

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 theory of knowledge (TOK) teachers, and the Diploma Programme Coordinators.

Overall grade boundaries

Boundaries for this session were set as below:

Grade:	E	D	C	B	A
Mark range:	0 - 3	4 - 9	10 - 15	16 - 21	22 - 30

Teachers are reminded that the essay score is doubled and added to the presentation score to give a maximum possible total of 30 marks.

Statistical Summary

	May 2018	May 2017	% change
English	75,677	71,591	5.70%
French	689	720	-4.30%
Spanish	7,275	7,212	0.87%
German	129	117	10.25%
Chinese	782	659	18.66%
Total candidates	84,552	80,299	5.29%

Section 1: The essay

Component grade boundaries

Essay grade boundaries for this session were set during the grade award meeting after extensive reading and discussion of scripts, as follows:

Grade:	E	D	C	B	A
Mark range:	0-1	2-3	4-5	6-7	8-10

These boundaries remained unchanged from previous sessions.

Examiners

Thanks are extended to 440 examiners who assessed TOK essays this session. The comments in a document such as this tend to focus on weaknesses of assessed work, but there are many rewards associated with the opportunity to appraise TOK work from around the world. Teachers who wish to become examiners can visit <http://www.ibo.org/informationfor/examiners/> for more information (note that teachers must have a minimum of a year's 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 course and for the insight afforded with respect to the strengths and weaknesses of their own candidates.

General comments

Overall quality of work

Taken as a whole, essay work this session exhibited a decline in quality as compared with that of May 2017. This is naturally disappointing, and it was particularly disturbing to read such few essays meriting scores at the very top of the marking scale. There seemed to be a reluctance to treat the process of unpacking key terms such as "interdisciplinary", "uniformities" and "suspension of disbelief" with sufficient resolve, and this led to work that only partially met the requirements for sound analysis.

Problems in Spanish

However, the overall picture masks once again a severe dichotomy between performance in the English and Spanish language domains. The principal examiner for Spanish summarised the issue as follows:

"The general standard is worryingly low. Basic, superficial, simplistic arguments are presented. Some candidates seemed to think a TOK essay is merely about giving your opinion about something in a general and descriptive way. Of great concern is the question of what is or is not going on in the TOK classroom. As one examiner put it, the situation in Spanish is 'critical'. Very few essays achieved higher than level 2. A common weakness is the presentation of abstract but simplistic arguments with no substantiation, no examples. Often the title is

forgotten. Mention of ways of knowing (WOKs) is rhetorical; they are often mentioned as if it were an obligation to do so, but these mentions are unrelated to the analysis of the question.

The few very good essays unpacked the titles well, showed very good understanding of TOK and did not have to try hard to be deep, but they were few and far between. It is evident that many candidates have had little practice writing essays and even if they have, the evidence suggests that they did not receive good feedback. One wonders whether candidates are given exemplar essays to read.

The concept of 'academic discipline' seemed problematic for some. Command terms tend to be ignored or are not understood. As regards to structure and planning, once again a lack of effort is evident. It was clear that many essays were just written as ideas came into the candidates' minds and they showed little organisation. On the other hand, there were also a few examples of a rigid structure followed and these formulaic essays were devoid of personal voice and meaning."

Some successes

Examiners noted that candidates were generally capable of mastering the basics of language, syntax and vocabulary, and there was some satisfaction in the standards of paragraphing, structure and development of argument. The best papers keep the focus narrow, incisive, concise. These essays offered interesting and informative analysis of a specific issue within the disciplines. By keeping the focus narrow, such candidates avoided all the superficial and unhelpful generalizations that so many other essays fall prey to. Broadly speaking, successful candidates are willing to conclude that while there are certain obstacles to our complete understanding, presently we know a great deal. They recognize that, although there is still much to learn, we have every reason to conclude that in time we will deepen our understanding. It is this realistic outlook that one can only hope TOK instruction encourages in young minds.

Even though many candidates used common examples that are generally very popular and can be effective if well expressed, there were some that employed examples that were original and new and were linked well to the prescribed title. Candidates often try to twist standard examples in an effort to make them fit the requirements of the selected prescribed title– with limited success– and so it is particularly gratifying to come across some essays that exhibit evidence of originality. While it is agreed that original "evidence" in candidate's work doesn't necessarily make them better essays, it does suggest that they have taken some time with their research and not just grasped the first thing they found in a last-minute Google search.

Some weaknesses

Some candidates seem to believe that the purpose of a TOK essay is to challenge at any cost the basic foundations of knowledge, but often very little is accomplished by following this path. Hence, it is not uncommon to read that historians are involved in an irrational pursuit solely to further personal and political ends, or that human beings cannot reach any common understandings in the areas of ethics or aesthetics. That which is not absolute, certain, or universal is described as marginalized, biased, or unsound. The senses cannot be trusted; emotions distort understanding; language is social construction; reason is rationalization. It is vital to encourage candidates to view knowledge as real and as an achievement in the context of the difficulties despite which it is created.

Too often candidates fail to identify or narrow down in any way to whom the word "we" (that is often found in titles) might refer. Even where "we" does not appear, candidates tend to use the pronoun in any case. This leads to a variety of problems when it comes to drawing any sort of convincing or meaningful conclusion. The outcome is often generalizations that deny the importance of cultures, history, countries, gender, ethnicity, etc. Many candidates end up building arguments that lack nuance and recognition of anomalies and outliers.

As usual, there was evidence of numerous candidates resorting to TOK help sites online, often with deleterious impact upon evidence of personal involvement in the thinking behind the writing.

Degree and quality of teacher guidance

Examiners once again expressed concerns that assistance to candidates veers from far too extensive to non-existent. At one extreme, it seems that candidates are being provided with common templates and formulaic guidance such that there is little room for them to express themselves in their own terms.

At the other (and more common) extreme, there are large numbers of essays that seem to have been written by candidates with no input from teachers at all. Examiners lamented that in such cases teachers must have been either too detached even to read the candidates' work before submission, or lacking in knowledge of what kind of advice to offer. It appeared to some examiners as if candidates had in some cases barely been taught TOK at all, that their work had seemingly been done at the last minute. Teachers need to find ways to facilitate the degree of clarity in candidates' work without imposing their thinking upon the candidates themselves.

The unpacking of key terms was often too perfunctory. It is obvious that most candidates understood that they had to unpack them, but many seemed to lack an understanding of how this process contributes crucially in crafting an argument. This is another area that teachers need to work on—the explanation and teaching of how to unpack in a meaningful way.

Lack of any oversight for candidates affects not only the content of the essay but also leads to a failure to observe clerical matters. Examiners continue to complain about essays that are single-spaced, include candidate names and session numbers. Teachers might also indicate to candidates that essays that fall well below of the permitted maximum word count may well be self-penalizing as they are likely to exhibit shallow analysis or lack of essential detail. A preponderance of short essays was noted by a number of examiners this session.

Key points

- Some teachers are providing too much input, sometimes with counterproductive results
- Some teachers seem not to be providing any guidance to candidates at all
- The distinctive nature of the TOK essay requires carefully tailored support from the candidate's teacher
- Poor formatting can be difficult to ignore during the marking process

Optionality in the course

In this edition of the TOK course, teachers and candidates are advised to study six areas of knowledge (AOKs) (see TOK subject guide, pages 8 and 28). In addition, there is a suggestion that four ways of knowing (WOKs) should be given particular attention (see TOK subject guide, pages 8 and 23). As the numbers of areas and ways presented in the subject guide exceeds these figures, there is freedom of choice as to which parts of the course can be studied. The subject guide provides for these choices in the interests of flexibility with regard to the local circumstances of schools and the interests and preferences of teachers and candidates. Fairness of assessment within this structure dictates that prescribed titles cannot specify parts of the course to be addressed in an essay, and so one of the first hurdles encountered by candidates is to make decisions as to which of them should form the bulk of the essay content.

The TOK essay is comparative in nature, and indeed many recent prescribed titles indicate explicitly that two areas of knowledge should be included in a response. It is important to be able to draw contrasts between the areas that are selected, and evidence suggests that the capacity to do this is uppermost in candidates' minds when they make these decisions. This is as it should be, but a sophisticated analysis is also dependent upon finding points of similarity across the spectrum of knowledge, and this should be borne in mind as choices of areas are deliberated and made. The teacher's role in providing guidance to candidates should include some discussion on this matter as the decisions settled upon will have a strong bearing upon the eventual quality of the essay.

It was noticeable this session that a surprisingly large number of candidates chose to ignore the clear requirements of the titles in terms of number of areas of knowledge to be examined. In particular, many essays addressed three or more AOKs, with the result that the ones that appeared later in the work were likely to be ignored by examiners. In addition, the loss of available words for the AOKs that counted often militated against sufficient depth of analysis.

This session saw a great (and unprecedented) preponderance of writing on religion (stimulated presumably by the appearance of words such as "doubt" and "disbelief"). The decision by so many candidates to go in this direction might arguably have contributed to the drop in the quality of work, as the product was often either unexamined personal anecdote or was built upon poorly researched claims about the religious dispositions and affiliations of others. Teachers and candidates are reminded that the aforementioned optionality in the course with respect to areas of knowledge means that great care must be taken in the selection of areas for consideration, and any tendency to go with first impressions of relevance should be resisted until all the options have been weighed.

In many essays that dealt with religion, analysis was often built on personal anecdotal experience from which large generalizations were drawn. Arguments constructed in this way are rarely convincing and, more often than not, cannot support the conclusions they propose. There was a great deal of personal narrative in the area of personal religious faith, and many accounts of personal journeys from "young believer" to "teen skeptic" and a crisis in between. While personal accounts are not wholly irrelevant, they are best integrated into a larger framework designed to achieve whatever end the candidate has in mind.

Key Points

- The generic nature of current prescribed titles means that great care must be invested in the choice of parts of the course to be examined
- While it is advisable to select areas of knowledge that show distinct contrasts, comparisons that allow points of similarity are also crucial to the balance and sophistication of the response
- Personal accounts are encouraged, but ideally should be situated in a wider context

Misunderstandings about knowledge questions

It is clear that some candidates (and some of their teachers) have a poor understanding of what is required when attempting to respond to a prescribed essay title. The following is presented as an attempt to clarify the intentions of the TOK essay task with respect to knowledge questions.

The form of a prescribed title can vary to some extent:

It can be just a question:

To what extent do the concepts that we use shape the conclusions that we reach? (May 2016)

Should key events in the historical development of areas of knowledge always be judged by the standards of their time? (May 2017)

It can be a question followed by a clarification indicating how to respond to it:

Is the value of knowledge related to how easy it is to access? Develop your answer with reference to two areas of knowledge. (Nov 2017)

Given access to the same facts, how is it possible that there can be disagreement between experts in a discipline? Develop your answer with reference to two areas of knowledge. (May 2017)

It can be a claim followed by a question or clarification indicating how to respond to it:

"The simplest explanation is the best explanation." Discuss this statement with reference to two areas of knowledge. (Nov 2017)

"Facts are needed to establish theories but theories are needed to make sense of facts." Discuss this statement with reference to two areas of knowledge. (May 2017)

In all of these cases, **the task is to respond to the title exactly as it has been presented.** Under no circumstances should the candidate immediately present a knowledge question ("my knowledge question is...") such that it appears as if the title has been replaced by it. The essay task is not about "finding" a central knowledge question to which the rest of the essay is a response; that is rather a central requirement for the TOK presentation. It is worth reprinting here the extra advice added to teacher support material last year on these matters:

The description of the nature of KQs given in the subject guide (formulated as questions, about knowledge and so couched in the vocabulary of TOK, general in nature) is correct and continues to be so.

The guidance provided in the subject report that KQs in the actual essay need not (NOTE: "need not", not "must not") be articulated explicitly in no way invalidates this description of what a KQ is.

Treating a KQ implicitly in an essay does not mean that any of the characteristics of a KQ have been contravened - the exact formulation of a KQ is not necessarily the same as the way that that KQ will find expression in an essay - so it could be framed explicitly (i.e. as a KQ with all of the characteristics mentioned above), or it could be implicit (as in the KQ is still the same KQ but it is not stated explicitly in the essay as a question)

Therefore, there is no contradiction between what is written in the subject guide, the guidance provided in the subject reports and the way in which the candidates awarded high scores have presented their work in the essays that have been included in the TSM.

In summary:

- 1. There are prescribed titles. Answer one of them exactly as written.*
- 2. Plan out how to answer it in terms of knowledge questions.*
- 3. A knowledge question is of course a question. But questions can also be implied in a piece of text.*
- 4. So you choose - either state them boldly as questions in the text or leave them implicit in the text.*
- 5. Leaving them implicit tends to make the essay flow more coherently as a single entity, which is what an essay should be. That is why it is promoted as an option.*
- 6. If you make them implicit, that doesn't mean that the original questions cease to exist or have somehow become something else.*
- 7. Remember that the essay is not just an exercise in asking questions; examiners are looking to reward an analysis based on them while never losing sight of the title, which is the thing that must be answered.*

In order to construct a successful response to the title, it will be necessary to establish at least tentative or partial or provisional answers to a number of related questions as the essay unfolds. For example:

"Over time, knowledge has become more accurate." Discuss this statement with reference to two areas of knowledge.

What might it mean to say that some item of knowledge is accurate? That it is lacking in error; is close to the truth; acts as a good "map" of some aspect of reality.

What are the key difficulties in measuring accuracy of knowledge? *That we do not have direct access to the truth; our knowledge itself is our closest approximation to it so on the face of it the required comparison does not seem to be available; that the standards by which we try to measure accuracy in different areas might not be the same.*

What are the implications for knowledge of describing it as more or less accurate? *That knowledge need not be certain; there is room for doubt; that the justified true belief model of knowledge might not be helpful; that we might have to accept and be tolerant of shortcomings.*

How can knowledge become more accurate? *Through deliberate minimizing of error; as a result of new breakthroughs; or from cumulative work; through the construction of a new “map”.*

Which areas of knowledge appear, at a glance, to have become more accurate, and which not? *The sciences seem to demonstrate increasing accuracy while the same claim might be more difficult to sustain with the arts; might need to take into account shifts in the objects of study in some areas such as the human sciences.*

What kinds of development of knowledge might not count as increasing accuracy? *Maybe just more knowledge; or filling gaps between items of knowledge that are already highly accurate...*

[The above is for illustrative purposes only and is not offered as a model approach to this title.]

Ideally, such questions and the discussions that they inspire can be organized into a logical sequence such that they form the backbone of the essay – each contributing to the overall answer to the prescribed title. The content of each paragraph might constitute a response to one of these questions. Hence such knowledge questions can act as markers in the development of the argument and pave the way from title to conclusion. As described here, the identification or formulation of these questions can play a crucial role in the exploration and planning phases of the essay task, and when the final essay is constructed it may not be necessary or desirable to the flow of the arguments for the questions to be stated explicitly. A sequence of paragraphs each prefaced by “my next knowledge question is...” does not read well and is likely to appear disjointed.

So, in summary, knowledge questions are NOT “alternatives” to the title, and they are best thought of as aids to the exploring and planning processes such that they become woven into the analysis but not necessarily stated explicitly in the final essay.

Key Points

- While there is a great deal of choice available to the candidate in terms of alternative titles and parts of the TOK course that can legitimately be explored within the one title that is chosen, the exact wording of the title must be respected and examined very carefully.
- Writing “my knowledge question is...” near the start of the essay is usually a recipe for disaster as it means that, in effect, the title has been displaced.
- Knowledge questions should be thought of as way-stations on the journey to an answer to the prescribed title – useful in explicit form while exploring the title and planning a response to it, but not necessarily stated explicitly in the final text.

The role of ways of knowing

At the last course revision, the number of ways of knowing (WOKs) included in the subject guide was increased from four to eight. The rationale for this change was not to boost the relative contribution of ways of knowing to the course but rather to emphasize that the set of attributes available to the quest for knowledge is more complex and interactive than was previously suggested by the more restricted suite of four (see TOK subject guide, pages 8 and 27). In the spirit of this change, teachers and candidates are strongly encouraged to be very circumspect about treating ways of knowing in isolation. Unfortunately, it seems that many schools still take precisely this approach to TOK, with an extended tour of ways of knowing before addressing other aspects of the course. A consequence is that a selection of ways of knowing is often “laid on the table” at the start of essays in a way that does not prefigure sound analysis. Examiners often find themselves reading something like:

“In this essay I will be focusing upon the human sciences and history as areas of knowledge, and my ways of knowing will be intuition and memory.”

While most titles do require a clear statement of areas of knowledge to be addressed, there is no corresponding expectation for ways of knowing (except perhaps for the minority of titles which take ways of knowing as the main focus). A definitive identification of them at the start of the essay is often unnecessarily limiting for the subsequent analysis.

Because of the way the course is presented, and because of seemingly widespread practice of affording ways of knowing a privileged position in course structure, there is a strong tendency for candidates to treat ways of knowing as the primary elements of TOK analysis. This leads to a number of serious issues. Firstly, candidates tend to invoke them as “answers” rather than starting points for analysis, as if naming them were enough. The precise nature of emotion or imagination, for example, is often not considered worthy of attention. Many candidates write about how ways of knowing are “used” as if they were ingredients that ought to be “baked” together in order to generate various forms of knowledge. This is simplistic at best, and highly misleading. A deep understanding of the role of ways of knowing leads to the insight that just because a particular way of knowing is used to justify a claim does not guarantee that it is knowledge. It is how ways of knowing are used that supports knowledge claims.

Secondly, the effort to make ways of knowing fit with what is understood about various areas of knowledge produces some spurious connections and rather artificial constructs – we learn, for example, from many essays that history is somehow an outgrowth of memory, thus neatly sidestepping the actual role of the historian. Ways of knowing tend to be forced into the analysis in places where they do not and cannot enlighten. Sometimes they are mentioned seemingly just for the sake of making sure they are “name-checked” in the essay even though they provide no insight at all:

“Through sense perception, I observed the motion of the planet...”

“With the help of reason, I reached my conclusion...”

“Using language, I read the historical account...”

The most recent subject guide gave pride of place to a set of knowledge frameworks that were designed to provide appropriate tools for TOK analysis (see TOK subject guide, page 28 onwards). While ways of knowing are frequently mentioned within these frameworks (particularly in connection with methodologies), the promotion of the frameworks was a response to some of the problems described above that stem from the limitations in the competence of ways of knowing to achieve successful TOK analysis on their own. Teachers are strongly encouraged to consider shaping their treatment of various parts of the course through the use of the framework tools. While the subject guide states that the knowledge framework is not compulsory, neither are the ways of knowing required to form the foundation for addressing many of the prescribed titles.

Key Points

- The subject guide makes it clear that ways of knowing almost always operate together, and this should be reflected in the approach taken to them in essays.
- The great majority of current prescribed titles invite candidates to select and indicate the areas of knowledge to be explored in the essay, but, as a rule, no similar imperative applies to ways of knowing in these titles.
- Offering an explicit selection of ways of knowing at the start of the essay tends to undermine the claim above that they work together.

Areas of knowledge, knowledge production and learning

As (a) TOK is a course about knowledge and knowing, and (b) knowledge is a human construct, it is important to be clear about the relation between the two in TOK work. Discussion of how knowledge is produced by expert practitioners in subject disciplines is a central aim of the TOK course, but there must also be room for the exploring the ways in which other groups and individuals, such as the TOK candidate, come to know.

Phrases such as “the production of knowledge” (e.g. May 2017, prescribed title 4) or “knowledge produced” (e.g. May 2017, prescribed title 1) give a cue that there should be a strong emphasis on the former:

“In the **production of knowledge**, traditions of areas of knowledge offer correctives for ways of knowing.” To what extent do you agree with this statement?

“It is only **knowledge produced** with difficulty that we truly value.” To what extent do you agree with this statement?

Whereas “the acquisition of knowledge” (e.g. November 2016 prescribed title 1) allows for more latitude:

The **acquisition of knowledge** is more a matter of recognition than of judgment.” Evaluate this claim with reference to two areas of knowledge.

“Acquisition” here could refer either to the production or the consumption of knowledge. One reason why the distinction between shared knowledge and personal knowledge was introduced was to draw attention to the need for balance in this respect.

Key Points

- Candidates are advised to look carefully at the wording of prescribed titles in order to ascertain what kind of engagement with knowledge is being elicited
- Candidates should consider “home advantage” in the selection of areas of knowledge – there is a danger of thinking that one understands more than one actually does in areas that are unfamiliar to candidates beyond the TOK course.

Aspects of essay content

A perennial complaint from examiners concerns the use of definitions. Typical comments are as follows:

“Dictionary definitions for key terms are rarely helpful; they are not nuanced or rich enough, nor do they suggest that the candidate has spent at least 100 hours discussing knowledge, theory, truth, etc. Since these definitions usually appear at the very beginning of the essay, greater care should be taken to create a better first impression than one can achieve with a definition from dictionary.com.”

“Definitions offered are fairly weak or inappropriate to the task at hand; it is unlikely that any kind of categorical argument could be constructed that relies on them. An argument which calls for specific categorization of a practice, concept, state of mind, an object or outcome cannot be achieved without first clearly identifying the category to which these various things under consideration might belong. The definitions should offer a map, guidance or an accessible framework for the rest of the paper.”

Candidates’ employment of examples has been mentioned above, but there is perhaps more that ought to be said given their key role in the construction of convincing responses to prescribed titles. A wide variety of examples was on offer in essays, but a preponderance of a particular group of them drew some concerns among examiners. Some examples appear with great regularity but, with some additional thought, could have been substituted by others that would function at least equally effectively, and perhaps have offered additional insights. Many

examples have much potential when they have been mastered by candidates and applied in situations where they support or illustrate the exact claims being made about knowledge.

Some examples stem directly from candidate experience in other Diploma Programme (DP) components, and as such are to be welcomed as evidence for a primary aim of TOK in action. However, there may be other such points of contact across the DP that could also be exploited. Candidates often included their own experiences with extended essays and internally assessed tasks, and this is to be encouraged as long as they are described in enough detail to illustrate the claims at large. It is no use the candidate simply mentioning that, for example, there were difficulties with data collection in an extended essay; we need to understand the context of the particular experience that is being revisited. At the same time, candidates are advised to consider whether the number of words used to convey an example is a good investment in terms of bringing the analysis forward.

Examiners are aware that the ideal of the TOK essay as the culmination of the student's personal adventure to date in knowledge is perhaps unrealistic for many candidates on grounds of the limits of personal experience or motivation, but it must be pointed out that the constraints imposed by these factors can be exacerbated by the temptation to rely on external sources designed specifically to "help" with the task. As there is a finite quantity of such material available, shared patterns of essay structure and content across schools often become evident to examiners. If a candidate's first move is to search the internet for material that responds directly to a prescribed title, there is no way back from the "contamination" of thought that has occurred, and the short-circuiting of the process of internalization often leads to correspondingly poor work. Teachers are strongly urged to lead their candidates to formulate a personal and independent response to a title before allowing the wider world into the task that lies before them.

Key Points

- Candidates are strongly advised to resist the temptation to search for responses to prescribed titles on "help" sites or elsewhere as, once accessed, they contaminate the candidate's thinking and cannot be "unthought".
- Dictionary definitions often do not provide helpful guidance for the direction that should be taken in constructing an essay.
- Some examples are inherently ineffective because they are simplistic and cannot support the quality of analysis that is required in TOK.
- Some examples are ineffective because they are described at length and without sufficient regard for their contribution to argument.
- Some examples are employed ineffectively because they do not support the point being made or because they are described without due care for accuracy.
- Some examples have their origins in other DP courses, and these should be generally encouraged.
- Fresh examples are more likely to be effective, but even relatively common ones can work well if they are used with respect for their nature.

Feedback on specific titles

1. “The fields of study of academic disciplines can overlap, but adopting interdisciplinary approaches to the production of knowledge leads only to confusion.” Discuss this claim.

This was a slightly subversive title given the educational philosophy of the IB, and candidates were challenged to examine the success or otherwise of interdisciplinary projects. Many candidates ignored the edict to focus on knowledge production here and ended up writing exclusively about the connections between subjects in the classroom. A failure to establish some daylight between overlaps in subject content between disciplines and the ways in which those disciplines approached the common subject matter often proved fatal to the effort to construct a viable analysis. However, some candidates succeeded in demonstrating how common methodologies or sets of concepts can lead to profitable interdisciplinary knowledge production, or indeed that differences between them might turn out to be complementary.

Stronger candidates made an effort to unpack the concept of confusion as it might apply to the knower on one hand and the condition of the knowledge produced on the other. Weaker responses tended to dwell on the use of knowledge from one discipline in the domain of another without exploring carefully the reasons why the exploitation of the former might have turned out to be profitable or otherwise. With its focus on disciplines and their relations, this title provided some freedom for candidates to roam across the traditional areas of knowledge without being confined to a comparison of just two – some candidates exploited this latitude well.

2. “We know with confidence only when we know little; with knowledge doubt increases” (adapted from JW von Goethe). Discuss this statement with reference to two areas of knowledge.

With this title, candidates often conflated doubt with growing awareness, as in “the more I learn the more I am aware of how much more there is to learn”, which is not the same as “the more I learn the less confident I am that what I know matters or is complete”. The former might be seen as a positive reaction to possibilities whereas the latter might be seen as a negative reaction leading to an end to questioning.

Many candidates drew arbitrary lines around examples so that one example says that doubt increases with knowledge and the next says confidence increases with knowledge. The problem with building an argument entirely on examples is that there will always be another example that can undermine your argument. Something more along categorical lines was needed in order to advance a more successful argument for this title.

A common troublesome move was for confidence to be treated as equivalent to certainty. But the idea of absolute truth is not an obstacle to confidence – candidates were better served by recognizing the difference between higher and lower degrees of probability, and the difference between stronger and weaker arguments based on stronger or weaker claims to evidence.

3. “Without the assumption of the existence of uniformities there can be no knowledge.” Discuss this claim with reference to two areas of knowledge.

The most significant conceptual blunder that many candidates made here is to avoid, forget, or eliminate entirely the word “assumption” from the discussion – by doing this they removed the critical distinction between an assumption of existence and existence itself. Such candidates often went on to discuss the importance of uniformities in, say, mathematics or science, but the assumption and with it the possibility that these uniformities might not exist never comes into it. A typical claim made by a candidate in this paper was that “uniformities must exist” for there to be knowledge. This approach avoided the most interesting of implications: that uniformities might not exist but we require them anyway in order to produce knowledge.

4. “Suspension is disbelief” is an essential feature of theatre. Is it essential in other areas of knowledge? Develop your answer with reference to two areas of knowledge.

There seemed to be a raft of intractable difficulties that candidates experienced with this title. While most candidates demonstrated a firm grasp of the meaning of suspension of disbelief in the field of theatre, many problems emerged in the effort to apply the concept to other areas of knowledge. The use of common dictionary definitions led to immediate difficulties as these definitions suggested that suspension of disbelief involves the abandonment of critical thinking for the purposes of entertainment. It was thus difficult to reconcile this very restrictive interpretation with, for example, the idea of modelling in the sciences.

Candidates struggled with the “double negative” aspect and often appeared to be addressing the notion of suspending belief rather than disbelief. This created a temptation to discuss the provisional nature of knowledge in the sciences and seemed to offer an opportunity to write about falsification. Scientific knowledge is always going to be provisional, research will continue, questions will be asked. This does not necessarily suggest that suspension of disbelief is at play. When we suspend disbelief we temporarily give up doubt; not embrace it as many candidates seemed to indicate.

Even when the integrity of the original concept was maintained, there were troublesome convolutions of argument. Many candidates chose to write about religion and put forward, with little or no support, the idea that religious adherents find the tenets of their religion hard to accept, and hence spend their days defensively suspending their difficulties in believing them. The possibility that many people simply believe things rather than suspending a pervasive disbelief in them was often not considered. One must assume that for the vast majority of religious believers there is no disbelief to suspend and thus the perspective offered is not relevant or convincing. If you begin with belief than no suspension of disbelief is necessary.

5. “The quality of knowledge produced by an academic discipline is directly proportional to the duration of historical development of that discipline.” Explore this claim with reference to two disciplines.

Candidates were faced here with the challenge of unpacking the notion of quality of knowledge if a meaningful response to the title was to be built. Some candidates shifted quality into

quantity, with predictably poor results. Defining quality as simple accuracy was also limited and of limited use.

Candidates too often understood historical development as simply the passing of time and made little specific reference to the discipline under consideration. Typical was the effort to offer only randomly selected slices of time from what is a longer and broader discipline. By doing this the candidate sidestepped the notions of direct proportion and duration. Some candidates took advantage of the opportunity afforded by this title to focus on particular disciplines that do not fit comfortably into the traditional AOK structure of the TOK course, such as computer science.

6. "Robust knowledge requires both consensus and disagreement." Discuss this claim with reference to two areas of knowledge.

Responses to this title tended to exhibit some structural similarities to those on title 2. In title 2 we had confidence and doubt and in title 6 we had consensus and disagreement. The flawed strategy was built on the assumption that examples of all possibilities are all that is needed. More successful candidates grasped that describing or explaining the knowledge itself was less important than talking about what makes it robust.

Some candidates inadvertently shot down their own analysis by defining robustness in terms of consensus. Hence the argument tended to take on a circular form. Stronger essays examined the notion that consensus could be a consequence of robustness rather than a necessary property of the knowledge itself.

Weaker candidates tended to draw arbitrary lines around examples so that one example says that consensus points to robust knowledge and the next says disagreement points to robust knowledge. While a more effective approach would be to look at one example considering both consensus and disagreement, candidates often used separate examples, one for consensus and another for disagreement. By doing this they ran into the problem that examples become interchangeable. Hidden in one example is the obvious fact that while there is a great deal of disagreement there was never consensus or where there is overwhelming consensus there was never any disagreement and yet in both cases we are told there is robust knowledge. The problem with building an argument entirely on examples is that there will always be another example that can undermine the argument.

Section 2: The presentation

Component grade boundaries

The following boundaries were applied for this session.

Grade:	E	D	C	B	A
Mark range:	0 - 1	2 - 3	4 - 5	6 - 7	8 - 10

General comments

Thanks are extended to the 68 examiners who moderated the TOK presentation this session. Once again there was a wide range in the quality of the TK/PPDs reviewed by examiners. As one examiner put it, “there was a huge range and level of suitability...from clear, concise, excellent, and thoroughly analysed to pointless and irrelevant”. Some examiners noted that there were more PPDs focused on second order argumentation but on the other side of the spectrum, and particularly in Spanish, there were also more PPDs which reflected a lack of understanding of the nature of the TOK presentation. That was evident from both the candidate and the teacher sections, so it is strongly advised that schools adopt significant measures to help prepare teachers for TOK so that candidates can be receive appropriate TOK teaching and support.

Key Points

- Some teachers need to study the TOK guide and other support TOK material to have a better grasp of what is expected from the TOK presentation.
- Teachers must give their students support for their presentations according to TOK guidelines in the subject guide.
- A TOK presentation is centred on second order thinking. Many schools are to be commended for their achievements in this respect whilst others need to make improvements.

Comments regarding the completion of the TK/PPD

Candidates who start with a concrete real-life situation (RLS) and have extracted a viable knowledge question (KQ) tend to do well and focus their presentation on knowledge acquisition or construction using TOK concepts. Those who start badly, rarely recover. Sometimes the problems would appear to come from a lack of understanding on the teacher's side.

Where TK/PPDs were completed well, they displayed clear TOK argumentation. The ‘Candidate Section’ gives the candidates step-by-step guidance of what to do, but all too often examiners saw that candidates did not avail themselves of this guidance. Describing the real-life situation is the first step and many candidates chose real-life situations which were concrete and significant, and from which good knowledge questions could be extracted. Many other candidates, instead, chose real-life situations which were not real-life situations, but

general statements or mentions about a topic. Quite a few were also hypothetical or purely anecdotal. Some schools show evidence that candidates do not understand what a real-life situation is. One examiner suggested that in those cases teachers should ask their students to provide a specific reference for their real-life situation. This would prevent candidates inventing something or just giving a topic.

The second step is the extraction of the knowledge question from the real-life situation. Again, many did very well but some problems persist. The general comment from examiners was that many candidates still struggle to extract decontextualized knowledge questions and their knowledge questions are poorly formulated. For instance, questions which are specific to a topic. These are not knowledge questions –they are not about knowledge, general and open. Some questions were very difficult to follow and contained too many elements –those questions were not answered in the candidate outlines. Once again, examiners found far too many presentations based on ethics where the presentations were for instance about solving ethical dilemmas, not about knowledge. The real-life situation and the knowledge question are essential to the presentation, or as one examiner put it *'the presentation is usually doomed without the real-life situation and knowledge question'*.

The final two steps in the 'Candidate Section' are the 'Outline' and the 'Conclusions'. Guidance is given on the actual TK/PPD regarding what to include in these two parts. The range of topics in the RLSs was wide and some provided solid outlines with varied and interesting approaches. Sadly, a lot of the planning is not done carefully, and examiners found many outlines with no content, at best they said a little about the structure. The outline must summarize the presentation, so it must have TOK content.

Teachers must be made aware of the critical nature of the outline portion of the PPD. Far too many PPDs came in with high marks, but the outlines completed by the candidate(s) were insufficient to support those marks. Often the candidate section was simply a list of intended points with little or no explication of how the investigation would actually be undertaken. This was particularly true for marks in the 8-9 range, many of which had to be moderated down significantly.

The candidate sections are not always completed to a high standard. In many cases they seem to have been completed at the last minute as an administrative requirement for the presentation. Conclusions are particularly weak. At best they are drawn, but candidates rarely show the significance of these conclusions effectively.

Schools might consider making more use of the knowledge framework provided for the course, as this will challenge the tendency to approach the presentations with too much emphasis on ways of knowing or from an overly first order perspective. Grounding the analysis in the context of an area of knowledge is always helpful.

Most teachers gave explanations for their assessment in the 'Teacher Section' with helpful comments and not just copying the assessment instrument. A few teachers made very little effort and just wrote a few words describing the presentation or copying from the assessment instrument rather than showing how they used it.

Many teachers' comments referred to the candidates' efforts, or how well organised the PowerPoints were, or how confident the candidates were. Naturally this is irrelevant to

motivating the mark and is unhelpful to the examiner whose task is to determine the teacher's ability to apply the assessment instrument.

Key Points

- Candidates must ensure that their knowledge questions are not specific to a topic and teachers must give them support in this respect.
- Teachers should check with their students that their knowledge questions are answered in their outlines.
- The knowledge framework should be used to help focus the presentation on TOK.
- Teachers need to remember that their comments should explain the mark awarded. These explanations are very helpful to examiners in their task to determine the teacher's ability to apply the assessment instrument.

Recommendations for IB procedures, instructions and forms

Examiners commented that the same issues persist. The first one being that the documents are not completed properly. Teachers must help their students understand how to complete the TK/PPD to best indicate their approach. If candidates do not provide the needed content, and teachers do not reflect this shortcoming in the mark awarded, they run a good chance of being moderated down.

Candidates must select their real-life situation and extract their knowledge question from it. It must be their choice of real-life situation and their extracted knowledge question. Teachers are reminded that the presentation is NOT the presentation of the essay and therefore, prescribed titles should not be used.

Teachers must ensure that the electronic marks entered on IBIS match the marks given on the PPDs. Sometimes different marks are entered from those written on the TK/PPD. This may significantly disadvantage one candidate and the rest of the cohort affected by moderation.

All schools must use the latest version of the TK/PPD and names and candidate numbers must not be included.

Schools are reminded that as stated in the subject guide: **“Students are not permitted to offer presentations on the same specific subject matter more than once.** This refers to either the same knowledge question, or the same real-life situation.”

A few hand-written PPDs were seen again. All TK/PPD must be typed. Schools are reminded that candidates may not exceed the 500-word limit in the ‘Candidate Section’ nor should they attempt to hide that they are doing so by using a very small font size.

Key Points

- Teachers should advise their students when completing the TK/PPD
- All TK/PPDs should be typed.
- Candidates are not permitted to offer presentations on the same specific subject matter more than once. This refers to either the same knowledge question or the same real-life situation.
- The TOK presentation is NOT a presentation of the candidate's essay/prescribed title.
- The *Candidate Section* may not exceed 500 words.

Recommendations for the teaching of future candidates

As has been highlighted before, candidates need to show TOK analysis in their TK/PPDs. For that they need to use TOK vocabulary and show evidence of second order TOK thinking.

Teachers must guide their students so that they have a concrete real-life situation from which they extract a knowledge question which needs to be well formulated. In order to do this, teachers themselves need to understand TOK and the nature of the TOK presentation. As noted last year, teachers must use up to date TOK materials and resources. It is evident that some teachers require further training and preparation. Schools must ensure that their team of TOK teachers have received adequate TOK training.

Key Points

- A successful presentation will use TOK vocabulary and second order questions.
- Teachers must assume the responsibility they have as TOK teachers and understand the course and assessment requirements.
- Schools must ensure teachers have sufficient opportunity for professional development in TOK.