

“The production of knowledge is always a collaborative task and never solely a product of the individual.”

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Within the concept of knowledge there lies both shared and personal knowledge. Shared knowledge puts an emphasis on the “we,” whereas personal knowledge highlights the use of “I.” Shared knowledge can be recognized as collaborative work, as it resides within more than one individual (Dunn). This knowledge is fluid and it can be corrected by anyone in society. Personal knowledge sits within just one individual, it can be thought of as an emotion. However, personal knowledge is developed into shared knowledge as soon as it is expressed to another individual (Dunn). It is difficult to distinguish the time when individuality becomes collaboration. Individual thought is something that stays contains within one’s mind, but once that thought is expressed to anyone else it can be furthered into a collaborative idea. When these individual thoughts come together they develop into a better concept. To ensure that the investigation of the guiding prompt is well developed the question of “is collaboration necessary to produce credible knowledge?” can be asked. Knowledge will always be a collaborative task, as every idea stems from another. To look further into this topic the areas of knowledge of art and science can be considered. Though they will provide a full perspective, they will lend support of the idea that collaborative tasks exist based off of multiple individual thoughts.

In order to further this argument, art is an area of knowledge that can help explore the production of knowledge as being a result of a collaborative task. The question of “How does subjectivity affect the concept of collaboration?” can be developed out of the main guiding question to help us better understand specifically the AOK of art. Often in history class we look at artwork in order to further understand a

certain perspective that is being discussed in the content. One specific piece we studied during history was *American Progress*. At first glance one can understand that the piece shows an angel crossing a field. With context and information provided by the teacher we were able to learn that this piece was created by John Gast in 1872, a time when the concept of “manifest destiny” was becoming popular (Sandweiss). Gast painted this on commission for George Crofutt, who was recognized for his books about western travels. With this information the symbolism of the light and dark values, railroads and wagons, and the different types of people seen can be better understood (Sandweiss). Art has the ability to express an individual thought, but the understanding of that thought comes from both the artist and viewer.

The initial reaction to a piece is much different than the reaction that is obtained after proper historical and cultural context are provided to the viewer. Therefore, the full understanding of the piece develops from a collaboration of teacher and student knowledge. Using this specific example one can see that the subjectivity of art lends it to be difficult to understand the intended meaning of the piece. Using *American Progress* it is easy to see how the piece’s meaning is enhanced with the historical and cultural context that was provided by the teacher, leading to the conclusion that collaboration produces credible knowledge. Subjectivity will indeed affect the personal, individual knowledge of the viewer. Though by collaboration with others it clearly provides a more credible understanding of that knowledge. Therefore within the AOK of art one can see that there is evidence of multiple individual thoughts producing credible knowledge.

Cubism, an art movement in the early twentieth century, was pioneered by a man named Pablo Picasso (Rewald). Picasso was credited with this new style of art, which strays from the traditional techniques of perspective and foreshortening (Rewald). Cubism took its course through many artists and allowed them to demonstrate their individual thought in a new and exciting art form. The art style later developed into both analytic and synthetic cubism, both of which had their own respective techniques involved (Rewald). This production of knowledge, the creation of cubist art, is a perfect example of an individual idea becoming a shared form of knowledge. Once Picasso allowed this knowledge to become shared it developed into a much larger movement in which other artists participated in. It is clear that the production of Cubism came from the individual thought of Picasso, however as it was further developed by the participation of other artists. The development of Cubism can be considered collaborative knowledge, which was what gave way for it to become a more developed art style.

The AOK of science can be studied to see how the production of knowledge is a result of a collaborative task. Within this AOK the question of “Does credible knowledge appear more often due to technological developments?” can be considered, as science is an area where technology has completely changed its set up. Technology has helped further develop certain ideas and allowed for collaboration to become essential when developing credible knowledge. Looking at DNA James Watson and Francis Crick are both credited with its discovery in the 1950's. However, DNA was first identified in the late 1860's by a Swiss chemist named Friedrich Miescher (Pray). Miescher discovered the nuclein, later referred to as the deoxyribonucleic acid in 1869 though he was not

mentioned much as his discovery was claimed to be before its time. With the accumulation of other evidence Watson and Crick were able to put together the concept of the double helix and DNA. As a result, their work is still being utilized today and provides evidence that collaboration is necessary to produce credible knowledge. In order for science to become credible it must be verified multiple times, which can be done through various forms of testing. This furthers the idea that the production of knowledge is crafted through the collaboration of ideas. In addition it was evident that time and advancements in technology allowed for scientific collaboration to produce credible knowledge.

There are instances in science where individual knowledge is the sole source of a production of knowledge, however this knowledge lacks credibility as it was only tested by one individual. Mendel's Law of Independent Assortment states that the presence of an allele of one of the genes in a gamete has no influence over which allele of another gene is present ("3.4 Inheritance."). Mendel discovered this in 1865 during his studies with pea plants and their genetics. To this day Mendel is still credited with his work done in laws of inheritance and his observations are still being taught. Mendel worked alone on this discovery and his individual perspective created his own definition of verification. Mendel actually got lucky with his discover as it is only applicable when the genes are unlinked, if the genes are linked then the law of independent assortment does not hold true. His experiment was later proven partially true by other scientist who continued to assess the validity within his theory ("3.4 Inheritance."). It is evident that Mendel had independent thought that was able to create a partially valid theory,

however with the collaboration of more ideas Mendel's Law of Independent Assortment was able to become more reliable and accepted.

The production of knowledge, that is valid and credible, is always the result of collaborative ideas. Collaboration allows for multiple individual thoughts to merge together and create something that is valid and applicable to a wide range of people. As seen through the exploration of the AOK of art it is evident that the accumulation of artistic techniques and ideas allows for the development of greater art to be produced. Art, even with its subjectivity, allows for the viewer to better understand the subject at hand. Science is another AOK that provides another example of why collaboration lends to credible knowledge. This AOK is constantly changing, but this change is due to the drive of scientist who want the most up to date information available, meaning that collaboration is necessary to obtain this. It is obvious within both these AOK's that there are times in which an individual produces knowledge, however that knowledge is further developed by collaborative ideas. Individual knowledge has the potential to be limited, whereas collaboration provides validification of evidence. It is important to remember that concepts of validity, reliability, and interpretation are essential when determining the strength of knowledge that is produced. The concepts of validity and reliability are best met through the production of knowledge, which develops from a collaborative effort.

## Bibliography

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