



INTERNATIONAL BACCALAUREATE
DIPLOMA PROGRAMME
CENTRAL ACADEMY

CORE REQUIREMENTS

Extended Essay	Theory of Knowledge	Creativity, Action & Service
<ul style="list-style-type: none"> Independently chosen topic from one of the DP subjects High level research and writing Approximately 40 hours of work No more than 4,000 words Students work with faculty advisor 	<ul style="list-style-type: none"> Interdisciplinary, serves to unify academic areas Encourages application of various cultural perspectives Engages students critical thinking about knowledge itself One of seven classes students take 	<ul style="list-style-type: none"> Encourages students to be involved in activities as individuals and as part of a team Experiential learning to enhance personal and interpersonal development of students Completed on an individual timeline over a two year period

ACADEMIC DISCIPLINES

Academic Groups	Requirements
Group 1: Language A Group 2: Second Language Group 3: Individuals & Societies Group 4: Experimental Sciences Group 5: Mathematics & Computer Science Group 6: The Arts	<ul style="list-style-type: none"> Students take one course from each of the six academic groups Courses are two years in length (11th & 12th grades) Exams are taken in May of the student's senior year for each course Three of the six courses are taken at the higher level Three of the six courses are taken at the standard level

EARNING THE IB DIPLOMA

Students who are successful in earning the IB Diploma:

- Meet or exceed the expectations set forth in the comprehensive, culminating exams and papers for each course. These are scored externally.
- Meet or exceed expectations on a number of internally scored assessments for each course.
- Meet or exceed external expectations for their External Essay and Theory of Knowledge course, as well as fulfill the obligations of Creativity, Action, and Service.
- Often receive recognition at the university level which may or may not include college credit.

World-wide, approximately 78% of IB Diploma Candidate students earned the IB Diploma in 2011.

IB Learners Are...	A student who will be successful in an IB school...
Inquirers	...asks good questions and relentlessly <i>pursues</i> answers (and more questions)!
Knowledgeable	...seeks out <i>challenges</i> across all subjects and is <i>persistent</i> in the face of difficult course material.
Thinkers	...pushes beyond basic skills like recall and memorization to deeper levels of understanding across all subject areas.
Communicators	...has shown <i>growth</i> in their ability to speak, write and think coherently for various purposes and audiences.
Principled	...demonstrates <i>empathy</i> and an emerging sense of justice and fairness.
Open-Minded	...is <i>eager to learn</i> with and from people who are different and is comfortable expressing and considering divergent viewpoints.
Caring	...shows <i>respect</i> for themselves and others along with a sense of <i>responsibility</i> for doing their part to make the world better.
Risk-takers	...will take on new <i>challenges</i> and responsibilities as learners that might be <i>uncomfortable</i> at first.
Balanced	...works to maintain their <i>physical, social, emotional</i> and <i>intellectual</i> well-being.
Reflective	...considers how they learn best and <i>adapts</i> to different situations through thoughtful consideration of their ideas and actions.

DP AND AP: A COMPARISON

ADVANCED PLACEMENT (AP)	IB DIPLOMA PROGRAMME
May take a single course	Must take all seven courses to be eligible for the IB Diploma
Exam taken at the completion of each course	Series of exams or papers completed at the end of each course (which is usually taught over a two year period)
College credit is often awarded in individual subjects and is contingent on certain exam scores	College credit may or may not be awarded for individual subjects and is dependent on the institution
Allows students to specialize in particular subjects	Provides students with a well-rounded college preparatory curriculum in six different academic areas
Widely regarded nationally as a rigorous, college preparatory curriculum	Widely regarded internationally as a rigorous, college preparatory curriculum

For additional information regarding the IB Diploma Programme at Central Academy contact:

- Isaac Pedelty, IB Diploma Programme Coordinator, isaac.pedelty@dmschools.org, 515.242.8512
- Jessica Gogerty, Director, Central Academy, jessica.gogerty@dmschools.org, 515.242.7888

Q: What makes a well prepared International Baccalaureate DP candidate?

A: It is often asked by parents, students, and counselors, which students are a good fit for a program with the variety and rigor of the International Baccalaureate Diploma Program. While many characteristics are held by successful Diploma Program students, careful attention has been given here at Central Academy to which characteristics tend to be the most important and pervasive among those students who go on to complete and receive the International Baccalaureate Diploma.

Here are a few of the most important general characteristics we see among DP students who enter the program:

- The student has solid academic performance across the subject areas
- Has successfully completed Geometry
- The student has evident preparation for a college level work load (as evidenced by a history of accelerated, advanced coursework, AP classes, or some coursework at DMACC)
- The student is aware of DMPS' graduation requirements and has taken proactive steps to meet these prior to enrolment as an 11th grader
- The student has practice with time management in order to meet competing personal, academic, and extracurricular goals
- The student is willing to take a full academic schedule away from their home school at Central Academy their 11th and 12th grade years of high school
- The student has a strong desire to distinguish themselves from their peers while pursuing a course of college level study that will allow them to develop their passions prior to committing to the fees and obligations of a formal college experience

While we have enrolled students lacking in some of the above characteristics, a general portrait of commitment to their education and a willingness to work hard to earn further opportunities is a norm among IB candidates. In addition to the portrait of preparation outlined above, we have come to recognize that students who possess some combination of the following list are even more likely to succeed in working toward and achieving the International Baccalaureate Diploma:

- The student has completed Algebra II and at least two lab sciences (biology/chemistry/physics)
- The student has completed Government/Economics
- The student is willing to spend 2-3 hours per night on homework/ studying
- The student has a thirst for new knowledge and a desire to see how all knowledge fits together
- The student has a history of resilience in the face of substantial challenge and has learned and grown as a result of this experience

It is important to emphasize that the above hallmarks of preparation are not necessary in order to enroll and succeed in the Diploma Program, but a substantial minority of these characteristics significantly increases the likelihood of a students' overall success in the IB Diploma Program at Central Academy.

If you, as a student, or parent, are curious about your, or your child's fitness for this program, please feel free to schedule a meeting with either Isaac Pedelty, the IB Diploma Program Coordinator, or Kristin Hilton, the Counselor at Central Academy at your soonest convenience. We would be happy to help you assess you or your child's level of preparedness for the IB DP.

DIPLOMA PROGRAM MYTHS

- The DP is only for kids who get into Central Academy.
- You have to be insanely smart to do the DP.
- You have to totally give up your social life to be in the program.
- You can't be in athletics or other performing groups (like band or choir) if you are in the DP.
- You have to leave your high school for good to be in the DP.
- You have to already be doing a second language or you have to give up the one you are studying at your home school.

DIPLOMA PROGRAM REALITY

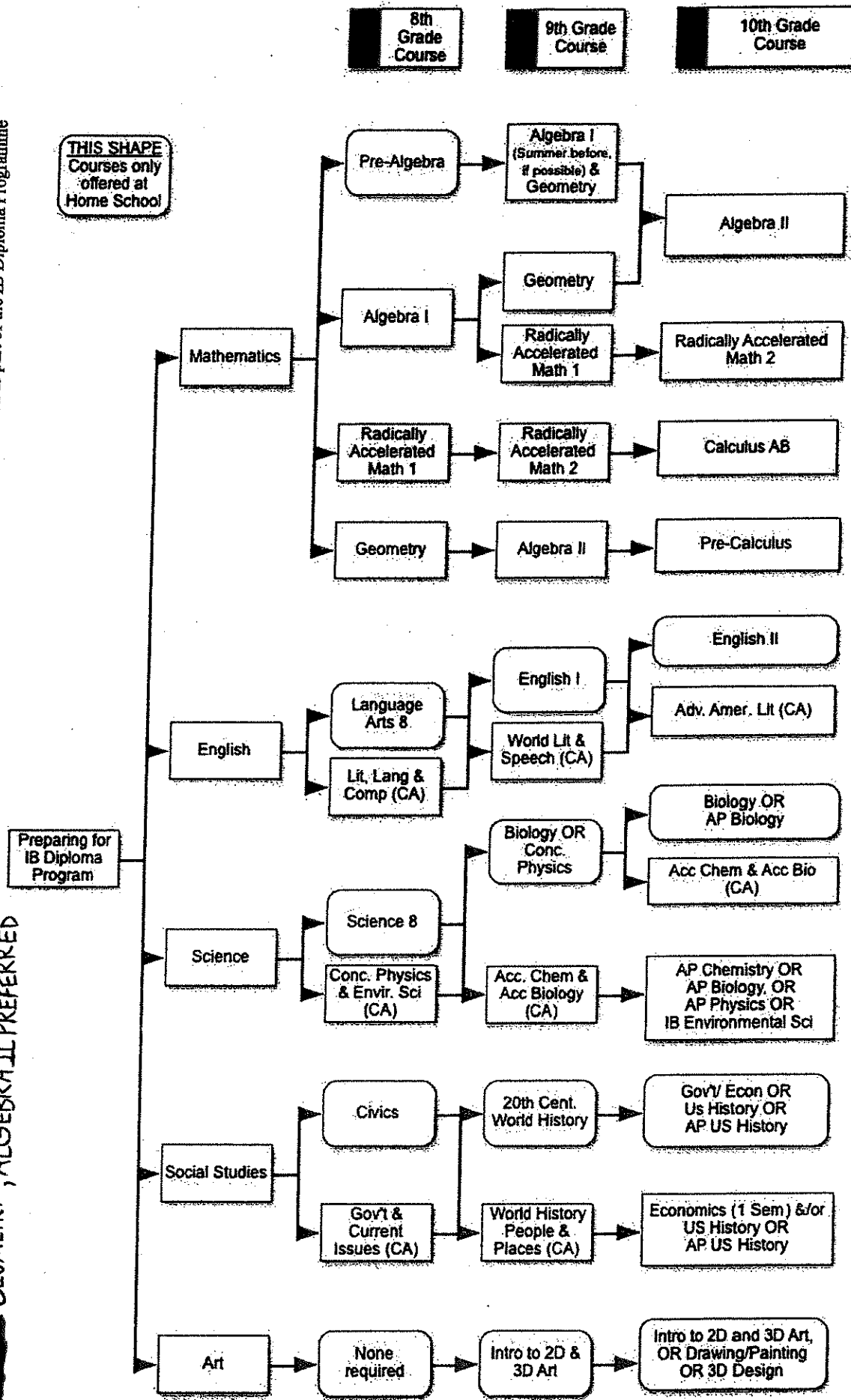
- The DP is a program open to EVERY STUDENT in DMPS.
- Students with solid grades across their subjects and who are intrinsically motivated and thirst for knowledge tend to fair the best in the DP.
- Past students in the DP reported that keeping in contact with friends both in and outside of their cohort in the DP required intentionality, but made it easier to stay connected overall.
- Due to deliberate scheduling choices at Central Academy, students in the DP are almost always able to maintain their involvement in BOTH their performing ensembles and athletics at their home schools.
- While students in the DP take the majority of their classes at Central Academy, past students have reported a higher sense of wellbeing when they remain actively involved in some way (athletics, performance, school dances, clubs) at their home schools.
- The DP now offers second language offerings in French, Spanish, and Chinese.

The IB Diploma is an internationally-recognized diploma. However, earning the IB Diploma is not a guarantee, even if students complete all of the requirements. Therefore, students must be prepared to earn a diploma from Des Moines Public Schools, or their district of residence. IB courses fulfill many graduation requirements of the Des Moines Public Schools and the state of Iowa. However, students should verify their progress toward graduation each year with the counselor at Central Academy or at their home school. Because of the demanding and inflexible course load required by IB, students who are credit deficient at the beginning of eleventh grade will not be considered for acceptance into the IB Diploma Programme.

Coursework ideally completed by the end of sophomore year:

- US government (Iowa graduation requirement)
- Economics (DMPS graduation requirement)
- US history* (Iowa graduation requirement) *As of 2012-13, this requirement can be satisfied when IB History of the Americas is taken as part of the IB Diploma Programme

GEOMETRY, ALGEBRA II PREFERRED



International Baccalaureate Diploma Programme Course Planner

Name: _____ Current Grade: _____ Date: _____

Grade	Language A1 (English)	Language B	Individuals and Societies	Experimental Sciences	Mathematics	The Arts/IB Elective	IB Core	DMPS and IA Graduation Requirements and Electives
SENIOR	<ul style="list-style-type: none"> English Literature HL 	<ul style="list-style-type: none"> Spanish B SL Spanish <i>ab initio</i> SL French B SL Chinese <i>ab initio</i> SL 	<ul style="list-style-type: none"> History HL or SL: World Topics 	<ul style="list-style-type: none"> Biology HL or SL Physics HL or SL Env. Systems & Societies SL** Chemistry* HL or SL 	<ul style="list-style-type: none"> Mathematics SL Mathematical Studies SL 	<ul style="list-style-type: none"> Visual Arts HL or SL Env. Systems & Societies SL** 	<ul style="list-style-type: none"> Theory of Knowledge Extended Essay Creativity, Action, & Service 	<ul style="list-style-type: none"> _____ _____ _____
JUNIOR	<ul style="list-style-type: none"> English Literature HL 	<ul style="list-style-type: none"> Spanish B SL Spanish <i>ab initio</i> SL French B SL Chinese <i>ab initio</i> SL 	<ul style="list-style-type: none"> History HL: European Options History HL: Americas^{cr,va} Options 	<ul style="list-style-type: none"> Biology HL or SL Physics HL or SL Env. Systems & Societies SL** Chemistry* HL or SL 	<ul style="list-style-type: none"> Mathematics SL Mathematical Studies SL 	<ul style="list-style-type: none"> Visual Arts HL or SL Env. Systems & Societies SL** 	<ul style="list-style-type: none"> Theory of Knowledge Extended Essay Creativity, Action, & Service 	<ul style="list-style-type: none"> _____ _____ _____
SOPHOMORE	<ul style="list-style-type: none"> Adv. Am. Literature English II 	<ul style="list-style-type: none"> Spanish II or III French II Chinese II Alt. language 	<ul style="list-style-type: none"> AP US History US History AP Human Geography AP European History AP World History Gov/Econ 	<ul style="list-style-type: none"> AP Biology AP Chemistry Biology Chemistry Physics 	<ul style="list-style-type: none"> Algebra II Pre-Calculus AP Statistics Geometry^v 	<ul style="list-style-type: none"> Art I & II _____ _____ 	<ul style="list-style-type: none"> _____ _____ _____ 	<ul style="list-style-type: none"> _____ _____ _____
FRESHMAN	<ul style="list-style-type: none"> World Lit/Speech English I 	<ul style="list-style-type: none"> Spanish I or II French I Chinese I Alt. language 	<ul style="list-style-type: none"> AP Human Geography 20th Century World History 	<ul style="list-style-type: none"> Accelerated Phys/Chem Biology 	<ul style="list-style-type: none"> Geometry Algebra II Algebra I^v 	<ul style="list-style-type: none"> Art I & II _____ _____ 	<ul style="list-style-type: none"> _____ _____ _____ 	<ul style="list-style-type: none"> _____ _____ _____

*Chemistry: Pending staff availability and student interest
 **Env Systems & Societies: one year course
 Only with very strong performance
 vIB History of the Americas satisfies US History graduation requirement

DMPS and Iowa Graduation Requirements

- US Government (one semester)
- Economics (one semester)
- US History (one year)

IB Core

Theory of Knowledge: Two year course
Extended Essay: maximum 4000 words; choice of subject and advisor; rough draft due May of junior year; final draft due October of senior year
Creativity, Action & Service: ~3 hours per week during junior and senior years



Tips For Parents: AP vs. IB - Which is best for my kid?

Mathews, J.
Davidson Institute for Talent Development
2011

This Tips For Parents article is from a seminar hosted by Jay Mathews, who compares Advanced Placement (AP) and International Baccalaureate (IB) classes in relation to gifted students.

Much of the discussion on the Davidson site took me in different directions than I am used to going. Many of the parents were concerned about students who were working far above grade level and trying to figure out how to keep them engaged without being forced to enroll them in college at age 12.

My most important point was that for families needing the maximum flexibility, AP was much better than IB. Students can take the AP courses online. Anyone can sign up to take the exams in May. (I took them at age 52, as a reporter covering AP, to give myself some insights and some street cred.) IB is rooted in a system for 11th and 12th graders. Unless you want to promote your child to those grades right away, you won't be allowed into IB. The IB programs for younger children---the Primary Years Program and the Middle Years Program---are smart and engaging, but do not provide much acceleration beyond their grade levels.

HOWEVER, and I capitalize that word for a reason, if your student is an 11th or 12th grader and you are choosing between AP and IB, in my mind IB is the better program. The principal reason is that it has significantly more emphasis on writing than AP. The IB exams, unlike AP, rarely have multiple choice questions. Students must answer in essay form and their answers graded by human beings. (Usually about half of AP exam questions are essays graded by human beings, but a good grade on that section can get the student a final top grade of 5 on the exam even if he misses most of the multiple choice questions.)

A student who goes for the IB diploma, which requires the equivalent of six two-year courses, must also write a 4,000 word extended essay, often a research paper on some topic. Most of the former IB students I know say the extended essay was the most satisfying and challenging thing they did in high school, and prepared them well for college research. Let me put this next sentence also in all capitals: IN THE UNITED STATES, ONLY THE IB PROGRAM AND PRIVATE SCHOOLS CONSISTENTLY REQUIRE HIGH SCHOOL STUDENT TO WRITE MAJOR RESEARCH PAPERS.

The failure to emphasize writing in that way is a scandal. But it is true.

That was pretty much the extent of my argument on choosing between AP and IB. Here are the important ways in which they are the same: College admissions officers love both fervently and equally. If you have taken 5 IB exams but not done the full diploma, you are still going to be regarded as identical, at least in that dimension, to the student who has taken 5 AP exams.

Many parents were interested in how many AP or IB courses and exams their children should take. The answer, based on conversations with many admissions offices of the most selective colleges, is three to five. Three is fine, particularly if the scores are good. Five is also good, but not much more so. If you take 6, 7, 8 courses and exams and on up in anticipation of the colleges giving more respect to those applicants who take the most AP or IB exams, you will be wrong. It is fine to take that many if the student enjoys them and thinks her time is better spent with them than other available courses but it will do nothing to improve her chances of getting into Harvard. She will be put in the same maybe pile with students who have taken just three APs, and the decision will be made on other factors---GPA and test scores relative to others in her high school's senior class, recommendations and activities.

I advised families to note that a student who is taking 12 APs may not have enough time to show the deep and passionate involvement in activities that the colleges seek. That would be bad. Be careful NOT to fill the activities box with several different enterprises. The student should put a lot of effort into only a few activities, no more than two, and one is enough if the student has reached a high level, like running a local assemblyman's campaign or winning the state lacrosse championship.

There is a problem at the moment at most colleges with getting course credit for one-year Standard Level IB course final exams. You can easily get credit for a good grade on a one-year AP course exam. You often cannot get similar credit for a good grade on a one-year IB course exam. This is the colleges' fault. They have been slow to see that they are discriminating against IB. But it is changing. Virginia's legislature has outlawed the double standard, and other states are thinking about doing the same.

An IB student who completes the full diploma will not have a problem, since he will have taken several Higher Level two-year IB courses that do receive college credit.

The most important point is that IB and AP courses are only as good as their teachers, so check with parents of children older than yours on the quality of instruction, then select whichever program works best for you.

Permission Statement

This article is provided as a service of the Davidson Institute for Talent Development, a 501(c)3 nonprofit dedicated to supporting profoundly gifted young people 18 and under. To learn more about the Davidson Institute's programs, please visit www.DavidsonGifted.org.

Comments

Contributed by: Parent on 8/25/2015

Thanks for the info - wondering though - if you have a child that is in 9th now (my situation) and maxed out on preIB classes, what do we do in 10th grade before the 11/12th grade IB classes kick in? Chose current school b/c they could put him in math and science and language 2+ years ahead without grade skipping. But now concerned with 10th grade year since the true IB classes not open to him yet.

What are the differences between AP and IB courses/exams?

The difficulty level of AP and IB courses does not differ significantly. Both AP and IB curricula are academically demanding and require motivation and commitment on the part of the student. Additionally, both are considered to be high quality preparation for college and university courses.

Some notable differences between IB and AP include the following:

- There is much interconnection between IB subjects, and teachers frequently work collaboratively. AP courses usually stand alone.
- Students enrolled in the IB Diploma Programme must take courses from each of the IB subject areas. Students may elect to take as many or as few AP courses as they would like.
- Most IB courses are two years in length, with the culminating external exam taken at the end of the student's second year. AP courses are one semester to one year in length, and the culminating exam is taken at the end of that time.
- The content of some courses differs, reflecting the international nature of the IB and the US-based approach of AP.
- IB teachers have some input into each student's test score by means of the Internal Assessment portion of the course, usually about 20% of the final mark. This teacher input is moderated to ensure the same standards apply worldwide. A student's AP score is determined by the AP exam alone, which is externally scored.
- The interpretation of AP and IB exam scores differs in the credit policies of colleges and universities.

Do American colleges and universities "favor" either the IB or AP methods of preparation?

No - post-secondary institutions recognize that students who perform well on either IB or AP exams are likely to be successful in college. However, prior to the 1990's the IB Diploma Programme was relatively rare in US public schools, so some colleges and universities may not be as familiar with it as they are with AP. The issue has largely disappeared among selective colleges and universities, and continues to diminish rapidly nationwide as more and more high schools offer the IB Diploma Programme. Most universities publish their recognition policies on their websites. For more information, please visit the IBO website.

For a full listing of IB University Recognition policies: visit the following page:

<http://www.ibo.org/en/university-admission/recognition-of-the-ib-diploma-by-countries-and-universities/>

Nature of the subject

TOK plays a special role in the Diploma Programme by providing an opportunity for students to reflect on the nature of knowledge. The task of TOK is to emphasize connections between areas of knowledge and link them to the knower in such a way that the knower can become aware of his or her own perspectives and those of the various groups whose knowledge he or she shares. TOK, therefore, explores both the personal and shared aspects of knowledge and investigates the relationships between them.

The raw material of TOK is knowledge itself. Students think about how knowledge is arrived at in the various disciplines, what the disciplines have in common and the differences between them. The fundamental question of TOK is “how do we know that?” The answer might depend on the discipline and the purpose to which the knowledge is put. TOK explores methods of inquiry and tries to establish what it is about these methods that makes them effective as knowledge tools. In this sense, TOK is concerned with knowing about knowing.

The individual knower has to try to make sense of the world and understand his or her relationship to it. He or she has at his or her disposal the resources of the areas of knowledge, for example, the academic disciplines studied in the Diploma Programme. He or she also has access to ways of knowing such as memory, intuition, reason and sense perception that help us navigate our way in a complex world.

It is easy to be bewildered by the sheer diversity of the knowledge on offer. For example:

- In physics, experiment and observation seem to be the basis for knowledge. The physicist might want to construct a hypothesis to explain observations that do not fit current thinking and devises and performs experiments to test this hypothesis. Results are then collected and analysed and, if necessary, the hypothesis modified to accommodate them.
- In history there is no experimentation. Instead, documentary evidence provides the historian with the raw material for interpreting and understanding the recorded past of humanity. By studying these sources carefully a picture of a past event can be built up along with ideas about what factors might have caused it.
- In a literature class students set about understanding and interpreting a text. No observation of the outside world is necessary, but there is a hope that the text can shed some light upon deep questions about what it is to be human in a variety of world situations or can act as a critique of the way in which we organize our societies.
- Economics, by contrast, considers the question of how human societies allocate scarce resources. This is done by building elaborate mathematical models based upon a mixture of reasoning and empirical observation of relevant economic factors.
- In the islands of Micronesia, a steersman successfully navigates between two islands 1,600 km apart without a map or a compass.

In each case above there is clearly knowledge at work, although the collection as a whole illustrates a wide variety of different types of knowledge. The task of TOK is to examine different areas of knowledge and find out what makes them different and what they have in common.

At the centre of the course is the idea of **knowledge questions**. These are questions such as:

- what counts as evidence for X?
- what makes a good explanation in subject Y?
- how do we judge which is the best model of Z?
- how can we be sure of W?
- what does theory T mean in the real world?
- how do we know whether it is right to do S?

While these questions could seem slightly intimidating in the abstract, they become much more accessible when dealt with in specific practical contexts within the TOK course. They arise naturally in the subject areas, the extended essay and CAS. The intention is that these contexts provide concrete examples of knowledge questions that should promote student discussion.

Discussion forms the backbone of the TOK course. Students are invited to consider knowledge questions against the backdrop of their experiences of knowledge in their other Diploma Programme subjects but also in relation to the practical experiences offered by CAS and the formal research that takes place for the extended essay. The experiences of the student outside school also have a role to play in these discussions, although TOK seeks to strike a balance between the shared and personal aspects of knowledge.

Recognizing the discursive aspect of the course, the TOK presentation assesses the ability of the student to apply TOK thinking to a real-life situation. The TOK essay gives the opportunity to assess more formal argumentation prompted by questions of a more general nature.

TOK is a course in critical thinking but it is one that is specifically geared to an approach to knowledge that is mindful of the interconnectedness of the modern world. “Critical” in this context implies an analytical approach prepared to test the support for knowledge claims, aware of its own weaknesses, conscious of its perspectives and open to alternative ways of answering knowledge questions. It is a demanding course but one that is an essential component not only of the Diploma Programme but of lifelong learning.

Aims

The overall aim of TOK is to encourage students to formulate answers to the question “how do you know?” in a variety of contexts, and to see the value of that question. This allows students to develop an enduring fascination with the richness of knowledge.

Specifically, the aims of the TOK course are for students to:

1. make connections between a critical approach to the construction of knowledge, the academic disciplines and the wider world
2. develop an awareness of how individuals and communities construct knowledge and how this is critically examined
3. develop an interest in the diversity and richness of cultural perspectives and an awareness of personal and ideological assumptions
4. critically reflect on their own beliefs and assumptions, leading to more thoughtful, responsible and purposeful lives
5. understand that knowledge brings responsibility which leads to commitment and action.

Knowledge questions are general questions about knowledge

Another challenging aspect of TOK is the requirement that a knowledge question is somehow more general than the particular examples which illustrate it. This requirement springs from the idea that TOK deals with second-order questions.

For example:

- In physics, one deals with questions about the material world. In TOK, we ask questions about knowledge in physics. How can the physicist be sure of his or her conclusions given that they are based on hypothesis and experiment? The student in TOK is not talking in physical terms because he or she is not talking about the physical world but the discipline of physics. Therefore, it is necessary to use a different, more generalized vocabulary. The physicist uses terms like particle, energy, mass and charge. In TOK, the student uses terms such as hypothesis, experimental data, interpretation, anomaly, induction, certainty, uncertainty, belief and knowledge. So knowledge questions should employ these terms, not the terms of physics.

This distinction can be seen in the following diagram.

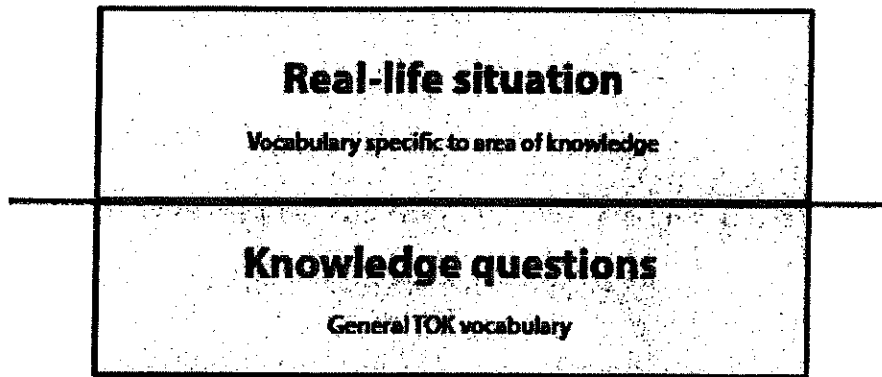


Figure 4

Examples of knowledge questions

You can find knowledge questions underlying almost any issue. They are sometimes difficult to formulate precisely but they often lurk underneath popular and often controversial subjects that are discussed in the media, for example. It is a very useful exercise to try to tease out knowledge questions underlying articles in the media.

Here are two examples of a topic that has been discussed in newspaper articles and possible knowledge questions associated with the topic.

Example 1: Future population growth in Africa

- Not a knowledge question: "How can we predict future population growth in Africa?" This is not a knowledge question because it is a technical question within the discipline of population studies.
- Good knowledge question: "How can a mathematical model give us knowledge even if it does not yield accurate predictions?" This is now sufficiently general and explores the purpose and nature of mathematical modelling.

Example 2: The placebo effect and its impact on the medical profession

- Not a knowledge question: "How does the placebo effect work?" An answer to this might involve a technical explanation in psychology. This therefore sits above the line in figure 4.
- A good knowledge question: "How could we establish that X is an 'active ingredient' in causing Y?" This question is actually a rather general one about how we can know about causal links. It is a classic knowledge question.