

Math Teachers' Professionalism After Motivation Training: A Contextual Approach

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ABSTRACT

Professional educators can carry out their primary duties as educators and teachers, including planning lessons, implementing, and evaluating learning outcomes according to their fields. The problem of competence is one of the factors in the development of the educator as a professional position. It is necessary to research the formulation of how professional mathematics educators are after giving motivation training using a contextual approach. The type of research used is descriptive with a qualitative approach. Observation and questionnaires are data collection techniques used to collect data. Observations were made to obtain information about how the implementation of learning was carried out by educators after the motivation training. At the same time, the questionnaire was used to collect data related to the effect of giving motivation training. Analysis of the data used in this study is to examine the results of observations and the questionnaire results. Then the results are described with support and strengthened by the findings during the implementation of activities. The results showed that the analysis of the provision of motivation with a contextual approach carried out had a good impact on the quality of learning.

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1. INTRODUCTION

The presence of an educator in the teaching and learning process plays a significant role in education (Widayati, 2019). The presence and role of educators cannot be replaced by even the most modern machines or computers. This is due to its many human elements, such as attitudes, systems, values, feelings, motivations, habits, and others, which are expected to be a learning process that is impossible to achieve through modern machines. The role of educators determines the implementation of the learning process reasonably in schools (Kirom, 2017). The educators themselves are the main factors determining the quality of education (Dalyono & Agustina, 2016). Educators form students who are academically

qualified, skilled, emotionally mature, moral, and spiritual (Novauli. M, 2015). So that later it will produce future generations who are ready to face the challenges of life in their era. To support the success of education and success in the learning process, educators with high qualifications and competence are needed to carry out their professional duties.

However, there are still problems in the field where there is still a lack of educators who uphold their professionalism. This impacts the need for more quality learning and passive learning activities. Professional educators can carry out their primary duties as educators and teachers, including planning lessons and implementing and evaluating learning outcomes according to their fields (Qulub, 2019; Sopian, 2016). Four competencies must be possessed by an educator, namely pedagogic competence, personal competence, social competence, and professional competence (Pahrudin et al., 2016) (Taniredja & Abduh, 2016) (Hatta, 2018). The problem of competence is one of the factors in developing educators in a professional position. Competence is a set of actions full of responsibilities that a person must have to be considered capable of carrying out tasks in a particular field (Taufik; et al., 2014; Novauli. M, 2015). One of the competencies that an educator must possess is competence in managing learning materials or managing classes. This competence can be possessed when an educator can manage good learning and can be accepted by students. These abilities, for example, are regarding the use of learning media, the preparation or use of teaching materials, the provision of learning evaluations, and an interactive classroom atmosphere. In addition, an educator must also be able to master the character and understand each student.

The ability of educators to manage the class by understanding the feelings and desires of students will make the class atmosphere fun and colourful. Educators who involve students in the learning process make students feel valued and feel they belong to each other because they pay attention to each other and need each other between educators and students (Willms, 2003). This kind of attitude is effective educator professionalism in fostering student learning motivation because motivation is one of the factors that can improve the quality of learning. Students will learn with enthusiasm if they have high learning motivation (Nasrullah et al., 2022) (Wardani et al., 2020). Furthermore, the most important thing is how students recognize and have closeness with students; this closeness can be emotional, and there is no gap between students and educators (Gray & Diloreto, 2016) (Spilt et al., 2011). So that in learning activities, students will feel comfortable and confident to ask questions when there is material or learning materials that need to be understood.

The reality in the field is that educators still need the motivation to create exciting learning activities. Included in the management of learning that uses a contextual approach, namely in Mathematics. Students will easily understand mathematics if the learning is directly involved and uses concrete objects (Sulianto, 2008). So that mathematics will be easily recognized and not something difficult. Realizing this, educator professionalism has a significant role and function in shaping the personality of students (Inanna, 2018), especially in learning mathematics. The educator's personality in teaching directly or indirectly will impact students' learning motivation, both positively and negatively (Andriani, 2017; Munirah, 2018).

Research conducted by Panjaitan & Tiarapuspa (2021) states that giving motivation to educators has a significant influence on educator performance. In addition, Handayani (2017) also states that the provision of motivation and training has a significant and positive effect on teacher performance even though the environment does not have a partial effect. In addition to providing this motivation, contextual-based learning is carried out. It provided by educators has a remarkable impact on learning, as revealed in Santoso's (2020) research. Using a contextual approach can improve student learning outcomes, and learning also goes well. Therefore, giving motivation to educators is needed so that educators can perform well and have high knowledge in managing learning. In addition, good performance can support educators in developing and maintaining a professional attitude as an educator.

Of course, to support these learning activities, professional educators with good knowledge are needed. Good teacher professionalism and high motivation in teaching can create a learning atmosphere where students can understand the material delivered, which can later be applied in mathematical

problem-solving. Seeing these problems, it is necessary to research how the professionalism of Mathematics educators after providing motivational training uses a Contextual approach. This research will allow educators and school management to identify the needs and obstacles of educators in increasing their professionalism so that it is expected to carry out further evaluations and actions in developing the attitude of professionalism of educators.

2. METHODS

The approach used in this research is a qualitative approach with a descriptive research type. This study examines the professionalism of Mathematics Educators after being given Motivation Training with a Contextual approach. The data obtained during the research will then be analyzed and described according to the motivation indicator. The subjects in this study were Mathematics Teachers at SMK Muhammadiyah 1 Kepanjen. In contrast, the research object is how the professionalism of teachers after being given Motivation Training with a Contextual Approach.

The research procedure used starts from the preparation stage, an implementation, which includes Training and Teaching Observation activities and the preparation of reports. Data collection techniques used to collect data are observation and questionnaires. Observations are used to see how the implementation of learning is done after being given Motivation Training. In comparison, the questionnaire is used to see the effect of giving Motivation Training on learning activities. The instruments used in this study were observation sheets and motivational questionnaires. The data analysis used in this study is by examining the results of the observation sheets and questionnaires. Then these results are described, supported, and strengthened by the findings during the implementation of the activity.

3. FINDINGS AND DISCUSSION

This research was conducted in December 2021 and obtained data from the results of filling in the Google form related to how professional mathematics educators, after being given motivational training with a contextual approach. This motivation was given to 10 mathematics educators at SMK Muhammadiyah 1 Kepanjen. This motivation is provided with a contextual approach that begins with taking, simulating, telling, having a dialogue, debriefing, or discussing real-world events in everyday life that are experienced, then raised into concepts that will be studied or studied and discussed in preparation for learning. There are five elements in the contextual approach used in giving motivation. Trainers use these elements to motivate mathematics educators.

The results of the analysis of motivational activities through observation are related to the acquisition of learning information from outside the school and the preparation of learning materials that must be prepared in the early learning activities, namely as follows:

a. Activating knowledge

In this element, the result is that the educator's mathematical knowledge of the already known material is good. Educators can associate and provide apperceptions related to the material being taught. For example, knowledge to teach Geometry material associated with a contextual approach or everyday objects that contain elements or characteristics of geometry. An example is a block exemplified by a toothpaste box and so on.

b. Acquiring new knowledge by studying as a whole first

In this element, educators have not gained much new knowledge at this time because of a lack of literacy and a lack of interest in reading, and a lack of desire to find and attend workshops or seminars outside of school. The knowledge obtained is only based on teaching experience that has been carried out so far. Educators said that because students are from the vocational level, the focus is more on how educators can explore what is in the syllabus and not get to a further development stage. So that educators need to be emphasized to seek new information from online media and attend workshops or seminars conducted outside of school.

- c. Understanding knowledge, namely by way of compile:
 1. Hypothesis
Some mathematics educators rarely practice hypotheses. An example of preparing this hypothesis is in the preparation of learning tools. So far, what has been done to prepare learning tools is direct without making a design first. Even educators use devices or media that already exist or have been prepared in the previous year without further development adapted to the latest competencies that are more appropriate.
 2. Sharing
Sharing activities have been carried out by mathematics educators. It is just limited to the school environment only. This sharing has not been done outside school as in other schools or the Subject Teacher Consultation (MGMP). This is because only a few teachers are active in MGMP activities, and these activities are also less active. Given these problems, schools should accommodate them to encourage and facilitate educators, for example, by actively seeking information regarding sharing session activities and sending these educators to attend.
 3. Concept revision and development.
For this element, mathematics educators carry out only the concept revision stage. At the development stage, it has yet to be carried out. This activity is in the preparation of learning devices. Revisions were only made for some learning tools, namely lesson plans and evaluation tools. The revisions to the RPP are limited to the materials used and adjustments to the core and essential competencies. There are no improvements or adjustments to the excellent learning model or method in the learning activities. For teaching materials, media, and LKPD, most educators do not revise and leave it for each year. While the development was also not carried out, the fundamental reason was that the teacher needed more time, so there was no time to re-develop according to current needs.
 4. Put the knowledge and experience into practice (applying knowledge).
This element in the preparation of learning tools is when educators get new information about new learning methods or media that can be used in learning. From these elements, only six teachers did it, and it was also not done optimally because the educator said that the lack of detailed information obtained so that implementing or using it was not sure it was suitable and appropriate. So that educators only practice based on what is understood. Therefore it is necessary to have an evaluation and follow-up from the school principal to see and assess and even give an appreciation of what the educator has done to implement and make changes.
 5. Reflecting knowledge on the development strategy that knowledge
Reflection has been carried out by educators in learning activities. The reflection activities are not comprehensive and are only in the Evaluation section. For others, it has not been done.

Based on this description, to improve and support the professionalism of an educator in learning activities, it is necessary to carry out evaluations and strategies to support and facilitate educators in obtaining and acquiring new knowledge. In addition, there is a need for evaluation and follow-up in understanding and increasing knowledge in terms of preparing learning tools or in the content of the material being taught so that educators will be better prepared and can prepare well to manage the class. The school management also needs to assess the learning activities carried out by educators so that educators will know how performance is and what needs to be improved and further developed in the educator's efforts in learning activities. So observation activities to identify how the contextual approach to improving the professionalism of educators is essential and critical. This is because it can provide an overview of how educators prepare and strive for optimal learning activities. So that when some activities or stages are considered lacking and not optimal, evaluation and follow-up can be carried out immediately. The research framework conducted by (Rusu & Avasilcai, 2014) also states that identifying significant contextual factors that influence motivation to share knowledge will provide new directions for increasing activity performance and encouraging new creativity. In

addition, it can provide essential insights for school management to understand the importance of building relationships between contextual factors that influence educator motivation.

In addition to describing the contextual approach used to motivate educators, this research was conducted to see how educators were motivated after motivation training activities to see their professionalism. The results of the professional assessment of educators after being given Motivation Training are as follows:

Table 1. Percentage of Educator Professionalism Assessment Based on Motivation Training

No	Professionalism Indicator	Percentage
1	Mastering the characteristics of students from the physical, moral, spiritual, social, cultural, emotional, and intellectual aspects	74%
2	Mastering learning theory and principles of educational learning	80%
3	Developing a Curriculum related to Mathematics subjects	80%
4	Organizing educational learning	84%
5	Utilizing information and communication technology for the benefit of learning	85%
6	Facilitate the development of potential students to actualize the various potentials they have	78%
7	Communicate effectively, empathetically, and politely with students	86%
8	Carrying out assessment and evaluation of learning processes and outcomes	88%
9	Utilizing the results of assessment and evaluation for the benefit of learning	80%
10	Reflective take action to improve the quality of learning	82%
11	Mastering the material, structures, concepts, and scientific mindsets that support the subjects being taught	82%
12	Mastering competency standards and essential competencies of the subjects taught	84%
13	Develop learning materials taught creatively	78%
14	Sustainably develop professionalism by taking reflective action.	78%
15	Utilizing information and communication technology to develop yourself	82%
	Average	81,4%

Based on Table 1, it was found that the overall average obtained was 81.4% or above 80%. The highest percentage on the indicator Carrying out assessment and evaluation of learning processes and outcomes is 88%. This is because educators have made an assessment every time during the learning process and can immediately see how students carry out the learning process so that the assessment is not carried out as a whole at the end of the lesson but can be done between lessons. In contrast, the lowest percentage is on the indicator Mastering the characteristics of students from the physical, moral, spiritual, social, cultural, emotional, and intellectual aspects, namely 74%. In this indicator, educators experience difficulties because educators only master some of the characteristics of students. These, namely, students who have the most superior knowledge in learning and students who are less prominent in learning. Meanwhile, other indicators get an average percentage above 80%.

From the analysis results, with motivation training and follow-up of these activities, educators can evaluate and make improvements and adjust needs for preparation in learning. So that learning materials and performance in teaching become more optimal and can support their professionalism. Educators become more structured and understand what needs to be prepared and developed in preparing for learning. For example, in preparing teaching materials, mastering classes, conducting evaluations, and even recognizing students' character. Educators better understand how to use technology to support learning and reflect and evaluate what has been done during preparation and learning activities. Therefore giving motivation in the preparation of learning given to educators is very important and needs to be done. This activity can be done at the beginning of each semester or the start of a new school. So that educators will get a variety of new information that can be implemented in the

preparation and implementation of further learning activities. This information will add insight that can increase creativity as an educator (Sopian, 2016). Due to the demands of increasingly rapid development of technology and information requires educators to be more creative and clever in managing learning, as described by (Lase, 2019) and (Erazo & Esteve-gonzález, 2015).

Motivating with a contextual approach to educators gives good results in education. This is in line with research conducted by (Santoso, 2020). Providing motivation will add insight to educators and encourage them to work hard in achieving learning goals and have enthusiasm in helping students understand the material. (Gorozidis & Papaioannou, 2014) It was also stated that the need to investigate the motivation hypothesis in work involved is essential, where the improvement and achievement of competence have a significant meaning for individuals or educators.

Research conducted by (Santos et al., 2016) emphasizes the importance of carrying out positive activities that can increase the subjectivity of relationships in knowledge, skills, and attitudes. An increase in these relationships will increase the creativity and professionalism of educators in learning. (Vero & Puka, 2017) recommends how motivation and development relate to one another with associated individual and cultural differences, developmental changes, and classroom contexts. So motivation is significant to give. (Kotherja, 2013) suggests that teachers must be motivated and stimulated to be more effective and productive in teaching and educating capable generations in the coming years. Educators, besides having competence and creativity in managing learning, must also be able to motivate students. By assuming that motivation is essential, educators can also implement it for students by motivating learning. Therefore, what is experienced will also be experienced by students. The hope is that students will get new information and increase their creativity in learning.

4. CONCLUSION

Based on the description of the results of the research and discussion, the analysis of motivating with a contextual approach has had a good impact on the quality of learning. The quality of the learning includes the preparation, implementation, and evaluation activities that educators have carried out. Besides that, educators need the motivation to get new information in learning.

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