

# Effects of science on changing knowledge



**ASSIGN  
BUSTER**

*“ That which is accepted as knowledge today is sometimes discarded tomorrow.” Consider knowledge issues raised by this statement in two areas of knowledge.*

- Rhumer Culmer

Knowledge itself is “ facts, information and skills acquired by a person through experience or education” (Merriam-Webster). It is the understanding of any given subject matter and can be understood either practically or rationally. Knowledge can be broken up into numerous hypotheses and theories due to different beliefs people may have. These hypotheses can be *proven* to be true as they are justified logically through experiments or observation. However, others can be considered to be unjustified for a certain amount of time. There is a constant change in knowledge that is accepted because the view that people have on the world is never written in stone. The way people see the world and the things in it changes with time, as they change as a person or their environment changes as well.

The reason knowledge can be accepted today and can be discarded tomorrow is because society is mechanized at every moment. Somewhere in the world, a new discovery is taking place, leading to new information on subject matter. The use of the word *discarded* in the statement given does not necessarily mean that all previous knowledge is thrown away and an entirely new idea is accepted, but it actually explains the idea of evolution and the world moving forward as a society. Evolution is the idea that the views on the world as we see it “ may be tested and retested by future observations” (Wikipedia). As technology becomes more mechanized and gaining information is facilitated, we are able to understand more. This not

only happens because of technological advances, but also because of worldwide social trends as well as new discoveries being made.

Because of this a knowledge issue can be created; since some knowledge is discarded *tomorrow*, or what could be the near future, does this mean that the knowledge what we currently possess will always eventually be proven incorrect? New discoveries are constantly being made specifically in two areas of knowledge - natural/human sciences and history. Historians make new discoveries continuously, which is known as *historical revisionism*. This means that what we know from history now is not necessarily always wrong; it is just open to review. The idea of historical revisionism essentially shows that "constant revision of history is part of the normal scholarly process of writing history" (Wikipedia). As history is not complete, it is always modified to change truths in order to fit modern society. Therefore, this emphasizes the idea that instead of all knowledge being rejected because it is wrong, it is actually still accepted as the truth that has been modified due to new information, thus creating a better truth. Nevertheless, just because everything is open to modification, this does not mean that everything is right at the moment. This shows that we must never fully believe what has been given to us as fact because there is always something more to be added which can end up changing our view on the subject matter.

Knowledge is also constantly altered in another area of knowledge: natural and human sciences. Scientific discoveries that create the knowledge that we accept are made from experiments and observations. These experiments are done with the use of scientific methodology, which is defined as "principles and procedures for the systematic pursuit of knowledge involving

<https://assignbuster.com/effects-of-science-on-changing-knowledge/>

the recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of hypotheses” (Merriam-Webster). Scientific methodology has become more accurate over time due to advances in technology, thus affecting what is accepted and what is discarded. A good example of this is when scientists found a direct link between people smoking cigarettes and developing lung cancer. In the past, lung cancer was actually considered an exceptionally rare disease. Therefore, the fact that was accepted then was that there was no link to smoking and getting the disease. However, in the 1950s, “evidence linking cigarette smoking with lung cancer began to accumulate” (Bastian, 2008), showing that the fact that was accepted before was discarded by some people as they believed that there was now a connection between cigarettes and lung cancer. Scientific methodology even proved that there was a relationship between the two; “...study, carried out in Britain between 1951 and 1994, revealed that the death rate for smokers from lung cancer was about three times that of non-smokers from men over 35” (Bastian, 2008). Even though this experiment clearly showed a link between the two variables, some people still accepted that there was no way smoking cigarettes would at some point make you develop lung cancer. This example questions our knowledge issue as well as the statement given because we now see that knowledge given today and knowledge that is discarded tomorrow is not only done because of facts but also in the end it is a person’s choice what they want to believe in. It depends on the people themselves: in the end, there is no way for anyone to be forced to discard any knowledge that they possess or accept anything that they do not want to.

Medical advances also have been a result of discarded knowledge that was previously accepted. An example of this is the medical advances over the past 25+ years or so with heart disease. In the past, it was accepted that “heart attacks, called infarcts, were [big] and the damage to heart muscle was often catastrophic, leading eventually to heart failure and death” (Cox, 2009). The only *cure* for a heart attack was putting a patient into a dark room and giving them pain medication and medicine to “prevent dangerous irregular heartbeats” (Cox, 2009). This method was not successful all the time because the rate of death from this disease was still high. Both doctors and patients thought there was nothing they could do and accepted it. This accepted fact was discarded in the 2000s because there were new discoveries. Finding new drugs, such as Lipitor, for heart disease “are now routinely used to slow the progression of atherosclerosis...”(Cox, 2009), which is plaque that can cause heart attacks. This example shows that the increase in technology and new discoveries helps improve the knowledge that we have accepted in the past, or even change our knowledge for the better.

The use of the word *accepted* in the statement implies that there is something or someone influencing what is accepted by society, and which is denied. Whatever is accepted by society is called the truth. This brings in the idea of social factors affecting what people believe in. Nowadays, people are under the influence of way too many people. For example, celebrities have more influence on people than they should. If they say one thing is the right thing to do, then most people follow this idea. Proof of this is the changing trends in clothing. Celebrities can wear one thing and suddenly most people

are wearing the same thing, if not something similar because they think it looks good. This shows that *today* or better yet, in the present, the ideas are accepted. However *tomorrow*, or in the future, the trends can be discarded. This happens if a different celebrity wears something else. The public then think whatever they were wearing before is no longer acceptable, therefore they must move on with the world.

Another example of this is a person's view on the world from when they were younger to when they become older. For instance, as a child we are taught that the opposite sex is annoying, strange and can spread a fictional disease, sometimes called *cooties*. As children we all accepted this as common fact and dare not test the theory to be incorrect. However, with the test of time, or aging, we start to view the opposite sex as attractive in certain ways. Therefore, we end up discarding what we thought was pure fact and knowledge as a child. There is proof of this because there are males and females getting married, starting families and having serious relationships worldwide.

Things that are currently accepted as knowledge are easily open to be discarded in the future. Nothing is permanent because what we believe constantly changes. This is due to technology and research on different subject matter being furthered. However, if any piece of knowledge is accepted or discarded entirely depends on the person. There are many cases to show that generally, yes, knowledge has been accepted and discarded throughout time, but in the end it is always up to a single person to determine if they want to accept a piece of knowledge or to discard a piece of knowledge because it is their belief. People's beliefs change over time

<https://assignbuster.com/effects-of-science-on-changing-knowledge/>

because the world around us is constantly changing and there is no way to stop that, thus there will be a large number of ideas that will be accepted and discarded in society in the future.

## Works Cited

1. Bastian, Sue. " Chapter 10: Natural Science." *Pearson Baccalaureate: Theory of Knowledge* . N. p.: Pearson Education Limited, 2008. 172-80. Print.
2. " Scientific Method." *Merriam-Webster* . Merriam-Webster, n. d. Web. 07 Jan. 2014.
3. Cox, Lauren. " The Top 10 Medical Advances of the Decade." *The Top 10 Medical Advances of the Decade* . MedPage Today, 17 Dec. 2009. Web. 06 Jan. 2014.
4. " Definition of Knowledge in English." *Knowledge: Definition of Knowledge in Oxford Dictionary (British & World English)* . Copyright © 2013 Oxford University Press., n. d. Web. 08 Jan. 2014.
5. " Historical Revisionism." *Wikipedia* . Wikimedia Foundation, 27 Dec. 2013. Web. 05 Jan. 2014.