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The Implementation of Inquiry-Discovery Learning

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Abstract

In teaching learning activity, a method is needed by every teacher. A teacher cannot do his task if he does not master a teaching method which proposed by the experts in education psychology. A teaching method is a way taken by a teacher in delivering the lesson to the students and in involving the active and dynamic interaction between teacher and students so the learning objective can be achieved. Inquiry and discovery method is the way to present the lesson which involves the students in a mental process to discover the knowledge**.** Inquiry discovery is a mental process in which an individual assimilates concepts and principles to be knowledge. This article exposes the definition, method, basic concept, application, strength and weakness of inquiry-discovery learning.

Keywords: Implementation, Inquiry-Discovery Learning

Introduction

Inquiry-discovery approach interests the education practitioners in the recent decades because it offers autonomous learning to the students. The learning aims to help the students in proposing question, finding out the answer, or solving a problem to satisfy their curiosity and to form a theory and idea about the world, and even to develop critical thinking level skill.[1] Thus, inquiry-discovery approach is appropriate to be used in improving the students' behavior and activity in learning. Positioning the students as the orientation center of learning activity has become an interesting issue among the education observers.

Unlike some other learning approaches and methods which neglect the importance of students' existence, inquiry-discovery learning attempts to build active, creative and innovative behavior of the students. A learning oriented on the students gives a wide opportunity for them to create and think in order to find self concept, behavior, and skill.[2] This learning can involve several learning models both in individual context and cooperative one. This article explores the theoretical concepts of inquiry-discovery learning which can be applied in learning Civic Education (Pendidikan Kewarganegaraan (PKn)). The findings of this article are in line with the benefits of inquiry-discovery learning stated by Gulo (2008), Brooks and Brooks (2001),[3] Mulyasa (2008),[4] and Sanjaya (2008).[5]

Teaching students to discover idea, to think critically, to question and to solve problem

[1] Jamil Suprihatiningrum, *Strategi Pembelajaran: Teori & Aplikasi*, h. 164.
[2] Hanafiah dan Suhana, *Konsep Strategi Pembelajaran,* (Bandung: Refika Aditama, 2009).
[3] J.G. Brooks dan M.G. Brooks, *In Search of Understanding: The Case for Constructivist Classroom,* (Upper Saddle River NJ: Merrill, 2001), Dikutip dalam John W. Stantrock, 'Educational Psychology' diterjemahkan oleh Tri Wibowo dengan judul *Psikologi Pendidikan,* h. 8.
[4] E. Mulyasa, *Standar Kompetensi dan Sertifikasi Guru*, (Cet. III; Bandung: Remaja Rosdakarya, 2008), h. 13.
[5] Wina Sanjaya, *Kurikulum dan Pembelajaran: Teori dan Praktik Pengembangan Kurikulum Tingkat Satuan Pendidikan (KTSP),* (Cet. I; Jakarta: Kencana, 2008), h. 232-233.

are the general principles in learning science and technology.[6] The method is based on constructivism theory which views that the strategy of obtaining is more prioritized than the number of students who memorize the knowledge. This implicates on the teacher's role which not only to give information but also as motivator to activate the students in processing the information though finding and experiencing.[7] For that purpose, a teacher can develop the learning model through the activity in the form of case study, group project, research project, field work.

Several obstacles are still found in the learning process in the class. The students is less supported to develop their critical thinking ability, religious character, communication ability[8] and the learning results are still dominated with the accumulation of memorized material without connecting the new knowledge with daily life.[9] Thus, constructivism approach which is also known as active learning approach is considered to be able to construct systematic thinking so the students can produce more accurate knowledge in coping with the obstacles in learning process. In this case, the acquisition of the students' knowledge should go through systematic processes namely searching information, posing question, investigating, formulating hypothesis, testing hypothesis, predicting, considering alternative assumption, drawing conclusion.[10]

From this context, the implementation of inquiry-discovery learning becomes significant to be applied in Civic Education (Pendidikan Kewarganegaraan) subject. The structure of this article is divided into several parts namely definition, method, basic concept, application, strength and weakness of inquiry-discovery learning. The parts are discussed based on the implementation of inquiry-discovery learning in Civic Education subject at *Sekolah Menegah Atas Negeri (SMAN) 2 Palopo*.

A. Inquiry-Discovery Learning Approach

1. The Definition of Inquiry-Discovery

The word 'inquiry' derives from English which means 'investigation'.[11] Piaget defined inquiry as a method to prepare the students in doing an experiment independently and widely to see what happens, proposing question and answering it, connecting one finding with other finding, and comparing the finding with their friends' finding. According to Mulyasa, inquiry is a way to realize what has been experienced in which the teaching learning system demands the students to think. This method positions the students to be involved in an intellectual activity and to process a learning experience becomes something meaningful.[12]

While according to Syafrudin Nurdin, inquiry discovery learning is a method set by a teacher in teaching learning process as a tool to achieve the education objective. Through this method, the students will be able to develop their curiosity and bravery to participate in teaching learning process.[13] Inquiry-discovery learning is learning to find and discover by own self. Similar to S. Nurdin, Djamarah and Zain further explain that this method enables a teacher to

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[6] Ali Gunay Balim, 'The Effects of Discovery Learning on Student's Success and Inquiry Learning Skills', dalam *Eurasian Journal of Educational Research,* Issue 35, Spring 2009, h. 1-20.

[7] Dadang Sukirman, *Microteaching*, h. 120.

[8] Kunandar, *Guru Profesional: Implementasi Kurikulum Tingkat Satuan Pendidikan (KTSP) dan Sukses Sertifikasi Guru,* (Cet. III; Jakarta: Rajagrafindo Persada, 2008) , h. 20.

[9] Wina Sanjaya, *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan,* (Cet. X; Jakarta: Kencana, 2013), h. 1.

[10] Collin dan Stevens, 'Goals and Strategies of Inquiry Teachers' dalam *Advances in Intructional Psychology*, Vol. 2, h. 68, diakses pada 14 Maret 2017.

[11] Sutrisno, Joko dalam Lahadisi 'Inquiry: Sebuah Strategi Menuju Pembelajaran Bermakna', *Jurnal Al-Ta'dib*, Vol.7 Nomor 2 Juli-Desember 2014.

[12] E.Mulyasa, *Kurikulum Berbasis Kompetensi*, (Cet. II. Bandung: Remaja Rosdakarya, 2008), h. 235.

[13] Syafrudin Nurdin, *Guru Profesional dan Implementasi Kurikulum*, (Jakarta: Intermasa, 2002), h. 129.

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deliver the lesson which is incomplete and give opportunity to the students to find and discover the knowledge, skill, and behavior by themselves using problem solving technique.[14]

Inquiry discovery learning is an instructional technique in which the students are faced with a problem in a teaching learning process. The form of teaching is mainly on giving motivation to the students in investigating the problems using scientific ways and skills in order to find clarification. This teaching helps the students to develop the skills of scientific inquiry-discovery learning. It is to attract the students to investigate a number of information in order to find a solution of a problem and to train them to develop facts, build concepts, and draw a general conclusion or theory which clarify the phenomena faced to them.

In teaching learning process using inquiry discovery learning method, a teacher delivers the lesson not in the form of complete one (from the beginning until the end) or in other words the teacher only presents a part of it. The teacher then gives a great opportunity for the students to obtain the things which have not been presented using problem solving learning approach.[15] It means that the emphasize in inquiry discovery learning is the effort to discover and investigate the relation patterns, facts, questions, definitions, conclusions, problems, solutions, and implications which are prominent in a subject.[16] So the learning happens in an investigation which can be accountable for.

From several definitions above, it can be concluded that inquiry discovery learning is a teaching learning process which centered on the students, the teacher does not need to present all the information to them. The teacher just needs to adjust the learning atmosphere that supports the discovery process for the students. The material presented is not in the form of information but the students are given opportunity to find and discover the information of the lesson learned. Inquiry discovery learning encourages the students to develop their intellectual potential. By finding the relation and pattern of the lesson, the students can be easier to understand the structure of the material learned. The students propose several questions, construct hypothesis, do investigation and experiment, analyze data, and give explanation as evidence.

The approach in learning, according to Gulo, is a turning point to see the whole existing problems. That particular point of view describes the thinking pattern and the behavior of a teacher in solving problem.[17] Pursuant to Sanjaya, approach can be defined as a turning point or point of view toward a learning process. Then, 'approach' is a term which refers to view about the happening of a rather general process so the learning strategy and method used can originate and depend on a particular method.[18] Therefore the learning approach is a point of view which is made as the source of learning strategy and method used by a teaching in learning process.

Killen as quoted by Wina Sanjaya clarified two approaches in learning: teacher-centered approaches and student-centered approaches.[19] Teacher-centered approaches generate direct instruction, inductive learning or expository which give crucial role on teacher. While student-centered approaches generate inductive learning strategy. For example, the question formulated by the teacher is limited and structured on all students as a whole so they tend to have less intellectual ownership of that question answer inquiry. In contrast, the question formulated by the students will give intellectual ownership for them so they feel responsible to study and find the answer by themselves.[20]

Inquiry-discovery learning is described by Suprihatiningrum as a cycle process through

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14 Syaiful Bahri Djamarah dan Aswan Zain, *Strategi Belajar Mengajar*, (Cet. III; Jakarta: Rineka Cipta, 2006), h. 19.

15 Muhibbin Syah, *Psikologi Pendidikan dengan Pendekatan Baru*, (Bandung: Remaja Rosda Karya, 1997), h. 244.

16 J. Drost, *Proses Pembelajaran Sebagai Proses Pendidikan*, (Jakarta: PT Gramedia, 1999), h. 42.

17 W. Gulo, *Strategi Belajar-Mengajar*. Dikutip dalam Jamil Suprihatiningrum, *Strategi Pembelajaran: Teori & Aplikasi*, (Cet.1; Jogjakarta: Ar-Ruzz Media, 2013), h. 146.

18 Wina Sanjaya, *Kurikulum dan Pembelajaran: Teori dan Praktik Pengembangan Kurikulum Tingkat Satuan Pendidikan (KTSP)*, h. 295.

19 Wina Sanjaya, *Kurikulum dan Pembelajaran: Teori dan Praktik Pengembangan Kurikulum Tingkat Satuan Pendidikan (KTSP)*, h. 295.

20 Wina Sanjaya, *Kurikulum dan Pembelajaran: Teori dan Praktik Pengembangan Kurikulum Tingkat Satuan Pendidikan (KTSP)*, h. 295.

the activity of observing, questioning, investigating, analyzing, and constructing a theory both individually and collectively with friends which aims to develop the students' thinking skill level.[21] Thus, the application of inquiry discovery needs much more time than the time allocation determined in the syllabus and curriculum. Inquiry-discovery learning basically aims to improve the students' learning activity and behavior. The teacher's role in this model is as facilitator who guides and helps the students to find facts, concept, or principle for their ownselves.[22] While the whole process of exploration, discovery, and construction is done by the students.

The process of inquiry and discovery to obtain the lesson through thinking activity is something suggested in Islam, as in QS Ali 'Imran/3: 7. The verse gives indication that the learning which supports the students to inquiry and discovery is one of the important approaches to develop the students' ability. Inquiry-discovery learning is done by a teacher through the procedure of stimulation, problem statement, data collection, data processing, verification, and generalization which are suitable for cognitive lesson/subject.[23]

Jaworski researched on inquiry in mathematics subject. His research suggests the needs of inquiry to exist in three levels of education system. First, the inquiry process exists in the level in which the students learn mathematics through exploration of drills, tasks and problems in the class. Second, the inquiry process exists in which the teacher uses inquiry to explore the design and implementation of the classroom drills, problems, and activities. Third, inquiry process exists in the research of mathematics teaching development. In this case, the teacher investigates the systematic inquiry in mathematics subject.[24]

Eventhough Jaworski's research focuses on exact subject, it is considered necessary to develop the application of inquiry discovery learning in social sciences to enrich the knowledge of teaching learning with inquiry-discovery. One of the subjects which full of concepts, definitions and facts is Civic Education (Pendidikan Kewarganegaraan).[25] Thus, inquiry-discovery learning is appropriate to be used in teaching Civic education subject to develop learning instrument.

2. The Method of Inquiry-Discovery Learning

Learning model is learning activity containing theoretical concepts about learning method and strategy.[26] Learning based on inquiry discovery is an art of creating such situations that the students can take the role as scientist. Trianto stated that inquiry method is the core of learning activity based on context.[27] Inquiry is an extension of discovery process which is used more in depth. Inquiry means questioning, examining and investigating. Inquiry discovery means a set of learning activity which maximally involves the whole ability of the students to find and investigate systematically, critically, logically, analytically, so they can construct their own findings confidently.

To maximize all the students' potentials in learning, the teacher should firstly make sure that the students are in the prime condition to learn using inquiry discovery method. Related to learn maximally, Azhar Arsyad explained that learning is a complex process happens in every individual throughout his life. The learning process happens because there is an interaction between the individual and his environment. One of the signs that someone has learned is the

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21 Jamil Suprihatiningrum, *Strategi Pembelajaran: Teori & Aplikasi*, h. 164.

22 Muhammad Khalifah Mustami, "Profil Guru/Dosen dan Tantangan dalam Era Pengetahuan," dalam *Lentera Pendidikan,* vol. 19, No.2, Desember 2016), h. 165. Diakses, 15 maret 2017.

23 Abin Syamsuddin Makmun, *Psikologi Pendidikan: Perangkat Sistem, Pengajaran Modul*, h. 232-233.

24 Jaworski, B. 'Grappling with Complexity: Co-learning in Inquiry Communities in Mathematics Teaching Development', dalam *Proceedings of the 28th Conference of the International Group for the Psychology of Mathematics Education* (Vol. I, pp. 17–36). *Bergen: Bergen University College*. Diakses 20 Maret 2017.

25 Wina Sanjaya, *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*, h. 226.

26 Rusman. *Menejemen Kurikulum* (Jakarta: Raja Grafindo Persada, 2011), h. 223

27 Trianto. *Mendesain Model Pembelajaran Inovatif- Progressif*. (Jakarta : Kencana, 2009), h. 115

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change on behavior which is caused by the change in the level of knowledge, skill, and behavior.[28] Based on that opinion, method and strategy in learning process is a must for every teacher to motivate students. In this case, the use of inquiry discovery method can be an alternative to be applied by the teacher.

a. The main target of inquiry discovery learning

The main target of inquiry discovery learning covers several things: *first*, involving the students maximally in the learning process; *second*, directing the activities maximally in the learning process; *third,* developing self confidence of the students on what has been found in discovery process. It can be concluded that this learning model can give space and opportunity for the students to discover and construct knowledge concept based on their own experience.

b. The general conditions as the requirement for inquiry discovery learning

There are several general conditions as the requirement for inquiry discovery learning. The conditions are closely related to the wider situation like the social aspect in the classroom and open air class which interests the students to do a discussion, focus on hypothesis, and use facts as evidence or information. To create such condition, the teacher's roles are as follow:

1) Motivator, gives stimulus to the students to make them active and enthusiastic in thinking
2) Facilitator, shows the way out if the students face difficulty
3) Question giver, makes the students realize their mistakes
4) Administrator, is responsible for all the classroom activity
5) Director, leads the students' activities in achieving the expected learning objective
6) Manager, manages the learning source, time, and classroom organization
7) Reward giver, give reward for the students' achievement

Inquiry discovery learning is designed to encourage the students to directly involve in the scientific process in quite short time. The result of Schlenker' research in Joice and Weil quoted in Bidandiah showed that drill with inquiry discovery method can increase the understanding of science, productive and creative thinking, skill in obtaining and analyzing information.[29] Thus, the educators starting from the elementary school level until high education should pay attention on this method especially the teachers of Civic Education (Pendidikan Kewarganegaran).

3. The Basic Concept of Inquiry-Discovery Learning

The method of inquiry-discovery learning is the set of learning activities emphasizing on the process of critical and analytical thinking to find and discover the fix answer of a problem. The thinking process is usually done through question and answer between teacher and students. According to A. Sochibin[30], inquiry-discovery method should cover the learning experience to guarantee that the students can develop inquiry discovery process with certain limits for the students in lower class, and can recognize the inquiry discovery learning for the students in higher class based on the level of intellectual development. Thus, the students can develop their ability of inquiry-discovery thinking, only if they involve in the activity that demands the execution of that mental task. The students are actually never master the mental task perfectly thus there is only one level in which the students can become expert in learning that is to discovery and to inquiry.

According to Sanjaya, inquiry-discovery learning strategy has several main characteristics, namely:

a. Inquiry-discovery emphasizes on the students' activity maximally to find and discover which means inquiry-discovery strategy places the students as the learning subject. In the learning process, the students do not only play the role as the lesson receiver through the teacher's explanation verbally, but also play the role to find the core of the lesson by themselves.

b. All the activities done by the students are directed to find and discover fix own answer on the thing questioned which is expected to grow self confidence. In inquiry discovery learning, the

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[28] Azhar Arsyad, *Media Pembelajaran* (Ed.1-7; Jakarta : PT. Raja Grafindo Persada, 2006), h. 1.

[29] Widyatun " Model Pembelajaran-inquiry" *Jurnal bidandiah.* Edisi April, 2012

[30] A. Sochibin dkk. "Penerapan Model Pembelajaran Inquiry Terpimpin untuk Peningkatan Pemahaman dan Keterampilan Beprpikir Kritis Siawa SD", dalam *Jurnal Pendidikan Fisika Indonesia (JPFI Unnes)* 5 (2009). Diakses 10 Agustus 2017

teacher is not only as the learning source but also as facilitator and motivator for the students.
c. The objective of the use of inquiry discovery learning strategy is to develop the thinking ability systematically, logically and critically.[31]

The strategy of inquiry discovery learning will give positive impacts if:

1. The teacher expects the students to find the answer of a problem by themselves.
2. If the subject material taught is not in the form of fact or concept rather a conclusion which needs verification.
3. If the learning process starts from the curiosity of the students on something.
4. If the teaching is done toward the students who are in general have intention and ability to think.
5. If the students do not learn too much so the learning can be controlled by the teacher.
6. If the teacher uses an approach which focuses on the students.

A meaningful learning is the learning in which the teacher provides a space for the students to develop hypothesis and prove the truth of the hypothesis proposed.[32] Pursuant of I.M. Jaya et al., the low level of the students' learning result in biology subject is highly related to the learning process which is still conventional, does not tidak menyentuh cover the students' dimension. The learning process nowadays still gives teacher's domination and does not give access for the students to develop independently through discovery in their thinking process. In learning process, concept understanding highly influences students' behavior, conclusion and technique in solving problem. Thus, the teacher should be able to assemble the learning insight which is more interesting and loved by the students.

4. The Implementation of Inquiry-Discovery Learning

Carolyn's research about the role and knowledge of teacher in applying inquiry discovery learning in the classroom has great impact on science education because her study reflects what can be achieved realistically in a big scale. In a research agenda, gathering data is very important for reliable knowledge. Data is needed to give information for science education community, teacher, administrator, educator, and public about the kind of science based inquiry discovery learning that can be applied in the classroom and the students' learning result that is expected so we may evaluate the effectiveness of inquiry discovery method as the tool of science teaching learning.[33]

Generally, the process of inquiry discovery learning can follow the steps below:

a. Orientation

In this step, the teacher can do some stage to establish a conducive learning situation or climate. This orientation step covers several things. First, the teacher explains topic, objective, and learning result which is expected to be obtained by the students. Second, the teacher explains the main activity should be done by the students to achieve the objective. In this second stage, the teacher explains the steps of inquiry discovery learning, starting from formulating problem until drawing conclusion. Third, the teacher explains the importance of the lesson topic and learning activity. This thing is done in order to give the students learning motivation.[34]

b. Formulating problem

According to Sugiyono, formulating problem is a question which needs an answer through data collection.[35] Formulating question is a step that can bring the students to a

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31 Wina Sanjaya, *Kurikulum dan Pembelajaran,* h. 235.

32 Wina Sanjaya, *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*, h. 227-229.

33 Carolyn W. Keys, Lynn A. Bryan. "Co-Constructing Inquiry- Based Science With Teachers: Essential Research fo Lasting Refom". *Journal of Research in Science Teaching.Vol 38 No.6. Science Education Departemen, 212 Aderhold Hall, Univercity of Georgia. Athens, Georgia. 2001*

34 Mohammad Muchlis Solichin, Penerapan Metode Pembelajaran Inquiry Discoveri dalam Pendidikan Agama Islam, *Jurnal Tadris*. (Vol. 12. Nomor 2, Desember 2017), h. 22

35 Sugiyono, *Penelitian Pendidikan* (Cet.20, Bandung: Alfabeta; 2014), h. 56.

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problem. The problem presented challenges the students to solve it. The question in a problem formulation is surely has its answer and the students are supported to find the correct answer. The process of looking for the answer is indeed the important thing in inquiry discovery learning. Thus, through the process of finding the answer, the students will get a worth experience as an effort to develop mental in thinking process.

c. Formulating hypothesis

Hypothesis is a temporary answer of a problem investigated. As a temporary answer, the truth of a hypothesis needs to be tested. One of the ways that can be done a teacher to develop the ability to hypothesize of every student is by giving various questions which can encourage the student to formulate the hypothesis or formulate the prediction of possible answer of a problem investigated.[36] Thus, a hypothesis is very important.

d. Collecting data

Collecting data is an activity to gather the information needed to test the hypothesis formulated. In inquiry discovery learning, collecting data is a mental process which is very important in intellectual development. Collecting data process does not only need a strong motivation in learning but also diligence and ability to utilize the thinking potential.

e. Testing hypothesis

Testing hypothesis is to determine whether the answer found is considered accepted based on the data and information gathered. Testing hypothesis also means develop the ability of rational thinking. It means the truth of the answer should be supported by the data found and can be accountable for and the research hypothesis is stated in declarative form.[37]

f. Drawing conclusion

Drawing conclusion is the process of describing the finding obtained based on the result of hypothesis testing. To have an accurate conclusion, a teacher should be able to show to the students which data are relevant. The steps used in inquiry method starts with teaching some questions by giving some short information. Based on the available material, the students are supported to think by themselves to find general principle. How far does a teacher guide the students depends on their ability and the material learned. Inquiry method gives an opportunity to the students to investigate and draw conclusion.

5. The Strength and Weakness of Inquiry Discovery Learning

a. The strength of inquiry discovery learning

The result of the analysis done by Erin Marie discussed inquiry based science teaching namely as three main research findings. First, the synthesis of histories sampling of the study through the years determined in which the inquiry based teaching is frequently used again. It shows a positive impact toward the learning given to the students. With the great impact toward the learning interest of the students in the level which is the combination of inquiry, procedural, epistemic and social ability. Second, the research also showed the significant impact on the study involving the teaching activity initiated by the teacher. Third, enriching the science of inquiry based teaching, the research has described how a model adjusted with teaching approach can give impacts' interpretation of the approach toward the result of the students' learning.[38]

According to Mulyani Sumantri and Johar Permana, the good things of inquiry method are:

1) The students participate actively in learning activity because inquiry discovery method emphasizes on the students' processing information process. The students really can understand a concept and pattern because they experience process by themselves to get the concept and pattern. Inquiry discovery method is a learning strategy emphasizing on the development of the aspect of cognitive, affective, and psychomotoric in balance way so the learning through this strategy is considered more meaningful.

2) This method enables the scientific behavior and cause the curiosity spirit of the students.

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[36] Sugiyono, *Penelitian Pendidikan,* h. 96

[37] Hamid Darmadi, *Metode Penelitian Pendidikan*, (Cet.2; Bandung: Alfabeta. 2011), h. 44

[38] Erin Marie Futak et.al. 'Experimental and Quasi Experimental Studies of Inquiry- Based Science Teaching : A Meta Analysis', dalam *Review of educational Research Jurnal,* 2012. Diakses 20 Pebruari 2018.

This method can give an opportunity for the students to learn based on their own learning style.

3) This method gives opportunity for the students to discover the knowledge and concept by themselves so they feel very satisfied. So the students' mental satisfaction as an intrinsic value is fulfilled. This method is a strategy considered suitable based on the modern psychology development regarding learning as changing process. Muh. Sain Hanafy stated that learning is a psycho-physic resulting changing of knowledge, behavior and skill which is relatively constant.[39]

4) The teacher has individual contact which enables to serve the need of the students who have the ability above average. With this condition, the students who have good learning ability will not hamper by the students who are weak in learning.

5) The finding found by the students can be an unforgettable ownership. It is enabled because something obtained through own hard working will give deep impression.

6) It gives the students opportunity to go forward continuously with own ability. Besides, this method enables the students to fix and extend their intellectual ability independently. It means that the students do no depend on the teacher's opinion.

b. The weakness of inquiry discovery learning

The weakness of this strategy is that it takes a long time. If it is not well managed or less directed, disorder and unclearness of the material learned may exist.[40] The weaknesses of inquiry-discovery method are as follow:

1) It will less success if there is big number of students in the classroom. That is why the students is arranged not more that the number determined by the government.

2) It is difficult to apply this method because the teacher and the students have been accustomed with lecture and question-answer method.

3) It emphasizes more on cognitive mastery and neglect skill aspect, value, and attitude.

4) The freedom given to the students is not always utilizes optimally. The students often get confused on the problem investigated possibly because the topic chosen is out of the context of the curriculum.

5) It needs more facilities and time which sometimes exceed the allocation determined in the curriculum.

6) It is rather difficult to control the activity and the success of the students because they are divided into a number of groups.

7) Since the parameter of the learning success is determined by the ability of the students in mastering the subject matter, internal control is difficult to be applied by every teacher[41].

C. Conclusion

Inquiry-discovery learning method gives great opportunity for the students to be involved actively in constructing and forming knowledge, skill, and behavior. Though in the beginning, this learning method is more applied in natural science learning, like mathematics and biology, in further development this method is also applied in social science including Pendidikan Kewarganegaraan (PKn). The implementation of this method has been proven to be able to increase the learning achievement and to form critical attitude of the students. Specifically, inquiry-discovery method has assisted the students' development in scientific process, concept understanding, critical thinking, and positive behavior. So it can be concluded

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[39] Muh. Sain Hanafy, Konsep Belajar dan Pembelajaran. *Jurnal Lentera Pendidikan*, h. 77.

[40] Suhendri Oki Tri Cahyono, "Pengembangan Perangkat Pembelajaran Berbasis Guided Discovery Sebagai Penunjang Implementasi Kurikulum 2013 Pada Mata Pelajaran Teknik Elektronik Dasar, Kelas X Jurusan Teknik Audio Vidio di SMKN 5 Surabaya" *Jurnal Pendidikan Teknik Elektro* Vol. 03 No. 03 Tahun 2014. Diakses 10 Pebruari 2018

[41] Suhendri Oki Tri Cahyono, "Pengembangan Perangkat Pembelajaran Berbasis Guided Discovery Sebagai Penunjang Implementasi Kurikulum 2013 Pada Mata Pelajaran Teknik Elektronik Dasar, Kelas X Jurusan Teknik Audio Vidio di SMKN 5 Surabaya" *Jurnal Pendidikan Teknik Elektro* Vol. 03 No. 03 Tahun 2014

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that this method can help the students to improve the students' cognitive, psycho-motoric, and affective in relatively balance portion.

The implementation of inquiry-discovery method places the students as the learning subject and the teacher as guide, facilitator, and one of the learning sources. In the context of this method, the teacher's intervention which is high should be limited though the guidance is still needed. Eventhough this method is started to be applied by many practitioners, its implementation may still varied depends on subject matter, learning situation, teacher's quality, and school condition. However, the learning using inquiry-discovery method has general components, namely questioning, students' engagement, cooperative interaction, performance evaluation, and variety of resources such as textbook, website, television, video, poster, interview with expert, subject teacher.

References

Al-Qur'an al-Karim

Arsyad, Azhar. 2006. *Media Pembelajaran* Ed.1-7; Jakarta: Raja Grafindo Persada,

B. Jaworski. 2017. 'Grappling with Complexity: Co-learning in Inquiry Communities in Mathematics Teaching Development', dalam *Proceedings of the 28th Conference of the International Group for the Psychology of Mathematics Education.* Vol. I. *Bergen: Bergen University College*. Diakses 20 Maret 2017.

Balim. Ali Gunay. 2009'The Effects of Discovery Learning on Student's Success and Inquiry Learning Skills', dalam *Eurasian Journal of Educational Research,* Issue 35, Spring

Cahyono, Suhendri Oki Tri. 2018. "Pengembangan Perangkat Pembelajaran Berbasis Guided Discovery Sebagai Penunjang Implementasi Kurikulum 2013 Pada Mata Pelajaran Teknik Elektronik Dasar, Kelas X Jurusan Teknik Audio Vidio di SMKN 5 Surabaya" *Jurnal Pendidikan Teknik Elektro* Vol. 03 No. 03 Tahun 2014. Diakses 10 Pebruari 2018

Collin dan Stevens. 2017. , 'Goals and Strategies of Inquiry Teachers' dalam *Advances in Intructional Psychology*, Vol. 2, h. 68, diakses pada 14 Maret 2017.

Darmadi, Hamid. 2011. *Metode Penelitian Pendidikan.* Cet.2; Bandung: Alfabeta.

Djamarah, Syaiful Bahri dan Aswan Zain. 2006. *Strategi Belajar Mengajar.* Cet. III; Jakarta: Rineka Cipta.

Drost, J.1999. *Proses Pembelajaran Sebagai Proses Pendidikan.* Jakarta: Gramedia.

Futak, Erin Marie et.al. 2012. 'Experimental and Quasi Experimental Studies of Inquiry- Based Science Teaching: A Meta Analysis', dalam *Review of educational Research Jurnal,* 2012. Diakses 20 Pebruari 2018.

Gulo, W.2004. *Strategi Belajar Mengajar.* Jakarta: Grasindo.

Hanafiah dan Suhana. 2009. *Konsep Strategi Pembelajaran.* Bandung: Refika Aditama.

Hanafy, Muh. Sain. 2014. 'Konsep Belajar dan Pembelajaran', dalam *Jurnal Lentera Pendidikan*, Vol. 17 No.1 Juni 2014.

J.G. Brooks dan M.G. Brooks, *In Search of Understanding: The Case for Constructivist Classroom,* Upper Saddle River NJ: Merrill, 2001, Dikutip dalam John W. Stantrock, 'Educational Psychology' diterjemahkan oleh Tri Wibowo dengan judul *Psikologi Pendidikan,* h. 8.

Jaya, I.M. dkk.*"* Pengembangan Perangkat Pembelajaran Biologi Bermuatan Pendidikan Karakter dengan Setting Guded Inquiry untuk Meningkatkan karakter dan hasil Belajar Peserta didik SMP". e-*Journal Program Pasca Sarjana Universitas Pendidikan Ganesha Program Studi IPA*. Volume 4 Tahun 2014. Diakses 20 Januari 2018.

Keys, Carolyn W dan Lynn A. Bryan. "Co-Constructing Inquiry- Based Science With Teachers: Essential Research fo Lasting Refom". *Journal of Research in Science Teaching.Vol 38 No.6. Science Education Departemen, 212 Aderhold Hall, Univercity of Georgia. Athens, Georgia. 2001*

Kunandar. 2008. *Guru Profesional: Implementasi Kurikulum Tingkat Satuan Pendidikan (KTSP) dan Sukses Sertifikasi Guru.* Cet. III; Jakarta: Rajagrafindo Persada.

Lahadisi. 'Inquiry: Sebuah Strategi Menuju Pembelajaran Bermakna', *Jurnal Al-Ta'dib*, Vol.7

Nomor 2 Juli-Desember 2014.

Makmun, Abin Syamsuddin. *Psikologi Pendidikan: Perangkat Sistem, Pengajaran Modul*,

Mulyasa, E.2008. *Kurikulum Berbasis Kompetensi.* Cet. II. Bandung: Remaja Rosdakarya, .

Mulyasa, E.2008. *Standar Kompetensi dan Sertifikasi Guru.* Cet. III; Bandung: Remaja Rosdakarya.

Mustami, Muhammad Khalifah. 2017. "Profil Guru/Dosen dan Tantangan dalam Era Pengetahuan," dalam *Lentera Pendidikan,* vol. 19, No.2, Desember 2016. Diakses, 15 Maret 2017.

Nurdin, Syafrudin. 2002. *Guru Profesional dan Implementasi Kurikulum.* Jakarta: Intermasa,

Rusman. 2011.*Menejemen Kurikulum.* Jakarta: Raja Grafindo Persada,

Sanjaya, Wina. 2008. *Kurikulum dan Pembelajaran: Teori dan Praktik Pengembangan Kurikulum Tingkat Satuan Pendidikan (KTSP).* Cet. I; Jakarta: Kencana,.

Sanjaya, Wina. 2013..*Strategi Pembelajaran Berorientasi Standar Proses Pendidikan.* Cet. X; Jakarta: Kencana,

Sochibin, A. dkk. 2017."Penerapan Model Pembelajaran Inquiry Terpimpin untuk Peningkatan Pemahaman dan Keterampilan Berpikir Kritis Siswa SD", dalam *Jurnal Pendidikan Fisika Indonesia JPFI Unnes*. 5, Tahun 2009. Diakses 10 Agustus 2017.

Solichin, Mohammad Muchlis. 'Penerapan Metode Pembelajaran Inquiry Discoveri dalam Pendidikan Agama Islam', dalam *Jurnal Tadris*. Vol. 12. Nomor 2, Desember 2017.

Sugiyono,2014. *Penelitian Pendidikan.* Cet.20, Bandung: Alfabeta;

Sukirman, Dadang. *Microteaching*, h. 120.

Suprihatiningrum, Jamil. *Strategi Pembelajaran: Teori & Aplikasi*, h. 164.

Syah, Muhibbin .1997.. *Psikologi Pendidikan dengan Pendekatan Baru.* Bandung: Remaja Rosda Karya.

Trianto.2009. *Mendesain Model Pembelajaran Inovatif- Progressif*. Jakarta: Kencana.

Widyatun. 2012. "Model Pembelajaran-inquiry" *jurnal bidandiah.* Edisi April.