IB TOK ESSAY SAMPLE

WRITING METIER

TITLE

IS THE POWER OF KNOWLEDGE DETERMINED BY THE WAY IN WHICH THE KNOWLEDGE IS CONVEYED?

Is the power of knowledge determined by the way in which the knowledge is conveyed? Discuss with reference to mathematics and art.

Introduction:

It is given that knowledge is powerful, but its power lies not only in what one knows but also in how it is passed along. The act of communicating knowledge in the Theory of Knowledge framework is defined as the medium or method by which knowledge is transmitted, whether through symbols, language, or art. That is important because knowledge can influence or even generate change, and it can be enhanced or hindered by how it is delivered to its target audience. This contrast is portrayed in mathematics and art.

The study of mathematics, which is based on logical reasoning, numbers, and abstract formations, communicates knowledge with accuracy and generality. It is clear that enabling knowledge to cut across cultural barriers and spearhead technological advancement. However, art is a means of expression through creative visual, auditory, or performance art. It is a message of meaning and emotion that shapes outlooks and values in a highly subjective, culturally specific manner. These two fields of knowledge show how knowledge is presented, not only shaping its accessibility but also the type of difference it produces for people and societies.

This essay argues that the power of knowledge depends on its mode of delivery: mathematics demonstrates its precision and universality, whereas art reveals its transformative power through emotional and interpretive expression.

Mathematics:

There is a claim that the manner in which the knowledge of mathematics is taught is what makes it powerful. Mathematics has acquired considerable authority due to the accuracy of its communication. When knowledge is symbolically conveyed through models, symbols, and evidence, it becomes universally powerful. The use of cryptography in digital security is a good example[1]. Sensitive information can even be transferred across borders and cultures, since mathematical knowledge is transmitted via algorithms such as RSA or elliptic curve encryption. This knowledge is not powerful in its abstract concept of prime numbers or modular arithmetic, but in how these ideas can be expressed in coded systems that can be applied universally. The mathematics is again in terms of TOK, the Area of Knowledge, and it depends on reason as a

[1] IBM. “What Is Cryptography?” IBM Think, IBM, https://www.ibm.com/think/topics/cryptography

Way of Knowing, and the organized transfer of knowledge is the way to make maximum use of this knowledge. Knowledge of number theory is theoretical without accurate communication; it is one of the foundations of modern digital life. This shows that the strength of mathematical knowledge can not be separated from the method of communication.

Mathematical knowledge may become powerless despite the accuracy of expression. However, mathematical knowledge does not necessarily equip one to transfer it. Interpretation and context are also a part of the strength of knowledge. The example of the predictive algorithms in policing, including the "predictive crime mapping[2]," should be considered. Such systems are based on mathematical models presented in statistical detail; however, their strength has been questioned because data interpretation is often biased by what already exists in society. Its mathematics is presented transparently, but its use can reinforce inequality rather than strengthen communities.

In this case, the AoK of mathematics intersects with the AoK of human sciences, demonstrating that reason cannot be applied alone, without the WoKs of ethics and language, to put meaning in its context. The example shows how a clear presentation of mathematical knowledge can be undermined or distorted, even when its meaning is misunderstood or when ethical concerns are disregarded.

Examples put together demonstrate that although the power of knowledge can be enhanced by the means of conveyance, by means of exact symbols and models, conveyance alone is not the determinant of the power of knowledge. Cryptography shows the power of mathematical expertise in transforming structured communication, and predictive policing shows the same clarity to become weak, even harmful, when it is not read and interpreted in context.

According to TOK terms, conveyance is dialectically related to power: it can increase potential, yet the practical effect of knowledge depends on its interpretation and application within broader social constructs. Mathematics thus demonstrates the strength and weakness of the assertion that, though the mode of transmission of knowledge is essential, it is not alone in the influence of its potency.

Art:

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[2] Bowers, Kate J., Shane D. Johnson, and Ken Pease. “Prospective Hot-Spotting: The Future of Crime Mapping?” British Journal of Criminology, vol. 44, no. 5, 2004, pp. 641–658.

There is a claim that the power of artistic knowledge depends on the mode of its transmission. Art owes much of its strength to the medium of its expression. Such contrasts with mathematics, where knowledge is expressed in symbols and logical accuracy, the art language uses sensual and emotional channels of visual images, performance, and sound. The conveyance itself constructs the meaning and impression of the knowledge. Indicatively, Guernica by Picasso[3] conveys knowledge of the atrocities of war not through statistics or historical narratives, but through fragmented forms, distorted bodies, and stark monochrome. What is so powerful about the painting is in the manner of its presentation: the visual disorder and symbolism produce an emotional reaction that would not be possible using pure facts.

The art in the TOK terms, as an Area of Knowledge, is heavily grounded in sense perception and emotion as Ways of Knowing, and how knowledge can be rendered through these modes defines the extent to which it can be transformed. The wisdom, the savagery of war, which is inherent in Guernica, is practical just because of the way of its delivery. Therefore, when it comes to art, the transfer of knowledge is not peripheral to the capacity to influence viewpoints and shared memory.

A counterclaim also exists that artistic knowledge may have power, no matter what may be its channel of transmission. However, the strength of the creative expertise does not necessarily depend on the way in which it is expressed, but on the preconditions and perception of the reader. The simple act of conveying does not justify empowerment; meaning is created through the interaction between the artwork and viewers. For example, native oral histories tend to transmit knowledge through stories, songs, and ritual. The strength of the knowledge lies in its cultural meaning and audience interpretation, even in cases of repetitive or straightforward conveyance. A song that has endured for several generations might not rely on complex artistic methods, but it has enormous power because of the values and identity it conveys.

Likewise, Fountain, Duchamp's urinal, introduced knowledge in an unconventional, perhaps minimal, fashion[4]. Its strength was not in the conveyance itself but in its interpretive context: it was provocative of what it is to be art and knowledge. This demonstrates, in terms of TOK, that the AoK of art intersects with language and reason, and that the WoK of interpretation becomes

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[3] Rick Steves. “Picasso’s ‘Guernica’.” Rick Steves’ Travel Blog, 27 Aug. 2021, blog.ricksteves.com/blog/picassos-guernica/.

[4] Grovier, Kelly. “The Urinal That Changed How We Think.” BBC Culture, 10 Apr. 2017, https://www.bbc.com/culture/article/20170410-the-urinal-that-changed-how-we-think
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as significant as conveyance. The influence of knowledge concerns cultural structures and the audience's interaction, rather than the medium of communication.

These instances demonstrate that the issue of conveyance, as well as the power of knowledge, is complicated in art. Guernica shows that the manner of knowledge expression, namely, visual symbolism and emotional appeal, can amplify the impact of knowledge about war and turn it into something visceral and memorable. But the Indigenous oral traditions and the Fountain by Duchamp demonstrate that knowledge can hold or even acquire power regardless of its mode of transmission, since interpretation and cultural context can decisively shape it. As Tom can say in terms of TOK, this implies that although conveyance plays a significant role in defining the strength of knowledge in art, it is not the only one. Conveyance, audience interpretation, and cultural structures ultimately interact to create an empowering, challenging, or transformative effect on artistic knowledge.

Another way in which art brings out the dialectical nature of the title is through its own dialectical nature. On the one hand, knowledge can be delivered through sensual and emotional channels of expression, creating a more accessible and impactful body of knowledge than abstract reasoning alone. Conversely, the conveyance may be vague, and most people can arrive at their own interpretation of the message, thereby blurring or distorting the intended meaning. The street art by Banksy, for example, conveys a message about consumerism and inequality through the dramatic contrasts in the open areas. It is powerful because it is accessible to anyone passing by and can interact with the message. However, there are instances when the same works are commodified and sold in galleries, losing their original context and thereby their power. This shows that conveyance relates to the audience and context to determine the power of knowledge.

Conclusion:

To sum up, the impressive force of knowledge is directly dependent on the mode of its transfer, but mathematics and art are not able to prove this in a plain and unconditioned way. Mathematics demonstrates the power of precision and universality in conveying, as in cryptography or pandemic modelling, but also fails to be clear when there is no interpretation or moral context. Art, in turn, demonstrates how the sensory and emotional delivery of knowledge can enhance its influence, as in the case of Guernica by Picasso or street art by Banksy, and also shows that meaning frequently relies on cultural context and audience interpretation. Regarding TOK terms, both Areas of Knowledge emphasize the interaction of both Ways of

Knowing, such as reason, emotion, sense perception, and language, with the medium of communication. Finally, the title also asks us to perceive conveyance not as the sole determinant of the power of knowledge, but as part of an ongoing relationship among medium, context, and interpretation.

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