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Epistemology as a Scientific Methodology Foundation for the Development of New Theories in the Field of Islamic Education Management

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A B S T R A C T

In the process of observing to satisfy human curiosity, it is carried out in certain ways, certain methods, by the process of scientific activities, especially in Islamic education management. Method as a way to observe a process of scientific activity. The method as a way to observe something, the process of scientific activity, must also be in certain ways, which can be justified as a scientific activity. The scientific method is a procedure in obtaining knowledge which is called science. scientific knowledge born of the scientific method in order to become scientific truth. Scientific truth is a clear and definite knowledge of the truth according to scientific norms. Epistemology is a philosophy of science that is reasoning or thought, the scientific method and scientific truth are part of the scope of the philosophy of science in the new theory of Islamic education management

INTRODUCTION

Philosophy of science is a branch of epistemology (the philosophy of knowing) that specifically examines the nature of science (scientific knowledge). Epistemology is the discipline of philosophy that explores the occurrence of knowledge, its source, its origin, its limitations and methods, and its dependability. Therefore, we will examine the beginnings of epistemology in more depth on this occasion. Man is essentially a truth-seeking being. Man is never satisfied with the existing state of affairs; instead, he seeks the actual truth by enquiring about it. Nonetheless, each of these answers consistently satisfies folks. To ascertain if what is meant here is scientific truth, i.e., truth that can be evaluated using scientific procedures, he must conduct a specific test.

The rapid expansion of knowledge in the contemporary day does not hinder people from seeking the truth. In contrast, it encourages people to continue seeking truth based on preexisting beliefs in order to test a new hypothesis or refute a previous theory. So that individuals are now more interested in doing scientific research to find solutions to all of their difficulties. It will continue to fulfill man's curiosity about his surroundings throughout time since it is static and not rigid.

It seems that in the 20th century, in developed countries, a new field of study, management, was reluctant to be recognised as science. This is not normal bar conduct. In addition to other fields that had existed for quite some time, social science, previously known as sociology, had to fight for its position. In the time of Auguste Comte and Herbert Spencer, sociology was not yet recognized as a science, but Spencer's research was unquestionable: he was well-known as a philosopher, ethicist, biologist, and sociologist, as well as for the dozens of hefty volumes he authored, which demonstrated his vast knowledge. It might also be due to the English (Spencer's birthplace and life), since it is inconceivable that the English would have such a narrow perspective that the so-called "humanities" are not included in Science.

Similarly, the theme of our discussion today is "management" science. When Taylor and Fayol started to establish "management" as a science, it was not yet recognized as such. Even now, in certain nations, there is still suspicion and reluctance to teach it alongside philosophy, which, according to experts, is the oldest science, and other disciplines such as natural sciences, precise sciences, doctorate sciences, etc.

An epistemology that is capable of incorporating several areas of philosophy is used to study the origins of knowledge. Alternatively, epistemology is the study of what knowledge is and how its nature and authenticity are independent of external factors. As a result, three essential concepts became the focal point of his research: what are the sources of knowledge, where does it come from, and how do we acquire it? What is the nature of such knowledge? Is there a cosmos beyond human reason, and if so, can we know about it? This is the conundrum of the appearance of reality: How can we distinguish between the truth and a fallacy? This is the difficulty of trying to verify a reality based on any information.

Philosophy of science is a subfield of epistemology (the philosophy of knowledge), which analyzes the nature of science in particular (scientific knowledge). Epistemology is the branch of philosophy that investigates the occurrence of knowledge, its source, its genesis, its limits and techniques, and its reliability. Therefore, on this occasion, we shall study the origins of epistemology in more detail. Man is fundamentally a truth-seeking creature. Man is never happy with what currently exists, but always pursues the genuine truth by inquiring about it. But each of these responses also consistently satisfies individuals. To determine if what is intended here is scientific truth, i.e., truth that can be assessed using scientific methods, he must use a certain test.

The fast increase of information in the modern day does not prevent individuals from pursuing the truth. On the contrary, it encourages individuals to continue to seek truth based on pre-existing hypotheses in order to test a new hypothesis or disprove a prior theory. So that people are now more engaged in performing scientific study to discover answers to all of their problems. Because it is static and not inflexible, it will not end at a single point, but will continue to satisfy man's curiosity about his environment throughout time.

It seems that in the 20th century, in industrialized nations, a new discipline of research, namely management, became hesitant to be accepted as science. This is not typical bar behavior. In addition to other disciplines that had been present for a long time, social science, which was formerly known as sociology, had to struggle for its place. In the era of Auguste Comte and Herbert Spencer, sociology was not yet acknowledged as a science, but Spencer's research could not be questioned: he was well-known as a philosopher, ethicist, biologist, and sociologist, and for the dozens of hefty volumes he wrote, demonstrating his extensive knowledge. It may also be because of the English (Spencer's birthplace and life) because it is not conceivable for the English (Spencer's birthplace and life) to have such a restricted view that the so-called "humanities" are not included in Science.

Similarly, the topic of our discussion today is the science of "management." When Taylor and Fayol began to advance the science of "management," it was not yet considered a science. Even today, in some countries, people are still suspicious and hesitant to teach it alongside philosophy, which, according to scholars, is the oldest science, and other sciences such as natural sciences, exact sciences, doctoral sciences, and so on.

Epistemology that is able to integrate branches of philosophy examines the origin of knowledge. Or it can also be said, epistemology is what is knowledge, how character and truth of knowledge are self-sufficient. As a result, he was in three main principles that became the center of his attention, namely:

1. What are the sources of knowledge, what means does it come from and how can we know it. This is the origins problem of the philosophy of epistemology;
2. What is the character of that knowledge; Is there a world that is beyond human reason and if there is, can we know it? This is the appearance problem of rality; Whether our knowledge is correct (valid); How do we distinguish a truth from a fallacy? This is the problem of trying a truth (verification problems) from the knowledge of something.

LITERATURE REVIEW

1. Understanding Epistemology Etymologically

Greeks episteme and logos are the origin of epistemology. The term episteme refers to knowledge, whereas logos is often used to refer to systematic knowledge. Therefore, one might argue that epistemology is the systematic study of knowledge. J.F. Ferier popularized the phrase in 1854 when he founded two areas of philosophy: epistemology and ontology (on = being, being, what + logos = theory) (theory of what). Briefly, epistemology is one field of philosophy that investigates the topic of the nature of knowing. In other words, epistemology is a branch of philosophy that focuses on acquiring knowledge about knowledge. In this instance, information takes the shape of both old and freshly acquired knowledge via conscious sensory absorption.

In addition, anything obtained passively or outside of awareness, such as inspiration, intuition, wangsit, or revelation (by the prophet). In other words, scientific information is acquired intentionally, actively, and methodically; the process is procedural, methodical, and technical; it is not random; and it concludes with verification or testing of scientific truth. According to Conny Semiawan et al. (2005:157), epistemology is the discipline of philosophy that discusses philosophical issues pertaining to the theory of knowing. Epistemology focuses on the meaning of knowledge in relation to ideas, knowledge sources and standards, knowledge categories, and so on. From a variety of expert viewpoints, it may be deduced in straightforward terms that epistemology is the technique to acquire accurate information.

2. Understanding Science

The term science is derived from the English term sciense. The origin of the term sciense is the Latin word scientia, which implies knowledge. The term scientia comes from the Latin verb scire, which means to study or become knowledgeable. Initially, the etymological definition of science's scope relates to knowledge alone, or knowledge of anything. This idea of science experienced a further extension in meaning, therefore encompassing all systematic knowledge. In German, the term wissenschaft refers to any structured body of knowledge, encompassing natural sciences and human knowledge, however in Indonesian, it is referred to as cultural sciences, which typically include language and literature, aesthetics, history, philosophy, and religion.

According to Suparlan Suhartono's book, Fundamentals of the Philosophy of Science, the philosophy of science is the body of knowledge that strives to attain scientific truth about particular things using certain ways or viewpoints, methodologies, and systems. This science was formed by man because he is insatiably curious in objects, ideas, or minds that question the testimony of his senses, as his senses are frequently believed to betray him. This skepticism of logic is then followed by inquiries such as, "What is something?" Why is anything present? How is it possible? And so on. There will be results for each of these questions: philosophical, causalistic, descriptive-analytic, and normative science.

In terms of significance, scientific knowledge points to at least three things, namely knowledge, actions, and procedures, so long as it is read in the literature. Thus, it may be comprehended when the concept of science as an activity is included. Furthermore, according to Harold H. Titus, many individuals have used the word science to refer to an objective and verified way of acquiring information. This is the dual meaning of the term "science." On closer inspection, however, the idea of science as knowledge, action, or technique is not contradictory. Contrariwise, these three entities form a logical oneness that must coexist. The pursuit of science requires deliberate work that yields systematic knowledge.

3. Scientific Method

The scientific method is a technique that consists of numerous mental acts, labor patterns, technological approaches, and stages for acquiring new information or expanding current knowledge. Method is derived from the Greek terms meta, which means after, and hodos, which means route. Thus, method refers to the actions done in a certain sequence to get right information; it is an ordinance, technique, or route that has been developed and used in the process of gaining knowledge of any sort, whether humanistic, historical, or scientific. Arturo Rosenblueth describes the scientific method as "the approach and criteria used by scientists in the growth and building of their particular field." (methods and procedures used by scientists in the preparation and advancement of a specific field of expertise).

4. Scientific Truth

Definition of Truth, According to scientific standards, scientific truth refers to information that is obvious and definite. Typically, scientific truth is objective. In other words, it comprises a variety of information from many perspectives that are compatible with one another. The topic of truth is especially addressed in epistemology. The existence of truth is inextricably linked to human knowledge (the knowing subject) of things. While there are several sources of information. These sources concurrently act as truth indicators.

The term "truth" may be either tangible or abstract. If the individual is telling the truth, the statement is true. The definition of proposition is the meaning included in a statement or assertion. When the subject asserts that the proposition being evaluated must have traits, attributes, characteristics, relationships, and values, and when this assertion is true.

5. Understanding Islamic Education Management

The language of management is derived from the English word management, which directly translates to management, governance, or governance. In the Indonesian-English dictionary, management is derived from the root term to manage, which implies to arrange, execute, manage, and treat. Marshal in Ike asserts that management is understanding where to go, what obstacles to avoid, what forces to use,

and how to lead your ship and its people most efficiently without wasting time.

While Schermerhorn argues that management is the process of planning, organizing, directing, and utilizing other organizational resources to achieve predetermined organizational goals, I contend that management is the process of achieving organizational goals through planning, organizing, directing, and using other organizational resources. Sondang Palan Siagan further claimed that management is the full process of collaboration between two or more individuals to accomplish set objectives. While education management is the activity of integrating educational resources to be consolidated in order to accomplish defined educational objectives, as well as a process of systematic and comprehensive collaboration to actualize national education. Islamic education management is the practice of managing Islamic educational institutions in an Islamic way by using learning resources and other relevant concerns to effectively and efficiently fulfill the aims of Islamic education.

METHODOLOGY

In selecting the research technique in writing, qualitative data is used since it consists of the expressions of education management idea and scientific thinkers. The strategy used is library research. This study utilizes materials in the form of books and scholarly journals to address research issues.

This investigation seeks to determine the philosophy of education management science. In this research, the data sources consist of books on the knowledge of philosophy, books on Islamic philosophy, books on management within the framework of Islam, and other materials. A document is the data gathering instrument. Data analysis include data gathering, data reduction, data representation, and data inference.

RESULT

The discussion of the actions of researchers will revolve around the scientific technique used. Science thus has a second methodological meaning. In the form of new or extra knowledge about something, outcomes may be obtained by a series of recurring, systematic research or inquiry actions. Consequently, in the previous discussion, scientific comprehension has been defined as knowledge.

As indicated in one of the above definitions, the scientific process does not consist only of observations and experiments. There are other more techniques that may be termed scientific method patterns, including analysis, sketching, categorization, measurement, comparison, and surveying. No one in the literary book expresses a view about the precise number, kind, and order of stages that constitute the scientific process. In accordance with the expanding number of specialized fields, the scientific measurements are becoming more diverse. People sometimes claim that the sort of scientific method used relies on the specific science, particularly in terms of its formal goal.

Based on the steps used in various branches of science, there are at least five steps that can be said to be a general pattern, namely :

a. Problem determination
b. Formulation of provisional conjectures
c. Data collection d. Formulation of conclusions, and
e. Verify results.

Methods in Epistemology

There are five methods in the epistemology of Islamic education, namely: rational, intuitive, dialogical, comparative, and critical (Qomar, 2005). Then the author completes it to six by adding the method of 'ibrah.

- **Rational Method (Manhaj 'Aqli),**
  Rational Method is a technique for acquiring information utilizing truth-acceptable factors or criteria. According to this technique, anything is true if it can be rationally justified, such as ten is more than five. No one is able to dispute this reality on the basis of common sense, since ten is logically more than five. This strategy is utilized to get Islamic education knowledge, particularly a priori knowledge. The mind provides logical solutions to a problem, while the senses provide empirical evidence for these solutions. Islam is justified by the application of reason to gain information, especially Islamic education understanding. Machfudz Ibawi had the audacity to declare that the language of the Qur'an is totally philosophical, despite the fact that it is difficult to comprehend without looking, dissecting, or digging for anything hidden underneath the literal language. As a result, greater logical thought is required in order to achieve knowledge and comprehension of the Quran's content. Because Islamic academics' ideas are deemed inferior to Western theories, they are not generally employed as a foundation for discussion in each subject. Even more intellectually perilous is the fact that Western views have never been questioned while being regarded as conventional and sacrosanct. Using logical approaches, Islamic educational notions created by ancient Islamic intellectuals were also reexamined.

- **The Intuitive**
  In the epistemology of Islamic education, technique is a particular concept. Given the scientific legacy of the West, such approaches were never required for the advancement of science. In contrast, Muslim academics see intuition as a valid means of acquiring information, and as a result, they have become used to using this approach to record the evolution of knowledge. Muhammad Iqbal referred to this intuition as "love" or heart experience. The author himself refers to this strategy as fu'ad/af'idah. According to QS al-Nahl/16: 78. Allah brought you out from your mother's womb in a state of complete ignorance, and He gave you hearing, sight, and a heart so that you would be thankful (Depag RI, 2010: 375). To be in a position of thankfulness, scientific (empirical/sensory) truth and then af'idah (plural of fu'ad) truth, which is referred to as intuitive in this discussion, are required methods of truth finding. In Islamic education, intuitive knowledge has a prominent role.

Currently, Islamic education transforms man into a material object, when the formal object is human capability. Islamic education emphasizes the study of human capacities, based on revelation, rational empowerment, and direct observation (Burga, 2019). In Islamic thought, intuition is not only equated with reason and the senses, but it is seen as superior to both. According to al-Gazhali (2010), al-zawaq (intuition) is superior and more reliable than reason for acquiring information that is sincerely held to be true. This source of knowledge is known as al-nubuwwat, which takes the form of revelation for prophets and inspiration for ordinary people. As an epistemological technique, intuition is neutral. This indicates that it may be utilized to acquire several types of information.

- **Dialogical Method (Manhaj Jadali)**

  The dialogical technique alluded to here is an endeavor to investigate Islamic education knowledge via written works presented as discussions between two or more professionals based on scientifically explicable reasons. This technique has a strong religious foundation. According to Islam and science, the pursuit of answers is a worthy pursuit. In the Quran, events are described as a type of discourse. Developing Islamic education necessitates a debate between Islamic education and human rationality in order to acquire meaningful solutions. This reason will possess keen analytic ability while confronting obstacles. The science of Islamic education must be based on dialogical concepts and empirical experience consisting of facts or data that may be transformed into accurate theories upon which scientific knowledge is founded.

  In order to utilize this strategy, the container may be prepared in a variety of ways, such as by creating discussion partners, establishing a dialogue forum, bringing together two dialogue forums, or by inviting Islamic education specialists. The only difference between the conversation containers is their size, while their goal and function are comparable. All of them are places to investigate Islamic education information derived from the Quran, hadith, and Islamic education practices, and then produce scientific ideas about Islamic education.

  This dialogical method in the epistemology of Islamic education may be applied to a variety of objects, including the provisions of revelation, both those found in the Qur'an and hadith, referred to as normative concepts, the opinions of Islamic education experts, both past and present, referred to as theoretical concepts, and observations of the experiences of carrying out education for Muslims, both past and present, referred to as "empirical concepts." All items exist under the framework of Islam because Islam is separated into two components: Islam as revelation and Islam as culture. Revelation Islam consists of the Quran and hadith, while cultural Islam consists of Muslims' views, experiences, and customs.

- **Comparative Method (Manhaj Muqāran)**

  The comparison technique is the means of knowledge acquisition (in this case knowledge of Islamic education, both fellow Islamic education and Islamic education with other education). This strategy is used to explore benefits or combine knowledge or comprehension in order to get determination from educational challenges. Therefore, this comparative technique remains distinct from comparative education. The comparative method as one of the epistemological methods of Islamic education objects that are diverse to be compared, such as: comparison of fellow Quranic verses about education, between educational verses and educational hadiths, between fellow educational hadiths, between fellow educational thinkers, between fellow Islamic and non-Islamic education experts, between fellow Islamic educational institutions, between Islamic educational institutions.

- **Method of Criticism (Manhaj Naqdi)**

  The approach of critique is an endeavor to learn more about Islamic education by pointing out the flaws in an educational idea or implementation and then proposing alternatives. Therefore, criticism is not motivated by hostility, but by a quirk or a deficiency that must be corrected. In fact, criticism is a time-honored technique in kalam, fiqh, Islamic history, and hadith. Unfortunately, Muslims seldom depend on criticism as a means of expressing their thoughts nowadays. Muhammad Arkoun is a Muslim thinker whose writings include undertones of critique. He challenged the Islamic scholarship's epistemic structure. In actuality, criticism implies a positive endeavor, contrary to the common misconception that it is an insult. And so, Muslims develop an aversion to criticism. Using the approach of critique, one may criticize western beliefs that contradict Islamic education-related passages of revelation.(Qomar, 2005).

- **Method of 'Ibrah**

  Through the study of the history of Islamic education, this technique attempts to investigate Islamic educational philosophy. Incorporating the instructional aspect of history included in the Qur'an. According to QS Joseph/12:111. Indeed, there is a lesson for the clever inside their narratives. (The Qur'an) is not a made-up narrative; instead, it validates the preceding (books), explains everything, and provides direction and kindness to believers (Depag RI 2010). The verse emphasizes the significance of the 'ibrah method in gaining information or finding answers to the issues of Islamic education by way of the Islamic education philosophy. The tales of the past should form the basis of the lesson, so that what is negative from the past may be deleted or abandoned, while what is positive can be accepted and developed as an Islamic education philosophy.

Various Scientific Truths

The first truth relates to the quality of knowledge. What does it mean is that knowledge is :

1) Ordinary knowledge, this kind of knowledge has truth that is subjective, meaning that it is very attached to the subject who knows. This knowledge has the nature of always being right, insofar as the means of acquiring knowledge are normal or there are no deviations.
2) Scientific knowledge, that is, knowledge that has established a distinctive or specific object by applying or a distinctive methodological approach, meaning a methodology that has gained agreement among similar experts. The truth contained in scientific knowledge is relative, meaning that the truth content of the type of scientific knowledge always gets revision, that is, it is always enriched by the latest findings. Thus, truth in scientific knowledge is always updated in accordance with the latest research results and obtaining the approval of similar scientists.
3) Philosophical knowledge, which is a type of knowledge whose approach is through the methodology of philosophical thought, which is fundamental and thorough in nature with analytical, critical, and speculative thinking models. The nature of truth contained in philosophical knowledge is absolute-intersubjective. The point is that the truth value contained in this type of philosophical knowledge is always an opinion that is always attached to the philosophical view of a philosophical thinker and always gets justification from later philosophers who use the same methodology of thinking.
4) Religious knowledge, religious knowledge has a dogmatic nature, meaning that statements in a religion are always approached by certain beliefs so that statements in religious scriptures have truth value in accordance with the beliefs used to understand them.

The second truth relates to the nature or qualities of how or with what methods this information is acquired. Whether he constructs it using common sense, logic, ratio, intuition, or faith. Consequently, the truth value's consequences are likewise consistent with this form of knowledge.

The third truth is the truth value of knowledge that is assigned to the occurrence of knowledge's dependency. This indicates how the connection or relationship between the subject and object determines which one is dominant in constructing the knowledge, topic, or object in question.

Theories of Truth

The debate of truth in the evolution of philosophical thinking started with Plato and continued with Aristotle. Included among the notions of truth that have been institutionalized are:

1) Correspondence theory of truth

Correspondence theory is the first and oldest explanation of truth that differs from Aristotle's theory of knowledge, which asserts that all we know may be returned to the subject's known reality. Or, as Randal and Buchler argue, "A belief is considered "true" if it "corresponds" to a reality.

Correspondent theory employs inductive logic, which is the process of reasoning that proceeds from the particular to the universal. In other words, the ultimate decision is reached based on previously investigated and assessed supporting evidence. For instance, if someone says, "Jakarta is the capital of the Republic of Indonesia," such statement is true since its factual object is Jakarta, which became the capital of the Republic of Indonesia. The assertion that "the capital of the Republic of Indonesia is Bandung" is false since it does not correspond to the facts.

2) **Theory of truth coherence**

Another well-established theory of truth is the notion of truth coherence. Leibniz, Spinoza, Hegel, and Bradley, together with other rationalists, formulated the notion of coherence. A coherence theory is a proposition or the meaning of a knowledge statement that is true if it has a link with the concepts of a true proposition. The theory of coherence employs deductive logic, which is the way of reasoning that proceeds from the general to the specific. For instance, if we believe that "all men will die" is true, then "the fulan is a human creature and the fulan will certainly die" is likewise true.

3) **Pragmatic theory of truth**

Three American philosophers, particularly C.S. Pierce, William James, and John Dewey, developed pragmatic thinking only towards the end of the nineteenth century and the beginning of the twentieth. A pragmatist evaluates the veracity of a proposition based on whether or not it is applicable to real-world situations. In other words, a proposition is true if it or its implications are applicable to human existence. A straightforward illustration of the pragmatic theory of truth is Yadi's desire to work for an oil business due to the large wage. Yadi's pragmatism manifests itself in the fact that he wants to work for the corporation in order to get a large income.

4) **Syntactic theory of truth**

Syntactic theory of truth adherents utilize a statement or grammar to which it is tied. Thus, a statement has true value if it adheres to normal syntactic standards; alternatively, if it does not adhere to the requirements or differs from what is implied, the notion lacks meaning. A normal sentence, for instance, must have a subject and a predicate. If a sentence has no subject, it is deemed non-standard or non-sentence; as with all corruption, this sentence is non-standard since it lacks a subject.

5) **Semantic theory of truth**

A statement has true worth in terms of meaning or significance, according to the notion of semantic truth; this theory is responsible for verifying the proposition in its reference. The analytic philosophy of language embraces the notion of semantic truth, according to which knowledge is deemed true if it has a clear reference and incorrect if it does not.

6) **Theory of logical truth Basically**
This conception of truth is only a product of linguistic misunderstanding, which is a waste. Because the logical degree of what is to be shown true is essentially the same, one complements the other. Consequently, all propositions have the same information and everyone agrees with them. Therefore, if we prove it again, only logical forms are redundant. For example, a circle is a line that is the same distance from the same point, therefore it is a round line. This has already been discussed, since a circle is essentially a line that is the same distance from the same point.

7) **Theory of spiritual truth**
The earliest Muslim philosopher, al-Kindi, initially asserted that God is ultimate truth in Islamic philosophy. He proclaimed God to be the first al-haqqul. The primary truth serves as the foundation for all related truths. Therefore, the validity of a philosophical system depends on whether or not it is logical. The measure of whether or not it will be observed in the arguments that create theoretical conclusions, as well as the role of arguments in philosophy and facts in scientific knowledge, are of utmost importance.

8) **Non-explanatory theory of truth**
This idea was established by proponents of the functionalism ideology, which holds that the actual worth of a statement relies on its role and function.

Nature of Scientific truth

Utilizing regular techniques in the scientific realm, termed scientific methodology, scientific truth is attained. The argument is that every science specifies the kind of object as either concrete or abstract in a rigorous manner. The discussion regarding the item has been detailed in full up front. Aside from this, science builds scientific procedures based on the objects it meets. Truth in science is objective truth, which means that the truth of a theory or higher postulate or paradigm must be substantiated by facts that constitute objective reality.

A fact that is fully independent of the subject's desires. The questioned reality is a reality in the form of a reference or a reality that was first an object in the production of scientific knowledge. Referring to the objective ontological position, truth in science may be broadly categorized as either correspondence truth theory or coherence truth theory. The natural sciences typically need correspondence to be true, since objective evidence is required to prove every claim or assertion. However, it is distinct from the humanities, social sciences, logic, and the mathematical sciences. The basis for these disciplines is based on the principle of truth coherence, which requires consistency and coherence among statements.

Regarding this reality, it is crucial to note that scientific truth must always be the outcome of consensus or convention among scientists in the subject.

Typically, these scientists are academics. Insofar as scientific truth can be preserved, this is the reason why the character of scientific truth is universal. Because the truth of science must always be a convention-agreed-upon fact, the universality of the nature of science is restricted by new inventors or other discoveries whose outcomes reject or contradict prior discoveries. If such a thing exists, a thorough review is required. And if the findings are in fact different, the old truth must be replaced with a new discovery, or the two must coexist with their separate powers over the truth.

CONCLUSION AND SUGGESTION

Conclusion

The author may infer from the above statement that epistemology is a field of philosophy that investigates the nature of knowledge. In other terms, epistemology is the study of how accurate knowledge is acquired. Science has three meanings that complement one another and make up an integrated whole. Science as a process refers to research; science as a technique refers to the scientific method; and science as a result refers to structured knowledge. The link between the three is that science must be grown by human activity, that activity must be conducted in accordance with a certain method, and that methodical action produces systematic knowledge.

The scientific method is a technique consisting of diverse mental acts, labor patterns, technological approaches, and stages for acquiring new information or expanding current knowledge. Since the goal of science is to deduce a systematic interrelationship between facts, the scientific method is willing to use a systematic skeptical approach to seek answers concerning facts. Therefore, research and the scientific process are quite similar, if not identical. With the scientific method, it is simple to answer questions about the discovery of general postulates, such as how far, why it is, if it is true, etc.

In issue are techniques for analysis and synthesis, each of which is equipped with inductive and deductive apparatus. Both are fundamental procedures relevant to all sciences. Thus, the variety of science and the fragments become uniform inside the oneness of the nature of the truth by means of these two approaches. Is the truth coherence, correspondence, or pragmatism? The combination of these three truth qualities constitutes real knowledge of any thing.

As the "connection" between the same subject and object, correspondence theory seems to be dependent on the truth based on the aforementioned three theories of truth. Lastly, pragmatic theory relates object truth to their utility.

Suggestion

In the third theory, pragmatic theory, the author argues that it be utilized to determine scientific truth in the context of time by scientists. Historically, scientific assertions that were formerly thought true may no longer be accurate. When faced with such a difficulty, scientists are pragmatic; as long as a statement is functional and helpful, it is accepted as true; if the statement is no longer of that sort because the advancement of science creates new assertions, it is abandoned. These three ideas are merely the most prominent explanations of what truth is that have been proposed. Thus, for science in general, philosophy

gives recommendations for the right use of research methodologies and truth evaluation standards.

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