

## THEORY OF KNOWLEDGE

In order to secure success for their students, 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 OCC) which provides clarification of the central concept of a ‘knowledge issue’.

### Overall grade boundaries

From the November 2010 session, the D-E grade boundary was lowered by one mark. All other boundaries remain unchanged from previous sessions.

<b>Grade:</b>	E	D	C	B	A
<b>Mark range:</b>	0 – 17	18 – 28	29 – 37	38 – 47	48 – 60

### Statistical Summary

	November 2009	November 2010	% change	May 2010	May 2011	% change
<b>English</b>	<b>3,194</b>	<b>3,387</b>	<b>6.0</b>	<b>43,958</b>	<b>48,143</b>	<b>9.5</b>
<b>French</b>	<b>0</b>	<b>2</b>	<b>-</b>	<b>528</b>	<b>613</b>	<b>16.1</b>
<b>Spanish</b>	<b>1,229</b>	<b>1,562</b>	<b>27.1</b>	<b>2,915</b>	<b>3,196</b>	<b>9.6</b>
<b>German</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>20</b>	<b>66.7</b>
<b>Chinese</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>179</b>	<b>219</b>	<b>22.3</b>
<b>Total Candidates</b>	<b>4,423</b>	<b>4,951</b>	<b>11.9</b>	<b>47,592</b>	<b>52,191</b>	<b>9.7</b>

### The Essay

#### Component grade boundaries

At the November 2010 session, the lowest score in the D-band was reduced from 11 to 10. All other grade boundaries have remained unchanged.

<b>Grade:</b>	E	D	C	B	A
<b>Mark range:</b>	0 – 9	10 – 16	17 – 22	23 – 29	30 – 40

## Examiners

Thanks are extended to 229 examiners who assessed TOK essays this session – whose individual contributions form the basis for this part of the subject report. Many examiners expressed how much they learned from marking essays and what a positive professional development experience it was. One wrote: “I have had a most enlightening, enriching, learning experience through this exercise of examining TOK essays. Marking the essays has given me much-needed guidance and confidence to teach this marvellous subject.” And another opined: “To become a TOK examiner represented such a great chance of professional development to me, and gave me that sort of broader perspective on my teaching for the time coming, as well as the certainty that, even after ten years as a TOK teacher, there’s always room for improvement.” Any teacher, therefore, reading this report to understand better how to help their students should seriously consider examining, and see <http://www.ibo.org/informationfor/examiners/> for more information (note that teachers must have two years experience of teaching TOK before examining).

The November 2010 session saw a number of important changes to the assessment process. As examining moved to an electronic platform, paper-based procedures became obsolete. Candidates were required to upload TOK essays through the IBIS site, which were then authenticated online – first by candidates themselves and then by teachers or coordinators. Examiners then passed through a preparatory process for electronic marking, involving practice and qualification scripts, and, if successful, they moved on to ‘live marking’ of essays. The statistical moderation system used in previous sessions, in which samples of essays were sent to team leaders and other senior assessors, was replaced by a seeding system in which examiners were required to mark previously assessed essays in order to check for agreement of standards within a certain tolerance. On the basis of experience gathered during the November 2010 session, arrangements for May 2011 were adjusted within the same basic pattern.

## Feedback on Specific Titles

Some examiners reported again this year that students sometimes paraphrased the prescribed title. This sometimes resulted in a lack of focus on knowledge issues; teachers are reminded not to allow students to change the prescribed title in any way.

As in previous years, some titles attracted much more attention than others, though quantity did not always correlate to quality. Four examples of knowledge issues are given for each of the ten prescribed titles. These examples are clearly not meant to be exhaustive or definitive; because each title can be, and usually is, addressed in many different ways, their inclusion here is illustrative. The knowledge issues indicated are in some cases rather general, and might well be refined in the course of an essay.

### **1 Consider the extent to which knowledge issues in ethics are similar to those in at least one other area of knowledge.**

Four examples of knowledge issues that *could* be addressed in this title:

- *How important is the role of value judgements in different areas of knowledge?*
- *How difficult is it to establish universal truths in various areas of knowledge?*
- *How do moral judgements differ from other types of judgement?*
- *Is there an analogue to the appeal to experiment in the natural sciences by which ethical claims can be tested (such as, for example, appeals to ethical intuitions)?*

This title was very unpopular. Candidates who chose it largely assumed the title to be asking for an examination of the role of moral dilemmas in other areas of knowledge, and so they tended to focus on examples such as those in the field of environmental matters in the natural sciences, or about the ethical limits of experimentation in the human sciences.

There was very little recognition that the title required an extra level of analysis – not only the identification and exploration of knowledge issues but the comparison of these knowledge issues across areas of knowledge.

## 2 How important are the opinions of experts in the search for knowledge?

Four examples of knowledge issues that *could* be addressed in this title:

- *In what ways and areas would the absence of experts most severely limit our knowledge?*
- *Under what circumstances should we ignore the opinions of experts in the various areas of knowledge?*
- *On what basis might we decide between the judgements of experts if they disagree?*
- *To what extent is the knowledge that experts possess transferable?*

The title was fairly popular (noticeably so in French). Candidates often understood experts to mean scientists or historians, and therefore failed to address conceptually the question of who is an expert and what expertise means. Many took a sceptical attitude to the role of experts in the search for knowledge – often asserting that what experts say needs to be corroborated by personal investigation – thus, often unwittingly, rather undermining the value of experts in the first place. The ‘search for knowledge’ was largely understood as learning; consequently the role of experts in the production of new knowledge was ignored. Candidates often emphasized that experts could be biased or dishonest. Few candidates understood that the term expert may have slightly different meanings in different areas of knowledge.

More successful candidates addressed the issue of how experts can be undermined through venturing beyond the limits of their domains, or being expected by others to do so. Comparisons across areas of knowledge were sometimes successful, but candidates were often particularly ready to dismiss the legitimacy of experts in the field of the arts – asserting the right of the individual to make independent aesthetic judgements.

## 3 “Doubt is the key to knowledge” (Persian Proverb). To what extent is this true in two areas of knowledge?

Four examples of knowledge issues that *could* be addressed in this title:

- *To what extent do different areas of knowledge incorporate doubt as a part of their methods?*
- *Under what circumstances might doubt undermine the construction or acquisition of knowledge?*
- *Why is the possibility of doubt needed for knowledge?*
- *Since doubt can be taken to be lack of convincing support for a claim, how can this lead to a situation in which the claim has convincing support?*

This was a very popular title, but it was widely misunderstood. When should you doubt and why; when should you stop doubting and start believing, were not treated by many. The feasible distinction between *doubt* as a state of mind and *uncertainty* as a description of the status of a knowledge claim was rarely made. Candidates often asserted that individuals such as Copernicus or Gödel experienced doubt, and that the presence of this

doubt was instrumental to the advances in knowledge for which these individuals were responsible. The speculative nature of such assertions by the candidate was usually not recognized and thus the effectiveness of such historical examples was often somewhat undermined.

Stronger candidates managed to compare the role of doubt in the acquisition of knowledge with other possible mechanisms, such as curiosity or serendipity. Furthermore, the way that doubt has been institutionalized in scientific methods received frequent treatment, with many accounts of the views of Popper and the idea of falsification in science. The radical skeptical methods of Descartes were often invoked but candidates seldom succeeded in explaining how his method could lead to the construction of what we commonly accept as knowledge today.

#### **4 To what extent do we need evidence to support our beliefs in different areas of knowledge?**

Four examples of knowledge issues that *could* be addressed in this title:

- *What counts as evidence in various areas of knowledge?*
- *To what extent are we obliged as knowers to provide evidence for our beliefs?*
- *How can we know when we have sufficient evidence?*
- *What could be the value of an unsupported belief?*

This was also a popular title. Candidates sometimes failed to show that they were distinguishing between belief and knowledge, and thus passed over the possibility that evidence could be employed in order to support beliefs that are wrong or irrational. Candidates often struggled to describe the nature of evidence in ways that allowed clear alignment with the question. Some took a more liberal line and admitted such concepts as mathematical proof as forms of evidence. Others took a narrower interpretation by restricting the discussion to directly-apprehended empirical evidence. The latter approach tended to precede the argument that science is heavily evidence-dependent whereas religion seems to require or provide none at all.

Stronger candidates characterized evidence and beliefs as working hand in hand, or as opposing forces, as in, for example, a case where experimental evidence is in conflict with established theory (beliefs) in the sciences. The amount, quality and origin of the evidence may all be factors that influence whether existing beliefs are or should be modified. Many candidates addressed the concept of paradigms in the sciences, and examined how well this model fits the activities in other areas of knowledge.

#### **5 To what extent are the various areas of knowledge defined by their methodologies rather than their content?**

Four examples of knowledge issues that *could* be addressed in this title:

- *To what extent does the nature of an academic discipline remain constant (in terms of content and methodology)?*
- *To what extent does the methodology of an investigation limit or determine the outcomes that are possible?*
- *Why might we be more concerned with process rather than product in the search for knowledge?*
- *Is there always a clear distinction between content and methodology?*

This was a markedly unpopular title. Some candidates seemed to have little idea of what to do with it beyond taking a largely descriptive approach to what each area of knowledge might be about.

However, there were a few sophisticated responses from candidates who had reflected upon the implications of a positive answer to the question in the title – namely that areas of knowledge might be thought of as ways of approaching the world from different angles and that the claims that they make might depend in some strong sense upon the activities in which practitioners engage.

## **6 “There are no absolute distinctions between what is true and what is false”. Discuss this claim.**

Four examples of knowledge issues that *could* be addressed in this title:

- *To what extent does truth exist in each area of knowledge regardless of whether we can recognize it?*
- *To what extent is knowledge dependent upon having absolute distinctions between what is true and what is false?*
- *How can we know what methodology to apply to distinguish between what is true and what is false?*
- *What is the relation between the truth of a claim and the possession of knowledge?*

This was quite a popular title. Many candidates interpreted it to be about ‘absolute truth’ rather than ‘absolute distinctions’, and this misunderstanding made it more difficult for them to respond appropriately – often finding it hard to explain the difference between ‘truth’ and ‘absolute truth’. Candidates frequently used the quotation in the title as a foundation for an exposition of relativism and claims that we cannot really know anything for certain, often getting stuck in various definitions of truth, from which they found it difficult to navigate into a cogent analysis.

Stronger candidates recognized differences between the kinds of knowledge generated by different areas of knowledge, and expressed the possibility that certainty may exist in places where our faculties might struggle to apprehend it.

## **7 How can we recognise when we have made progress in the search for knowledge? Consider two contrasting areas of knowledge.**

Four examples of knowledge issues that *could* be addressed in this title:

- *Are there viable universal criteria for measuring progress that are applicable in all areas of knowledge?*
- *To what extent is the degree of progress in an area of knowledge proportional to the value of that area?*
- *Which ways of knowing are most useful in measuring progress?*
- *What are the problems associated with progress in various areas of knowledge?*

This was another rather unpopular title. Weaker candidates tended to provide descriptive accounts of progress itself rather than exploring ways in which that progress could be recognized. Thus many essays provided a narrative of the history of science – often referring to technological or agricultural consequences without explicit awareness that these applications might themselves be used as yardsticks for progress. History, the arts and ethics were routinely dismissed as being non-progressive in nature – once again without applying rigorous analysis as to how this could be supported.

Stronger candidates recognized that probably some kind of external calculus was required that could be applied to the areas of knowledge in question.

**8 “Art is a lie that brings us nearer to the truth” (Pablo Picasso). Evaluate this claim in relation to a specific art form (for example, visual arts, literature, theatre).**

Four examples of knowledge issues that *could* be addressed in this title:

- *What kinds of truth are the arts capable of expressing?*
- *To what extent are the insights available from the appreciation of an art work dependent upon the intentions of the artist?*
- *What could be meant by artistic truth?*
- *What might be meant by a ‘lie’ in the context of an artwork?*

This was a very popular title which clearly appealed to candidates with a strong interest in the arts. Sometimes, this interest drew the candidate away to some extent from a direct engagement with relevant TOK knowledge issues – on occasion, responses read more like world literature assignments or commentaries on visual arts. It is worth emphasizing that the same assessment criteria are applied to responses on all prescribed titles and that titles that refer specifically to one area of the TOK programme still demand, for example, the same comparative approach. The fact that this title asked for a focus on one particular art form was often ignored, with candidates roaming across the field of the arts more generally. Candidates who chose art forms not suggested in the title were often less successful. Many candidates equated “lie” with “falsehood”, and thus ignored the possibilities for exploring the aspect of deliberate deception on the part of the artist.

However, this title elicited some very fine responses – in particular, the relationship of art to truth was sometimes contrasted in a sophisticated fashion with that of other areas of knowledge. Some candidates emphasized counter-claims – from the view that art, as a representation, leads us further from the truth, to an apprehension of the value of artistic realism.

**9 Discuss the roles of language and reason in history.**

Four examples of knowledge issues that *could* be addressed in this title:

- *To what extent should, or can, value-laden language be avoided in the writing of history?*
- *To what extent can the use of reason bring us closer to the truth in history?*
- *To what extent does the use of language in history influence our understanding of the past?*
- *To what extent is historical reasoning dependent on the language used by the historian?*

This was a fairly popular title, and one that led some candidates astray – possibly because of the deceptively simple and ‘TOK-familiar’ wording. It is apposite here to warn candidates that short titles containing terms familiar from the TOK course may not necessarily turn out to be the most straightforward to answer, or may need particularly careful unpacking. Given that history is specified as an area of knowledge in the TOK programme, it was surprising how many candidates chose to regard the term as meaning just a sequence of events in general. This approach altered the entire thrust of the title.

Stronger candidates succeeded in making useful distinctions, such as between the use of language as the raw material of history and as the medium for the recording of historical accounts. Such responses often went

beyond a hazy equating of reason with common sense into an examination of the types of logic that could be usefully employed in the historian's professional activities.

**10 A model is a simplified representation of some aspect of the world. In what ways may models help or hinder the search for knowledge?**

Four examples of knowledge issues that *could* be addressed in this title:

- *In the construction of a model, how can we know which aspects of the world to include and which to ignore?*
- *What aspects of the world are not amenable to representation by models?*
- *How is new knowledge acquired through the use of models?*
- *Since a model is, strictly speaking, false how can it lead to knowledge traditionally thought of as being true?*

This was not a particularly popular title, but it did produce some excellent responses. Unfortunately, some candidates did not stop to consider exactly what sorts of models would help in answering the question posed by the title, and proceeded to include a wide variety of devices (or even whole areas of knowledge) that might generally be considered model-like but could not be made to elicit or support relevant insights. The lack of a conceptual investigation of 'model' made for superficial responses. It was not generally recognized that not all simplifications are models; neither that models may be simplified representations but that does not mean that they are necessarily simple. Some candidates used the word 'model' synonymously with the word 'theory'.

Stronger candidates tended to make distinctions between physical and conceptual models and thus moved beyond a consideration only of globes and geographical maps. In general, students seemed to find it easier to defend the notion that models are helpful rather than limiting in the search for knowledge.

## General Comments

A major aim of this report is to point out weaknesses in the work of candidates so that problems can be minimized in subsequent sessions. However, it is also desirable and necessary to celebrate essays of the highest standard that have been read and appreciated this year. One senior assessor noted: "As ever, reading the personal, sophisticated essays written by some candidates has been a real pleasure. It never ceases to impress how insightful some students are..."

Unfortunately, many examiners also felt moved to comment on their frustration with some work and to speculate on reasons for the shortcomings of what they read. "It seems likely," wrote one, "that, with many of the essays, the teacher didn't give the students' work even the most cursory glance." Another suggested: "Many candidates' responses pointed to a lack of active supervision from teachers in developing the highly complex skills demanded in TOK analytical essays." It is not so much the existence of errors and weaknesses in the material submitted for assessment that prompts examiners to respond in their reports; but rather the fact that so many of these errors and weaknesses are so avoidable. The **role of teachers** is vital in guiding candidates towards successful outcomes while still giving them sufficient intellectual independence in their work. This guidance is only possible where there has been a proper TOK course delivered. Some essays reflected little or no TOK – a situation of particular concern. In contrast, there is no doubt when students have had an enriching learning experience through their TOK course.

TOK essays can be written in five **response languages** as shown in the tables on page 1. There were some, but few, excellent essays in French and Spanish. Examiners in both these languages have noted alarmingly, on the other extreme, that some candidates following the TOK programme in those languages seem to have little notion of what TOK is about and virtually no understanding of what is required in a TOK essay. An examiner in French expressed it like this: “Reading TOK essays in French, I am sometimes confronted with an obviously intelligent student, articulate and thoughtful who would have thrived had he been pointed in the right direction. Unfortunately, the teacher didn’t ‘buy into’ TOK”. Some essays give the impression that just a very few strategic comments on their draft (which is explicitly encouraged) would have been enough to point out obvious shortcomings. Several Spanish examiners commented on the focus on academic philosophy in many of the essays which can shift the emphasis away from making links and comparisons between areas of knowledge in particular, but also ways of knowing. They found that in some cases TOK seems to be understood as a vehicle for the expression of the theories of great thinkers, which does not allow the knower to show his own perspective and reflect on the prescribed title. Teachers should think about what they expect of a student on completing the course and how to achieve those objectives. It must be pointed out that teachers of TOK in French and Spanish do not currently have the wealth of resources which are available in English, and thus teachers are encouraged to make more use of the sharing of expertise through the OCC.

While there is still much work to be done, it does seem that clarifications about the nature of **knowledge issues** have been taken on board by candidates from some schools. However, one examiner warns: “It seems as if many students are now engaged in a kind of exercise of generating knowledge issues simply for the sake of generating them, and they have not yet reached the stage of being able to identify which ones are relevant—or to explain the relevance of those questions to the title as prescribed.” It is gratifying if candidates are thinking about knowledge issues as the central concept of the course, but care should be taken to ensure that the knowledge issues that are recognized or formulated do not come to overshadow the prescribed title itself. In trying to define knowledge issues relevant to the question some candidates re-word the question with a different emphasis and, in the most extreme cases, end up changing the title. Despite these trends in the overall candidature, many students only presented knowledge issues which were essentially reproductions of the prescribed title. In many cases they limited themselves to demonstrating the truth of the assertions made in the title (Picasso’s quote in title 8, for instance), thus producing work which rarely permitted consideration of counterclaims.

Candidates are encouraged, wherever possible, to treat **ways of knowing** within a context of areas of knowledge or supported by concrete examples, in order to avoid treatment in the abstract. Addressing them in isolation or without reference to established knowledge easily leads to anecdotal claims and unsophisticated and unrealistic hypothetical examples which add little to the understanding of learning and knowing.

With respect to **areas of knowledge**, examiners are still worried by the treatment of history in TOK essays. Many consider ‘history’ to be anything that happened in the past, not the discipline of that name. Too often, candidates depict history as an almost entirely subjective area, pursued by historians who are little better than liars – so deeply immersed in their own cultures that they are unable to appreciate the merit of alternative interpretations. Examples offered in this area are too often general and hypothetical (eg unnamed British and German historians’ contrasting reflections on WW2, faceless American and Russian historians on the Cold War). In many cases, those to whom such perspective-bound views are ascribed turn out not to be historians at all, but rather politicians or the general public at large. More guidance from teachers would be welcome here, and students would be well advised to attempt to dig deeper than the obvious and incorrect clichés.

With regard to mathematics, it must be repeated here that many students continue to cite that mathematical statements are, as a rule, justified empirically – so  $1 + 1 = 2$  is proven by re-arranging apples. Students should see from their own mathematical experiences that most things they know (matrices, functions, groups, sets)

cannot be justified in this way, and even for the simple  $1 + 1 = 2$  case, the 'proof' involving apples is about apples, not numbers. Furthermore, a number of those who succeed in showing a more sophisticated understanding of mathematics and realize the axiomatic nature of the subject, then fail to state or incorrectly state what is axiomatic and what is not.

It seems that all too often areas of knowledge are treated according to their place along a continuum which stretches from certainty to uncertainty at its extremes, or from objective to subjective knowledge. This means that simplistic and limited conclusions are drawn as areas of knowledge are attributed a place on the continuum according to their factual claims, but value statements are not esteemed as an important part of the belief and knowledge systems of each area of knowledge. Statements which refer to the spiritual world or religion can have a place in TOK too. This is expressed in the guide whereby one of the aims of TOK is to encourage 'an awareness of personal and ideological assumptions, including participants' own'. Although religion is not visible in the traditional TOK diagram, consideration of the nature of religion is not to be discouraged as long as it is approached from a TOK perspective. However, as with ethics, candidates find this area difficult and often resort to stereotypical generalizations of religions and religious beliefs or a superficial treatment of conflict between religion and science.

Examiners complained about essays in which illustrative **examples** were (a) absent, or (b) hypothetical in nature and thus unconvincing (a child touching a hot stove, a beggar deciding to steal food, a pet requiring euthanasia), or (c) did not extend beyond those that are very frequently used (the shape of the Earth; heliocentric theory, Copernicus and Galileo; Newton's apple; Australian black swans; the blue sky; the Big Bang, Genesis and Darwin;  $1+1=2$ ; Hitler, Jews and the Holocaust; the Mona Lisa and Guernica; Pluto's loss of full planetary status, etc.). One senior assessor noted: "It is not that examples on Hitler and the Holocaust, etc. are 'bad' examples, but it is how these examples are constructed that is the problem." The value of an example varies with the context in which it is used, and those mentioned here tended to be employed casually and often without due regard for **factual accuracy**. One examiner asked: "Did people in the Middle Ages believe the world was flat? If they did, show me a reference please. And Christopher Columbus did not prove the world was round!" The strand referring to accuracy in criterion D deserves attention.

Additionally, by relying on such commonly employed examples, many candidates seem to be ignoring much of the potential of their own heritage. Another senior assessor commented: "Much of TOK still seems sadly divorced from local wisdom and knowledge, as evident in examples and discourse that continue to privilege Greek and Western contributions, rather than validate the contributions of all learning traditions, which would indicate a truly international or global mindset." Students need to be encouraged to reflect more on the applications of knowledge issues in their cultural contexts. In this way they will be able to evaluate their own **perspectives** in relation to the prescribed title.

Examiners comment that often, **quality of analysis** (C) is the criterion where they find it most difficult to award higher scores. Candidates should be warned of the pitfalls of approaches that are too descriptive or speculative. Some essays lack effective counter-claims, and sometimes they are present but expressed poorly, such that they appear to be contradictions rather than explorations of alternative viewpoints. Candidates should take care with the ways in which they introduce such contrasts. The metacognitive dimension of TOK lies at the heart of the course, and candidates should be encouraged to take a step back from their own arguments in order to grasp the possible implications of what they are asserting.

Many candidates are still tempted to use **dictionary definitions** to pin down meanings of terms found in prescribed titles. Usually, these definitions are subsequently ignored and thus add no value to the work. It is emphasized once again that this type of use of the dictionary has the effect of closing down discussion and conceptual analysis just when it is desirable to open them up at an early stage in the essay. Rather than trying

to pin down a definition of, say, 'knowledge', in a pat sentence in the introductory paragraph of an essay and risking making the rest of the essay irrelevant, it would seem a better strategy to indicate what is understood by the term by giving examples and stating that a closed abstract definition might be outside the scope of the essay. In the age of the Web, instant access to **quotations** continues to prove too tempting for many candidates – in the words of one examiner: "Too many students still sprinkle quotations from quotation websites liberally throughout their essays, often without source citations and almost always without their serving any actual function in the essay." Candidates should also avoid the use of bulky **footnotes** offering lengthy clarifications of terms, concepts or examples – these usually appear to be attempts to circumvent the word limit, and examiners are not required to read them.

Many candidates seem to struggle with overall **essay structure**. Attention must be paid to the flow of an argument and also to the length of paragraphs. Many examiners complained of inappropriate responses to the requirements for **acknowledgements** in essays – with numerous candidates either providing no references or citations at all, or appending vast bibliographies that seemed to bear no immediate relationship to the content of the essay. Candidates and teachers are reminded that references to online sources should include access dates.

There are now numerous TOK 'textbooks' or 'companions' available to candidates. It is worth reiterating here that such materials can be useful but candidates should avoid undue reliance upon them in their essays. In particular, many essays refer to these books as a source of examples unfortunately taking precedence over the candidates' first-hand experience of areas of knowledge during the course of the IB Diploma Programme. Candidates would be well advised to consider their own contact with their diploma subjects a rich source for detailed exploration of knowledge issues.

## Administrative and Clerical Procedures

Schools are asked to observe the following requests in order to assist with the assessment process:

- Ensure that candidates use a spacing of at least 1.5 and a font size of 12
- Use a 'standard' font such as Times New Roman or Arial
- Use default-sized margins without any added border
- Write the prescribed title at the start of the essay as stated on the list
- Take note of the limits of the word requirement for the TOK essay – the actual word-count must be entered when the essay is uploaded

For some reason, more essays than usual were submitted this year on titles not prescribed for the current sessions. This can have disastrous consequences for candidates' grades. Coordinators, teachers and students are therefore urged in the strongest terms to ensure that they work from the correct list.

There is one list of ten titles for the November 2011 and May 2012 sessions. From the November 2012 session, there will be a unique set of six titles for each single examination session. This will create proper equity for November and May candidates, and allow title-specific marking notes to be provided for examiners in order to aid them in the assessment process by reinforcing TOK expectations and pre-empting some of the typical uncertainties and questions which arise.

## The Presentation

### Component grade boundaries

The boundaries remained unchanged for these sessions.

<b>Grade:</b>	E	D	C	B	A
<b>Mark range:</b>	0 – 8	9 – 12	13 – 15	16 – 18	19 – 20

**Much of the following account re-emphasizes (in part actually repeats) what is written in previous subject reports. This is because the weaknesses apparent in the presentations viewed by verifiers this year were once again very similar to those evident in previous sessions. In many cases, these weaknesses seemed to stem from misdirection from teachers rather than a lack of effort from the students. It is, therefore, essential that teachers read the comments below and ensure that they and their students avoid these persistent misunderstandings about the nature of the TOK presentation.**

## Forms

Coordinators and teachers should ensure that forms from the current Handbook of Procedures are used for the administration of the TOK presentation, as follows:

Form TK/PPD requires candidates to identify the following aspects of their presentation:

- The title of the presentation
- The real-life situation to which the presentation refers
- The knowledge issue that has been identified as arising from the real-life situation, expressed as a question
- A plan of the presentation as intended

Form TK/PMF requires the following:

- The title of the presentation
- The duration of the presentation in minutes
- The self-assessment of the individual candidate
- Authentication of the presentation by the candidate – name and signature required
- The assessment by the teacher
- Authentication of the presentation by the teacher – name and signature required

There have been some notable clerical problems this year once again. Some schools are still using obsolete versions of these forms from previous Handbooks of Procedures – this is very unhelpful and means that important information is not included in the package to the verifier. This is likely to affect the judgements made. Additionally, some schools are sending all presentation material and forms and leaving the selection of the sample to the verifier – this is not appropriate. Verifiers report that some TK/PPD forms appear to have been

completed after the presentations have been given, and some TK/PMF forms lack any written comments from candidates or teachers. The duration of the presentations is sometimes either not filled out, or not filled out with the correct time. Please see the appendix for correct procedures for submission of presentation samples.

## Assessment Issues

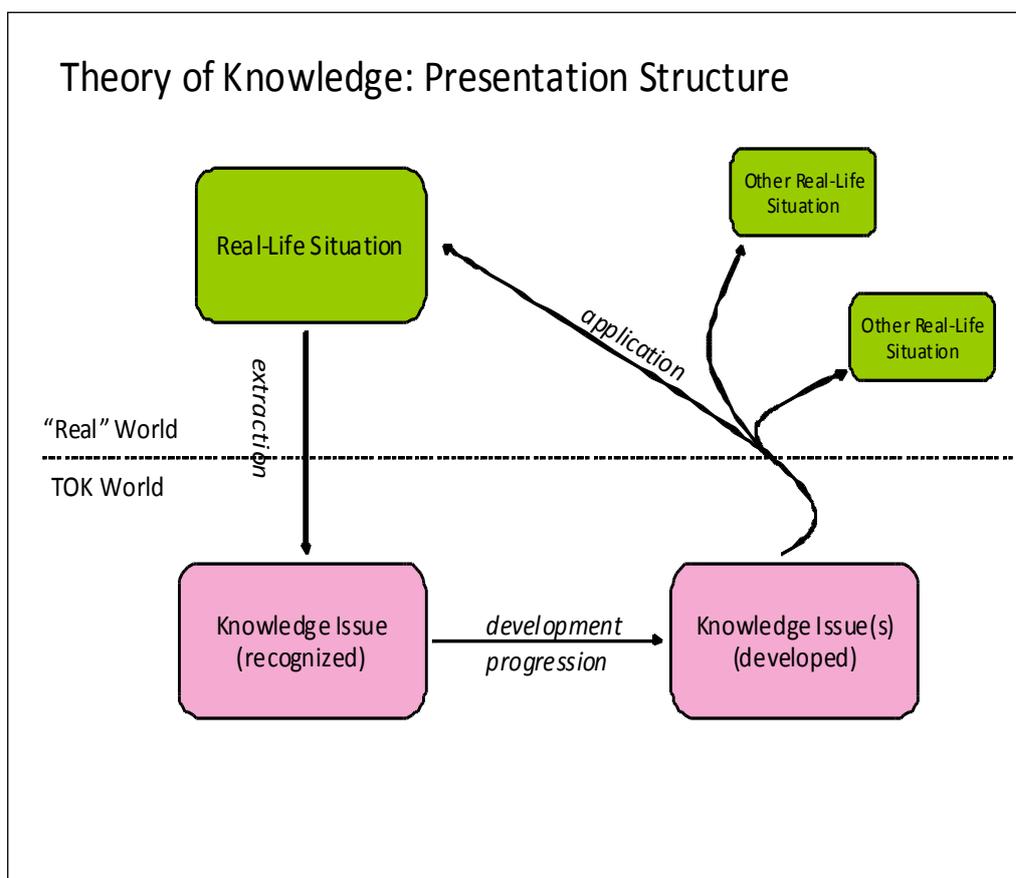
Teachers are reminded of the dual role of presentations in TOK. While the presentation is a formal *summative* assessment requirement for TOK, it is also intended as a *formative* opportunity for students to contribute a meaningful lesson to the TOK course in which they are participating. This second reason provides a further impetus to the need for effective planning – so that other students will benefit from the presentation.

It seems to the verification team this year that an understanding of the goals of the TOK presentation has still not been achieved in some schools. This may be due to either insufficient or inappropriate guidance from teachers. Reports continue to describe many presentations of poor standard, marked very generously by teachers. One verifier writes: “Too many of the presentations were descriptive, with a great deal of reading and video clips that were too long. We still have quite a long way to go in getting the point across of the presentation as a means to link the ‘real world’ with the ‘TOK world’... Sadly few are the presentations which convince and give a sense of progress regarding an issue... Unfortunately, most of the presentations I verified did not show much critical thinking about knowledge.” Some candidates who did take the trouble to formulate a knowledge issue then ignored it for the remainder of the presentation. Another verifier laments: “The biggest problem continues to be that the presentations take the form of descriptive subject reports on a topic with little relevance to, and therefore little understanding of, knowledge issues.” And another: “It seems difficult to believe that schools are using the myriad IB publications made available to them, including ‘Understanding Knowledge Issues’ (OCC), sample TOK presentations (OCC), examiner reports since 2008 (OCC), IB Prepared TOK (IB Store).”

In short, the articulation of real life situation and knowledge issue that lies at the heart of the presentation task is often still not being achieved. The result is that verifiers have found it unavoidable in these cases to deduct marks from the assessments made by teachers of their own students. Verifiers are deeply concerned about viewing so many presentations in which students clearly invest much time and effort, but do so to little effect as the outcomes are almost entirely descriptive and lacking in analysis. This is a problem of *relevance*; specifically, presentations are not focused on *knowledge issues*. Schools are once again, therefore, very strongly directed to the 2009 IB publication ‘Understanding Knowledge Issues’ which is available on the OCC. If students can structure their presentations around knowledge issues as defined in this document, this *relevance* problem should be avoided.

We cannot stress strongly enough; **the TOK presentation is NOT a descriptive research project; NOT a social studies “report” or “monograph” on some subject of general interest.** Without a focus on knowledge issues, presentations cannot deserve major credit on the assessment criteria (criteria A and B are almost certain to score zero for research projects, and a very low mark for D is very likely). They *can* be very good *presentations*, but are very poor *TOK presentations*.

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:



The two levels represent the students' 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 students and teachers in understanding this structure, the TK/PPD form now requires the written documentation of both the real-life situation **and** the knowledge issue that is extracted from it. The TK/PPD 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 students 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 would ideally be drawn on the reverse side of the TK/PPD form, and 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. In each case, the presentation was a real one, but in some cases the exact wordings of the situation and/or issue have been changed in order to make the intentions clearer:

**Real life situation:** A controversial exhibition in an art gallery

**Knowledge Issue:** To what extent are the limits of art defined by morality?

**Real life situation:** Claim in a biology textbook that mesosomes are not real structures in bacteria

**Knowledge Issue:** How can we be sure that scientific evidence gained through the use of technology is genuine?

**Real life situation:** A move to make history a compulsory school subject up to age 16

**Knowledge Issue:** To what extent should academic disciplines be ranked according to their usefulness?

**Real life situation:** The use of a personality test to assess students in the class

**Knowledge Issue:** What are the strengths and limitations of quantification in the human sciences?

**Real life situation:** The bombing of Coventry in the United Kingdom in WW2

**Knowledge Issue:** To what extent can we use reason to evaluate two competing ethical systems?

**Real life situation:** The connection between being a smoker and one's parents being smokers

**Knowledge Issue:** How does a scientific explanation distinguish between correlation and causation?

**Real life situation:** The death of Bogon – the last speaker of the Kasabe language in Cameroon

**Knowledge Issue:** In what ways does language affect how we interpret the world?

**Real life situation:** The inauguration of the Large Hadron Collider in Switzerland

**Knowledge Issue:** What is the scope of the scientific method in attempting to establish truths?

**Real life situation:** President Ahmadinejad of Iran calls for a conference to establish whether the Jewish Holocaust really happened

**Knowledge Issue:** How can we draw a clear line between fact and interpretation in history?

**Real life situation:** The banning of *burka* and *niqab* in France

**Knowledge issue:** To what extent can we distinguish between rational and emotional inputs into decision-making?

**Real life situation:** Conflict of views about global warming

**Knowledge issue:** How can we know when we have a good scientific explanation?

**Real life situation:** Case of a teenager who raped a small girl after watching pornography on the internet

**Knowledge issue:** How can we distinguish causal relationships from mere correlation?

On a more positive note, one verifier writes: “There is some hope that the task is indeed approachable... In one school, the presentations were commended for their focus and precision in engaging their knowledge issues effectively through real life situations. In each case, the candidates clearly established their real life situation and accompanying knowledge issue from the outset... The candidates put obvious energy into their presentations, which was also energy well directed toward critical inquiry in the spirit of the course...”

There are 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. 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.
- The presentation must be a live experience with the intended *formative* opportunity for students to contribute a meaningful lesson to the TOK course. Therefore the presentation must not be filmed by students at home or in another setting, nor be edited.
- While interactions with the audience are permitted during the presentation, they must be well-planned and not act as a substitute for clear thinking on the part of the presenters. Some presentations this year indicated a level of planning on the part of the candidates that did not seem to stretch much further than introducing the name of the topic and then asking the class “what do you guys think about it?” Discussion after the end of the presentation is not considered a part of the presentation and should not influence assessment judgements
- The use of movie and YouTube clips must similarly 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/PMF form – timings should be compatible with the recommendations given in the Subject Guide on page 47
- 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, thus struggle to maintain high levels of interest among members of the audience, and tend to fragment as individual students are assigned particular tasks that are not re-integrated into the whole. On the other hand, presentations by

individuals are necessarily very time-limited and candidates need to consider how much they can achieve within this 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

## Administrative and Clerical Procedures

Thanks are due to a team of 6 presentation verifiers who viewed presentations from schools during these sessions. Once again, about 5% of the schools entering candidates were asked to record some or all of the TOK presentations given by the students 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.

Schools selected for any given examination session are notified via the DP Coordinator by IBCA at the start of the diploma cycle that culminates in that session. For example:

- schools selected for the May 2012 session **will have been** notified by August 2010
- schools selected for the November 2012 session **will have been** notified by February 2011
- schools selected for the May 2013 session **will be** notified by **August 2011**
- schools selected for the November 2013 session **will be** notified by **February 2012**

Schools that have been asked to provide presentations for verification must observe the requirements outlined in the Appendix to this report. Failure to do so may make it difficult for verifiers to award appropriate marks and may make the verification process less reliable.

## 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 less than 5 in total). These materials comprise:

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

To clarify further:

- **a TK/PMF must be included in the documentation for each candidate in the sample, and for sampled candidates ONLY**

- **a TK/PPD must be included in the documentation for each presentation that forms part of the sample (there is no need for more than one TK/PPD for candidates involved in the same presentation)**

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.

**Schools are required to send recordings in DVD format only. Other formats such as VHS and camera cassette tapes are no longer acceptable.**

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 (bubble-wrap, etc.). USB sticks also provide a good format. 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). School may consider asking students 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 first words spoken.