherent thinking of students in writing scientific articles. Lecturers have a review sheet to perform a control function on student writing. Students who have been reviewed are asked to revise and then review again. The average student revises 3-4 times revisions.

Integrated Training
Writing skill is something that needs to be practiced continuously. This integrated training is training that is carried out continuously and thematically. Lecturers open online training outside of learning hours, once or twice a week. Lecturers talk about general things namely reference journals, environmental rules. Lecturers also provide tips and tricks so that scientific articles can be accepted. In addition, the lecturer opened a question and answer session for matters related to writing articles. If students ask basic questions related to citation rules, the lecturer will still explain. Basically, lecturers are committed to having an open heart in integrated training, even to the point of explaining the basic things needed to help bring out the potential of students. This zoom session is free for students in the Department of Indonesian Language and Literature, Faculty of Languages and Arts. This training at least resulted in journal articles that were accepted in sinta journals 3 and 4. One class averaged 4-6 articles successfully received. Therefore, this can continue to be developed and pursued in the future.

4 Conclusion

The regulation of the ministry of research, technology and higher education number 44 of 2015 particularly regulates student publication obligations. Campuses need to encourage the achievement of these policies. One of the efforts made by the Department of Indonesian Language and Literature, Faculty of Language and Arts, Universitas Negeri Semarang in this regard is to carry out an integrated and continuous pattern of student development to improve the quality of scientific writings in this case are student scientific articles. The pattern of coaching is in the form of mentoring in lectures, structured reviews, and research. The results of this coaching, there are at least 3-6 student articles accepted in the journals of sinta three and four.

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