



WRITING SCIENTIFIC PAPERS: EXPLORING THE DIFFICULTIES OF MADRASAH TEACHERS IN INDONESIA

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Abstract

Teachers as professionals play an essential role in the 21st Century in achieving the vision of national education. Teachers in the 21st Century must continue to improve their academic responsibilities, including writing scientific papers. However, the fact is that teacher activities are still focused on teaching and neglect scientific writing. Therefore, there must be an effort to explore their difficulties in writing. For this reason, this descriptive qualitative research aims to explore the difficulties of teachers in writing scientific papers identified through training activities. The research subjects were teachers of Madrasah Aliyah Negeri 2 Manggarai Ruteng, Indonesia (n=20). We followed a method of using a data collection process that includes document analysis, participatory observation, and focus group discussions. As a result of our research, we mapped the difficulties of teachers. Ongoing training, adding to the library collection, controlling and monitoring the implementation of Madrasah teacher working groups' activities, and mentoring experts need to be considered to support Madrasah teachers' professionalism. This finding has implications for applying a managerial reward and punishment pattern to increase teachers' motivation and interest in writing scientific papers.

Keywords: Professionalism, academic writing, professional 21st century teacher.

INTRODUCTION

Currently, students' academic tendencies show increased pressure, feelings of being overwhelmed, and stress levels (Bennett, 2018). Meanwhile, the quality of teaching and student performance is determined by the availability of professional teaching staff (Barry, Pendergast, & Main, 2020; Tahira & Haider, 2019); Suparman, Juandi, & Tamur, 2021; Tamur, Juandi, & Kusumah, 2020). In line with that, the quality of teacher learning must answer the demands of the 21st Century (Kim, Raza & Seidman, 2019; Juandi, Kusumah, Tamur, Perbowo, Siagian, Sulastri, & Negara, 2021; Yunita, Juandi, Tamur, Adem, & Pereira, 2020). The importance of professional development and 21st century teacher skills to support students' academic success and solve daily problems (Williams-Britton, 2021; Nurjanah, Latif, Yuliardi, & Tamur, 2020; Haviz, Maris, Adripen, Lufri, David, & Fudholi, 2020; Tamur & Juandi, 2020). Thus, the teaching profession must continue to be developed into a dignified profession and as the spearhead towards quality education.

As an effort to produce professional teachers, the Indonesian government has highlighted the importance of self-development of teachers through scientific publications (Regulation of the Minister



of State for Administrative Reform and Bureaucratic Reform of the Republic of Indonesia, 2009). Although this policy is considered very heavy for teachers, experts claim scientific writing is academic responsibility. For example, Lamanauskas (2019) mentions scientific writing as a responsible academic activity. This work will help researchers to improve individual performance.

Scientific writing is a work that contains and examines a particular problem by using scientific principles. Scientific work is designed to help professionals, including teachers, write about their work clearly and effectively (Alley, 2018; Blackwell & Martin, 2011; Thomas, 2021). Here it seems clear that scientific writing can help teachers express and communicate their ideas to other academic communities. This kind of atmosphere will develop teacher skills and support teaching abilities and communication patterns to students.

However, it cannot be denied that the productivity of scientific writing among teachers is very low. The Indonesian National Education Department's central bookkeeping agency noted that teachers who could write were no more than 1% (Nugroho, 2011). A similar condition was described by Kim et al. (2019) in other parts of the world on this issue. They highlighted the importance of an in-depth examination of teachers' difficulties with writing. Thus, in-depth research to examine the difficulties of teachers in writing is needed.

In the literature, Valdivia & Martínez (2018) have specifically examined the difficulties of teachers in writing. They identified the problems faced by teachers revolving around intertextuality and the creation of conclusions. In order to improve teachers' quality of writing, research is needed in training and coaching in writing scientific papers (Rosa & Mujiarto, 2020). This qualitative research aims to conduct research in training on scientific writing for teachers in Indonesia. This study contributes to the literature to complement the identification of previous teachers' difficulties and practical policies required.

METHOD

The qualitative method is applied in this research, in the form of an analysis of the reasons why teachers at Madrasah Aliyah Gugus Ruteng, Indonesia have difficulty writing scientific papers. Qualitative research is an iterative process in which a better understanding of the scientific community is achieved by making new significant differences that result from getting closer to the phenomenon being studied (Aspers & Corte, 2019; Smeyers, 2014). This researcher wants to explore the difficulties of the teachers at Madrasah Aliyah Negeri (MAN) 2 Manggarai Ruteng Indonesia and capture their hopes for consideration in the future.

The research method used in this research is the descriptive method which aims to describe the results of research by describing in detail, complete and in-depth the results of interviews, observations, document analysis and focus group discussions from informants, namely MAN 2 Manggarai Ruteng teachers who are certified educators (certification). This is done to obtain data that can be described in a manner to describe the factors causing the difficulties of the teachers.

Data obtained from in-depth interviews, document analysis, observations, and focus group discussions (FGD). Furthermore, data analysis was carried out by: (a) reducing data, (b) presenting data, (c) drawing conclusions and then verifying. Data validation was carried out by (a) expanding observations; (b) accuracy of observation; (c) triangulation; (d) the provision of colleagues, (e) adequacy of references; (f) negative case analysis; (g) check the list of members. We have implemented the triangulation method to generate valid data. First, we conducted a source translation by comparing the information obtained from different subjects. Second, we perform time triangulation, i.e. the data is obtained from repeated observations.



RESULTS

This research was conducted at MAN 2 Manggarai Ruteng Indonesia. This is because MAN 2 Manggarai Ruteng almost all teachers are certified educators, and these two Madrasahs have an "A" definition. In qualitative research, these peculiarities and uniqueness are the considerations for selecting the research location. The focus of this research is the teachers of MAN 2 Manggarai Ruteng who already have educator certificates. Teachers who already have an educator certificate can be declared as professional teachers.

Classification Based on Type of Difficulty

The analysis results resulted in two identified difficulties: difficulties that originate from the author (internal) and those caused from outside the author (external). In detail, the difficulties stemming from the author are described as follows:

Motivation

Most of the teachers in the research place that the researcher is doing now feel lazy to write because they do not know how to write scientific papers. What will be written in writing a scientific paper, how to put it in writing, such as the following informant's narrative:

"I am very lazy and I have no idea what to write. If I am obliged, I will write. Don't know Sir, there is no intention at this time" (Teacher Interview Results 1: 12 July 2020).

Time

The limited writing time is often the main obstacle in writing. It cannot be denied that writing is associated with ample time and a strong will. Every individual must own these two things, namely free time and will / self-motivation. How much free time is available, but if there is no will / self-motivation, of course, it will not result in written work, as the following informant explained,

"To write, I seem to be constrained by time, especially when I need more demands, I came home from school, and I was tired, and I still had to do my lesson plans, that time passed quickly. In the evening, I prepare the material for tomorrow so that the time to write is like there is no. Plus, the examples of limited journals that I have and in school reference books are also minimal" (Teacher Interview Results 1: 12 July 2020).

Writing Technique

Lack of ideas, knowledge, skills, and scientific writing techniques makes many teachers reluctant to start writing. Basically, the teachers at MAN 2 Ruteng are generally not used to writing, as explained by the following informants:

"My difficulty in writing is not clear. I don't understand what the CAR is like. In the workshop that I attended I did not understand less and only partially, only briefly and at school there was never an explanation, so the picture of writing CAR was what I was not clear about" (Teacher Interview Results 1& 2, 18 July 2020)

Field Data Collection

Based on research data, most of the teachers of MAN 2 Ruteng have just written scientific papers on the type of classroom action research. The difficulty many have experienced is data collection. The teachers are simultaneously teaching and researching, so a lot of data is missing. The following is the narrative of the Principal of the main Madrasah informant,

"My difficulty in writing, among others, is looking for data in the field. This is actually my own fault, and sometimes my absences are incomplete; my diary with students is also not thorough, I haven't been able to analyse (Deputy Principal of the main Madrasah, 19 July 2020).



Less Mastering Technology

In this era of advances in science and technology, it is very worrying if teachers do not have the desire to learn to operate computers. Based on the research results, there are still some teachers of MAN 2 Manggarai Ruteng who cannot operate computers as one of the reasons why teachers are reluctant to write as told by the following informants:

"I don't know a computer yet, sir, so I'm lazy to start writing, constrained due to lack of IT" (Teacher Interview Results 2, 19 July 2020)

Furthermore, difficulties originating from outside the teachers are reported in detail as follows:

Availability of Reference

Availability of references is one of the factors highlighted by many informants. This includes supporting books, text books and other reference books. The following is the narrative of informant A.

"Regarding the preparation of writing, I have prepared books that I can use as references by borrowing from friends. In the MAN 2 library there are only a few books that can be used to support written works. Here only books for children, including text books, so if you want to write CAR you have to look here and there" (Teacher Interview Results 1, 20 July 2020).

Internet network has not been optimal.

From the research results, the researcher during the research obtained data that the internet network was indeed not in stable condition. Sometimes the day is there, and sometimes it's gone, likewise, at night. Furthermore, the results of the interview researchers obtained data that the internet network was not yet optimal. As the informant said, the following is a snippet:

"If I have been lazy to write all this time because I have books, journals are not in the traffic, the internet network is also not smooth, so I am lazy" (Teacher Interview Results 1, 22 July 2020).

Limited Role of Madrasah Teacher Working Groups

Activities programmed by the Madrasah Teacher Working Group (TWG Mad) Deliberation are limited to matters relating to syllabus creation, lesson plans, exam questions, assessments, and new things such as the 2013 curriculum. The problem of writing as a sustainable competency development has only been discussed at the TWG Mad meeting. Until the time the researchers got this information, it was true that TWG Mad activities rarely discussed issues related to writing scientific papers. The following is the narrative of the chairman of TWG Mad:

"So far, the discussion about scientific writing at the TWG Mad meeting is very lacking, because it takes a lot of time and my friends have not had any input to discuss matters related to writing scientific papers. But if there is information on the workshop results, we will inform you, such as the current 2013 curriculum, which is often discussed at the TWG Mad meeting" (Teacher Interview Results 3 & 4. 22 July 2020).

Lack of socialization from institutions

Socialization of activities is something that can clarify the teacher's lack of understanding in carrying out tasks. The confusion of teachers in writing is also caused by the lack of schools sending teachers to attend training on scientific writing techniques. This is obtained from the following narrative of teacher S:

"At school, there was never any socialization on how to write CAR according to what the assessment team wanted. Lack of training for teachers so that the understanding of writing CAR is uniform and in accordance with what the assessors want" (Teacher Interview Results.S, 23 July 2020).

Based on the research results described above, a graphical mapping of teacher difficulties can be made. Figure 1 presents a chart of the mapping of madrasah teachers in MAN 2 Ruteng, Indonesia.

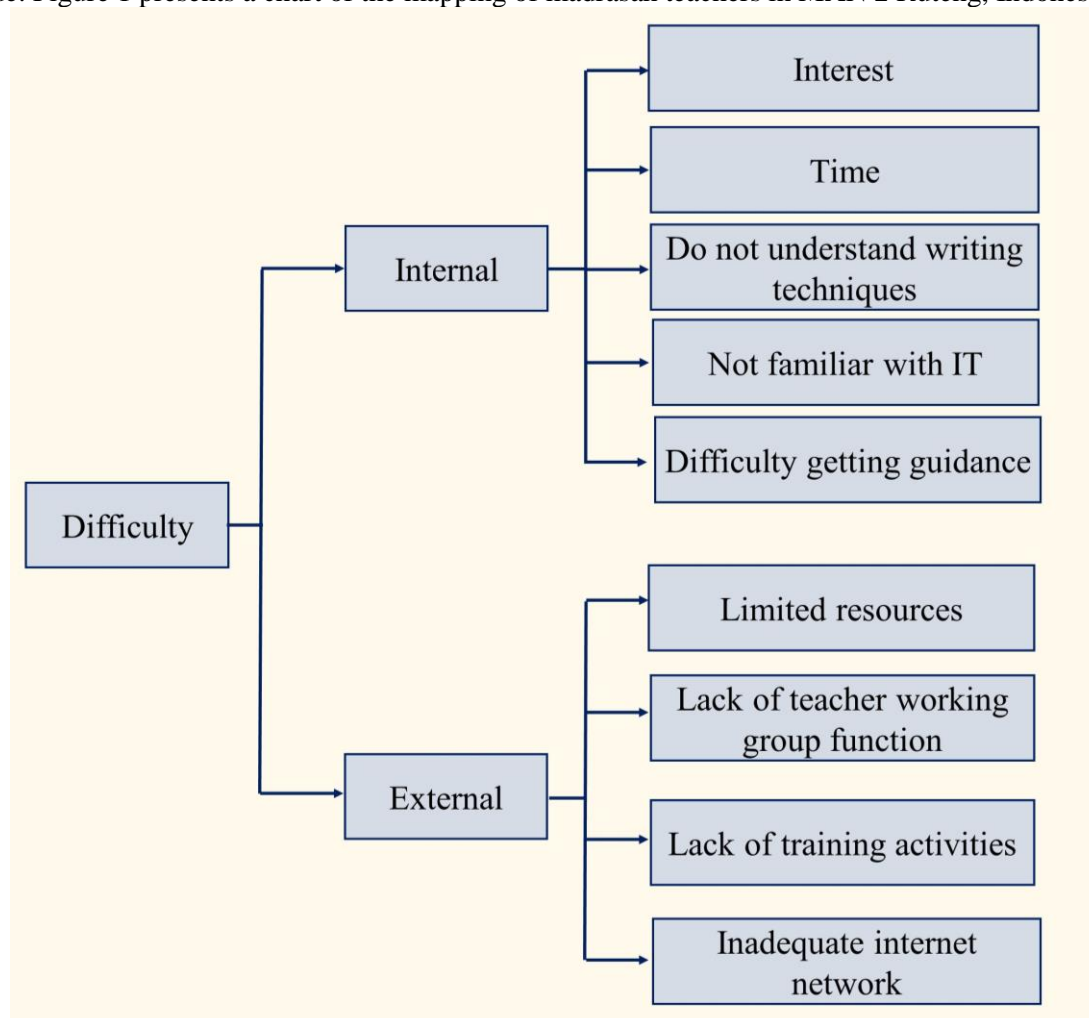


Figure 1. Grouping difficulties for Madrasah teachers

Classification Based on Age

In terms of age, this study shows that the difficulties of teachers in writing scientific can be described as follows: (1) lack of motivation. Teachers aged 39-47 years said that they were lazy to write because they were busy at home. Meanwhile, teachers aged 51-58 years explained that the lack of interest in writing scientific papers was influenced by feelings and thoughts and a lack of interest in reading, (2) difficulties in operating computers. Teachers aged 51-58 from the results of in-depth interviews showed that they experienced many difficulties compared to teachers aged 39-47 years. (3) Difficulties in the procedure for writing scientific papers, especially CAR. Teachers aged 51-58 proved to have more difficulties than teachers aged 39-47 years. Not accustomed to writing is the cause of ignorance of the procedures for writing scientific papers.

Classification Based on Gender

Based on gender, MAN 2 Manggarai Ruteng teachers' difficulties in writing, female teachers and male teachers are not so different. Both female and male teachers experience various difficulties. Teacher Efforts of MAN 2 Manggarai Ruteng to Develop Teacher Professionalism through Writing Scientific Papers. The results of this study indicate that the efforts that the teacher has made include:

Workshop / Training

Most of the teachers of MAN 2 Manggarai Ruteng attend training/workshops waiting for activities held by the madrasah. There has been no own initiative with independent costs. Figure 2 shows the involvement of teachers in scientific writing training.



Figure 2. Scientific writing training for madrasah teachers

Learn on my own

Another effort that has been made by MAN 2 Manggarai Ruteng teachers to develop teachers' ability to write scientific is to look for examples of CARs. Examples of existing CARs are then used as a reference for teachers to teach and write. This process involves motivation and guidance from school principals and researchers. Figure 3 presents the focus group discussion (FGD) process.



Figure 3. Focus group discussion (FGD) process



DISCUSSION and CONCLUSION

Difficulties of MAN 2 Manggarai Ruteng Teachers in Writing Scientific Papers

As mandated in (Law on Teachers and Lecturers, 2005), teachers are professional workers. The study results based on document analysis showed that all informants in this study had an educator and teaching certificate according to their qualifications. Thus, the teachers at the research location can be said to be professional teachers in accordance with the mandate of Law Number 14 of 2005 concerning Teachers and Lecturers.

A professional teacher is required with a number of minimum requirements, including: having adequate professional education qualifications, having scientific competence in accordance with his / her field, has the ability to communicate well with his students, has a creative and productive spirit, has a work ethic and high commitment towards the profession, and always carry out continuous self-development (continuous improvement) through professional organizations, the internet, books, seminars, workshops and the like.

The results showed that the informants at the research location were weak in writing. Consequently, in order to fulfil the demands of the profession, they resorted to unscientific methods. This is based on several subjects who claim to have used writing services. This is triggered by low motivation and interest in writing. The results showed that the teacher's age influenced the motivation in writing. More than 51 years of age, informants do not have the enthusiasm to write due to decreased memory and vision.

Another internal problem is the limited ideas, skills, and understanding of teachers in writing scientific papers. Some teachers admit that they do not understand the procedures or procedures for writing CAR, especially teachers who are over 51. years because they never got the knowledge of writing CAR. In the literature, it has been described that the difficulties of teachers in writing, for example, are related to writing anxiety and a lack of ideas (Fareed & Bilal, 2016). On the other hand, there is a demand that professional teachers must continue to learn to develop self-competence by learning through other media such as the internet, books, and scientific forums. Most of the teachers cited the lack of free time in writing because they were burdened with teaching and learning administration work.

From the triangulation of sources that the researchers conducted for teachers who served as deputy head of madrasahs, it was stated that time is not a reason for someone not to do writing activities because many people are busy fact, productive in producing written work. The problem only lies in the willingness and habit of writing. Someone who is used to writing will be very burdened if it is not put into writing so that no matter how busy the person is, he is still able to produce a written work. This study's results are not in line with the description in the literature that professional teachers must have a creative and productive spirit. Teachers must always carry out self-development continuously through professional organizations, the internet, books, seminars and the like (Daryanto, 2013) .

The discrepancy between the results and the theory may be because the informants have not carried out sustainable self-development. This research also reveals that the teachers' intention to write is still very low because they are disturbed by family matters, are not interested in writing, and do not have enough free time. Teachers in research locations will be moved to write if there is assistance from the madrasah's service or budget funds.

Based on the research data analysis, if it is related to the theory put forward by Nugroho (2011) about the type of writing teacher, the teacher in the research location belongs to the second type, namely the teacher writing due to compulsion. Teachers with this type want to write only if they have to. The compulsion arises because of a stimulus as a condition for proposing promotion/class or assignments from superiors. The type of teacher who writes because of compulsion has the following characteristics: (a) writing for some reason; (b) write when you have a desire or have free time; (c)

reading is not done every day; (d) sometimes want to learn to improve the quality of writing; (e) willing to accept input from others.

Apart from the low writing interest, there are also some teachers who are unable to operate computers. This makes it more difficult for teachers to write scientific papers. There are still teachers who cannot operate computers, as told by the following teacher:

"I can't work on a computer, so writing is constrained by IT incompetence" (Teacher Interview Results 2 & S). Professional teachers are able to carry out the responsibilities of students, society, nation, and country. The teacher's responsibility and independence, namely being able to understand himself, organize himself, control himself and respect and develop himself. Social responsibility is expressed through participation in the social environment, and actively helping others. Intellectual responsibility is expressed by skillfully using knowledge to support tasks. Spiritual and moral responsibility is manifested through the appearance of teachers as religious beings whose behavior does not always deviate from religious and moral norms, as well as the theory put forward by Daryanto that professional teachers must always carry out self-development continuously through various media such as the internet, books, attending seminars, training or training, and the like.

If viewed from Law Number 20 of 2003 concerning the National Education System, educators are tasked with planning and implementing the learning process, assessing learning outcomes, conducting mentoring and training, and conducting research and community service. This study's results are not in accordance with the mandate of Law Number 20 of 2003 because most of the teachers of MAN 2 Manggarai Ruteng can be said to have not implemented the mandate of Law Number 20 of 2003 as a whole. This is because many teachers are just carrying out their duties and obligations as teachers or teachers and have not all carried out research activities as a form of continuous professional development. External problems that affect the difficulties of teachers in research locations in writing scientific papers, especially CAR, as a form of sustainable professional development include:

Availability of Reference Books

Reference books are one of the causes of the difficulty of teachers in the research location in writing scientific papers, especially CAR. Most of the teachers in the research locations did not have books related to writing scientific papers. Most of the teachers in the research location owned books that were still in the form of textbooks only. The certification money that teachers should receive is to support the development of teacher competence. One form of teacher competency development activities through self-development by continuous learning through books. So, it is unfortunate if the teacher is professional and has received certification but still complains about not having books as a reference for writing, as explained by the informant of teacher Y, "There is a lot of need so there is no budget to buy books."

Lack of Functional Madrasah Teacher Working Groups

Lack of function of the Teacher Working Group (TWG) forum in socializing the procedures for writing scientific papers. Ideally, teacher professional development requires policy, moral, infrastructure, and financial support that can lead teachers to become professionals (Tanang & Abu, 2014). However, the work orientation of TWG Madrasahs as a forum for professional development teachers still revolves around syllabus, lesson plans, teaching materials, and assessment. In practice, they only carry out the essence of teaching. Meanwhile, those related to sustainable professional development received less attention, both from the management and from among members. Lack of Socialization from Institutions / Schools. Schools have not provided specific time to provide socialization for teachers about understanding and knowledge related to procedures and techniques. Writing scientific papers as a form of teacher professional development.



The Efforts of MAN 2 Manggarai Ruteng Teachers in Writing Scientific Papers

Teachers' efforts to develop sustainable professionalism through scientific writing are by attending workshops/training in writing scientific papers. Workshop/training is an activity that many MAN 2 Manggarai Ruteng teachers participate in as an effort to minimize the difficulty of writing CAR among MAN teachers as one of the sustainable professional development. The training that the teachers of MAN 2 Manggarai attended could be in the form of an independent initiative or because it was sent from an institution/school. The teachers were very enthusiastic about asking for assistance for the government's research activities, who was present at the opening ceremony of the training. They also highlighted the importance of ongoing training of teachers. Independent personal responsibility that can understand themselves, manage themselves, control themselves and appreciate and develop themselves is a characteristic that they have a willingness to learn after being given training.

The teachers' next effort in the research location was by learning by themselves by reading books and looking for examples on the internet or by fostering self-motivation. Besides that, they are also not ashamed to ask other people who know more about CAR writing. In this way, the teachers have a little description of CAR writing, which can be used as sustainable professional development. These findings suggest an important role for Madras heads. As explained by (Demir, Bağlama, & Yikmiş, 2020; Tahira & Haider, 2020) the principal in the overall school development plan plays an important role because all school development activities revolve around the role of the school principal.

The results of this study indicate that most of the teachers in the research location have made efforts to carry out professional development in accordance with the mandate of the Regulation of the Minister of State for Administrative Reform and Bureaucratic Reform Number 6 of 2009 concerning Teacher Functional Positions and Credit Score that the competencies that teachers must possess to develop professionalism through reflective action consisting of six indicators, namely: (1) reflecting on one's own performance continuously; (2) make use of the results of reflection in order to improve professionalism; (3) conduct classroom action research to improve professionalism; (4) following the progress of the times by learning from various sources; (5) utilize information and communication technology in communicating; (6) utilize communication and information technology to develop themselves.

Conclusion

Based on the discussion and analysis of the results of research on the development of teacher professionalism through writing scientific papers for professional teachers at MAN 2 Manggarai Ruteng, it can be concluded based on indicators of difficulties experienced by teachers when writing the following:

1. There are still many MAN 2 Manggarai Ruteng teachers in writing scientific papers as an effort to develop the teaching profession, experiencing various difficulties. The results of the focus group discussion obtained data that various problems faced by teachers caused the lack of motivation / interest in writing, including: (a) teacher motivation in writing is still low, (b) do not have enough free time, (c) lack of understanding about writing techniques, (d) difficulties in data collection, (e) lack of mastery of technology, (f) lack of reference books, (g) lack of functioning Madrasah TWG activities in disseminating written writing.
2. The classification of the difficulties of MAN 2 Manggarai Ruteng teachers in writing scientific papers as an effort to develop the teaching profession is classified into 3 types, namely: (a) Most of the teachers of MAN 2 Manggarai Ruteng have difficulty writing scientific papers due to internal and external factors. , (b) based on age, MAN 2 Manggarai Ruteng teachers who are 51-58 years old have more difficulty writing compared to teachers aged 39-47 years, (c) gender, the difficulty of teachers in writing scientific papers is not a significant difference between male teachers and female teachers. Both have almost the same difficulties, (d) Most of MAN 2 Manggarai Ruteng teachers have tried to



develop teacher professionalism through writing scientific papers by (a) participating in workshops both independently and from institutions, (b) self-learning via the internet, and (c) a small number of MAN 2 Manggarai Ruteng teachers who strive to develop teacher professionalism by participating in scientific writing training.

To encourage MAN 2 Manggarai Ruteng to become a creative teacher in writing, efforts from various parties are needed to foster self-motivation. First, the madrasah management institution periodically organizes training for those related to knowledge, understanding and practice of writing scientific papers. Training is carried out by bringing in competent resource persons in their fields so that they can provide clear knowledge and understanding of scientific writing. Second, the need to control and monitor the implementation of the Madrasah teacher working group meetings. Third, the need to add books and journals in the library to support learning and research activities. The fourth is the importance of providing training to teachers who have not mastered computers so that they want to learn to use computers for self-development purposes.

Although data collection involved in-depth interviews to ensure the credibility of the data, this study was conducted on subjects who were nearing retirement age. As a result, the results obtained cannot be generalized to all teachers. Therefore a similar study needs to be carried out in selected subjects taking into account their age.

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