

Implementation of Scientific Approach in Economic Learning

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Abstract

Based on Permendikbud Number 22 of 2016 regarding the standard of primary and secondary education process, the policy is a motivation to conduct research to know the extent to which the implementation of scientific approach in economic learning. This research aims to find out and analyze the preparation of RPP (Lesson Plan), implementation of learning, evaluation of learning economic and students' perception to the teacher's skill in implementing economic learning by using scientific approach. The significance of this research can add to the repertoire of science on the implementation of scientific approach in economic learning. This research uses descriptive qualitative approach. The research technique used to collect the research data in the form of interview, observation, and documentation. The data analysis is done by data reduction, data presentation and conclusion. To obtain valid data used triangulation of data. The result indicates; the preparation of lesson plan is adjusted to the rule or instruction that applies in the school either through meetings or internal MGMP (Teacher Education Consensus Points). The implementation of economic learning is carried out with the system and principle of scientific learning that is student center. Assessment conducted at SMA Negeri 2 Mranggen is authentic consisting of process or skill assessment conducted through observation with assessment indicator of group work, individual work and presentation. According to the students the skill of economics teacher at SMA Negeri 2 Mranggen in economic learning by using scientific approach is good enough.

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INTRODUCTION

In the economic learning of Senior High School class XI there are basic competence of inflation and price index. This basic competence is very important for the students of senior high school because the material of inflation and price index are closely related to daily life. It is hoped that by studying the material of inflation and price index the students are able to observe, apply question, collect data/information, analyze on critical and conclude the results of analysis, arrange report and present the results of analysis or findings in form of oral and written about the price index, inflation, and the demand and supply of money.

In the secondary education, the teacher is required to implement the 2013 Curriculum in learning activity in the classroom. Before implementing the learning in the classroom, the teacher needs to make lesson plan (RPP). RPP is learning plan developed in detail that refers to syllabus, textbook and teacher manual. The implementation of classroom learning involves three main activities, namely introduction, core and closing. Meanwhile RPP components include: school identity, subject, and class or semester; time allocation; core competence, basic competence, indicator of competence achievement; learning material; learning activity; assessment; and media or tools, material and learning source. RPP of Economic learning with scientific approach is learning approach mandated in the 2013 Curriculum. Through the scientific approach in Economic learning one of them aims to develop the potential of the learners to be sensitive to social problems that occur in society, have attitude mentally positive in facing economic problems happen.

One of the senior high school that applies the 2013 Curriculum is SMA Negeri 2 Mranggen. SMA Negeri 2 Mranggen has implemented the 2013 Curriculum starting from academic year 2013/2014. According to the economics teacher at SMA Negeri 2 Mranggen the implementation of economic learning by using the 2013 Curriculum in school still finds some obstacles namely: 1) Teacher feels that the preparation of RPP 2013 is very complex activity because the teacher has to

separate the student's core activity into five learning processes, namely observing, questioning, gathering information, associating, and communicating. 2) The teacher still has not mastered the learning with the 2013 Curriculum, sometimes economic learning is still monotonous in the classroom so the student's participation is still passive. This is due to the student still considers that the teacher is the main source of information, whereas in the learning of the 2013 curriculum the student has to find out information. 3) the teacher is still confused about spiritual competence and over-imposed attitudes that disrupt the scientific substance and excessive administrative burden on the teacher. This is because attitude and spiritual assessment are not easily attributed to learning material. 4) The teacher feels that the assessment method is very complex and time consuming because the assessment scope of the learning outcomes includes spiritual, social, knowledge and skill competence.

Policy that has been made by the Ministry of Education and Culture to implement the 2013 curriculum is not necessarily expected to be able to be implemented well by school that still applies the 2013 Curriculum according to the Regulation of the Ministry of Education and Culture Number 22 of 2016 regarding the standard of primary and secondary education process. The policy is the motivation for conducting the 2013 curriculum application research according to the Regulation of the Ministry of Education and Culture Number 22 of 2016 on SMA Negeri 2 Mranggen to find out how far the application of scientific approach in economic learning in the senior high school. In addition, so far there is no research on this theme conducted at SMA Negeri 2 Mranggen.

This research aims to: 1) find out and analyze the preparation of RPP for economic subject of basic competence of inflation and price index at SMA Negeri 2 Mranggen, 2) find out and analyze the implementation of learning on the economic subject of basic competence of inflation and price index at SMA Negeri 2 Mranggen, 3) find out and analyze the implementation of learning evaluation on the economic subject of basic competence of inflation and price index at SMA Negeri 2 Mranggen, 4) find out and analyze

the student's perception on the teacher's skill in implementing economic learning by using scientific approach.

METHODS

The research method that will be used to study the implementation of scientific approach in economic learning at SMA Negeri 2 Mranggen is with qualitative research. According to Bogdan and Taylor (Moleong, 2010: 4) in the qualitative research is research procedure that produces descriptive data in the form of written or oral words of people and behavior that can be observed.

Qualitative research emphasizes the nature of socially constructed reality, the close relationship between the researcher and the subject studied, and the pressure of the situation that makes the inquiry. The researcher uses qualitative approach by consideration. Firstly, qualitative research is easier when dealing with multiple or double realities. Secondly, this research presents directly the nature of the relationship between the researcher and informants. Thirdly, this method is more sensitive and adaptable by sharpening more of shared influence on the patterns of value encountered (Moleong, 2010: 9). This is in line with what the researcher wants to study and understand the attitude, view, feeling, and behavior of both individual and group of people that can not be measured by numbers.

The background of the research is at SMA Negeri 2 Mranggen located on Jl. Pucang Peni Raya, Batusari Mranggen Sub-district, Demak Regency. The reason why to use this school as object of the research because at SMA Negeri 2 Mranggen has implemented the 2013 curriculum since academic year 2013/2014 so it is model school for Demak Regency. In addition, the Economics teacher of SMA Negeri 2 Mranggen is a model of teacher who has applied the use of economic learning by using scientific approach.

The focus in this research is to evaluate the implementation of learning with scientific approach on economic subject at SMA Negeri 2 Mranggen based on the Regulation of the Ministry of Education and Culture of the Republic of Indonesia Number 22 of 2016 regarding the

standard of primary and secondary education process covering RPP for economic subject prepared by the teacher, the implementation of economic learning carried out by the teacher by using scientific approach and the learning steps (opening and closing activities), and evaluation of the learning outcomes of economic subject at SMA Negeri 2 Mranggen, and the student's perception to the teacher's skill in carrying out economic learning by using scientific approach.

RESULT AND DISCUSSION

Planning of Economic Learning with Scientific Approach at the 2013 Curriculum SMA Negeri 2 Mranggen

Economic learning in the 2013 curriculum conducted at SMA Negeri 2 Mranggen the preparation of lesson plan is draft or format model means that the draft or format has been provided, so that the teacher only develops and makes creative, active and innovative learning method and tries to make learning student center, while the teacher acts as facilitator and motivator during the learning process. This situation illustrates that the teacher must have the ability to be creative, active and innovative in designing and developing his/her ideas for more interesting learning. In this condition is seen and illustrated the teacher's ability that the teacher must have extensive knowledge and insights both technique, pattern, strategy and model in learning.

The above exposure is similar to Permendikbud Number 22 of 2016 regarding the standard of primary and secondary education process that in preparing RPP should pay attention to the following principles: (a) Individual differences of the learners include initial ability, intellectual level, talent, potential, learning motivation, social skill, emotion, learning style, special needs, learning speed, cultural background, norms, value, and/ or environment of the learners; (b) Active participation of the learners; (c) Centered on the learners to encourage the spirit of learning, motivation, interest, creativity, initiative, inspiration, innovation and independence; (d) Development of reading and writing culture designed to develop passion for reading, understanding various reading, and

expression in various forms of writing; (e) Provision of feedback and follow-up RPP includes the design of positive feedback program, strengthening, enrichment and remedial; (f) Emphasis on the linkage and integration between KD (Basic Competence), learning material, learning activity, indicator of competence achievement, assessment, and learning source in terms of the learning experience; (g) Accommodating integrated thematic learning, integrity of cross subject, cross-learning aspects and cultural diversity.

Implementation of Economic Learning with Scientific Approach to the 2013 Curriculum SMA Negeri 2 Mranggen

Learning conducted at SMA Negeri 2 Mranggen the researcher sees the student more dominant in doing teaching and learning process through group discussion, both teacher with student and student with student this is seen from the stage done by the teacher and student in developing the idea of learning deeply and planned, with the third learning theory that is Vygotsky learning theory suggests that the learning occurs when the learners work or learn to handle tasks that have not been studied, but still learn within the reach of the zone of proximal development area lies between the current level of child development defined as the ability of problem solving under the guidance of more capable adults or peers. The Vygotsky theory is known as scaffolding, which affects the help given by peers or more competent people.

Based on the Vygotsky theory above, the implementation of economic learning by scientific approach at SMA Negeri 2 Mranggen has been implemented that is the assignment of both individual and group as well as project tasks. The assignment of the project is implemented and adapted to the range of students' ability as well as the assignment or implementation of learning in the form of group in order to get guidance or cooperate with peers. The implementation of economic learning at SMA Negeri 2 Mranggen has been adapted to the Vygotsky theory that is the teacher's role as facilitator and motivator in learning. The teacher has role as active, creative,

innovative learning process designer and as facilitator in learning.

This opinion is in line with the research conducted by Gamlunglert published in the journal of Educational Technology Procedia - Social and Behavioral Sciences 46 (2012) 3771 - 3775 Thailand under the title "Scientific Thinking of the Learners with the Knowledge of Construction Model Enhancing Scientific Thinking". The result of Gamlunglert's study concludes that scientific learning model will build scientific knowledge, academically knowledge every year will certainly increase because it has been designed with scientific learning model such as problem solving, merging, research, solution search, scientific thinking, inquiry, analysis and opinion.

Evaluation of Economic Learning with Scientific Approach to the 2013 Curriculum

Based on the observation and field interview on October 11, 2017, it is known that to measure the success rate of the learners in the formative and summative evaluation with test and non test assessment techniques. The formative evaluation is done at the end of each presentation of a subject on a title of subject while the summative evaluation is done at the end of each semester. Both evaluation aim to measure the level of success and mastery or achievement of the learners in the learning process from both cognitive, affective and psychomotor. In line with the above opinion, Sani (2013: 202) states that the evaluation is the process of concluding and interpreting facts and making professional basic consideration to take policy based on a collection of information.

The explanation is similar to the research conducted by Zhu Ke which is published in the information technology journal 13 (17) ISSN 1812-5638 in China under the title "Research on The Approach of Automatic Constructs Concept Maps from Online Course". The research result of Zhu Ke states that research or scientific concept is one way to facilitate knowledge of something, which has several functions and differences with others such as as managing knowledge, designing business and industry. The scientific concept always has effective function in learning that can help the student to create new integrity or personality for better knowledge. The concept of

scientific learning concludes to make evaluation-based plans and regulations propagated through the network. After the student learns the scientific concept it will be able to give ideas individually, and can make evaluation to get new plan or idea. With the existence of scientific evaluation system helps the student to if there are obstacles in the development of learning ideas.

Student Perception to the Teacher's Skill in Implementing Economic Learning by Using Scientific Approach

Based on the results of research and interview with the student the skill of economics teacher at SMA Negeri 2 Mranggen in economic learning by using scientific approach is good enough. The teacher often varies in economic learning method, and the 5M element in the scientific approach is always present in the learning process.

However, there are problems or obstacles that the student experiences in the learning process, especially economic subject, including: not all students have learning source in searching information assigned by the teacher, the way of delivering teacher material is less understandable, sometimes there is student who does not pay attention, not all students participate actively in the learning process.

CONCLUSIONS

Based on the research results described in the previous chapter, it can be concluded: (1) Learning planning stage at SMA Negeri 2 Mranggen the teacher conducts activities, among others, arranging learning tool, among others RPP (Lesson Plan), PROTA (Annual Program), PROSEM (Semester Program), KKM (Minimum Achievement Criteria). Preparation of RPP is done independently by the teacher through MGMP instruction or coordination. This means that the teacher arranges RPP in accordance with the draft or model that has been provided, so that the teacher just develops the learning in the classroom. RPP compiled by teacher has been adapted to the scientific approach (observing, asking, seeking information, associating/ analyzing and taking conclusion), whereas the syllabus has been

provided by the central government. (2) The implementation of economic learning with scientific approach at SMA Negeri 2 Mranggen exactly at class XI-S2 as a whole has been implemented, but there are still shortcomings that need to be improved in the form of some students who are less active in learning. The improvement is aimed at the implementation of economic learning with better scientific approach. (3) Evaluation conducted on economic learning with scientific approach at SMA Negeri 2 Mranggen divided into two namely formative and sumatif evaluation. The formative evaluation is carried out at the end of each tittle/ lesson chapter while the summative evaluation takes place at the end of the semester examination. The purpose of the evaluation is to know and as a measure of the student learning outcomes and achievement viewed from the aspect of cognitive, affective and psychomotor. The measurement of achievement is done through test and non-test. (4) Some students' perception to the teacher's skill in implementing economic learning by using scientific approach among them According to the student the skill of economics teacher at SMA Negeri 2 Mranggen in economic learning by using scientific approach is good enough. The teacher often varies in economic learning method, and the 5M element in the scientific approach is always present in the learning process. Problem or obstacle that student experiences in the learning process, especially economic subject is: not all students have learning source in searching information assigned by the teacher, the way of delivering teacher material is less understandable, sometimes there is student who does not pay attention, and not all students participate actively in the learning process.

REFERENCES

- Anggila, Firma. 2016. "Evaluasi Implementasi Pembelajaran dengan Pendekatan Saintifik Kurikulum 2013 pada Mata Pelajaran Ekonomi SMA Negeri 1 Kutowinangun". Skripsi: Universitas Sanata Dharma Yogyakarta.
- Gamlunglert, Thitima and Sumalee Chaijaroen. 2012. "Scientific thinking of the learners learning with the knowledge construction

- model enhancing scientific thinking". *Procedia - Social and Behavioral Sciences* 46, 3771–3775.
- Kardoyo and Esti Mumpuni Hayuningtyas. 2009. "Model Pembelajaran Role Playing pada Mata Pelajaran PS-Ekonomi Materi Pokok Manusia Sebagai Makhluk Sosial dan Ekonomi". *Jurnal Pendidikan Ekonomi Vol 4 No.2 Juli: UNNES*.
- Ke, Zhu. 2013. "Research on The Approach of Automatic Construct Concept Maps from Online Course". *Information Technology Journal* 12 (24): 8020-8024.
- Moleong, Lexy J. 2010. *Metodologi Penelitian Kualitatif Edisi Revisi*. Bandung : PT. Remaja Rosdakarya.
- Permendikbud No 22 Tahun 2016 tentang Standar Proses Pendidikan Dasar Dan Menengah.
- Purnamasari, Anita, Yuni. 2015. "Implementasi Pendekatan Saintifik pada Pembelajaran Desain Produksi Busana di Kelas XI Tata Busana A SMK N 9 Surakarta Tahun Ajaran 2014/2015". Skripsi: USM Surakarta.
- Ristiani, Christina, Ranti. 2015. "Evaluasi Pelaksanaan Pembelajaran dengan Pendekatan Saintifik pada Mata Pelajaran Ekonomi di SMA Stella Duce 1 Yogyakarta". Skripsi: Universitas Sanata Dharma Yogyakarta
- Sadikin, Muhammad. 2016. "Analisis Pembelajaran Ekonomi dengan Pendekatan Saintifik pada Kurikulum 2013 di Madrasah Aliyah Negeri Ketapang Kalimantan Barat". Tesis: USM Surakarta.
- Sani, Ridwan Abdullah. 2014. *Pembelajaran Saintifik untuk Implementasi Kurikulum 2013*. Jakarta: PT Bumi Aksara
- Setyoasih, Penelitian, Wahyu. 2015. "Implementasi Pembelajaran dengan Pendekatan Saintifik (Scientific Approach) dalam Mata Pelajaran Ekonomi Kelas X IPS Di SMA Negeri 3 Pati Tahun Ajaran 2014/2015". Skripsi: Universitas Sebelas Maret Surakarta.
- Thobroni, Muhammad and Arif Mustofa, 2011. *Belajar dan Pembelajaran (Pengembangan Wacana dan Praktik Pembelajaran dalam Pembangunan Nasional)*. Jogjakarta: Ar-Ruzz Media
- UU RI No 20 Tahun 2003 tentang Sistem Pendidikan Nasional.