# Mapping the Perception, Attitude, and Roles of Mathmatics Teacher's in Banda Aceh Dealing with Competition of ASEAN Economic Community (MEA)

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Abstract: This project was going to map the roles, perception, attitude, and strategy in improving high school teachers' competency in Banda Aceh dealing with the competition of ASEAN Economic Community (MEA). Information and data were obtained by a serial of interviews, questionnaire, essay and documentation had been done to the Mathematic teachers of high schools in Banda Aceh. Data was analyzed in qualitative description to see the validity and reliability of this research findings. Further processing and analysis of written test data quantitatively by using the formula of N-gain. Linking to research evidences in previous studies, the results showed that those high school teachers in Banda Aceh have relatively fair perception, attitudes and on the implementation of MEA a useful strategy in increasing teacher's competency to help their students. The findings are corresponded the research project questions. Therefore, this role and strategy in increasing teachers' competency was categorized as a strategic approach dealing with the competition of ASEAN economic community (MEA).

SCIENCE AND TECHNOLOGY PUBLIC ATIONS

## **1** INTRODUCTION

The graduation number of national exam of High School students in Aceh province dropped to zero point. In 2013, Aceh was at the lowest graduation number in national exam in Indonesia, which was 3.11% (1,754 students) just after Papua province at 2.85%, Southeast Sulawesi province at 2.32%, and Maluku province was at 2.21% (Bahri, Politika.com 2014). The highest national exam fail rate in 2014 was Aceh throughout Indonesia, which only 0.74 Aceh students who did not pass the National Exams (Indonesian: Ujian Nasional or UN). At that time, Aceh was ranked 25 out of 34 provinces in Indonesia (Kemendikbud RI, 2013). Means that, the UN passing rate in Aceh is not getting better, instead occupying the position of caretaker. UN results that dropped to the lowest line can be predicted from the results of the 2015 Teacher Competency Test (UKG) which placed Aceh in 32 of 34 provinces. In fact, Papuageographically more or less the same as Aceh, is in a much better position that is ranked 26 of 34

provinces. In fact, Aceh has 28,956 teachers with bachelor degree qualifications. While Papua only has 17,386 teachers bachelor qualified (Kemdiknas RI, 2010).

On the other hand, leaders of ASEAN member countries agree to establish a single market in Southeast Asia to increase ASEAN's competitiveness. The establishment of a single market termed the ASEAN Economic Community (MEA) will allow one country to sell goods and services easily to other countries in throughout Southeast Asia. So, the competition will get tighter. Workers in Indonesia will face competition from other workers in Southeast Asia, especially workers engaged in specialized skill sectors.

In facing MEA, on low national exam result and high school students condition, education is the sector that should get priority attention because it plays an important role and therefore it cannot be separated from life. It is absolute in the life of a person, family, nation or even international. Education is a conscious and well-planned effort to create an atmosphere of

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learning and learning process so that learners actively develop their potential to possess spiritual, selfcontrolling, personality, intelligence, character and skills needed by themselves, society, nation and state (Sisdiknas No.20: 2003). Furthermore, mathematics subject is one of the lowest score or the highest numbers of exam failure rate among the national exam subject. While this subject is the basic skill for mastering other subjects in order to take a part in advancements in technology.

As a country want to improve education quality, the role of teachers is notable as they directly shape and direct the students as the candidate leaders in the future to spearhead education. As the enforcement of the MEA in Indonesia, the role of the teachers is more challenging that they should be able to compete internationally in the way of teaching professionally and bear students with good competencies and able to compete in MEA. In addition increasing teacher competency and improving the quality of graduates are effort that must be spurred after ASEAN countries sign a free trade agreement known as the MEA. In facing these challenges it is necessary to know the level of competence that the teacher has in order to compete.

Therefore, it is very interesting to unserstand the mapping of teacher participation and teacher competency improvement strategies. In this regard, we would like to examine further the extent to which the role of teachers in improving their competence and efforts to be able to compete globally. This mapping is expected to be a foundation to determine the planning and stabilization of education especifically in learning mathematics and to concieve teachers understanding toward MEA. Thus study was done entitled " Mapping The Perception, Attitude, and Roles of Mathematics Teacher's in Banda Aceh Dealing with Competition of ASEAN Economic Community (MEA)".

### **2** LITERATURE REVIEW

### 2.1 Understanding the Quality of Education

According to Suryosubroto B (2009), the general sense of quality implies the degree of the superiority of a product in the form of goods or services, both tangible and intangible. In the context of education, the definition of quality in this case refers to the educational process and educational outcomes. In specific, Prof. Dr. Djaali (2008) states that the quality measures of education are (1) the competence of

graduates expressed with the achievement of essential basic essential competencies; (2) the quality of the learning process in the classroom and the education process in the school. Therefore, from these above opinions, it can be concluded that the quality of education is the highest value of input, process, output and outcomes, in relation to the fulfillment of national education standards. In addition, the quality of education is measured through evaluation, accreditation and certification.

#### 2.2 Quality Education Mapping

Djam'an (2009) states that quality mapping is a series of activities to find out the conditions and situations that describe the education quality standard of Education National Standard (SNP) conducted by education units, organizations, local government and central government for a certain period of time. The quality of education in Indonesia is judged by the performance of educational unit on National Education Standards. So, the mapping of the quality of education is a series of activities to find out the conditions and situations that describe the performance of the educational unit of the SNP within a period determined by the education units, education providers, local government and government to produce a quality map of education. Generally, the quality map of education is prepared to be used as baseline data on the real condition of the fulfillment and achievement of the 8 SNPs and the indicators that will enable stakeholders to develop program planning and quality improvement of budgeting to have the objectives, scope, objectives, targets, and clear stages.

#### 2.3 High School Teacher Competencies

Teachers for high schools such as SMA/ MA, or any other equivalent forms, must have a minimum qualification of Diploma- four years or undergraduate (S1) program in the major subject teaching and obtained from an accredited institution. The teacher's competency standard in this research is based on the Regulation of the Minister of National Education of the Republic of Indonesia Number 12 Year 2007 on Standards of School Supervisors/ Madrasah, the competence of high school and madrasah teachers.

### **3 RESEARCH METHODOLOGY**

This study used an empirical approach that to understand the knowledge obtained from the observation of the certain phenomenon that occurs in the fields. Meanwhile, the answer to a problem lies in the object, this study used the ontology approach in which the problem lies is not in people's mind. What it has been done was observation what happened and made a conclusion. Methods for this study was used qualitative and quantitative approaches. According Moleong (2007:3), qualitative methods as a research procedure that produces descriptive data, i.e. the written or oral words of the people and behavior observed.

While the type of descriptive research, according to Nawawi (2005: 44) is defined as research that seeks to tell the solution of existing problems based on the quantitative data. It presents data, analyses, and interprets. The research was conducted in all high schools in the city of Banda Aceh. The subject of the study were mathematics teachers at high school in Banda Aceh that consisting of 25 public and private high schools, and selected 150 teachers. Instrument of research in the form of questionnaire sheet, essay test, in-depth interview, and documentation. Questionnaire sheets and interview results were conducted and the data then analyzed qualitatively by making some provisions obtained as a clearly indicator. Further processing and analysis of written test data quantitatively by using the formula of N-gain (Meltzer, 2002).

# 4 FINDINGS AND DISCUSSIONS

Based on the results of this study, in the followings are some findings can be described as follows:

### 4.1 Teacher's Perceptions of MEA

The results of the analysis of teachers' perceptions about the MEA are generally spoke that the government has agreed on the establishment of a single market but they do not know when exactly the MEA will come into effective. Even some said that teachers' perceptions that the MEA has nothing to do with their profession as teachers. They believed that MEA focuses on job market and competition especially in the economic field such as trade, export-import, labor, and others non-education. Another result of this analysis is that the teachers do not feel that the MEA is a sign that their tasks will be heavier and more complex. This could be because the teachers will still receive a good pay even if the students are not successful in performing and learning.

On the other hand, teachers are confident that the MEA will cause many foreign workers to come to Indonesia to take their work as they can freely be

entering Indonesia. This condition is certainly a big impact for the workforce in Indonesia but the teacher does not think that the workforce will get rid of the existing workforce in Indonesia that could be one of them is his students even himself.

Approximately 65% of high school math teachers who were the participants of this research consider that teachers are able to face this MEA competition if they have foreign language skills (English and others), and 35% assume that this problem will be resolved by providing opportunities for teachers to study abroad.

The picture 1 bellow shows the perception of high school Math teachers in Banda Aceh about the competition of MEA.

## 4.2 Teacher's Attitude to MEA

The implementation of the MEA is largely unknown to teachers. Although it has been almost two years, the teachers have not shown any changes in attitude towards the implementation of the MEA even there are many teachers do not know what the MEA is about. Teachers generally still assume that Indonesia's human resources (HR) is still low. This opinion raises an apathy and a sense of inferiority to the ability of the nation itself. Apathy is one of mental depravity and less productive. Therefore, building a strong, moral mentality, improving skills and education is the responsibility of the Government and nations to be successful in the era of MEA. Nearly 80% of teachers are unconcerned about the implementation of the MEA, because there is no direct instruction from the school principal. MEA's implementation is only a discourse for the upper class and will not change the teacher's fate. In addition, it's about 100% of teachers strongly disagree if the government has tried to prepare the community in facing MEA. For details of teacher attitudes in facing the MEA is illustrated in Figure 2 below.



Figure 2: Attitude of teachers about MEA.



Figure 1: Perception of teachers about MEA

### 4.3 Interview Result

In-depth interviews were conducted on 100 high school Mathematics teachers in Banda Aceh who were the participants of research. From the interviews, the following results are obtained:

- 1. It is approximately 75% of teachers do not know about MEA and it is about 15% only knew of the information being overheard by accident, and 10% others knew the MEA from various information without finding out more information.
- It is about 85% of teachers did not want to know about MEA and did not seek information about it. There are 5% of teachers who try to read news about MEA via the internet to look for additional information from colleagues. Because there are not many friends knew then the teacher's curiosity did not continue.
- 3. The is so little MEA information and minimal curiosity of teachers making MEA less important and attentive for teachers. When the MEA comes to happen, it will not be a problem for the teacher as long as it does not force them to integrate it in the learning process. Therefore, its only 2 teachers know that MEA that has been since January 1, 2016.
- 4. It's about 30% of teachers assume that people who are involved in MEA are exporters of importers, government, laborers, and entrepreneurs.
- 5. High school Math teachers were not disturbed by MEA because they did not know the MEA at all and the effects it would cause them. "The MEA is not our business from the school and the

agency, and it is not also integrated in the school curriculum".

- 6. Some teachers argued that MEA is not important because teachers do not understand the effects of the MEA (teachers do not understand about MEA).
- 7. Most (75%) teachers cannot ascertain who is the most influential to MEA enforcement. And almost 100% of teachers answered that traders will feel the greatest effects of MEA. The proof if there is a price change in the market, traders who first react by raising the price of goods. 6% of teachers perceive that policy and government stakeholders are most influential to MEA enforcement.
- 8. When high school Math teachers already know the MEA's implementation, the teacher did not feel that the MEA will be able to influence our cultural education order because MEA is just a discourse (not socialized much less in force). And 80% of teachers are confident if the MEA will be removed because the community is not ready to face it.
- 9. Teachers are less prepared for the applicable MEA. This opinion was obtained from 785 teachers. One of the answers that can be raised is: "We are not preparing anything, we only prepare the applicable curriculum". The answer is very basic because teachers are only asked for accountability about the curriculum implementation not their readiness to MEA.
- 10. Based on the reality that many teachers (95%) do not know about MEA, it is only natural that the teacher never mentions / talks about the MEA in the class. According to the researcher's discussion with a teacher who served as vice principal, the teacher never mentions MEA issues specifically in the classroom but on a curriculum, demands, the teacher indirectly prepares his students to be ready for the MEA. For example, by implementing problem-based learning solving.
- 11. Related to the conditions in point 10, since the teacher never talks about the MEA, then the student did not know at all about MEA. Some students knew about, the information is obtained from friends, print media, electronic media, and or social media.
- 12. Teachers have never developed a specific learning plan dealing with the MEA because it was not mandatory and not as one of the official learning objectives (not required by the curriculum).

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- 13. After a glimpse of MEA from the researcher, students are able to face MEA, high school math teacher in Banda Aceh tells that students must master the knowledge taught to them. In addition, students must acquire additional skills in both language skills, special skills (life skill), and increase their knowledge by learning from other sources.
- 14. The effort that the high school math teacher has done is to provide instruction and guidance during the learning process at school. In addition, teachers provide home duties monitored by parents.
- 15. Officially the teacher never gets briefed on MEA from any party. There are 5% of teachers who are invited to attend a seminar on MEA based on a friend request to get a certificate, not because they want to know the ins and outs about MEA.

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## **5** CONCLUSIONS

Based on the results of the data analysis described in the previous chapters, it can be drawn some conclusions as follows:

- 1. Understanding of Mathematics teachers to MEA still very low.
- 2. Teachers do not have preparation in facing the MEA. This is due to the lack of understanding of teachers towards MEA.
- 3. Teachers never get any training or socialization about MEA. Therefore, in the process of teaching and learning the teacher never mention about MEA.

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