

**4. “Without application in the world, the value of knowledge is greatly diminished”
Consider this claim with respect to two areas of knowledge**

“Knowledge is of no value unless you put it into practice” Anton Chekhov

It can be argued that knowledge can only be applied when it has a purpose, or a use. The Russian physician and playwright, Anton Chekhov, born in the 19th century believed in this concept. He expressed this, because without application, knowledge may have no impact or effect on our reason or judgement.

Since a young age, I was taught that learning from our mistakes was the biggest form of progress. Therefore no matter what the outcome of the knowledge is, it will lead to some sort of development and personal growth. In other words, it could be argued that it is not the application itself that is valuable but what we learn from it.

Value is often considered as the relative worth, merit or importance. Valuable knowledge is however unique and authentic to the beholder, and thus cannot be defined. Value is personal knowledge, because it is individuals past experiences, that allow them to know what is important in their life. Application of a concept is putting our knowledge to practice, thus allowing the world to fully understand its meaning and repercussion. Application is therefore shared knowledge, because it derives from multiple people exchanging ideas and thoughts. The TOK question then becomes : Without shared knowledge in the world, the value of personal knowledge is greatly diminished.

Looking at different Areas of Knowledge, Arts (English Literature) and Natural Sciences, I will explore the importance of application in the value of knowledge. In English Literature, it could be argued that fiction is a source of knowledge because it educates us and enable us to understand the concepts of the past, present and future. Even though fiction does not necessarily represent reality, it does have hidden value and morals that can be applied to the real world. On the other hand, other books may have different functions such as distraction and will not be applied in the real world. Therefore, to what extent does artistic knowledge lack any practical value ?

In Natural Sciences, scientific research tends to have an extensive and expensive nature. One tends to pursue a research idea only if it has a distinct goal. If the goal is not reached then it will not be applied to the real world. However a scientist may be able to prove certain theories wrong, thus approaching, without ever reaching the fixed goal, and advancing scientific breakthroughs. Therefore, to what extent does scientific knowledge have value before its application ?

In English Literature, there is a wide spectrum of novels, all having different functions and roles in our society. In the novels 1984 and Animal Farm by George Orwell, the reader is shown the repercussions of a totalitarian society. Both these novels inform the readers about this political structure and are therefore valuable as they teach about the past and the future. They are important, because they represent reality and can therefore be applied to the real world. However it could be argued that certain fables that do not represent reality can still teach us morals and lessons that can be applied. For example, the Three Little Pigs teaches us that working hard will be beneficial in the long run. We can see that it is not the story line that is essential, but what can be learned and brought to our every day lives that is important. These two novels and even the fable are filled of practical value, thus making them useful in the real world.

Nevertheless, some novels are written for the enjoyment of the reader. Novels such as Pride and Prejudice by Jane Austen have a distractive function. They may not necessarily teach the reader about certain political structures like 1984 does, but they build imagination and creativity in our minds. Even though the knowledge found in these novels may not be implemented in our every day lives, they still hold a certain value in the expansion of certain ways of knowing. The moral of the storyline, created by the authors helps shape our points of view creating shared knowledge. These novels may also help shape our ethical views. For example, in Pride and Prejudice, Mrs Bennets makes the reader wonder if a woman is more than just the man she marries. This novel seems to be focused on romance, but it still has hidden messages in its subtext. Therefore, any type of novel educates us to a certain extent, and thus has practical value.

Every book is interpreted differently due to our personal knowledge. No one in the world has exactly the same personal experiences, therefore it is impossible for two people to have the same personal knowledge. When reading a book we analyse it through our ways of knowing. In my English Literature class, I use my emotion and memory from past experiences to analyse novels. In Top Girls by Caryl Churchill, I was able to understand the novel, because I used past emotion to place myself in the main characters shoes. After personal analysis, shared knowledge is created through class discussion. Classmates explaining their own ways of knowing, enable me to have a deeper understanding of the novel. Literature is valuable under any circumstance in this case, because it develops an individual in an emotional and intellectual way.

Knowledge in English Literature is obtained through language. Without it, the reader is unable to understand the message that is being transmitted. If one is able to understand the language, they can then move on to the next step being interpreting it emotionally through personal knowledge. This way of knowing is key to understanding the past and the future, but as well moral and lessons that can be used in our every day lives. In 1984, a new shortened language (Newspeak) is created in order to limit what the population of Oceania can express. This shows that language is needed to fully express one thoughts, feelings and emotions. Before one can fully grasp the knowledge that lays within a novel, one must first have access to personal knowledge and language.

Even if novels have different functions they all have practical value that can be applied in the real world. Therefore, artistic knowledge does not lack practical value, because novels educate us in different ways.

The area of natural sciences is based on practice, because a crucial step in the scientific method is testing. Testing is essentially application, because it puts the knowledge gained into practice. Without experimentation scientists cannot move on to the next steps.

For example, we can examine Albert Einstein's theory of general relativity. In 1918, he had predicted the existence of gravitational waves. Gravitational waves being : the ripples in space-time that stem from objects moving throughout the Universe. However it was only a week ago that scientists¹ may have proved this century old theory. Due to expensive nature of scientific research, if the goal is not reached it is not considered valuable. This meaning that even though application was present in the testing the value of knowledge was still diminished.

On the other hand, the scientific method still allows a certain advancement even if the goal is not reached. This process of disproving a theory is when personal knowledge becomes shared knowledge. A scientist must question the theories of others and his own in order to advance in his scientific research. For example, when scientist learn about this theory, they also learn about the universe, like how objects manipulate gravity. The theory itself may not be as important as what we can learn from it. The scientific method is therefore the use of personal knowledge to disclaim what was initially believed to be correct shared knowledge. It is clear that there is value before the application.

¹ Laser Interferometer Gravitational-Wave Observatory (LIGO) Scientific Collaboration.

Natural Sciences is often based on discovery, therefore scientists will only know if it is successful after its been applied. However if we consider the case of Marie-Curie, a polish physicist, it is the lack of application that gave the world value. Marie-Curie died due to a high exposure to radiation, which had yet to be discovered in the 1930's. Her death revolutionised the world of Natural Sciences by saving the lives of millions. If she had properly followed the scientific method, she probably would have discovered the danger that comes along with radiation. She therefore has little time to question what she believed (personal knowledge) to what others believed (shared knowledge). In order to disprove what others believed she would have had to done more experimentation, and would have maybe discovered the dangers of radiation. The use of personal knowledge to contradict the beliefs of shared knowledge, would not have led to a specific goal, but to a better understanding of what is being determined.

The scientific method is long and rigorous, but also essential. Even though a scientist may never arrive to the process of application, the value of knowledge is still present.

In conclusion, every Area of Knowledge is unique. It is therefore difficult to consider this claim as a whole . In English literature, practical value is always present in fiction, however it educates in different ways. Some novels may explain politics, while others explain morals, nevertheless they all can be applied to the real world. In Natural sciences, value is gained before and after the application. Value is gained when one reaches his goal through the scientific method, but also when a scientist disproves other theories.

In both of these Areas of Knowledge, it is the interaction of personal and shared knowledge that allows the scientist/reader to understand the depth of what he or she is doing. Without this interaction, the value of knowledge is greatly diminished