

# TOK MAY 2013 – STUDENT GUIDANCE

## UNPACKING THE ESSAY QUESTIONS

*The following guidance is not intended to be prescriptive as there are many ways to approach TOK essay questions. However it will get you thinking about the knowledge issues / questions involved and the possible content. (RGT October 2912)*

### **(1) In what ways may disagreement aid the pursuit of knowledge in the natural and human sciences.**

This question has a clear focus for discussion.....*disagreement*. It also distinguishes between the natural and human sciences, implying that there are differences which the student is expected to explore. The pursuit of knowledge clearly refers to the scientific process and the roles of the WoKs within this.

Disagreement may be professional leading to a possible knowledge issue:

*To what extent does the 'normal' scientific process depend on / respond to professional disagreement.*

To develop this you would need to explore the nature of the inductive 'scientific method' in both the natural and human sciences and give examples of the ways in which challenges / disagreements from other scientists have taken knowledge forward.

'Science is the only genuine permanent revolution in human affairs, since it is committed to challenging the findings of its forebears' (Daniel Bell 1919 -)

Scientists continually challenge each other over possible weaknesses in their experiments, e.g.: the observer effect; confirmation bias; measurement problems; inductive reasoning incorrectly moving from the observed particular to the unobserved general. Falsification is a vital check on scientific accuracy. It is because the scientific method has greater perceived weaknesses in the human sciences than in the natural sciences that the former is often referred to as 'soft' and the latter as 'hard'.

However disagreement may be due to wider attitudes across society leading to another possible knowledge issue:

*Is the focus of scientific progress to challenge established ideas across society?*

Sciences tend to advance through 'scientific revolutions' (Kuhn) breaking down established 'paradigms'. In both the natural and human sciences you would need to explore examples of where disagreement between established attitudes across society, and evolving scientific ideas, have boosted the pursuit of knowledge. A possible conclusion might be your views on the importance of disagreement in the sciences.

**(2) 'Only seeing general patterns can give us knowledge. Only seeing particular examples can give us understanding'. To what extent do you agree with these assertions?**

This essay requires a continual consideration of arguments and counter arguments with a personal conclusion focused on the 'extent' to which you agree in different contexts. It poses important knowledge issues, e.g.:

*Are the processes through which we understand knowledge different from the processes of obtaining knowledge?*

*To what extent can we understand knowledge in the abstract?*

*Do our senses require patterns to give us knowledge?*

You would need to explore the extent to which we use the range of WOKs to obtain knowledge. You should then consider how we establish a level of understanding from this knowledge; an important consideration is the difference between 'absolute' and 'relative' truth (correspondence theory; coherence theory; pragmatic theory). It may be through personal experience or wider examples but in the last resort it is often from emotion / intuition.

This essay title gives a lot of openings to explore the roles of the WOKs and to develop the 'knower's perspective' in relation to examples. You would need to discuss the statement within the contexts of two or three AOKs. The natural sciences do not follow the statement; they use the inductive scientific method which moves from the particular example of the experiment to wider general patterns. It could be argued that the human sciences are more in line with the statement.

**(3) 'The possession of knowledge carries an ethical responsibility'. Evaluate this claim.**

This essay should be approached as a straightforward discussion essay leaving your overall personal points of view until the conclusion. This title requires you to explore the importance of our own ethical values in our processing of knowledge. It poses interesting knowledge issues, e.g.:

*To what extent do our ethical values filter our acquisition of knowledge and influence our use of it?*

*In the use of knowledge is ethical responsibility the most important consideration?*

A good essay will briefly refer to theory / issues in ethics so that ethical responsibility is defined / clarified, e.g. moral relativism; self-interest theory; duty ethics (Kant); religious ethics; utilitarianism.

You would need to explore the ways in which our ethical values from our family, religion and the wider society, influence the knowledge we obtain from the WoKs. This is rich ground for developing the 'knower's perspective'.

You would then need to evaluate the statement in the context of several AOKs. The natural sciences should be an essential choice as much research and knowledge

involves ethical issues. History would be another good choice as historical research often involves ethical issues.

You should consider both historical and current examples of where at the personal, family, national, international levels knowledge has led to ethical evaluation and controversy, e.g. genetic engineering; GM foods; nuclear weapons.

- (4) The traditional TOK diagram indicates four ways of knowing. Propose the inclusion of a fifth way of knowing selected from *intuition*, *memory* or *imagination* and explore the knowledge issues it may raise in two areas of knowledge.**

The limiting to four WOKs within the TOK specifications has been much criticised and is likely to be amended in the new specs. for those starting in 2013. *Intuition* is the most discussed additional WOK because although it is currently incorporated into *emotion* quite often the four TOK WOKs fail to give us a convincing answer and so we fall back upon our intuition, which is often based upon our memory of previous situations or our imagination. It is therefore recommended that if you choose this title you should select *intuition*.

The nature of intuition needs to be explored as it has a number of types: core; subject specific; social; natural versus educated intuition. A possible general knowledge issue is:

*To what extent would a fifth WoK (intuition, memory or imagination) enhance the process through which we obtain knowledge?*

This issue needs to be explored through reference to the four TOK WOKs using suitable examples.

The choice of two AOKs needs to be carefully considered in relation to the relevant examples you may have. Two very contrasting AOKs would be the natural sciences plus either the arts or ethics.

Possible knowledge issues in the natural sciences:

- *Is expert intuition more reliable than natural intuition?*
- *Does intuition create an obstacle to scientific understanding because many scientific ideas are contrary to our ordinary ways of thinking?*
- *Should intuition only be accepted if backed up by another source of knowledge, especially reason, and / or experience?*

Possible knowledge issues in ethics:

- *Can we use intuition to assess right and wrong as different people at different times will have different intuitions?*
- *Does changing 'social intuition' undermine the development of reliable ethical ideas?*

Possible knowledge issues in the arts:

- *To what extent should artistic quality be based upon intuition?*
- *As people have conflicting intuitions is artistic value primarily subjective?*

**(5) 'That which can be asserted without evidence can be dismissed without evidence'. (Christopher Hitchens). Do you agree?**

In approaching this question you must argue for or against the statement but you can say that the context will alter the extent to which you agree / disagree. This statement is at the heart of many science versus religious controversies. It is also an important issue in evaluating the arts and in natural science theories being seen as more reliable than those in the human sciences. Knowledge issues include:

*To what extent is it necessary to have evidence to be able to accept knowledge / ideas?*

*In our acceptance of knowledge, what are the relative importance of verifiable facts, emotional response, our overall beliefs and practical utility?*

You should consider some of the theories related to 'truth': correspondence theory; coherence theory; pragmatic theory. You would need to firstly explore the statement in relation to the four WOKS; clearly reason is the WOK most focused on the need for evidence whereas emotion / intuition does not. You would need to develop your viewpoint through suitable examples.

You would then need to move on to developing your arguments for or against in several contrasting AOKs. The sciences, religion, the arts or ethics could all be developed. In the natural sciences the scientific method is used to establish knowledge; this always requires measurable evidence. In the arts emotion is an important basis for evaluation. In religion *faith* is belief held with strong emotional commitment even though Sigmund Freud said it is 'the believing of propositions upon insufficient evidence'. Given the power of religion worldwide, it would be very unwise to say that religious ideas can be dismissed on lack of evidence.

**(6) Can we know when to trust our emotions in the pursuit of knowledge? Consider History and one other area of knowledge.**

As it is often difficult to interpret language, be sure of our senses or come to a reasoned judgement, we often fall back upon our emotion / intuition. This title poses an important knowledge issue:

*Does the reliability of emotion as a WOK depend on corroboration from other WOKs?*

You would need to explore aspects of emotion: emotions as a source of knowledge; emotions as an obstacle to knowledge; the nature of intuition; the James-Lange theory. There are big openings here for the knower's perspective to be developed in relation to personal experience and IB subjects being studied. You need to explore a range of contexts.

Why does the question want you to use History as one of your two AOKs? Modern historiography encourages research from a wide variety of sources and perspectives to try to minimise bias which may be emotion based. Good contrasting AOKs would be religion or the arts, where emotion is a very important WOK.