

## THEORY OF KNOWLEDGE

In order to secure success for their candidates, schools are strongly recommended to ensure that this report is read in detail by all TOK teachers, and the Diploma Programme Coordinator. Teachers are also once again directed towards the IB Publication “Understanding Knowledge Issues” (on the OCC) which provides clarification of the central concept of a ‘knowledge issue’. The term ‘knowledge issue’ is still in use for the remaining two sessions on the extant TOK programme – namely for candidates in May 2014 and November 2014.

The new TOK programme, starting with candidates for the May 2015 session, refers to ‘knowledge questions’ instead of ‘knowledge issues’, and further clarification on this change in terminology can be found in the new subject guide and teacher support material (also on the OCC).

### Overall Grade Boundaries

Boundaries for this session were maintained as they were for the May 2013 session.

Grade	E	D	C	B	A
Mark range	0 - 16	17 – 27	28 - 36	37 – 46	47 - 60

### Statistical Summary

	November 2012	<b>November 2013</b>	% change
<b>English</b>	4028	<b>4180</b>	3.78
<b>French</b>	2	<b>0</b>	-100.00
<b>Spanish</b>	1835	<b>2209</b>	20.38
<b>German</b>	1	<b>0</b>	-100.00
<b>Chinese</b>	28	<b>40</b>	42.86
<b>Total Candidates</b>	5894	<b>6429</b>	9.08

## The essay

### Component Grade Boundaries

As a result of the boundary-setting exercise undertaken by the senior examining team at the grade award meeting, it was decided to maintain grade boundaries in the same places as they were set for the preceding May 2013 session.

Grade	E	D	C	B	A
Mark range	0-8	9-15	16-21	22-28	29-40

## Examiners

Thanks are extended to 37 examiners who assessed TOK essays this session – whose individual contributions form the basis for this part of the subject report. Many of these examiners are quoted directly in the pages that follow. The comments in a document such as this tend to focus on weaknesses of assessed work, but the successes that are observed each session always deserve acknowledgement. One assessor described his reactions to his examining experience this session as follows: “As always, this was an interesting learning experience. I have admiration for the efforts on the parts of both candidates and teachers as one can see from the majority of the discussions there is a great desire to do their best and attempt to fulfil the expectations of Theory of Knowledge”. Another noted: “Overall, another good marking session. No matter how many times marking TOK I find it great for my own thinking and analytical processes”. A further examiner noted enthusiastically: “Some candidates exhibit an astonishing engagement with complex issues of knowledge construction, depth of scholarship and academic flair, as well as a remarkable maturity in critical thinking.”

Teachers who wish to become examiners can visit <http://www.ibo.org/informationfor/examiners/> for more information (note that teachers must have at least two years experience of teaching TOK before examining). It is often the case that teachers find examining helpful both in terms of their own understanding of the programme and for the insight afforded with respect to the strengths and weaknesses of their own candidates.

### Examiner preparation notes

Examiners once again generally welcomed the provision of preparation notes – particularly in indicating in advance the range of possible responses that candidates might make to the prescribed titles. Typical was one examiner who found them “very helpful, though once I read through them, I didn't feel I had to refer back to them whilst I was marking. They did, however, 'prime' me to start thinking about possible approaches to the knowledge issues.” Teachers are reminded that these notes are posted on the OCC after the close of each examining session (15<sup>th</sup> March for November sessions; 15<sup>th</sup> September for May sessions), and it is hoped that they will help to guide instruction in TOK in general, and preparation for essay-writing in particular. Notes for the November 2012 and May 2013 sessions are already available on the site.

## Presentation of work

Examiners noted with some astonishment the frequency with which essays were submitted in single-spaced format despite the prominence of the instruction in so many subject reports over the years to use double-spacing.

Several schools submitted essays that displayed abstracts at the start – teachers and candidates are reminded that this is not appropriate as the TOK essay is not a research project. At least one school had essays that were pointlessly watermarked, which created a constant distraction to the process of marking.

It is still the case that some candidates are attempting to circumvent the word limit through the use of extensive footnoting. This practice should cease, as examiners are not required to read such additions to the submission.

## Degree and quality of apparent teacher guidance

Examiners' comments in this area mirrored many of those offered in previous sessions. For example, one spoke for many when he noted that “there seem to be extremes. Sometimes you wonder if there was any guidance (or teaching) at all and how it is possible that such weak or irrelevant work is presented. Then on other occasions you feel that there is guidance bordering on doing most of the work for the candidate – and sometimes that is misguided in itself”.

A different examiner commented: “I continually saw the same examples, the same frameworks for the discussions and at times the same phrasing no matter the title chosen. It was almost as if there was a 'template' being taught and attempted to be applied by the candidates whether it 'worked' or was 'applicable' for the chosen title”. Teachers and candidates are once again urged to treat with suspicion websites that purport to provide advice with respect to TOK essay writing.

With respect to the other side of the spectrum of teacher assistance, another examiner, marking in Spanish, exclaimed: “sometimes it seems that the teacher has not had anything to do with the essay. How is it possible that essays are sent in that are purely descriptive, or contain no examples?” Another suggested that “it is obvious that some teachers do not even read the essays for coherence before submitting them.”

It is of great importance that a common understanding among TOK teachers is achieved with respect to the degree of assistance to candidates that is advisable and permissible. Guidelines can be found in the new subject guide on page 53. These can be considered as appropriate for all candidate cohorts from now on.

## Treatment of knowledge issues

Reports reflect the reality that “candidates are still listing knowledge issues as questions at the outset of the essay (or throughout it), and then failing to answer these questions.” Some candidates seem to think that a specific number of knowledge issues are required. Others state “this is my main knowledge issue”, followed by a rewording of the question that throws

the response off at a tangent. Teachers are advised to instruct candidates on how to present and analyse knowledge issues in a more seamless manner, and to encourage them to check their relevance by tracing logical pathways backwards from them to the prescribed title.

On the other hand, one examiner noted that “candidates’ work at the best of times was articulate, with a lucid use of TOK terminology, clarity of argument and counter-argument, all of which was sustained throughout the essay. Some candidates have grasped the focalising effect of knowledge issues and most make a sincere effort to frame open-ended questions based on the title to guide their enquiries”.

It is hoped that the suggested knowledge issues in this report (and in previous ones), and to be found in the examiner preparation notes, are helping to create a common understanding of their nature. It must be stressed once again that while they are articulated in a very explicit manner in these documents in order to further this goal, it is expected that candidates will couch the phrasing of knowledge issues with sensitivity to the essay form and in ways that make the connections to the title clear.

## Treatment of various ways of knowing and/or areas of knowledge

Some examiners noted that the treatment of ways of knowing was weak and often seemed to be forced into the essay without adding much that was worthwhile to the analysis. In particular, reason seemed to be treated in a vague and general manner without reference to the mechanics of different types of argument.

With respect to areas of knowledge, history was once again singled out as problematic, as many candidates wrote about the past rather than the academic discipline of history and the work of historians. Ethics was approached by some candidates in a purely personal manner, rather than as an established field.

Weaker candidates tended towards over-simplistic connections between domains of the TOK programme, such as “mathematics uses reason while history uses emotion”, etc.

In summary, an examiner concluded that “strong essays were able to show the connections between areas of knowledge and ways of knowing in a clear and detailed manner, but most merely mentioned the ways of knowing without presenting any analysis. Responses to all six titles focused on a good range of areas of knowledge, although mathematics and ethics were under-represented”. Also noted was that “some essays showed influence of the new guide and attempted an exploration of memory, imagination and intuition but not in any extended analytic manner”.

## Use of examples

One examiner complained it “never ceases to surprise [her] how, despite having a wealth of examples from their different subjects, candidates still gravitate towards tired clichéd examples”. Teachers should encourage candidates to use examples connected to their learning, without encouraging such examples to become “common class” examples that find their way into every essay.

Examiners in Spanish lamented an abundance of hypothetical examples, and a preponderance of many that did not go beyond the anecdotal. Detail was often lacking in the examples chosen, which lent an air of superficiality to the argument.

However, some candidates presented a variety of examples that ranged from the merely anecdotal to insightful explorations of personal experience which developed into significant self-awareness.

## Quality of analysis

Examiners found that the quality of analysis varied much as expected across the scripts. Attempts at analysis were seen across the majority of essays, but description, bald assertion and unexamined assumptions were often used as replacements. The posing of rhetorical questions as replacements for synthesis and analysis was also noted. One report asserted that “it seems as if many candidates do not have a clear understanding of the title before they start, and so the analysis tends to be quite shallow. Teachers need to spend more time 'unpacking' questions so that candidates are clear on what is being asked of them.”

In the words of one examiner, it was “all too often clear that candidates do not understand what is actually meant by analysis, with different perspectives not addressed, and neither implications nor counterarguments considered”. Another opined that “while many candidates showed a sound level of awareness and unfolding of counter-claims pertinent to the titles, lower-end essays merely mentioned counter-claims or completely ignored them. Stronger candidates integrated counter-claims into the body of their essays as part of a focused and coherent approach to exploring the knowledge issues”.

## Treatment of key terms in titles

Most candidates made deliberate attempts to define key terms. However, the examining team would encourage candidates to avoid presenting dictionary definitions in their work, but rather to consult them as a means of clarifying terms in their own minds.

One examiner registered the recurring problem that “candidates do not read the titles carefully. That’s a classic situation, of course, and happens so much in examinations – but here they have time to unpack the titles and still so many just pick on a few words and produce an answer based on those”.

Nevertheless, some examiners noted “very pedantic attempts to define every term of the title, usually in the opening paragraph, which are subsequently ignored throughout the remainder of the essay”. Candidates should be encouraged to discriminate between words that are key to the analysis and those that merely connect the key terms to each other. They should make sure that the definitions they adopt inform the structure of the subsequent essay as well as its content.

## Overall crafting of essay structure

The vast majority of essays were structured satisfactorily with a clear introduction and conclusion, using a range of components of the TOK programme to shape the main

exploration of knowledge issues. However, many candidates showed limitations in the construction of their work at a more detailed level. One examiner wrote that “the best essays flow from a clear conceptual framework and thesis in the introductory segment, but few candidates seem to have been trained in the value of an attempted synthesis in the concluding passages, or in conveying the sense of a personal learning and thinking odyssey which embodies TOK at its best”.

## Factual accuracy

Examiners noted that while the expectations for acknowledgement of other people’s work has improved, “some errors persist: websites given without access dates; works not listed in alphabetical order of surname; mixing print and web sources together at the end”. More pleasing is the observation that “very few essays were submitted without acknowledging factual sources”.

## Feedback on Specific Titles

As in previous years, candidates appear to have found some prescribed titles much more attractive than others, though quantity did not always correlate to quality, and it is possible that many candidates chose titles without sufficient careful thought. Seven examples of knowledge issues are given for each of the six prescribed titles. As emphasised earlier in this report, it is crucial that knowledge issues such as those shown below should arise naturally within the candidate’s exploration of the prescribed title; not emerge abruptly as stand-alone questions or alternatives to the title itself.

**1. “In the natural sciences progress can be made, but in the arts this is not possible.”  
To what extent do you agree?**

### Knowledge Issues

Knowledge issues that a candidate *might* identify in the course of the development of a response to the title include:

- *What might constitute progress in an area of knowledge, and how could we know that it has been achieved?*
- *Is it possible to reach universal agreement that progress, rather than merely change, has taken place? If so, on what basis?*
- *What is it that makes progress often seem easier to identify in the natural sciences than in the arts?*
- *Can progress be measured entirely within an area of knowledge (with reference to knowledge alone) or only with reference to some benchmark outside it (such as its practical application)?*
- *Can an increase in the amount of knowledge always be considered to be progress?*
- *Can the rejection of knowledge ever be considered to be progress?*
- *To what extent is the ability to make progress a measure of the worth of an area of knowledge?*

This was a very popular title – responses ranged from some solid answers to descriptive re-telling of the history of the areas of knowledge. Most candidates tended to agree with the title, though the quality of the essay depended on the conception of progress offered. Progress in the natural sciences was considered established with reference to the “knowledge output” (laws, theories, etc.) and to technological applications. Difficulties with supporting the notion of progress in the arts were often addressed by examining and comparing changes of a technical and conceptual nature.

One examiner noted that some candidates “got bogged down in dictionary definitions of knowledge moving towards some goal. The best essays were those that recognized that progress can mean different things in different areas of knowledge, though there were some that took a more rigid approach, presenting criteria for progress and working methodically through them for each area”.

As in previous sessions, treatment of the arts lags somewhat behind that of the sciences. Candidates once again found difficulties treating the arts as an area of knowledge at all and some essays failed to get off the ground for this reason. This problem was particularly acute for those candidates who uncritically adopted a Platonic view of knowledge as a species of belief.

**2. “Technology both enables us to produce knowledge and limits the knowledge that is produced.” Discuss with reference to two areas of knowledge.**

### Knowledge Issues

Knowledge issues that a candidate *might* identify in the course of the development of a response to the title include:

- *How might technology influence specific ways of knowing which in turn influence the areas of knowledge under discussion?*
- *To what extent does technology enable or limit the production of knowledge as opposed to the dissemination of knowledge?*
- *Is technology more important in some areas of knowledge than others and what are the implications for those areas of knowledge?*
- *What role do ethics play in how technology is used in the production of knowledge?*
- *With what degree of certainty can we know that technology is enabling or limiting and what role might its historical development play in allowing us to make decisions on this?*
- *To what extent has technology changed the nature of the knowledge we gain in different areas of knowledge?*
- *How might we distinguish between the production of knowledge and the acquisition of knowledge and what might be the similar or differing roles played by technology?*

Some candidates presented a description of technology that was too broad for the title; others adopted a very narrow focus on single inventions, such as the internet. The best essays recognised that human reliance on technology as a means to acquire new knowledge was the danger here, as it removes the need for critical pursuit or even intellectual rigour.

Many candidates elided the production of knowledge and the dissemination of knowledge in response to this quite popular title. Hence, the treatment often gravitated towards the everyday use of devices such as calculators or mobile phones. With reference to technology limiting knowledge, analysis was very weak and most comments were that “technology makes you lazy” or “with technology we run the risk of becoming like machines”. Some just ignored this part of the prompt altogether.

**3. “Every attempt to know the world rests on a set of assumptions that cannot be tested.” Examine this proposition in relation to two areas of knowledge.**

### Knowledge Issues

Knowledge issues that a candidate *might* identify in the course of the development of a response to the title include:

- *What does ‘knowing the world’ mean? What kinds of knowledge should be included here?*
- *What counts as an assumption?*
- *What are the respective roles of conscious and unconscious assumptions in the construction of knowledge?*
- *What are the possible reasons why an assumption may be untestable?*
- *Are some areas of knowledge more dependent on (sets of) assumptions than others?*
- *If sets of assumptions underpin all areas of knowledge, what does that imply for knowledge as a whole?*
- *Are there particular circumstances in which assumptions facilitate our attempts to know the world, and other circumstances in which they limit these attempts?*

Candidates who chose this title often struggled to maintain a conception of “assumptions” that would support a rigorous analysis. Candidates tended either to misunderstand the notion of an assumption or contradict their own assertions about it – often conflating assumptions, theories, hypotheses and other concepts. This manoeuvre obviously suggested to candidates that assumptions could indeed be tested and consequently many essays focussed on how these supposed “assumptions” could be tested rather than on the implications that would follow from the immunity of genuine assumptions from testing.

Good essays were those that suggested that knowledge had to rest on something, and so the best practice was to choose those assumptions that were the most solid and least likely to shift. Many of the essays referred to the scientific method as the way to solve this problem, with varying degrees of success. Part of the problem here was a lack of critical analysis of scientific methodology itself. This stemmed from a failure to identify the broader operating assumptions underlying these methods.

4. “Knowledge gives us a sense of who we are.” To what extent is this true in the human sciences and one other area of knowledge?

**Knowledge Issues**

Knowledge issues that a candidate *might* identify in the course of the development of a response to the title include:

- *What are the ways in which ‘who we are’ can be interpreted in terms of different types of group?*
- *To what extent are human sciences more concerned with group rather than individual characteristics? Do human sciences give each of us as much of a sense of ‘who I am’ as ‘who we are’?*
- *What are the differences between ‘who we are’ and ‘what we are’ (and possibly ‘how we are’), and which areas of knowledge are concerned with each?*
- *Why do we need organized knowledge, such as that found in areas of knowledge, in order to help us understand ourselves? To what extent can we get a sense of who we are through independent reflection and introspection?*
- *Which potential dimensions of the human condition (for instance: sociability, rationality, physiology, morality) are most important for gaining a sense of who we are? Hence, which disciplines or areas of knowledge are most effective in this regard?*
- *To what extent do the human sciences give us insight into the nature of our ways of knowing, as aspects of ‘who we are’?*
- *How do the ways of knowing themselves, as aspects of ‘who we are’, influence the construction of the knowledge that gives us the sense of ‘who we are’? What might be the implications of this?*

This was a popular title that elicited some good answers. Most candidates recognised that “we” could mean a collective or an individual; the problem was often in showing how individual experience shapes individual identity. Strong essays were able to give examples from both areas, and those candidates who used personal experiences as a means of illustrating ‘who they are’ presented the most compelling arguments.

Weaker responses described in a very general way what constitutes our personal and physical self, whereas more sophisticated answers opened their investigation to explore the cultural or national context. Candidates did tend to forget that the question demanded them to explore how knowledge from different areas of knowledge shapes our sense of who we are.

5. "... our knowledge is only a collection of scraps and fragments that we put together into a pleasing design, and often the discovery of one new fragment would cause us to alter utterly the whole design" (Morris Bishop). To what extent is this true in history and one other area of knowledge?

### Knowledge Issues

Knowledge issues that a candidate *might* identify in the course of the development of a response to the title include:

- *To what extent is it reasonable to describe human knowledge as a 'collection of scraps and fragments'?*
- *Is knowledge in history, because of its object of study, necessarily more rudimentary in nature than knowledge in other areas?*
- *How can we decide which fragments of knowledge to select and put together to produce a coherent whole?*
- *What are the implications for knowledge if isolated fragments of it can be assembled coherently in many different ways?*
- *To what extent is it sustainable to claim that the construction of knowledge is based on aesthetic preference ('pleasing design')? What might be the implications if this were true?*
- *As time goes on, does it become increasingly less likely that 'one new fragment' will necessitate a total re-organization of knowledge?*
- *In which areas of knowledge might rival 'designs' simultaneously be accepted as legitimate knowledge?*

This was a popular choice among candidates with some very good answers. Some included quite original examples, and overall the title seemed to bring out a better treatment of history than has been the case in some previous sessions. Better candidates recognised that there were two parts to the quotation that needed to be addressed – to do with the construction of the "pleasing design" and its metamorphosis being triggered by something as apparently insignificant as a "scrap" or "fragment".

The strongest essays discussed what "pleasing" might mean, with its overtones of aesthetic judgement exerting an influence on the construction of knowledge. Many referred to paradigm shifts in science; other essays used examples from other, perhaps less obvious areas of knowledge such as the arts and history. There were some very interesting and balanced responses based on the analogy of puzzles and models.

6. "The methods used to produce knowledge depend on the use to which it will be put." Discuss this statement in relation to two areas of knowledge.

### Knowledge Issues

Knowledge issues that a candidate *might* identify in the course of the development of a response to the title include:

- *How could a method for producing knowledge depend on its uses (especially if these might not be known at the time)?*
- *What is it about the methods employed by an area of knowledge that guarantee reliability in their use?*
- *Can we know how reliable methods are in delivering the required use?*
- *Is it fair to say that our methods change because the use of knowledge changes?*
- *Might not the methods (and the type of knowledge produced) dictate the use to which knowledge is put?*
- *Is there such a thing as the method associated with a particular area of knowledge (for example 'the scientific method' or 'the historical method')?*
- *To what extent might there be a varied cluster of methods employed by a given area of knowledge?*

This was a very unpopular title; few candidates attempted it, and most did not really understand it. Some wrote exclusively about the methods used to acquire knowledge across the areas of knowledge, but very few were then able to connect choice of methodology to usage. It was extremely rare to find an essay that contained a genuine attempt to make any connection between both elements of the question.

Perhaps part of the problem here is that candidates quite often conceive of knowledge as being prior to the uses to which it is put. This might be true in the arts and in some parts of the pure sciences and pure mathematics but it is certainly not true in most applied science, medicine and the human sciences. It is expected that these problems will be solved by the approach taken by the new subject guide which emphasises the idea of knowledge being often produced as a response to a problem.

## Presentations

### Component Grade Boundaries

The boundaries remained unchanged for this session.

Grade:	E	D	C	B	A
Mark range:	0 - 8	9 - 12	13 - 15	16 - 18	19 - 20

**Teachers play a central role in guiding their candidates towards success in the oral presentation assessment task. All teachers, whether new or experienced, should read the comments below in order to ensure that their candidates understand the nature of the TOK presentation and that they have been well guided to accomplish the task successfully.**

## Administrative and Clerical Procedures

As is the norm, about 5% of the schools entering candidates were asked to record some or all of the TOK presentations given by the candidates for the purposes of confirming the scores

awarded by teachers for this internally assessed component of the programme. Some of these schools were selected at random; others were selected on the basis of major inconsistencies in past sessions between performance in the essay and the presentation.

It is worth reminding schools that those selected for any given examination session are notified via the DP Coordinator by the IB Assessment Centre at the start of the diploma cycle that culminates in that session. For example:

- schools selected for the May 2014 session **will have been** notified by **August 2012**
- schools selected for the November 2014 session **will have been** notified by **February 2013**
- schools selected for the May 2015 session **will have been** notified by **August 2013**
- schools selected for the November 2015 session **will have been** notified by **February 2014**

Schools which have been asked to provide presentations for verification in the May 2014 and November 2014 sessions must observe the requirements outlined in the Appendix to this report and keep to the deadlines. With the advent of the new TOK programme for May 2015 onwards, arrangements will be somewhat different, and these will be communicated in due course.

## Forms

Schools are reminded that, since May 2012, there is **one** form to fill in for the presentation which is the **TK/PPM Form (presentation planning and marking form)** which takes the place of the two TK/PPD and TK/PMF forms. Coordinators and teachers should ensure that the form from the current *Handbook of Procedures* is used for the administration of the TOK presentation.

It is important that the TK/PPM form is correctly filled in, and this is not just procedural. The “presentation planning” part of the form is intended to help candidates by guiding and structuring their planning and must thus be completed before the presentation. The “presentation planning” part requires candidates to state the title of the presentation and then to answer three questions which refer to:

1. The real-life situation
2. The knowledge issue that has been identified as arising from the real-life situation, expressed as a question
3. A plan of the presentation

Some schools are not using the form adequately and in some samples it was seen that whole sections were left blank. In terms of content there still seems to be a problem differentiating

between the real-life situation and the knowledge issue, despite their separation on the form showing that they are distinct. Point two of the form requires that the real-life situation be stated, and explicitly asks for the knowledge issue to be expressed as a question. By expressing the knowledge issue as a question, candidates are more likely to understand the nature of the task that lies at the heart of the TOK presentation – namely, explore a question to do with knowledge that arises from the real-life situation.

In some cases, a proper working plan was submitted but in others the “plan” consisted of no more than a list of a few words and phrases which did not even correspond to the order of ideas in the presentation. Teachers should explain the purpose of the presentation plan to their candidates and give them guidance.

The reverse side of the form is the “marking form” and requires the following:

- The self-assessment of the individual candidate
- The candidate’s signature and date
- The assessment by the teacher
- The teacher’s name, signature and date
- The duration of the presentation in minutes

There is space for a one-line comment/justification for each criterion to be followed by the respective mark. The comment/justification should not just be a repetition of the descriptor for that grade but offer an indication of why that level was awarded in terms of that particular presentation.

## Assessment issues

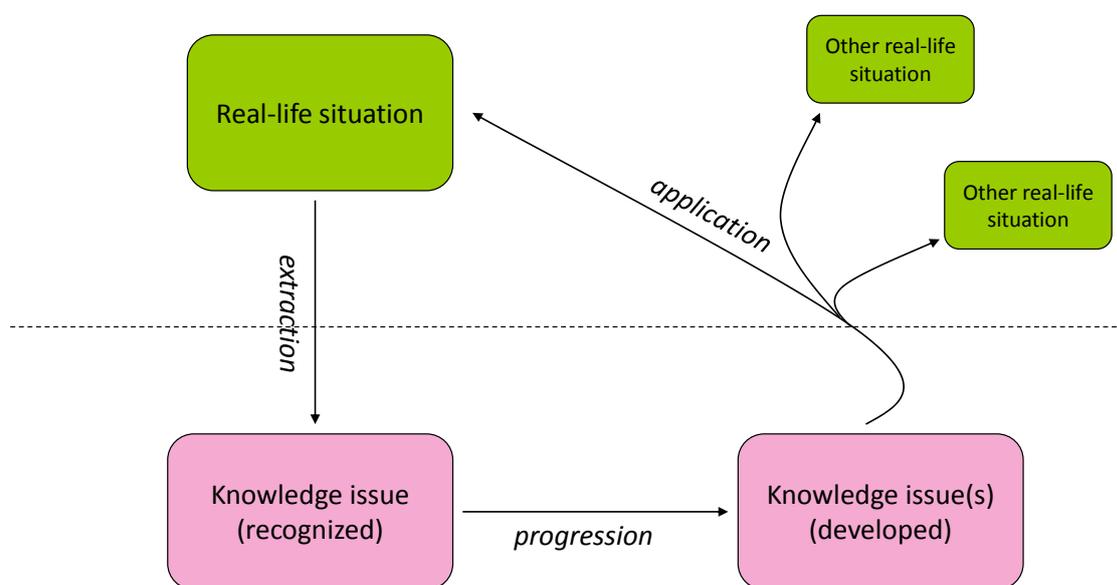
The presentation is supposed to be an integral part of the TOK course. It complements the essay. While the presentation is a formal *summative* assessment requirement for TOK, it is also intended as a *formative* opportunity for candidates to contribute a meaningful lesson to the TOK course in which they are participating. That is why it is recommended that candidates do more than one presentation during their TOK course. The presentation should start with a situation which must be particular and real, and from it an interesting and relevant knowledge issue is to be extracted for consideration.

A good presentation will explore knowledge issues and avoid unnecessary or lengthy descriptions. Information regarding the real-life situation should be kept to a minimum and only what is relevant to the knowledge issue should be given. A concrete **real**-life situation must be the starting point from which a single knowledge issue (not multiple ones) may be extracted. The knowledge issue must be precise but also general (i.e. it may be applied to a wider range of situations than simply the one chosen) and couched in the concepts and vocabulary of TOK (see the linking questions in the guide for help in this respect). Schools have been directed to the *Understanding Knowledge Issues* document on the OCC and its use in the classroom has been recommended. Candidates should be given the opportunity to study and discuss the contents of the document so that they can see the extra quality of good

knowledge issues and try to emulate them.

The TOK presentation must focus on analysis, not description, and, in order to do this, a real-life situation must be connected to a knowledge issue. Thus, the core intention of the TOK presentation essentially takes the form of an analytical dialogue between two levels of discourse. This is illustrated by the following diagram:

## Theory of Knowledge: Presentation structure



The two levels represent the candidates' experiences in the TOK course (lower level) and in the world beyond it (upper level), and the connection between the levels demonstrates the relevance of TOK to life beyond the TOK classroom.

At the “real world” level, we have the real-life situation from which a knowledge issue (note that “knowledge issue” here is singular, corresponding to criterion A) must be **extracted**. This knowledge issue, residing in the “TOK world”, must be **developed** using ideas and concepts from the TOK course, and in this **progression** it is likely that other related knowledge issues will be identified (note that “knowledge issues” here is plural, corresponding to criterion B) and will play a part in taking the argument forward. The product of this reflection can then be **applied** back to the real-life situation at the “real world” level. In addition, the presentation should be able to show how the process of application extends beyond the original situation to others, thus demonstrating why the presentation is important and relevant in a wider sense.

In order to assist candidates and teachers in understanding this structure, the TK/PPM form requires the written documentation of both the real-life situation **and** the knowledge issue that is extracted from it. The TK/PPM form also requests a title for the presentation – this is intended as a useful summary label that can perhaps be used in a published schedule of

presentations for internal school use, but could also be displayed on the DVDs and thus would also assist verifiers in identifying each piece of work.

In addition, it is strongly recommended that the construction by the candidates of a diagram like the one above, adapted to the individual nature of the planned presentation, be made a part of the planning process. A structured diagram of this sort could be attached to the TK/PPM form. This would encourage an analytic exploration of knowledge issues which would likely result in the award of high marks.

The following pairs of real-life situations and knowledge issues are intended to illustrate the sort of relationship that can be constructed between them.

**Real-life situation:** Vesalius in 1543 disproving the Galen theory that men had a rib less than women

**Knowledge Issue:** What is the role of emotion in shaping our beliefs?

**Real-life situation:** Whistle-blower Edward Snowden and NSA's obtaining of American telephone records

**Knowledge Issue:** How do we know which perspective to believe?

**Real-life situation:** The cloning of a mouse from a single drop of blood in Japan which could lead to cloning in order to propagate species

**Knowledge Issue:** How do we know how to balance utility against a principle?

**Real-life situation:** The rise in ADHD diagnoses

**Knowledge issue:** What is the role of culture in the production of knowledge in the human sciences?

**Real-life situation:** Airbrushed make-up advertisements banned because they mislead

**Knowledge Issue:** How do we know when we have a moral obligation to act?

**Real-life situation:** The painting "On Strike" by Hubert von Herkomer

**Knowledge issue:** What role does language play in the accumulation of knowledge in the visual arts?

**Real-life situation:** An article about robot warrior technology and the future of warfare

**Knowledge Issue:** How can we distinguish between innovation and progress?

**Real-life situation:** Article showing how instances of extreme weather in 2013 have had an impact on attitudes to global warming

**Knowledge issue:** What makes an explanation convincing?

In this session there were several good (and also some very good) presentations from some

schools and we commend those schools for taking this assessment task in the spirit in which it is intended. They produced presentations where candidates engaged their knowledge issues effectively through real-life situations. There are, however, schools that need to adopt a very different approach to help their candidates do this task properly. The oral presentation is a challenging task for candidates and requires practice and guidance from teachers. The instructions in the guide need to be followed as well as the guidelines offered in these reports.

There are also other aspects of the TOK presentation that deserve reiteration:

- The presentation must not be delivered from a script – while flashcards and other prompts are likely to be helpful, these must be subordinated to the primary nature of the TOK presentation as an oral exercise. Teachers must make it very clear to their candidates that presentations may not be read. They must tell their candidates that if they are read they cannot be evaluated. Should that occur, **the teacher must stop the presentation as soon as it is evident that it is being read or there is too much reading and ask the candidate/s to prepare it properly and present it on another occasion.**
- Similarly, a presenter turning his/her back on the audience in order to read large quantities of text from a projector is not delivering material in a manner consistent with the intentions of the task. This session saw several presentations where candidates delivered their presentations at desks and behind their laptops. That does not make for dynamic or interesting presentations which makes a difference.
- The use of movie and YouTube clips must be subordinated to the overall aims of the presentation and not be used as substitutes for thinking and analysis.
- The duration of the presentation should be recorded and entered onto the TK/PPM form and timings should be compatible with the recommendations given in the subject guide.
- While the instructions in the subject guide allow for group presentations up to a group size of 5 candidates, the size of the group is likely to affect the structural logistics of the presentation itself. Presentations involving large groups are necessarily long, and they struggle to maintain high levels of interest among members of the audience. On the other hand, presentations by individuals are necessarily very time-limited and candidates need to consider how much they can achieve within their time allocation.
- Just as good writing enhances the clarity and persuasiveness of an essay, good speaking skills, while not part of the formal assessment, can enhance a presentation. Material that cannot be heard clearly cannot attract credit and cannot contribute to understanding.
- The principles of academic honesty must be observed and the need for acknowledgement recognized even in the oral context of the presentation.

## Appendix

### Mandatory requirements for schools selected for verification of presentations

Selected schools are required to submit (by 15<sup>th</sup> September for November sessions, and 15<sup>th</sup> March for May sessions) materials for **5 candidates** (or all candidates if the school is registering fewer than 5 in total). These materials comprise:

- recordings of the presentations in which these candidates were involved, and
- the TK/PPM forms for those candidates

To clarify further:

- a TK/PPM must be included in the documentation for sampled candidates **ONLY**

The selection of the 5 candidates is at the discretion of the school, but should as far as possible reflect the diversity of assessment scores awarded for presentations. For this reason, schools should try to avoid the inclusion in the sample of candidates from the same presentation unless a small overall number of candidates make this inevitable. It is recognized that scores cannot be known in advance of the presentations themselves, and so it may be necessary to record more presentations than will actually be sent to the verifier in order to be sure of capturing evidence for the range of scores required. **Many teachers have found that the recording of all presentations in any case has contributed to good practice for subsequent sessions, as these recordings can be helpful during the process of presentation preparation. It is a practice to be encouraged.**

### Schools are required to send recordings in DVD or USB format only

DVDs should be sent clearly labelled (examination session, candidate numbers where known, titles of presentations in correct order) and packaged such as to avoid damage in transit (e.g. bubble-wrap or padded envelope). Particularly important is the quality of sound on the recording, and teachers are strongly advised to check this before commencing the actual recordings of the presentations. The quality must also be checked after recording each presentation to ensure there have been no problems. If visual projections form an important part of the presentation, it should be ensured that they are readable on the recording.

As the verification of presentation assessment is on the basis of individual candidates, even if they participated in group presentations, **it is vital that verifiers can identify the candidates being sampled.** Candidates should announce clearly and slowly their identity on the recording at the start, including names (and candidate numbers if known at the time the presentation is given). Schools may consider asking candidates to hold up cards with this information at the start of the recording in order to facilitate this. Teachers should also ensure that recordings start well in advance of the presentation.