Henrico High School International Baccalaureate Program

Diploma Program Curriculum



Organizing Elements: Theory of Knowledge and CAS

The curriculum model of the DP places the student and the way the student learns at its center, as the child's development is the basis of the whole educational process. Building on MYP's approaches to learning, key concepts and global contexts, the Diploma Program continues with Theory of Knowledge (TOK) and Creativity, Activity, and Service (CAS). TOK course activities provide a framework for learning within and across the subject groups and promotes connections among the subjects themselves, and between the subjects and real-life issues. All six subject area curricula reflect and consider TOK and CAS issues. *The following information is quoted from IB guides on TOK and CAS*.

Theory of Knowledge

It is a commonplace to say that the world has experienced a digital revolution and that we are now part of a global information economy. The extent and impact of the changes signaled by such grand phrases vary greatly in different parts of the world, but their implications for knowledge are profound. Reflection on such huge cultural shifts is one part of what the TOK course is about. Its context is a world immeasurably different from that inhabited by "renaissance man". Knowledge may indeed be said to have exploded: it has not only expanded massively but also become increasingly specialized, or fragmented. At the same time, discoveries in the 20th century (quantum mechanics, chaos theory) have demonstrated that there are things that it is impossible for us to know or predict. The TOK course, a flagship element in the Diploma Program, encourages critical thinking about knowledge itself, to try to help young people make sense of what they encounter. Its core content is questions like these: What counts as knowledge? How does it grow? What are its limits? Who owns knowledge? What is the value of knowledge? What are the implications of having, or not having, knowledge?

What makes TOK unique, and distinctively different from standard academic disciplines, is its process. At the center of the course is the student as **knower**. Students entering the Diploma Program typically

have 16 years of life experience and more than 10 years of formal education behind them. They have accumulated a vast amount of knowledge, beliefs and opinions from academic disciplines and their lives outside the classroom. In TOK they have the opportunity to step back from this relentless acquisition of new knowledge, in order to consider knowledge issues. These include the questions already mentioned, viewed from the perspective of the student, but often begin from more basic ones, like: What do I claim to know [about X]? Am I justified in doing so [how?]? Such questions may initially seem abstract or theoretical, but TOK teachers bring them into closer focus by taking into account their students' interests, circumstances and outlooks in planning the course. TOK activities and discussions aim to help students discover and express their views on knowledge issues.

The course encourages students to share ideas with others and to listen to and learn from what others think. In this process students' thinking and their understanding of knowledge as a human construction are shaped, enriched and deepened. Connections may be made between knowledge encountered in different Diploma Program subjects, in CAS experience or in extended essay research; distinctions between different kinds of knowledge may be clarified. Because the subject matter of the course is defined in terms of knowledge issues, there is no end to the valid questions that may arise in a TOK course.

International dimensions

In many ways TOK is ideally placed to foster internationalism, in close harmony with the aims of the IB learner profile. The TOK aims embody many of the attributes needed by a citizen of the world: self-awareness; a reflective, critical approach; interest in other people's points of view; and a sense of responsibility. Global controversies often rest on significant knowledge issues that can provide useful starting points for TOK explorations, depending on students' interests and awareness. TOK activity, in turn, can contribute significantly to the understanding of these large questions.

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:

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

Objectives

It is expected that by the end of the TOK course, students will be able to:

- identify and analyze the various kinds of justifications used to support knowledge claims
- formulate, evaluate and attempt to answer knowledge questions

- examine how academic disciplines/areas of knowledge generate and shape knowledge
- understand the roles played by ways of knowing in the construction of shared and personal knowledge
- explore links between knowledge claims, knowledge questions, ways of knowing and areas of knowledge
- demonstrate an awareness and understanding of different perspectives and be able to relate these to one's own perspective
- explore a real-life/contemporary situation from a TOK perspective in the presentation.

Creativity, Activity, Service

"...if you believe in something, you must not just think or talk or write, but must act." – Peterson (2003)

Creativity, activity, service (CAS) is at the heart of the Diploma Program. It is one of the three essential elements in every student's Diploma Program experience. It involves students in a range of activities alongside their academic studies throughout the Diploma Program. The three strands of CAS, which are often interwoven with particular activities, are characterized as follows.

Creativity: arts, and other experiences that involve creative thinking.

Activity: physical exertion contributing to a healthy lifestyle, complementing academic work elsewhere in the Diploma Program.

Service: an unpaid and voluntary exchange that has a learning benefit for the student. The rights, dignity and autonomy of all those involved are respected.

CAS enables students to enhance their personal and interpersonal development through experiential learning. At the same time, it provides an important counterbalance to the academic pressures of the rest of the Diploma Program. A good CAS program should be both challenging and enjoyable, a personal journey of self? discovery. Each individual student has a different starting point, and therefore different goals and needs, but for many their CAS activities include experiences that are profound and life? changing.

For student development to occur, CAS should involve:

- real, purposeful activities, with significant outcomes
- personal challenge—tasks must extend the student and be achievable in scope
- thoughtful consideration, such as planning, reviewing progress, reporting
- reflection on outcomes and personal learning.

All proposed CAS activities need to meet these four criteria. It is also essential that they do not replicate other parts of the student's Diploma Program work. Concurrency of learning is important in the Diploma Program. Therefore, CAS activities should continue on a regular basis for as long as possible throughout the program, and certainly for at least 18 months. Successful completion of CAS is a requirement for the award of the IB diploma. CAS is not formally assessed but students need to document their activities and provide evidence that they have achieved eight key learning outcomes. A school's CAS program is regularly monitored by the relevant regional office.

International dimensions

The aim of all IB program is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world. Creating "a better and more peaceful world" is a large aim. Working towards it should be seen as involving many small steps, which may be taken locally, nationally or internationally. It is important to see activities in a broader context, bearing in mind the maxim "Think globally, act locally". Working with people from different social or cultural backgrounds in the vicinity of the school can do as much to increase mutual understanding as large international projects.

CAS and ethical education

There are many definitions of ethical education. The more interesting ones acknowledge that it involves more than simply "learning about ethics". Meaningful ethical education—the development of ethical beings—happens only when people's feelings and behavior change, as well as their ideas.

Because it involves real activities with significant outcomes, CAS provides a major opportunity for ethical education, understood as involving principles, attitudes and behavior. The emphasis in CAS is on helping students to develop their own identities, in accordance with the ethical principles embodied in the IB mission statement and the IB learner profile. Various ethical issues will arise naturally in the course of CAS activities, and may be experienced as challenges to a student's ideas, instinctive responses or ways of behaving (for example, towards other people). In the context of CAS, schools have a specific responsibility to support students' personal growth as they think, feel and act their way through ethical issues.

As a result of their CAS experience as a whole, including their reflections, there should be evidence that students have:

- increased their awareness of their own strengths and areas for growth: They are able to see themselves as individuals with various skills and abilities, some more developed than others, and understand that they can make choices about how they wish to move forward.
- undertaken new challenges: A new challenge may be an unfamiliar activity, or an extension to an existing one.
- planned and initiated activities: *Planning and initiation will often be in collaboration with others.* It can be shown in activities that are part of larger projects, for example, ongoing school activities in the local community, as well as in small student-led activities.
- worked collaboratively with others: Collaboration can be shown in many different activities, such as team sports, playing music in a band, or helping in a kindergarten. At least one project, involving collaboration and the integration of at least two of creativity, action and service, is required.
- shown perseverance and commitment in their activities: At a minimum, this implies attending regularly and accepting a share of the responsibility for dealing with problems that arise in the course of activities.
- engaged with issues of global importance: Students may be involved in international projects but there are many global issues that can be acted upon locally or nationally (for example, environmental concerns, caring for the elderly).
- considered the ethical implications of their actions: *Ethical decisions arise in almost any CAS activity (for example, on the sports field, in musical composition, in relationships with others involved in service activities). Evidence of thinking about ethical issues can be shown in various ways, including journal entries and conversations with CAS advisers.*
- developed new skills: As with new challenges, new skills may be shown in activities that the student has not previously undertaken, or in increased expertise in an established area.

All eight of the above **learner outcomes** must be represented in students' activities for a student to complete the CAS requirement. Some may be demonstrated many times, in a variety of activities, but completion requires only that there is some evidence for every outcome.

IBDP Curriculum: What Courses You Take

Diploma Program curriculum pursues six areas which then rotate on the axis of Theory of Knowledge and Creativity, Action and Service. Courses may be offered at the Standard or Higher Level. Some courses are only offered at a certain level, where others offer a choice. This enables students to fulfill the DP requirement of taking 3 Higher Level courses. Students may sit for 2 exams their junior year.

Grade 11, Diploma Level One	Grade 12, Diploma Level Two
IB English 11	IB English 12 (SL or HL)
IB French, Spanish IV (MYP or DP) or IB French, Spanish V	IB French or Spanish V (SL) or IB French, Spanish (SL or HL)
IB History of the Americas	IB World Topics (SL or HL)
IB Biology or IB Chemistry	IB Chemistry (SL or HL) IB Biology (SL or HL)
IBMYP Standard or Extended Mathematics, IB Mathematical Application (SL)* or IB Mathematical Analysis (SL)*	IB Mathematical Applications (SL) or IB Mathematical Analysis (SL)
IB Theory of Knowledge	IB Theory of Knowledge
IB Psychology (SL *) IB Theatre Arts IB Visual Arts	IB Psychology (SL or HL) IB Theatre Arts (SL or HL) IB Visual Arts (SL or HL)
* Juniors may take up to 2 exams as anticipated Diploma Candidates. Math indicated MUST be taken. The others are options. Students may only take 2 one-year SL classes, however.	AP electives: Calculus, Physics, Statistics, Biology, Environmental Science, World History, Music Theory, and Art History

The Extended Essay: Curriculum Culmination

The extended essay is an in-depth study of a focused topic chosen from the list of approved Diploma Program subjects—normally one of the student's six chosen subjects for the IB diploma. It is intended to promote high-level research and writing skills, intellectual discovery and creativity. It provides students with an opportunity to engage in personal research in a topic of their own choice, under the guidance of a supervisor (a teacher in the school). This leads to a major piece of formally presented, structured writing, in which ideas and findings are communicated in a reasoned and coherent manner, appropriate to the subject chosen. It is recommended that completion of the written essay is followed by a short, concluding interview, or *viva voce*, with the supervisor. The extended essay is assessed against common criteria, interpreted in ways appropriate to each subject.

The extended essay is:

- compulsory for all Diploma Program students
- externally assessed and, in combination with the grade for theory of knowledge, contributes up to three points to the total score for the IB diploma
- a piece of independent research/investigation on a topic chosen by the student in cooperation with a supervisor in the school
- chosen from the list of approved Diploma Program subjects, published in the *Vade Mecum*
- presented as a formal piece of scholarship containing no more than 4,000 words
- the result of approximately 40 hours of work by the student
- concluded with a short interview, or viva voce, with the supervising teacher (recommended).

In the Diploma Program, the extended essay is the prime example of a piece of work where the student has the opportunity to show knowledge, understanding and enthusiasm about a topic of his or her choice. In those countries where it is the norm for interviews to be required prior to acceptance for employment or for a place at university, the extended essay has often proved to be a valuable stimulus for discussion.

The extended essay and the IB learner profile

The learning involved in researching and writing the extended essay is closely aligned with the development of many of the characteristics described in the IB learner profile. Students are, to a large extent, responsible for their own independent learning, through which they acquire and communicate indepth knowledge and understanding. The research process necessarily involves intellectual risk-taking and extensive reflection; open-mindedness, balance and fairness are key prerequisites for a good extended essay.

Students and teachers familiar with the IB Middle Years Program (MYP) will find that the extended essay is a natural progression from the MYP personal project.

Relationship to theory of knowledge

Whichever subject is chosen, the extended essay shares with the theory of knowledge (TOK) course a concern with interpreting and evaluating evidence, and constructing reasoned arguments. Where the two

differ is in the emphasis placed on the research process and its formal outcomes. These aspects are of primary importance in the extended essay but are given much less weight in TOK:

International dimensions

Some extended essay subjects include cross-cultural questions within them. Others invite such an approach. Whatever the subject, the extended essay student should strive to find relevant information from a diverse range of sources.

Aims

The aims of the extended essay are to provide students with the opportunity to:

- pursue independent research on a focused topic
- develop research and communication skills
- develop the skills of creative and critical thinking
- engage in a systematic process of research appropriate to the subject
- experience the excitement of intellectual discovery.

Assessment Objectives

In working on the extended essay, students are expected to:

- plan and pursue a research project with intellectual initiative and insight, reflecting on the process as it progresses.
- formulate a precise research question
- gather and interpret material from sources appropriate to the research question
- structure a reasoned argument in response to the research question on the basis of the material gathered*
- present their extended essay in a format appropriate to the subject, acknowledging sources in one of the established academic ways
- use the terminology and language appropriate to the subject with skill and understanding
- apply analytical and evaluative skills appropriate to the subject, with an understanding of the implications and the context of their research.

^{*}Note: "material" has different meanings in different subjects. It may be data or information; it may be arguments or evidence.