The Relationship between Knowledge and Stress Felt by Teachers of Economics Implementing Kurikulum Tingkat Satuan Pendidikan

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Abstract

The purpose of this study was to identify the relationship between knowledge and stress amongst teacher of economics in implementing kurikulum tingkat satuan pendidikan. This study used a questionnaire with 109 teachers from twelve middle schools in Aceh Besar, Indonesia, with overall reliability of 0.930. Descriptive statistical tests found that the level of knowledge of the teachers was at a moderate level with an overall mean value of 3.04. Meanwhile the level of stress was at a high level with an overall mean value at 3.56. An inferential statistical correlation test was used to test an hypotheses. The inferential statistical test found that there was a negative relationship between the level of knowledge and the level of stress. It can be concluded that the implementation of the curriculum gave the most teachers stress.

Keywords: curriculum, stress, knowledge.

Introduction

Education is an important component for the development of human capital. Education is able to install new capacity into persons to learn hence producing more productive people. On the other hand, education is also a vehicle for expansion of systems and social mobility in society, both horizontally and vertically [Sulisty o 2007]. One important component of an education system is the curriculum. Therefore, since Indonesia provides free education, the government also prepares the curriculum [Mulyasa 2006]. Since 1980, Indonesia has changed the curriculum at least three times. Kurikulum tingkat satuan pendidikan (KTSP) is a continuation and development from the previous one, kurikulum berbasis kompetensi (KBK), and now give full authority to each school to develop a curriculum that is appropriate for that school’s own characteristics and needs. The KTSP was created and established by teachers as was recommended by the Department of Education.

Development of the KTSP must be handled professionally with a good level of understanding in order to produce a curriculum with appropriate content and competency standards. Development of the curriculum requires not only the readiness of schools, but also the support of various stakeholders, especially the teachers. The role of teachers is very important as they are the major element that determines the success of the teaching-learning process, especially as protagonists and at the same time they play a major role in implementing the curriculum. Thus, in the early stages of curriculum change, the knowledge of teachers should be prioritized. According to Jadi [1993], teachers play an important role in addressing the implementation of curriculum reform, especially in terms of its spread in schools. This is because the teachers are the main driving force in the implementation of reforms in education. Furthermore, Nordin [1991] explained that a good education is the result of a good curriculum and good quality teaching as well. Whenever changes of curriculum occur, the teachers as educators must orientate themselves to the changes. Success of curriculum reform depends on the support, the readiness and the motivation of the teachers. They need more time, ability, knowledge, understanding and skills, otherwise, reforming curriculum will be difficult to perform effectively [Hurst 1981].

Lack of knowledge needed to prepare a curriculum, will make it difficult for teachers to implement the curriculum. Thus, plans prepared by teachers often do not relate to the philosophy and goals
of national education, and the objectives of the subjects. Malone and Howson [1987] and Avalos [1999] explained that failure of the teaching-learning process is due to lack of knowledge and skills. In order to develop teaching plans, teachers are required to have knowledge and understanding of the curriculum, either through manuals and/or training. In order to optimize the empowerment of teachers in preparing curriculum, however, facilities such as books and reference materials must be available. This is in line with the statement by Malone and Howson [1987], who has written that the processes of change will provide significant results if they are accompanied by an increase in materials.

According to Fattah [2000], improving the quality and the expansion of education requires at least three factors, namely: (i) availability of educational resources, such as educational personnel of good quality, low costs and ease of learning, (ii) quality teaching-learning processes that enable students to learn effectively, and (iii) quality of output in the form of knowledge, attitudes, skills and values. Furthermore, according to Kamadi of the State University of Jakarta, implementation of curriculum implies an increasing burden for teachers. Teachers are now expected to make curriculum for each subject. In fact, teachers are accustomed to follow curriculum set by governments. Now, however, the uneven quality of teachers in particular the diversity in the capacity for creativity of teachers is a difficulty in the program for all teachers to create their own curriculum. Thus, the current study investigates the relationship between knowledge and stress amongst teachers of economics at middle schools in Aceh Besar, Indonesia. It also aims to explore and understand problems experienced by teachers in implementation of curriculum. In particular, the current study was carried out to fulfill the following objectives: (i) identify the stage of knowledge of the sample teachers of economics, (ii) identify the phase of stress of the sample teachers of economics, and (iii) identify any relationship between knowledge and stress amongst the sample teachers of economics.

**Literature Review**

Curriculum is at the core of education and has an influence on the entire educational system. For implementation of a curriculum, teachers must necessarily understand the concepts and objectives of the curriculum. This is because the teaching process can only be achieved if teachers have the appropriate knowledge. Teachers who have the right knowledge will be more willing to carry out teaching processes and will find it easier to make changes to a curriculum without experiencing stress. Government regulation no. 18 for the year 2007 states that one of the competencies required of teachers is professional competence. This includes the ability of a teacher to gain mastery of a subject broadly and deeply, such as having the ability to develop a curriculum. Teachers must know the objectives, principles and characteristics of a curriculum. There are five characteristics and professional skills that teachers have to develop, namely [Botung 2008]: (i) mastering the curriculum, (ii) mastering the materials, (iii) mastering the use of multiple-teaching methods, (iv) having a high commitment to the job, and (v) being disciplined. Teachers with a lack of knowledge will result in low quality education not in accordance with the standards of education [Sudarminto 2001]. The low quality of teachers appears from the following symptoms: (i) lack of mastery of the material taught, (ii) mismatch between the subjects studied and the facts the subjects to be taught, and (iii) lack of effective methods for teaching. Similar studies by Ahmad [1986] and Sulaiman [2003] have found that problems like lack of knowledge and skills about changes and innovations must often be one of the main reasons for failure in the implementation of curriculum. Teachers need to have the knowledge, skills and values to be taught every day.

Whatever we do, we cannot escape from stress. Stress experienced by a teacher usually cannot be separated from the situation of teaching-learning in school, whether in relation to students, school climate or work load. Jali [2001] has stated that stress may affect the quality of teaching and so influence productivity, achievement and efficiency of teaching. Stress may also be experienced by individuals whose skills are weak [Tang and Yueng1999]. Stress can be defined as uncomfortable, negative emotions such as anger, indecision, stress and disappointment caused by the work [Kyriacou and Sutcliffe 1978]. In this case, teachers facing stress are teachers who cannot control their emotions to change educational culture, that is not only to provide knowledge but also to educate people to become useful in the community. Teachers are forced to work overtime, provide teaching aids and attend courses or workshops throughout the week as they are forced to make adjustments for new teaching methods. Smith [1994] has stated that teachers will not be able to function with confident if they are in a depressed state. Stress makes someone irrational, anxious, tense, unable to focus on work and fail to enjoy the feelings of joy or rewards for work done [Fun 2008]. According to a study by Pierce and Molly [1990], stress can be caused
by work overload, time pressures, problems with students, conflict between friends and/or other workers, high phase noise, lack of appreciation and a negative attitude towards rewards. While a study by Brown and Ralph [1991] has stated that teachers faced stress due to the introduction of new curriculum, classes which are not disciplined, malignant students, parent pressure, a big workload and poor management. Gold and Roth [1993] has also stated that one of the main stresses for teachers were rapid changes to the curriculum which contributed to their stress [Arshad 2003].

Research Method
This research used an explanatory review method with a quantitative approach that aims to measure aspects related to implementation of curriculum, that is to measure the stage of teacher knowledge and the stress level of the teachers. This is a qualitative case study according to Marshall and Rossman [1999] and Tellis [2000], where the number of participants is not limited. In fact, the number of participants was 109 teachers of economics at middle schools in Aceh Besar district. Assessment used the whole sample because of the limited population. This size was included in the range suggested by Krejcie and Morgan [1970] which was based on the size of a sample to the population size. Participants were given specific codes to protect their identity and personal rights.

A Likert scale was used in the study questionnaire to measure several aspects related to the implementation of the curriculum. Data obtained via questionnaires was analyzed using statistical software. This study used descriptive statistics for identifying information about the demographic profile of the respondents, while inferential statistics were used for correlation. Descriptive analyses used were frequency, percent, mean value and standard deviation, while the inferential analysis used the Pearson correlation. This was used to determine the relationship between the variables. A level of significance of $p<0.05$ was used.

Results and Discussion
Analysis of cross-tabulation showed that the level of knowledge of the teachers was at a moderate level. Only thirteen (12%) of the 109 respondents had a high knowledge, fifteen respondents had poor knowledge and the remaining 81 had moderate knowledge. Five male teachers had higher knowledge and two had lower knowledge. While eight female teachers had higher knowledge and thirteen had lower knowledge. 38 teachers understand the goals of the curriculum, thirteen teachers understand the principles of the curriculum, and thirty teachers understand the characteristics of the curriculum. Similarly, a total of thirty teachers understand the objectives of teaching economics. However, six teachers stated that the principles in the curriculum are not suitable for the teaching of economics.

36 teachers understood the implementation of the curriculum, 38 teachers understood the implementation of the teaching materials program, but thirteen teachers stated that the annual teacher upgrading programs do not enhance the learning processes for teaching economics. A total of 35 teachers understood the implementation of the teaching program, and forty teachers understood the implementation of the lesson planning program. A total of ten teachers stated that the curriculum teaching approach is not effective for teaching economics, while 26 teachers stated that the curriculum teaching method can provide a self-learning method (learners' self-assessment). However, a total of six teachers stated that the teaching techniques in the curriculum are not suitable for economics. A total of forty teachers understood the implementation of teaching resource materials, 33 teachers understood the implementation of curriculum teaching aids, and 36 teachers understood the exercise of assessments.

Overall, the mean value for level of knowledge of all the teachers of economics was 3.04, which was at a moderate level. The findings found that many teachers lacked knowledge as they had never attended a training / workshop and did not have a curriculum handbook. The findings were supported by Sutrisno [2008] who stated that understanding the model curriculum was not fully followed by the teachers. Lack of socialization of the teachers was a key factor in curriculum implementation problems. In fact, the comprehensive understanding of a curriculum whether at school level, planning, implementation or system evaluation level is essential, especially for the perceptions of teachers as protagonists so that the curriculum can be implemented as stipulated. Socialization and workshops are needed to increase knowledge and understanding amongst the teachers so that the curriculum can be implemented effectively.
Analysis of the cross-tabulations showed that teacher stress was at a high-level. 72, 65 % of respondents had high stress and 37 (34 %) had moderate stress. 24 male teachers had high stress, and thirteen had medium stress. While 48 female teachers had high stress, and 24 had medium stress. A total of 57 (52 %) teachers felt their workload was too heavy. 59 teachers said they were bored with everyday tasks, but only six teachers never felt tired and lethargic. A total of 68 teachers said they were irritable when confronted with problems at school, and a total of 82 teachers said they got a headache when doing lesson plans. Only thirteen (12 %) teachers said they would not run into trouble when doing an instructional program for a new curriculum. While a total of 62 teachers do not have enough time for family, 65 teachers found it was difficult to complete work within the time available, and there were only fifteen teachers who did not feel stress when dealing with a lot of school work. A total of 49 teachers had difficult or fast breathing if they had too much work at school, 45 teachers always suffered loss of appetite when their workload was too much, 48 teachers found it hard to sleep lately because of too much work, and 47 teachers said their hands or feet felt cold when their workload was too much. 45, 41 % of teachers bring work home because of too much work at school.

Overall, the mean value for the level of stress was 3.56, which is a high level. These findings showed that many teachers experienced stress, caused by the administrative work that must be done for their schools such as planning instructions, while the teachers felt they did not have the right skills. Teachers had to do it although they did not understand the contents of the curriculum which is a liability as teachers must do the planning for their teaching work in class. For this reason, many teachers experienced stress due to having to perform tasks that they felt did not understand.

There was a significant relationship between knowledge and stress for the teachers of economics from middle schools in Aceh Besar, Indonesia, with a coefficient of $r = -0.175$ (sign = .034 < 0.05). The negative relationship shows that the higher the knowledge, the lower the stress towards the implementation of curriculum. Conversely, the lower the knowledge, the higher the stress. This was due to if teachers not having the expertise to develop a curriculum, teachers felt overwhelmed by the task. This finding was supported by Aeria [1998] who found several factors influencing stress. These factors included overloaded workloads, lack of teaching materials, poor physical facilities and poor curriculum implementation factors such as lack of knowledge. This study found that the majority of teachers experienced stress when making a lesson plan, as they could not complete the work within the available time, even many teachers were forced to bring work home because of too much work at school. The study also found that one cause of stress experienced by the teachers was because of the introduction of a new curriculum that required teachers to perform tasks that were not in accordance with their previous work and understandings. This finding was also supported by Gold and Roth [1993] who stated that one of the causes of stress for the teachers of economics was changing the curriculum. This finding was also supported by Thomas et al., [2003] who has said that lack of time and too high a workload were major causes of stress. Teachers now have to deal with changes in the field of education so that there is overload. In conclusion, this study showed that knowledge is very important in affecting teachers in schools in order to perform task assignments that can be carried out easily and effectively without any feeling of stress or being overwhelmed. The level of thinking and understanding affects the level of teacher educators in the face of changing curriculum.

**Conclusions**

Descriptive statistics found that the level of knowledge of the teachers was at a moderate level with an overall mean value of 3.04. While the level of stress was at a high level with the overall mean value at 3.56. Inferential statistics found that there was an inverse relationship between knowledge and stress. It can be concluded that curriculum implementation knowledge had a very important impact on the stress of the teachers. Based on the findings, there are some recommendations to promote education and improve the quality of teachers' knowledge, and the government should make policies, namely: (i) send teachers for training, seminars and workshops, (ii) provide scholarships for teachers to continue their studies in order to improve teachers' knowledge and thinking, (iii) conduct comparative studies in other schools that are considered more advanced, (iv) complete facilities and a variety of media supporting learning activities, and (v) give awards to outstanding teachers and improve the welfare of teachers by providing additional income and provide exemplary, encouragement and arouse the conscience of teachers to be aware of their duties and responsibilities as teachers.
References