The interaction of critical and creative thinking philosophy essay



Modern theory of knowledge was introduced by the famous philosopher Immanuel Kant with his " critical system". Some authors considered once theory of knowledge as a part of philosophy under the term epistemology, however nowadays it has developed to a science on its own – investigating not only areas of knowledge, ways of acquiring knowledge and methods, but also the use of theory of knowledge in teaching, in organizing libraries and many other quite practical implementations.

For me, theory of knowledge is the most useful subject in school, because it gives me the fundamentals to approach any problem, question or challenge in my everyday life. Studying the ways of knowing and the ways of thinking, is a tool in our hands for further expanding and in the same time deepening our knowledge – general and specific.

At the beginning it is important to define exactly what we understand under " critical thinking", what we understand under " creative thinking" and what are the specific skills required in both ways of thinking.

So according to Michael Scriven and Richard Paul's definition:

" Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness. It entails the examination of those structures or elements of thought implicit in https://assignbuster.com/the-interaction-of-critical-and-creative-thinkingphilosophy-essay/ all reasoning: purpose, problem, or question-at-issue, assumptions, concepts, empirical grounding; reasoning leading to conclusions, implications and consequences, objections from alternative viewpoints, and frame of reference."

Main critical thinking skills are analysis, interpretation, inference, explanation and evaluation.

On its turn, creative thinking functions in exploring new ideas, creating new possibilities and generating a multitude of answers that even if incompatible, seems to solve the problem we are interested in.

What does interaction of critical and creative thinking mean? I personally think, this is the productive and harmonic interplay between the two with the aim to achieve more precise, deep and in the same time original results.

To solve a problem, we need to employ both critical and creative thinking. First, we must analyze the problem; then we have to search for possible solutions; next we must choose the best solution and try to implement it, and finally, we have to evaluate the results and the effectiveness of the whole procedure. During this process the two kinds of thinking take part alternating each other constantly. In everyday life, both kinds of thinking most often operate together and they cannot be considered totally independent of each other.

The first example I would like to give is from the medicine – area of knowledge, part of the natural sciences.

The Western mainstream medicine regards the human body generally as a solid body consisting of organs and systems. Usually a medicine is prescribed to cure specific problem in a specific organ. By using critical thinking many medical scientists were improving the diagnostic and treatment of diseases. Until the day when a medicine specialist, Samuel Hahnemann, combined both approaches and formulated the principles of the homeopathy.

Homeopathy comes from Greek. It has two components: homoeo, meaming similar and pathos (suffering). It is a system of therapy based on treating " like with like". The same approach can be found in mainstream medicine. The use of vaccines and antidotes are examples of this. Homeopathy applies this principle more thorough and deeper: if what I am suffering from is like viper's bite, then I must use viper venom as homeopathic treatment, although I have not in fact been bitten by a viper.

Even the "father" of modern Western medicine Hypocrates (468 -377 BC) was discussing the principle that like can be treated with like, however before the work of Samuel Hahnemann (1755-1843) it remained just a principle and only after his tremendous research and analysis the principle developed to a theory and then into an usable practice.

In order to prove his theory Hahneman organized research on himself and his healthy volunteers – he gave doses of different substances and then watched and described the effects in detail. Just for safety reasons, he gave substances which were very dilute, and it is here that Hahnemann had the chance to formulate one of the more puzzling aspects of Homeopathy. The more dilute a homeopathic medicine is, the more effective it is in treating illness.

Homeopathic remedies (also called homeopathics) are a system of medicine based on three principles:

Like cures like

For example, if the symptoms of your cold are similar to poisoning by belladonna, then belladonna would be your homeopathic remedy.

Minimal Dose

All forms consist of an active substance and transport agent – usually water or sugar. The active substance is normally one part to around 1, 000, 000, 000, 000 parts of water.

The Single Remedy

The doctor analyses and prepares a picture of all symptoms, then he has to find one remedy, which will aim all those symptoms and treat them at once

As we analyse the principles of homeopathy cited above, we can clearly see the alternation of both ways of thinking – observation as a way of knowing, then analyzing the found data – critical thinking, then finding a new angle of understanding the same data – creative thinking, next step – formulating a system of tests in order to prove the new way of explanation of the facts – skill of the critical thinking and at the end formulating the new concept – again critical thinking. My second example comes from the area of knowledge – history. The life and work of Jean Francois Champollion (1790-1832) is for me an excellent example which shows how the skills of critical thinking, combined with the ones of creative thinking can lead to a new level of knowledge.

Champollion was born in France in 1790. Until the age of nine he got private lessons, and then he became a student in the Lyceum in Grenoble. Under the influence of his brother who was an archaeologist, he became a passionate student of languages and particularly for Egypt. Even just a student, he presented an essay in which he tried to prove that the Copts language in nowadays Egypt was the same in essence as that used by the ancient Egyptians.

Later he continued his education at the College de France, specializing in Oriental languages. I was astonished only to read some the languages he mastered: Arabic, Chaldean, Chinese, Coptic, Ethiopic, Hebrew, Pahlevi, Persian, Sanskrit, and Syriac.

Aged 32, he wrote his famous " Letter a M. Dacier" and analyzed the hieroglyphic, figurative, ideographic and alphabetic systems of ancient Egypt. He died young and his last work was published by his brother – the great dictionary and grammar of ancient Egypt.

His career was short, but he achieved a lot of things during it. He became famous for his analysis of the signs on the Rosetta Stone. He deciphered the hieroglyphics contained on it, thus establishing the new discipline of Egyptian archaeology. Many scientist before him have been trying to

decipher the hieroglyphics by using traditional critical and logical approach. https://assignbuster.com/the-interaction-of-critical-and-creative-thinkingphilosophy-essay/ Only after he combined both ways of thinking, he reached the new knowledge – he remembered how as a small child he managed to learn reading by himself. He took the Bible and compared the written text with the prayers which have been cited everyday, so he found how words were looking like and afterwards he managed to analyze and find out which sounds were symbolized by which letters.

Many years afterwards he used this creative approach to understand the hieroglyphics – he compared the texts which were on the Rosetta Stone and concluded that they were saying one and the same but in different languages. Then little by little he found the respective words in the three languages by analyzing them – the meanings of the hieroglyphs. So the combination between analytical critical thinking and creative thinking as a matter of fact set the foundation of modern Egyptology.

Critical thinking is applying before all the analytical methods and handling different criteria. As a result we receive a correct estimation and assessment of the issue, with a focus on details and their description and explanation. The facts and conclusions are explained from the point of view of existing paradigm in knowledge and they are arranged by existing rules.

Creative thinking uses the results and achievements of critical thinking, but it puts the logical elements in a totally new pattern and as a result achieves a new perspective to already existing knowledge. This new perspective again is being analyzed critically and processed creatively and so at the end a new level of knowledge is attained. Thus, by applying both critical and creative thinking we arrive at new knowledge.