Students' Perception on Training in Writing Research Article for Publication

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Abstract

The ability in scholar writing is pivotal for students at higher degree of education. They are demanded to be able to write the results of their research in the form of research article and are encouraged to publish it in reputable journals. The low self- efficacy, low ability in scholar writing, and lack of knowledge as well as experience are the factors hindering the students in writing their research articles. This study reports the students' perception on the training in writing research article for publication. The participants were 25 students of the graduate program in Indonesian Language Teaching and Literature at an Indonesian university. They were trained and guided in writing research articles and the abstract. The results showed that the students had positive perception on the training. They also confirmed that they were guided in writing and developing the sections of research article and the abstract during the training.

Keywords: perception, publication, research article, training in writing

Introduction

Writing scientific paper or research article for publication is a predominant and prevailing demand for students who pursue graduate studies and higher educational degrees nowadays. They are required to be more innovative, active and productive in conducting research and writing the results of the research as a quality research article. They are also demanded to get their research articles published in reputable journals. Several purposes of the publication demand are to share the knowledge and ideas from the research results to others, to receive recognition, to obtain feedback from experts on the research results, and to legitimize the research (Cargill & O'Connor, 2009). The demand of writing for publication is intended not only to improve students' professionalism, but also to enhance their tenure, career, even promotion decisions (Jalong, Boyer & Ebbeck, 2014).

Success in writing for publication highly depends on the ability in academic writing. The students need to have a good ability in academic writing to produce a research article which reflects logical thinking and scientific arguments (Glew, Challa, & Gopalan, 2014). In academic writing, the students have to be able to integrate, synthesize and extend ideas and these require a higher-level construction skills (Lavelle & Bushrow, 2007). Particularly in writing research article, they need to develop each move of research article well to present the ideas, arguments, and the research results clearly.

The demand of writing for publication is considered uneasy to fulfill since the students may have difficulty in writing research articles. Graduate students often find it difficult to write research articles since they do not have sufficient knowledge on how to produce a quality research articles demanded by professional journals (Nolan & Rocco, 2009). From a preliminary study conducted by distributing questionnaire to 25 graduate students of Advanced Linguistics class at Lambung Mangkurat University, Indonesia, it was found that the students did not have adequate knowledge and ability in writing research articles. Most of them even found it difficult to start writing given that they were confused in expressing their ideas. This finding is in line with Glew et al.'s (2014) study which investigated the graduate students and postdoctoral fellows' perceived writing ability, experience in writing and the need of training in writing scientific manuscripts. Glew et al. (2014) report that the majority of the respondents in their study did not have good writing skills and that they regarded writing research articles as a difficult task. The finding of the preliminary study is also supported by Rosales, Moloney, Badenhorst, Dyer and Murray (2012) who found that the majority of the participants in their study perceived that they could not express and arrange their ideas well and they were not confident in writing due to their lack of writing skill.

The next finding of the preliminary study was that only few students stated that they have few experience in writing research articles, while the majority of the students asserted that they had no experience in writing research articles for publication. The students' lack of experience in writing and publishing research articles is also found in Cahyono and Amrina's (2016) study. The students also admitted that they lacked practice in determining topic for research and writing research results in the form of scientific paper. Subsequently, it was also found that the students needed a specific training on scholarly writing for publication since they wanted to learn it. This finding is similar to the respondents' perception in Glew et al.'s (2014) study. The respondents admitted that they were actually motivated to improve their ability in writing research articles,

but they considered that the trainings for writing research articles at graduate and postgraduate levels were still insufficient. Particularly in developing countries, the provision of institutional writing supports remains inadequate (Murugesan, 2012).

Based on the preliminary study reflecting Indonesian students' lack of experience in writing research article for publication and the need of specific instruction or training to assist the students to write research article, this study was conducted by providing graduate students with a training in writing research article for publication and investigating their perception on the training. The research questions in this study are as follows:

1. What are the students' perception on the training in writing research article for publication?
2. What are the students' perception on the guidance given during the training?

Literature Review

Scientific writing of research articles has different format from other types of paper, such as essays. According to Cargill and O'Connor (2009), the conventional article structure is started with abstract, introduction, method, results and discussion, which is known as AIMRaD structure. This structure can be varied in accordance with the format given by specific journals. Hengl and Gould (2002) provide more elaborated structure of research article, namely title, introduction, method, results, discussion, conclusion, and references.

Writing research articles for publication requires ability in academic writing and a lot of writing practices. Students encounter difficulties in writing research articles for publication mainly because they think they do not have a good writing ability (Catterall et al., 2011; Glew et al., 2014, Rosales et al., 2012) they are neither confident nor self-efficacious to write (Rosales et al., 2012), they do not have enough time to practice writing research articles (Jalongo et al., 2013) and they are afraid of getting bad judgment of their manuscript (Jalongo et al., 2013). Furthermore, other obstacles faced when attempting to write for publication, especially in the case of teacher researchers are grounding the research article within effective literature review, selecting a central focus of the article and developing the article based on it, and providing reflection based on the research results and connection of the results to the broader field (Smiles & Short, 2006)

The demand of writing for publication and students' difficulties in writing research articles for publication have resulted in the need of particular and intentional instruction in which students could get assistance and guidance in learning and practicing research article writing. The assistance and the guidance can be given through a focused and systematic instruction which helps students to understand the importance of scholarly writing for publication and provides sufficient practice to write research articles as well as useful feedback on students' work (Jalongo et al., 2013). Training and workshops as the form of instruction can also be used to facilitate students with the experience of writing research article and improve their writing skill (Cahyono & Amrina, 2016; Rosales et al., 2012, Catterall, Ross, Aitchison, & Burgin, 2011).

A number of researchers have investigated the impact of specific training and instruction in writing research articles for publication to students and students' perception or feedback

toward the training and instruction. For instance, Cahyono and Amrina (2016) investigated the Indonesian EFL doctorate students' perception on a training in writing research articles for publication which was conducted throughout a course at a graduate program. The training consisted of developing abstract, developing abstract into research article and developing the sections of research article. Cahyono and Amrina (2016) found that the students' perception was very positive and the students perceived that they obtained useful guidance and assistance in writing and developing research article from abstract to conclusion part during the training.

While Cahyono and Amrina (2016) conducted a training to help the students to learn and practice writing research article for publication, Rosales et al. (2012) conducted an intensive workshop, called as "Thinking Creatively about Research", to provide the participants who were the students from engineering major with the theories of writing, academic discourses, and guidance of research writing from formulating research questions to revising their final research articles. Rosales et al. (2012) also studied whether the workshop improved the participants' self-efficacy toward the writing of research article and their writing ability. The finding of their study showed that the participants felt more self-efficacious in writing research articles after they joined the workshop. They stated that they obtained useful strategies on how to write research articles well and the explicit instruction in the workshop helped them in writing the articles. Their self-identification as writers became more positive as they reported in their reflection that they were more confident in writing and they showed more evidence of productive writing. Furthermore, the finding of Rosales et al.'s (2012) study also demonstrated the participants' growth in writing output. Thus, it can be concluded that workshop on writing research article is beneficial for students in enhancing their self-efficacy and writing progress.

Glew et al. (2014) had an experience in teaching a manuscript-writing course named 'How to write a scientific manuscript in the biomedical sciences'. The students who took the course regarded the course influential in improving their knowledge of manuscript writing and their ability in writing research article for publication. From the course, they knew how to write and improve the quality of their research article. They also received useful feedback on their writing product. Based on the feedback from the students, Glew et al. (2014) emphasized that a formal manuscript-writing program is highly necessary in any graduate curriculum. Similar to Glew et al. (2014), Nolan and Rocco (2009) reported their experience in teaching the writing of research articles using three different models, namely writing conceptual or empirical manuscripts, conducting a structured literature review, and writing conceptual papers. One of the outputs from the teaching practices was students' manuscript which was encouraged to be submitted to educational journals. The students who were involved in the teaching practice stated that they obtained positive experience in writing and they enjoyed the process of writing through the practices. Some of them also succeeded in writing research articles for publication due to the essential guidance they obtained from the teaching practices.

Thus, based on the brief literature review, it can be concluded that focused instruction and training to write for publication are important to enhance students' skill in scholar writing, students' confidence, and students' success in publication of research article. The knowledge and the experience the students receive from the instruction and training can be used for further independent practice of writing for publication.

Method**A. The Participants**

The participants of this study were 25 students who took Advanced Linguistics course at the graduate program in Indonesian Language Teaching and Literature of Lambung Mangkurat University, one of leading universities in Indonesia. The participants consist of 16 females and 9 males. At the graduate program, the students are required to write a thesis and a research article as the requirements to be awarded the master degree. They were at the first semester of their graduate study while this study was conducted.

B. The Training and the Data of the Study

The training was aimed at providing the students with the knowledge of how to write research article for publication, practice to write research article and assistance during the practice. The trainer was the researcher herself. The materials for the training were made based on the structure of research article, namely abstract, introduction, method, results, discussion, conclusion and references.

The training material about abstract writing contains the components which need to be covered in the abstract, namely some information of the research background, the purpose and problem of the study, method used, the most important results of the study and conclusion (Weissberg & Buker, 1990 cited in Cargill & O'Connor, 2009). As abstract is the last thing to be written after the main sections of the research article are completed, this part of the training was given after the training in writing introduction, method, results, discussion, conclusion and references were given. The students were provided with some models of good research abstracts and were asked to analyze the contents with the researcher's guidance.

The models of well-developed sections of research article were also available for the students. Before they practiced developing each section of their own research article, they were asked to discuss the models to get the idea of how the sections in the models were well-developed. They also had sessions wherein they were given instruction or explanation about the development of the sections in research article. For instance, it was explained that the introduction part covered context of the study, research gap, aims and the problems of the study. The method part informs the reader about how a study was conducted, who the participants were, what were the data and the instruments and how the data were analyzed. The result part reports the results of the study and the discussion part provides the explanation of the research results by comparing and contrasting them with the literature and the previous studies. Conclusion provides the highlighted results based on the research problems and sometimes are complemented with recommendation and/or the implication of the research results in other fields. In addition to the specific instruction on how to develop the sections, the students also had individual practice and got scaffolded during the practice.

After the training was finished, the students were asked to complete two types of questionnaire. The first questionnaire was aimed at investigating their perception on the training holistically, while the second questionnaire was aimed at investigating their perception on the guidance given during the training. The first questionnaire used Likert scale and consisted of six statements about the training. The students were asked to select 4 options to respond to the statements, namely 'Strongly agree', 'Agree', 'Less agree', and 'Disagree'. The second

questionnaire elicited whether they considered they were guided in writing as well as developing the research article, and whether they perceived they were guided in writing the abstract. Open-ended items were included in the second questionnaire to find richer data about the students' perception on the guidance given during the training.

Research Results

The results of this study are described based on the research questions, namely the students' perception on the training in writing research articles for publication and the students' perception on the guidance given during the training.

A. Students' Perception on the Training in Writing Research Article for Publication

The data from the likert-scale questionnaire about the students' perception on the training were analyzed based on the percentage of the students' response for each statement. For all six statements, no students selected 'less disagree' and 'disagree' options. All the students' responses only varied from 'strongly agree' to 'agree' options. It means that their high agreement on the items of the questionnaire indicated their positive perceptions on the training. Table 1 reports the percentage of the students' responses from the questionnaire.

Table 1. Results of Students' Responses from the Questionnaire

No.	Questionnaire Statement	Percentage Strongly Agree	Agree	Less Disagree	Disagree
1.	The training in writing research article for publication helped me to improve my understanding on how to write research article for publication.	4%	96%	0%	0%
2.	I feel motivated during the training in writing research article for publication.	52%	48%	0%	0%
3.	The training helped me to develop self-efficacy in writing research article.	48%	52%	0%	0%
4.	I obtained positive writing experience and useful feedback during the training.	44%	56%	0%	0%
5.	My understanding on the writing of research article for publication can reduce my anxiety in thesis writing to finish my study.	12%	88%	0%	0%
6.	I attempt to apply the knowledge and the experience I got from the training to write my next research article for publication.	24%	76%	0%	0%

On the first item, the students were asked whether the training helped them to improve their understanding on how to write research article for publication. The majority of the students (94%) agreed with the statement and the rest of the students strongly disagreed with it. The students perceived that the training helped them to understand the writing of research article better. The second item was about the motivation during the training. All the students felt motivated while they were following the training, indicated by 52% of the students strongly agreed with the item and 48% of the students agreed with it. In addition to the students' positive perception on the training as viewed from their understanding and motivation, self-efficacy becomes the next aspect which the students perceived as the benefit of the training they have followed. They considered that the training helped them to develop their self-efficacy in writing research article.

Similar to the results of the first three items, the students showed their positive perception on the training related to writing experience and feedback they received in the training. It is showed by 56% of the students who agreed that the training provided them with positive writing experience and useful feedback and 56% who reported their strong agreement. Moreover, as the training could improve their understanding on how to write research article, they felt that it could reduce their anxiety in dealing with thesis writing at the end of their study later. The students also attempted to apply the knowledge and the experience they obtained from the training to write more research article, as indicated by their agreement on the last item of the questionnaire. To sum up, the students perceived that the training gave positive effect to their knowledge of scholarly writing, their confidence, self-efficacy, the reduction of their anxiety of scholar writing, writing experience and their awareness of long term practice in writing research article using the input from the training.

B. Students' Perception on the Guidance Given during Training

To investigate the students' perception on the guidance they received during the training, the students were asked whether they perceived they were guided in writing as well as developing each section of research article and writing abstract. The students reported that they were guided much in developing the sections of research article. They regarded the model of research article showed by the lecturer was useful to give them a clear picture of the structure and the content of a good research article. It can be seen from Student 22's following response, "At the beginning we analyzed the model of research question to get the idea of the components or content we should write in our research article". The majority of the students asserted that the lecturer gave systematic guidance to develop the sections of research article from introduction until conclusion. Student 18, for instance, underlined that they were guided to develop each section effectively using a central focus of their research. Besides, the direct interaction and feedback provided by the lecturer were also considered beneficial for the students in developing their research article. It is evident from the following statement of Student 14, "The lecturer willingly answered our questions when we were confused in developing the sections of the research article. She also reexplained the material about how to develop research article when we had problems. Her feedback is also important when I worked on my research article". This finding is also strengthened by the comment of the students who appreciated the lecturer's explanation, scaffolding and feedback while they were working on developing the sections of the research article. For example, Student 3 said, "We received the explanation on research process and data analysis and this helped us to develop our ideas into research article."

The way the guidance was provided and the positive effect the students experienced are the other important aspects which assisted the students in writing research article. Student 3 responded, "We are given the insight of how to write a good research article through power point slide, clear material and group discussion." Moreover, Student 5 said, "The lecturer gave us guidance gradually and step by step." In addition, Student 1 said that they were guided when they had individual practice. The guidance not only assisted the students in writing their research article, but also enhanced their confidence. For example, Student 17 stated, "After I received the explanation from the lecturer and class discussion, I felt positive to write my own article."

The guidance in writing abstract during the training is the last aspect to be investigated to answer the second research question. All of the students indicated that they got guidance in writing the abstract. Some of them stated that the guidance included giving the students the example of a good abstract and analyzing the abstract with the students to see the content of the model abstract. It is evident from the response of Student 1 who stated, "First we learned the model abstract and we analyzed it together with the lecturer's guidance. Afterwards, the lecturer gave us explanation on abstract writing." This response also pointed up that the guidance was complemented with explanation on how to write abstract. The explanation from the lecturer was considered comprehensible by the students as indicated by Student 11 who asserted "The lecturer clearly explained what to write in an abstract and what components should be included in the abstract", and by Student 16 who commented, "We got clear explanation and comprehensive theory about how to write abstract well". Similarly, Student 18 stated, "After I got the training, I know the characteristics of a good abstract, both technically and substantially." Based on all the students' responses, it could be inferred that the guidance perceived by the students was considered fruitful.

Discussion

The results of this study highlight the students' confirmation on how they were guided and scaffolded in writing research article which comprised developing the sections of the research article and writing the abstract. The students reported their positive perception both on the training holistically and the guidance during the training specifically. The improved understanding on the writing of research article as the benefit of the training found in this study confirms the results of the study conducted by Glew et al. (2014) who reported the similar issue. The students in this study much appreciated the explanation and explicit instruction of research article writing as these helped them get clear idea of how research article writing should be done. In the same vein, Rosales et al. (2012) has pointed up the value of explicit instruction to empower the students in scholar writing. Moreover, the knowledge they got from the training can ease the process of research article writing since they know what elements to write in each section of research article. Perceiving the improvement of their understanding on how to write research article well might be a factor which boosts their motivation to be engaged in scholar writing in addition to the role of the training itself. Moreover, the training made them not only motivated to learn and practice scholar writing, but also more self-efficacious in writing their research article. This finding is in line with the study conducted by Rosales et al. (2012) who found that the workshop they conducted contributed to the personal growth of the participants' self-efficacy in writing.

This study further reveals that the students valued the writing experience and the feedback they obtained during the training. They had opportunities to apply what they already knew about the writing of research article into practice. Writing experience is one of prominent elements of the training since the mastery of scholar writing requires learning process and experience (Singh & Mayer, n.d.). The students' positive perception on the training in relation to writing experience in this study is in line with Nolan and Rocco's (2009) study who reported that their students valued the positive writing experience in their teaching practice on scholar writing. The feedback given to the students is also crucial to improve the quality of their work.

Another interesting finding of this study deals with the response of the students who admitted that their improved understanding on the writing of research article reduced their anxiety in writing their future thesis. From this finding, it can be inferred that getting the training on the early period of their study is beneficial to prepare them in writing their thesis later on. Regarding this finding, Singh & Mayer (n.d.) suggest that students need to start learning scholar writing earlier in order that they have sufficient time to do intensive practice on it. The students in this study also showed their willingness to apply the knowledge and the experience they got from the training to do more practice of writing research article. This finding indicates that they have developed their awareness of how important scholar writing is. It also pinpoints that the students are willing to improve their proficiency in scholar writing.

The guidance in the form of giving explicit instruction, explanation, models, and feedback during the training is worth of attention in this study. The students perceived that all the forms of the guidance were very useful in assisting them to write their research article. This finding is in the same vein as the study conducted by Cahyono and Amrina (2016) who reported that the training in writing research article for publication was beneficial as it could assist students in writing the abstract of their research and writing their research article completely. In a nutshell, a training of how to write research article for publication is advantageous and essential for students to improve their proficiency in scholar writing.

Conclusion

This study pinpoints that the training in writing research article for publication is highly valued by the students and regarded beneficial to improve the students' knowledge and ability in writing research articles. The key points in the training are the guidance and the writing experience. The guidance given to the students may vary based on the need of the students. The guidance in this study comprises providing the models of well-developed abstract and research article, analyzing and discussing the content of the models, giving the clear explanation on the writing of research article, and providing feedback. The writing experience in the training is necessary to enable the students to apply the students' knowledge on scholar writing and to practice their writing ability. Early support and practice in writing research article should also be taken into consideration as this study indicates that students would be less anxious to deal with thesis writing or other required forms of academic writing after they obtain early support and undertake the early practice of scholar writing. Thus, any institutional writing support, either in the form of a course, instruction, or training in writing research article is necessary to be conducted to facilitate students to improve their ability and productivity in writing research article for publication.

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References

- Cahyono, B. Y. & Amrina, R. (2016). Indonesian EFL students' perception on training in writing research articles for publication. *Journal of Language Teaching and Research*, 7(5), 859-866.
- Cargill, M. & O'Connor, P. (2009). *Writing scientific research articles: Strategy and steps*. West Sussex, UK: Blackwell Publishing.
- Catterall, J. Ross, P., Aitchison, C., & Burgin, S. (2011). Pedagogical approaches that facilitate writing in postgraduate research candidature in Science and Technology. *Journal of University Teaching & Learning Practice*, 8(2), 1-10. Retrieved April 2, 2016, from <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1212&context=jutlp>
- Glew, R.H., Challa, A. K. & Gopalan, V. (2014). *Training in scientific manuscript writing*. *Current Science*, 107(9), 1386-1392. Retrieved September 16, 2016, from <http://www.currentscience.ac.in/Volumes/107/09/1386.pdf>
- Hengl, T. & Gould, M. (2002). *Rules of thumb for writing research articles*. Retrieved September 18, 2016, from https://www.itc.nl/library/papers/hengl_rules.pdf
- Jalongo, M. R., Boyer, W., & Ebbeck, M. (2014). Writing for scholarly publication as "tacit knowledge": A qualitative focus group study of doctoral students in education. *Early Childhood Education Journal*, 42, 241-250. doi:10.1007/s10643-013-0624-3
- Lavelle, E., & Bushrow, K. (2007). Writing approaches of graduate students. *Educational Psychology*, 27(6), 807-822. doi:10.1080/01443410701366001
- Murugesan, R. (2012) Promising outcomes of an online course in research writing at a Rwandan university. *European Science Editing*, 38(3), 60 – 64.
- Nolan, R. & Rocco, T. (2009). Teaching graduate students in the social sciences writing for publication. *International Journal of Teaching and Learning in Higher Education*, 20(2), 267-273. Retrieved September 15, 2016, from <http://files.eric.ed.gov/fulltext/EJ864344.pdf>
- Rosales, J., Moloney, C., Badenhorst, C., Dyer, J., & Murray, M. (2012, June). *Breaking the barriers of research writing: Rethinking pedagogy for engineering graduate research*. Paper presented at the Canadian Engineering Education Association (CEE12) Conference, Winnipeg, Canada.
- Singh, V. & Mayer, P. (n.d.). Scientific writing: Strategies and tools for students and advisors. *Biochemistry and Molecular Biology Education*, 405-413. Retrieved September 15, 2016, from <http://onlinelibrary.wiley.com/store/10.1002/bmb.20815/asset/bmb20815.pdf?v=1&t=iueygtgk&s=abd136f99a5946239616e5802a9f60e6d30254f0>
- Smiles, T.L. & Short, K. G. (2006). Transforming teacher voice through writing for publication. *Teacher Education Quarterly*, Summer 2006, 133 -147.

Appendix A. Questionnaire of Students' Perception on the Training in Writing Research Article for Publication (Holistically)

Instruction:

This questionnaire is administered to know your perception on Training in Writing Research Article for Publication. Please give your perception on each statement of the questionnaire by ticking option 'Strongly agree', 'Agree', 'Less agree', or 'Disagree'.

No.	Questionnaire Statement	Response			
		Strongly Agree	Agree	Less Disagree	Disagree
1.	The training in writing research article for publication helped me to improve my understanding on how to write research article for publication.				
2.	I feel motivated during the training in writing research article for publication.				
3.	The training helped me to develop self-efficacy in writing research article.				
4.	I obtained positive writing experience and useful feedback during the training.				
5.	My understanding on the writing of research article for publication can reduce my anxiety in thesis writing to finish my study.				
6.	I attempt to apply the knowledge and the experience I got from the training to write my next research article for publication.				

Appendix B. Questionnaire of Students' Perception on the Guidance given during the Training in Writing Research Article for Publication

Instruction:

You are requested to give response to the following questions about your perception on the Training in Writing Research Article for Publication. For the open-ended item, please explain your reason based on your answer.

1. Did you perceive that you were guided in writing research article and developing the sections of the research article during the training?

NO

YES

Why not?

Why?

2. Did you perceive that you were guided in writing and developing the abstract of the research article during the training?

NO

YES

Why not?

Why?