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# Actualization of Science Philosophy in the Development of Islamic Education Management

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**Abstract:** *The position of philosophy of science in Islamic Education Management certainly has a contribution to education because in education an ideal and rational foundation is needed. Philosophy of science can also provide the most basic, comprehensive and systematic view of the nature behind the problems of Islamic education management that will be faced. Thus the existence of a philosophy of science in the management of Islamic education contributes to its analysis of Islamic education regarding the nature of real and rational problems that contain basic values which are used as a basis or guide. Philosophy of science in Islamic education management is the basic scope of education implementation.*

**Keywords:** *Philosophy, Science Philosophy, Islamic Education Management*

## 1. INTRODUCTION

The existence of the philosophy of Islamic education management about the importance of studying basic studies in this Islamic education management. But the reviews above are still sketchy. As actors in managing Islamic education we are required to understand the position and usefulness of Islamic education management philosophy in this study of the Actualization of Philosophy of Science in the Development of Islamic Education Management Science.

Based on the explanation above, the author formulates the problem in this paper is?

1. What is the meaning of philosophy of science?
2. What is scientific thinking?
3. What is critical thinking?
4. What is scientific truth?
5. What is a theory of truth?
6. How is the actualization of the philosophy of science in Islamic Education Management?



### **Definition of Philosophy of Science**

Notions of the philosophy of science have been found in many books and other scientific articles. According to The Liang Gie (1999), philosophy of science is all reflective thinking on issues regarding all matters concerning the basis of knowledge and the relationship of science to all aspects of human life. Philosophy of science is a mixed field of knowledge whose existence and development depend on the reciprocity and mutual influence between philosophy and science. Surajiyo explained that the philosophy of science is a branch of philosophy that discusses science. The aim of the philosophy of science is to conduct an analysis of knowledge and the ways in which that knowledge is obtained. So the philosophy of science is an investigation of the characteristics of scientific knowledge and how to obtain it. The focus of the philosophy of science is the process of scientific inquiry itself. In its development, the philosophy of science directs its views on the strategy of developing science which concerns ethics and heuristics. Even up to the cultural dimension to capture not only the usefulness or usefulness of knowledge, but also its meaning for human life.

In the view of Koento Wibisono (1984), philosophy from one point of view can be defined as a science that seeks to understand the nature of something "exists" that is used as its target object, so that the philosophy of science which is a branch of philosophy is in itself a science that seeks to understand what the essence of science is science itself.

Furthermore, Koento Wibisono (1984), argues that the essence of knowledge concerns the problem of ontological beliefs, namely a belief that must be chosen by the scientist in answering the question of whether "there" (being, sein, het zijn) is. This is the beginning so that someone will choose idealistic-spiritualistic, materialistic, agnosticistic views and so on, the implications of which will be very decisive in the choice of epistemology, namely the ways, paradigms that will be taken in an effort to reach the goals to be achieved, as well as the choice of axiology namely values, which measures will be used in someone developing knowledge.

More than that, it is said that with the philosophy of science, we will be encouraged to understand the strengths and limitations of its methods, the presuppositions of its knowledge, the logic of its validation, the structure of scientific thought in context with reality in concreto in such a way that a scientist can avoid his arrogance and intellectual myopia. The objectives of studying the philosophy of science according to Proverbs Bakhtiar (2008:20) are:

1. Explore the basic elements of science so that we can thoroughly understand the source, nature and purpose of science.
2. Understanding the history of the growth, development and progress of science in various fields so that we can get an overview of the historical processes of contemporary science.
3. Become a guideline for distinguishing scientific and non-scientific studies.
4. Emphasize that there is no conflict between science and religion.

### **Think Scientific**

Science is knowledge obtained through the scientific method. The proper conduct of scientific activity requires thinking that allows for regular and broad-minded research. In epistemology or its development, scientific thinking is needed to gain knowledge. The vehicle for scientific thought is the instrument of the scientific method in fulfilling its



function properly. Thus, the function of scientific thinking tools is to help process the scientific method to obtain knowledge or other theories

Scientific thinking is logical and empirical thinking. Logic is logical and empirically discussed in depth on the basis of facts that can be justified, in addition to using reason to reflect, decide and develop. Scientific thinking is the process of thinking or developing thoughts that are arranged systematically based on existing scientific knowledge. Salam (1997) defines scientific thinking, namely the process or activity of a person to discover or acquire knowledge. Scientific thinking is a thinking process that leads to a conclusion in the form of knowledge. Suriasumantri (1999) states that scientific thinking is a method of thinking based on deductive and inductive logic. Scientific thinking is an attempt to discover previously unknown facts and ideas. The scientific way of thinking cannot be separated from the facts of natural events, the truth of which is always associated with the results of experimental research. If a theory cannot be proven by experimental testing it is said to be unreliable because it does not meet the scientific criteria.

### **Critical Thinking**

Critical thinking is a self-regulating judgment that results in interpretation, analysis, evaluation, and inference, as well as an explanation of the evidence, conceptual, methodological, criteriological, or contextual considerations on which the judgment is based. From this understanding it can be concluded that someone who shows good critical thinking has a set of cognitive skills and dispositions, proficient in the skills of interpretation, analysis, evaluation, inference, explanation and self-regulation. Can demonstrate a series of dispositions necessary for individuals to utilize these skills, accustomed to encouraging others to engage in critical appraisal (Facione, 2011).<sup>7</sup>

Another opinion according to Mc Peck is that critical thinking in itself is not a separate set of skills or activities. This critical capacity development is not limited to one disciplinary area or certain range of experiences. Due to the nature of the competencies required for critical thinking, the global relevance and the level of knowledge creation, the development of critical thinking skills is a lifelong commitment.

### **Scientific Truth**

According to Abbas Hamami, if the subject wants to tell the truth it means the proposition is true. The meaning of the proposition is the meaning contained in a statement or statement. And, if the subject states the truth that the proposition being tested must have qualities, traits or characteristics, relationships and values. This is because truth cannot simply be separated from the quality, nature, relationship and value itself

Then, what is meant by scientific? In the dictionary it is explained that scientific comes from the word, *Ilmu* means knowledge. However, in the study of philosophy, science and knowledge are distinguished. Knowledge is not science, but knowledge is an accumulation of knowledge. Meanwhile, what is meant by scientific knowledge is knowledge based on the fulfillment of scientific requirements, especially regarding theories that support and are in accordance with evidence. From this understanding it can be interpreted that science or science is knowledge that is obtained through certain conditions. These conditions are then called the scientific method. Method is a procedure or way of knowing something and has systematic steps.



So what is meant by scientific truth is the compatibility between knowledge and the object of compatibility is supported by certain conditions which Jujun S. Sumantri calls methods which are also supported by theories that support and are in accordance with evidence.

### **Theory of Truth**

The term "Truth" can be used as a concrete or abstract noun. In English "Truth" is called "truth", Anglo-Saxon "Treowth" (loyalty). The Latin term "varitas", and the Greek "eletheid", is seen as the opposite of the word "error", "heretical", "falsehood", and sometimes also "opinion". In "Arabic" "Truth" is called "al-haq" which interpreted by "naqid al-batil". Meanwhile, in the Indonesian dictionary, the word "Truth" refers to a condition that matches the actual situation, something that really exists.

Truth is closely related to knowledge. Truth is the conformity of knowledge with its object. The discrepancy between knowledge and its object is called error. Thus, it is clear that it is very difficult to reach the complete truth of a particular object let alone achieve the whole truth of everything that can be used as an object of knowledge.

Thus it is very clear that the truth is the reality of the meaning which is the case, the reality is also the thing both of them are seen as the same. It is even more emphatically stated that what is meant by real or unequivocal truth lies in the correspondence or suitability of clear impressions with reality. Truth is divided into four:

Religious Truth, namely truth that meets the criteria.

Philosophical Truth, namely the truth resulting from contemplation and contemplative thinking about the consequences of something.

Aesthetic Truth, namely truth based on aesthetic judgment.

Scientific Truth is the truth marked by the fulfillment of scientific requirements.

### **Actualization of the Way of Thinking Philosophy of Science in the Development of Islamic Education Management**

Previous discussion has explained the notion of philosophy of science. According to The Liang Gie (1999), philosophy of science is all reflective thinking on issues regarding all matters concerning the basis of science and the relationship of science to all aspects of human life. Meanwhile, Surajjiyo explained that the purpose of the philosophy of science is to conduct an analysis of science and the ways in which that knowledge is obtained. So the philosophy of science is an investigation of the characteristics of scientific knowledge and how to obtain it.

According to Liang Gie, the actualization of thinking in the philosophy of science is a series of exploratory activities that seek an explanation of a method to gain an empirical, rational understanding of the world in its various aspects, and overall systematic knowledge that explains various phenomena that humans want to understand. Knowledge must be cultivated with human activity, that activity must be carried out with a certain method, and finally methodicality brings systematic knowledge.

After knowing what are the requirements that must be met by a science, then a review of the management of Islamic education is carried out. Does the management of Islamic education meet the requirements to become a science of its own and is worthy of development, the explanation is as follows:

1. About objects.



There are two kinds of objects of knowledge, namely material objects and formal objects. In the management of Islamic education, the material object is potential sources, both human and non-human. Meanwhile, the formal object of Islamic education management is human activity in an effort to manage human resources based on Islamic values.

2. Development Method

The development methods that are used in Islamic education management are the interview method, the observation method, the experimental method, and so on.

3. Systematics

Regarding the systematics of management of Islamic education can be known by the classification of a problem and discussion of problem by problem in Islamic education.

Viewed from the perspective of the philosophy of science system, management of Islamic education is feasible to be developed with the following scope:

1. Ontology. Ontology as an object of management, in this case in the form of Institutions (organizations), and other related matters.
2. Epistemology. Epistemology as a way or method of management, in this case in the form of a management process and ways to get around it.
3. Axiology. While axiology as a result of management in the form of achieving goals.

## 2. CONCLUSIONS

From the description above, we can find out about the philosophy of science in relation to Islamic education management. Philosophy of science turns out to be the basis of the management of Islamic education and the essence of solving future problems regarding the management of Islamic education in the future or the past. We have compiled from the notions of philosophy of science, scientific thinking, critical thinking, theory of truth and scientific truth to the end how to actualize thinking from the philosophy of science in the development of management of Islamic education, we hope this presentation can be useful as material for learning and application in life.

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