Diploma Programme

Digital society guide

First assessment 2024

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The International Baccalaureate Organization (known as the IB) offers four high-quality and challenging educational programmes for a worldwide community of schools, aiming to create a better, more peaceful world. This publication is one of a range of materials produced to support these programmes.

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IB mission statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

IB learner profile

The aim of all IB programmes 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.

As IB learners we strive to be:

INQUIRERS
We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

KNOWLEDGEABLE
We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

THINKERS
We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

COMMUNICATORS
We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

PRINCIPLED
We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

OPEN-MINDED
We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

CARING
We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

RISK-TAKERS
We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

BALANCED
We understand the importance of balancing different aspects of our lives—intellectual, physical, and emotional—to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

REFLECTIVE
We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.

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Contents

About this publication

This resource guides teaching, learning and assessment for the International Baccalaureate (IB) Diploma Programme (DP) digital society course. Teachers and students are the primary audiences. This publication, along with additional support materials, subject reports and grade descriptors, can be found on the programme resource centre at resources.ibo.org. It can also be purchased from the IB store at store.ibo.org.

Prior learning

No specialized prior learning in the subject area is required for the digital society course.

Required resources

This course requires students to have access to an internet-connected computer, digital presentation tools and research materials in a range of media.

Additional resources

Additional publications such as specimen papers and markschemes, teacher support materials, subject reports and grade descriptors can also be found on the programme resource centre. Past examination papers as well as markschemes can be purchased from the IB store. Teachers are encouraged to consult official IB online communities to find and share resources created by other teachers.

Teacher support materials

Teacher support materials (TSM), including sample learning experiences, inquiries and formative activities accompany the guide. Where applicable, available resources are indicated in the guide.

Acknowledgments

The IB wishes to thank the educators, experts and schools who generously contributed time and resources to the production of this guide.

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About the IB

The aims and design of an IB education

An IB education develops internationally minded people who recognize their common humanity and shared guardianship of the planet. The IB believes that we can create a better and more peaceful world through high-quality learning and teaching informed by passionate pedagogical leadership.

All IB courses are designed to be:

- **mission driven**—by working with committed educators and experts, the IB provides unique and authentic educational experiences rooted in shared values
- **user centred**—we draw on insights and expertise across the IB ecosystem to ensure that our courses are informed by research and practice anchored in the practical realities of the contemporary classroom
- **future focused**—our courses prepare students to live, lead and thrive in a rapidly changing world and workforce.

The IB consists of four programmes: the Primary Years Programme (PYP) (ages 3–11), the Middle Years Programme (MYP) (ages 11–16), the Diploma Programme (DP) (ages 16–19), and the Career-related Programme (CP) (ages 16–19).

Any school, or group of schools, wishing to offer the IB programmes must first be authorized to do so by the IB. For more information about the IB, see the following resources.

- "The IB mission statement"
- *What is an IB education?*
- *Programme standards and practices*

Inclusion and the IB

The IB is committed to ensuring access and engagement for all students by identifying and removing barriers to learning. For more information about inclusion, see the following resources.

- *Access and inclusion policy*
- *Learning diversity and inclusion in IB programmes*
- *Meeting student learning diversity in the classroom*
- *The IB guide to inclusive education: a resource for whole school development*
- *Using Universal Design for Learning (UDL) in the IB classroom*

About the Diploma Programme

The Diploma Programme

The Diploma Programme (DP) is a rigorous two-year pre-university course of study for students in the 16 to 19 age range. The DP encourages students to become knowledgeable, inquiring, caring and compassionate young adults. There is a strong emphasis on developing intercultural understanding, open-mindedness and respect for diverse beliefs and points of view.

The Diploma Programme model

Students are required to choose one subject from each of the six academic areas. They may opt to complete two subjects in one academic area or subject group instead of an arts subject. Additionally, every student must complete the three components of the DP core. Students may also enroll in individual subjects as certificate candidates. Programme-wide and subject-specific approaches to teaching and learning support student success in the DP. Figure 1 provides a visual of the DP model.

Figure 1

The Diploma Programme model

The Diploma Programme core

The DP core reflects the IB's commitment to providing a holistic educational experience for young people. The DP core provides opportunities for students to think about their own values and actions, to deepen their understanding of their place in the world and to sensitively consider the contexts and views of others. There are three required components in the DP core.

- In the **theory of knowledge (TOK)** course, students explore themes and questions about knowledge and knowing. TOK emphasizes comparisons and connections between areas of knowledge while encouraging students to become more aware of their own perspectives and the perspectives of others.
- The **creativity, activity, service (CAS)** component provides students with opportunities to participate in real-world experiences to enrich their academic studies. The three strands of CAS are creativity (experiences that involve creative thinking and making), activity (experiences contributing to a healthy lifestyle) and service (engagements with communities).
- For the **extended essay (EE)**, students investigate a topic of special interest, either through one of their six DP subjects or through an interdisciplinary approach. The EE helps students to develop the research and communication skills that they need to fulfill their aspirations at university and in future work.

Approaches to teaching and learning

The Diploma Programme's approaches to teaching and learning support meaningful experiences that:

- engage students in structured inquiry
- promote concurrency of learning through connections to other subjects and areas of learning
- encourage student agency and self-directed learning
- enhance the coherence and relevance of the students' DP experiences.

These approaches are briefly outlined in the table.

Teaching	Learning
Encourages student curiosity and discovery through **inquiry**	Activates critical and creative **thinking**
Supports transfer, reflection and interdisciplinary connections through **conceptual understanding**	Develops **social** skills, including teamwork and collaboration with other students and peers
Is relevant according to the **local and global contexts** of students and teachers	Provides multiple opportunities for sharing and **communicating** discoveries and insights
Involves ongoing **collaboration** with other teachers and students in course delivery	Develops **self-management** skills, such as resiliency, planning, organization and reflection
Meets the needs of all students through **differentiation and inclusion**	Engages in sustained **research**, inquiry and multiple literacies

Each subject in the DP is guided by these approaches. For more information see the following resources:

- *Programme standards and practices*
- Diploma Programme *Approaches to teaching and learning*
- The "Approaches to teaching and learning in digital society" section of this guide.

Assessment in the Diploma Programme

Teaching and learning in the Diploma Programme is informed by assessment. Broadly, there are two types of assessment in the DP.

- **Formative assessment** for learning and teaching. Formative assessment is not submitted for external evaluation in the DP. The digital society syllabus provides links to materials for possible formative assessment activities. Teachers are encouraged to adapt these materials for use in their classroom.
- **Summative assessment** provides an overview of learning and is concerned with measuring student achievement. At the end of their course of study, DP students demonstrate learning through summative assessments in the form of examinations and coursework. Summative assessments are aligned to the stated aims and assessment objectives for each course. Submitted summative assessments are evaluated by professional educators, as guided by the highest standards of quality and reliability. Coursework submitted for summative assessment must be authentic, based on the student's individual and original ideas, with the ideas and work of others fully acknowledged. Summative assessment tasks must be completed in full compliance with the detailed guidelines provided by the IB.

Nature of the subject

Welcome to digital society

We are (in) a digital society. Digital systems are changing our world and transforming how we think, communicate, collaborate and create.

This course invites young people to better understand this changing world and to imagine where we might go next. As partners in inquiry, students and teachers explore the impacts and implications of digital systems for people and communities in diverse real-world contexts.

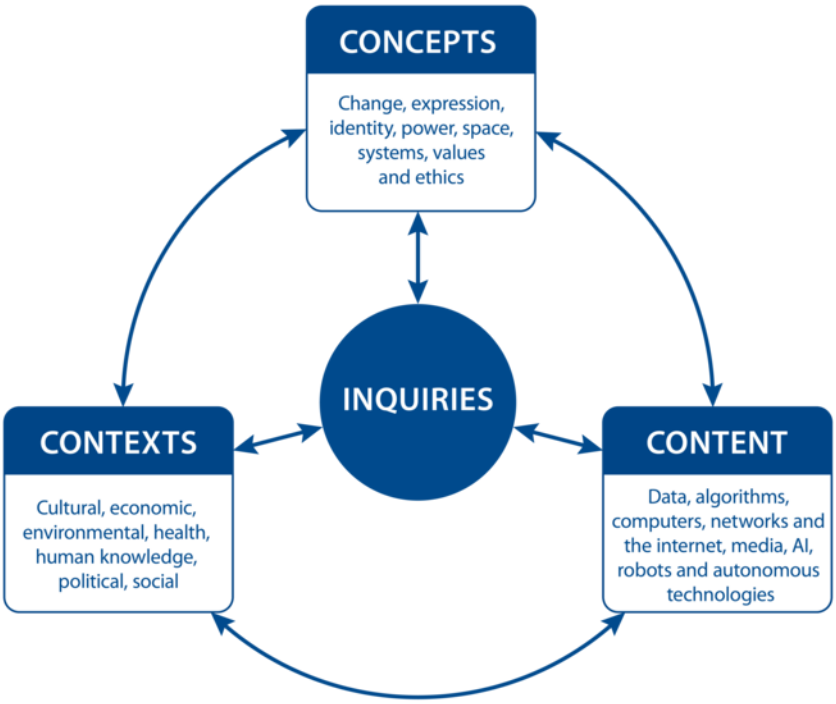
Rooted in the interdisciplinary perspectives and skills of the social sciences and humanities, the course develops attributes of the IB learner profile while preparing students for further study in a variety of fields and professions. The passions, interests and experiences of young people are central to the course, which aims to empower them to become citizens who not only participate in digital society but lead it as well.

Concepts, content and contexts

The course integrates **concepts**, **content** and **contexts** through inquiry.

Figure 2

The digital society course framework



Concepts highlight powerful, pervasive and debatable perspectives that provide insight for inquiry. **Content** informs inquiry with details related to digital systems. **Contexts** situate inquiry into areas significant to life in digital society.

The interaction of **concepts**, **content** and **contexts** helps students "think like a practitioner" in the social sciences and humanities by facilitating the transfer of learning to new situations and forming interdisciplinary links to:

- DP individuals and societies courses (for example, business management, economics, environmental systems and societies, geography, global politics, history, philosophy, psychology, social and cultural anthropology, world religions)
- DP subject groups (for example, studies in language and literature, language acquisition, sciences, mathematics and the arts)
- areas and fields that study digital society (for example, sociology, digital ethics, digital humanities, science and technology studies, media studies, information science, and others).

Distinction between standard level and higher level

The course values breadth and depth in teaching, learning and assessment while acknowledging differences for standard level (SL) and higher level (HL) pathways, as summarized in the table.

Teaching and learning		Assessment
Recommended hours for teaching and learning differ for SL and HL pathways. • SL: 150 hours • HL: 240 hours	**SL and HL syllabus** The SL and HL syllabus includes common topics, enduring understandings and areas for inquiry. **HL-only extension** An HL-only extension includes challenge topics and a framework for identifying, analysing and evaluating interventions in digital society.	• Distinct SL and HL versions of paper 1 • A common SL and HL paper 2 • An HL-only paper 3 • A common SL and HL inquiry project that is internally assessed and externally moderated

Digital society attributes

Students in digital society aspire to develop the following attributes informed by the IB learner profile:

- **innovative thinkers** who strive to understand digital society in new ways
- **resourceful researchers** who approach diverse sources of information with insight and imagination
- **curious and engaged creators** who link practical experiences to their inquiries into digital society
- **empathetic collaborators** who enrich their learning by working with others, locally and globally
- **critical users** who evaluate the impacts and implications of digital systems for people and communities
- **principled citizens** who act and lead, as guided by ethical values.

Local and global connections

This course encourages a complex and nuanced understanding of life in a digital society and emphasizes the importance of informed engagement with contemporary developments and issues. By exploring and investigating real-world examples situated in context, students gain an appreciation of the local and global connections that they share with others.

Internationally minded digital society students think, act and communicate from a position of purposeful responsibility, both locally and globally.

Course keywords

This section presents important keywords for the course. Further details are provided throughout the guide.

Inquiry

Inquiry is a sustained, iterative, practical and often collaborative process through which students construct and reflect on their own understanding and transferable knowledge. Inquiry places student agency at the centre of all learning experiences. Inquiry in digital society is structured using **stages and approaches** as well as a course **toolkit**.

- Inquiry **stages and approaches** facilitate the delivery of the syllabus through defined cycles that begin with a focus on real-world examples and connections to course concepts, content and contexts.
- The course **toolkit** indicates interdisciplinary skills to support inquiry**.**

Digital systems

Digital systems include technologies, applications and platforms that create, store, process and distribute digital data and information. Smartphones, gaming platforms, AI-enabled personal assistants and robots are types of digital systems.

Real-world examples

Real-world examples are specific existing instances involving digital systems and are required for all course inquiries. Real-world examples may be local, global or a combination of local and global. Real-world examples may be identified in many ways such as through social media, personal experiences and research.

People and communities

People and communities are individuals and groups affected by digital systems including those who may face barriers or obstacles to access. Various people and communities often disagree, make different claims or requests, or advocate for different courses of action. People and communities may include, for instance, users, developers, stakeholders, gamers and others affected by the digital systems explored in the course.

Impacts and implications

Impacts are effects and outcomes related to digital systems. Implications are opportunities and risks associated with digital systems. Impacts and implications overlap and inform one another.

Challenges and interventions

In the HL extension, students conduct extended inquiries to address **challenge topics** and **interventions** in digital society.

- **Challenges** are HL-only topics involving pressing complex issues with far-reaching impacts and implications for large numbers of people. Challenge topics are widespread, persistent and often transnational and transgenerational. In digital society, challenge topics are intertwined with digital systems. HL students may explore and investigate challenge topics individually and/or collaboratively with other digital society students.

- **Interventions** are innovations that attempt to mitigate, intercede, support or resolve aspects related to a challenge topic. HL students must use the HL extension framework to identify, analyse and evaluate interventions for each challenge topic in order to recommend steps for future action. Interventions may be explored and investigated individually and collaboratively. Interventions studied in the course must involve digital systems in some way.

Aims

Individuals and societies aims

Individuals and societies subjects help young people develop a connection to our shared planet, exploring how to live sustainably and promoting the well-being of all people in our pursuit of a more peaceful world.

The aims of all the individuals and societies subjects are to equip young people to:

- explore and critically engage with multiple perspectives and ways of thinking
- investigate and evaluate the interactions between individuals and societies
- think and act as informed and principled individuals in societies
- understand and value the variety and diversity of the human experience across time and place.

Digital society aims

The digital society course invites SL and HL students to develop as ethical, empathetic and creative people who address the world with individual and shared understanding, imagination and action.

The course aims indicate important milestones on a student's learning journey as they:

- **focus** inquiry using course concepts, content and contexts as well as real-world examples
- **explore** diverse sources relevant to digital society
- **investigate** impacts and implications of digital systems for people and communities
- **reflect** on emerging trends, future developments and further insights
- **share** discoveries about digital society with others.

Assessment in digital society

Assessment objectives

Having followed the digital society course, students are expected to demonstrate the following assessment objectives.

Understand, apply, analyse, evaluate and synthesize:

- course topics, enduring understandings and areas for inquiry
- real-world examples involving digital systems
- claims and perspectives of diverse sources
- impacts and implications of digital systems for people and communities
- emerging trends and future developments
- challenges and interventions in digital society (HL only).

Develop and refine digital society skills including:

- managing inquiry projects through planning, documentation and feedback
- researching using diverse and relevant sources
- thinking in critical and creative ways
- communicating in multiple modes and media.

Assessment at-a-glance

SL paper 1

Questions that address the common SL and HL syllabus and real-world examples in an integrated way.

HL paper 1

Questions that address the common SL and HL syllabus and real-world examples, as well as the HL extension, in an integrated way.

SL and HL paper 2

Source-based questions that address the common SL and HL syllabus in an integrated way. Sources may include text, visuals, data, diagrams and/or infographics.

HL paper 3

Questions that address an intervention related to an HL extension challenge topic. A brief statement indicating the real-world nature of a selected challenge topic will be released prior to the examination. Students will be required to evaluate an intervention and recommend steps for future action.

Inquiry project (internal assessment)

An inquiry project is common to SL and HL students. Students conduct an inquiry into impacts and implications of digital systems for people and communities. The submission requirements for the project include an inquiry process document, a recorded multimedia presentation and a list of references.

Assessment alignment

Assessment objectives are aligned with assessment components as indicated in the table below.

Assessment alignment in digital society	SL paper 1	HL paper 1	SL/HL paper 2	HL paper 3	Inquiry project
Understand, apply, analyse, evaluate and synthesize					
Course topics, enduring understandings and areas for inquiry	√	√	√	√	√
Real-world examples	√	√	√	√	√
Claims and perspectives			√		√
Impacts and implications	√	√	√	√	√
Emerging trends and future developments	√	√	√	√	√
Challenges and interventions (HL only)		√		√	
Develop and refine digital society skills					
Managing inquiry projects	√	√	√	√	√
Researching	√	√	√	√	√
Critical and creative thinking	√	√	√	√	√
Communicating	√	√	√	√	√

Inquiry stages

Inquiry stages facilitate the design and delivery of the syllabus. Students should gain experience with the inquiry stages outlined in this section. Inquiry stages are iterative, overlap and are not always linear. Students should receive and act in response to feedback throughout each stage of inquiry.

Figure 3

Digital society inquiry stages

Focus

The focus is a starting point that is refined throughout inquiry.

Inquiry focus		
A compelling **inquiry question**: • is developed by teachers and students • is open-ended, thought-provoking and worth considering from different perspectives • supports discoveries that move beyond recall, description and summary.	Connections to **course concepts, content and contexts** are selected to: • provide insight for inquiries with conceptual perspectives • inform inquiries with content topics and details involving digital systems • situate inquiries within a course context.	A **real-world example** is selected that: • involves a specific and existing digital system • may be local and/or global.
HL only: In an extended inquiry, a challenge topic is integrated with the inquiry focus.		

Explore

Inquiry explores diverse and relevant sources.

Sources		
Identify and gather sources that: • are grounded in the inquiry's concepts, content and contexts • provide a balance of claims and perspectives • support in-depth understanding.	**Engage** with source claims and perspectives by considering: • the origin and purpose of each source • the meaning and methods of each source • how each source is corroborated and used.	**Reference** sources to: • demonstrate awareness of the existing conversation and debate about an issue • acknowledge ideas, work and intellectual content of others • help others locate sources for future use.
HL only: In an extended inquiry, sources relevant to a challenge topic are explored.		

Investigate

Impacts and implications for people and communities are analysed and evaluated. The significance of the inquiry for digital society is considered.

Impacts and implications	People and communities
Supporting questions for analysis and evaluation may include, but are not limited to, the following. • How does the context and conceptual perspective inform and shape the investigation of impacts and implications? • What are positive and negative impacts for different people and communities? • Which impacts are intentional and which impacts are unintentional? • What is the timescale associated with investigated impacts and implications? • What are possible ethical, policy, legal and/or governance implications?	**Supporting questions** for analysis and evaluation may include, but are not limited to, the following. • How does the context and conceptual perspective inform and shape the investigation of people and communities? • Who are the people and communities directly and/or indirectly affected? • What are the different claims made by people and communities? • What are the roles performed by people and communities? • What are the responsibilities and relationships of people and communities?
HL only: In an extended inquiry, a challenge topic and relevant interventions are investigated.	

Reflect and share

The close of inquiry is an opportunity to reflect on emerging trends, future developments and further insights into new ideas and understanding. The discoveries arising from inquiry are shared with others.

Reflect	Sharing the inquiry
At the close of inquiry, **reflect** to: • offer further insight including new understanding and ideas • consider emerging trends and future developments related to the inquiry.	**Communicate** inquiry discoveries effectively by: • considering the purpose and audience as well as appropriate and available formats. • conveying ideas and evidence with organization and a coherent use of media.

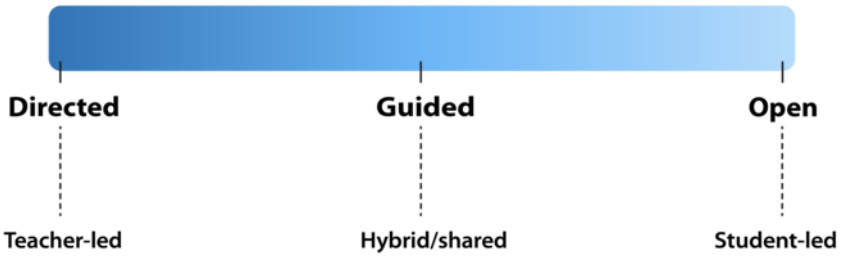
Reflect	Sharing the inquiry
HL only: In an extended inquiry, recommended steps for future action are developed and presented.	

Inquiry approaches

Inquiry approaches facilitate the design and delivery of the syllabus. Students should gain experience with the inquiry approaches outlined in this section. There is a spectrum of approaches to inquiry, including directed, guided and open approaches, as seen in figure 4.

Figure 4

Digital society approaches to inquiry



Teachers should provide guidance and feedback regardless of the approach taken. Multiple approaches may scaffold inquiry so that one cycle of inquiry combines directed, guided and/or open approaches.

Inquiry stages and approaches	Directed inquiries	Guided inquiries	Open inquiries
Focus	Teachers provide the inquiry focus.	Students and teachers co-develop the inquiry focus.	Students develop the inquiry focus.
Explore	Teachers model research using diverse sources relevant to the inquiry.	Students and teachers partner in research using diverse sources relevant to the inquiry.	Students lead research using diverse sources relevant to the inquiry.
Investigate	Teachers model the investigation of impacts and implications of digital systems for people and communities.	Students and teachers partner in the investigation of impacts and implications of digital systems for people and communities.	Students lead the investigation of impacts and implications of digital systems for people and communities.
Reflect	Teachers model reflection at the close of inquiry.	Students and teachers partner in reflection at the close of inquiry.	Students lead reflection at the close of inquiry.

Inquiry stages and approaches	Directed inquiries	Guided inquiries	Open inquiries
 **Share**	Teachers determine effective ways to present the inquiry.	Teachers and students partner to co-develop effective ways to present the inquiry.	Students determine effective ways to present the inquiry.

Digital society toolkit

The digital society toolkit highlights interdisciplinary skills that support inquiry. Students should gain experience with the skills outlined in this section.

Managing inquiry projects

Managing inquiry projects involves planning, documentation and feedback. The table describes how these skills may be demonstrated in the course.

Planning	Documentation	Feedback
Inquiry projects are sustained activities that require planning to: • identify the resources necessary (including time, people and materials) for their completion • break up and sequence long-term processes into smaller, more manageable tasks and stages • create deadlines to meet identified goals in a timely fashion • designing practical activities to accompany an inquiry.	Maintaining a journal or portfolio documents the process of inquiry by collecting evidence of: • developed and refined inquiry focus • news articles and sources related to real-world examples, issues and course topics • annotations and evaluation of a source's claims, value and limitations • mind maps, topic charts and inquiry sketches to aid and visualize analysis • images, sketches and other evidence of practical activities related to an inquiry.	Receiving feedback from teachers and peers, and taking action in response helps to: • identify the strengths and weaknesses of personal learning strategies through ongoing self-assessment • refine approaches for an inquiry and evaluate their effectiveness • synthesize significant findings and conclusions from an inquiry • brainstorming next steps for practical activities and/or sharing new knowledge and skills with others.

Digital services and platforms may be useful for managing inquiry projects. While the course internal assessment is an individual task, students are encouraged to collaborate in other inquiries with students, both in person and remotely.

Researching

Research creates and validates knowledge about the world around us. It involves considering ethics, using diverse sources and methods, and engaging with the claims and perspectives of sources.

Research ethics

Students, with teacher support, must maintain an ethical perspective during research by:

- ensuring safe and appropriate research, given the school context and the age of students
- acknowledging the ideas, words and intellectual content taken from or adapted from others
- engaging with challenging and/or sensitive topics and examples in a responsible manner.

Diverse sources for research

Researchers collect data and information by consulting primary and secondary sources, including:

- news sources representing a range of perspectives and agendas
- books, websites, articles and other predominately text-based sources
- online databases, social media feeds, blogs and posts
- images, videos, podcasts and other media sources
- live experiences, such as performances, workshops, lectures and interviews with experts and users.

Research methods

Research methods are techniques used to explore and investigate inquiry questions, support claims and reach substantiated conclusions. Research methods are influenced by disciplinary perspectives and ways of understanding. Research methods are categorized as qualitative, quantitative or mixed, as described in the table below.

	Qualitative	Quantitative
Purpose	To explore complex characteristics and behaviours of people and communities	To discover and organize measurable facts about people and communities
Data and information	Data and information—in the form of texts, images and multimedia materials—is collected through interviews, ethnographies, fieldwork, surveys, observations and reviews of primary and secondary literature	Numerical data and information is collected and/or classified using larger, sometimes randomized, samples including those found through surveys, polls, statistics and databases
Analysis and evaluation	Data and information is analysed and evaluated to determine important themes, features and descriptive characteristics	Data and information is analysed and evaluated to determine significant patterns and relationships
Findings and conclusions	Findings and conclusions are organized and presented through narrative description with inclusion of quotes, details and a range of media forms	Findings and conclusions are organized and presented through tables, charts and visualizations

Mixed methods
Mixed methods research combines techniques of both qualitative and quantitative methods to form complex and nuanced understanding. Mixed methods research is often interdisciplinary with the choice of technique dependent on the purpose and audience of research.

Claims and perspectives

A source's claims and perspectives can be explored through the following overlapping facets.

- A source's **origin and purpose** involves provenance such as where a source comes from, who made it (even if that authorship is hidden or obscured) and why it might have been created in the first place. Origin and purpose can help determine a source's potential bias as well as its value and limitations for different people and communities.
- A source's **meaning and methods** includes the main ideas of a source as well as the techniques used to support these ideas. Meaning and methods can be explored by considering features such as a source's words, images, numerical data, graphics and/or the overall design of a source.
- A source's **corroboration and use** involves determining how a source compares and contrasts with other attempts to explain the same topic as well as how a source has been used and circulated by

different people, communities and platforms. Corroboration and use can help determine the reliability, verifiability and validity of a source.

TSM resource
The TSM includes resources to further explore digital, information and media literacy.

Critical and creative thinking

Critical and creative thinking are higher-order ways of thinking that help make sense of the world around us. Both ways of thinking are important for exploring complex topics, ideas and issues. The table describes some of the ways critical and creative thinking may be developed and refined in the course.

Critical thinking	Creative thinking
• The ability to reach reasoned judgments about a topic, idea or issue that takes into account varied points of view and evidence. • The ability to form a coherent appraisal of strengths, weaknesses and potential biases of claims, including one's own.	• The ability to use imagination to generate insight and divergent connections between real-world examples with course topics. • The ability to synthesize and share ideas and insights in an engaging and compelling manner.

Critical and creative thinking in practice

Critical and creative thinking are most visible when students forge connections between concepts, content and contexts. During inquiry, students practically demonstrate these ways of thinking when they:

- pose and respond to open-ended, compelling and powerful questions
- make explicit claims that go beyond simple descriptions of an idea, issue, example or topic
- explain and justify claims using relevant and appropriate evidence from diverse sources
- consider and respond to counter-claims, different viewpoints and/or evidence
- synthesize findings and insights into well-supported conclusions
- advocate for possible courses of action as appropriate to an inquiry.

TSM resource
The TSM includes resources to further explore different ways of thinking, such as design thinking, computational thinking, algorithmic thinking and more.

Communicating

Communicating involves presenting an inquiry through multiple modes and media such as essays, infographics, blogs, podcasts, videos and/or multimedia presentations. Effective communication results in a compelling synthesis of **purpose**, **organization** and **coherence**. To develop and refine these qualities, students should consider the following:

- the **purpose** of communicating such as to inform, explain or persuade
- how best to **organize** ideas and evidence through thoughtful arrangement, signposting and ordering
- how best to use and integrate media with **coherence** to engage others and support understanding.

TSM resource
The TSM includes resources highlighting different ways that students can present their inquiries.

Inquiry in practice

Guidance for course design

Teachers and students enjoy a great deal of flexibility in the design and delivery of their version of the course. Teachers and students should personalize an approach based on their interests to ensure relevance.

The following statements should be considered when designing and delivering the digital society course.

- An introductory directed inquiry will familiarize students with inquiry stages, approaches and toolkit.
- Collaborative, creative and practical activities will enrich student understanding throughout the course.
- Collaboration in non-assessed inquiries is encouraged. Collaboration may involve digital society students, both locally and globally. HL extended inquiries may also involve collaboration.
- Course inquiries should focus on specific real-world examples that involve diverse digital systems and issues, both local and global. Real-world examples must be situated within at least one course context.
- Inquiries may combine directed, guided and open approaches.
- Stages may be addressed in a flexible, recursive and iterative way. Lessons and activities may, for instance, target only one or two stages of inquiry.
- Inquiries can be shared in combined SL and HL cohorts.

HL-specific guidance

- Extended inquiries into challenge topics and interventions should start from the beginning of the course.
- Extended inquiries may be designed as a standalone cycle and/or as extensions building on an inquiry cycle shared with SL students.
- Extended inquiries may involve practical and design-oriented formative activities to test and prototype intervention ideas and approaches. These practical activities can be used in other areas of students' DP experience, for example, with a CAS project.

TSM resource
The TSM includes sample inquiry plans, lessons and activities as well as support for multiple approaches to course design and delivery.

Syllabus outline

The digital society syllabus includes the following topics along with the inquiry project component.

Introduction
1.1 What is digital society?
SL and HL teaching hours: 10–15 hours

Concepts	**Content**	**Contexts**
2.1 Change	3.1 Data	4.1 Cultural
2.2 Expression	3.2 Algorithms	4.2 Economic
2.3 Identity	3.3 Computers	4.3 Environmental
2.4 Power	3.4 Networks and the internet	4.4 Health
2.5 Space	3.5 Media	4.5 Human knowledge
2.6 Systems	3.6 Artificial intelligence	4.6 Political
2.7 Values and ethics	3.7 Robots and autonomous technologies	4.7 Social
SL and HL teaching hours: 105–110		

Inquiry project (internal assessment)	**HL extension: challenges and interventions**
An inquiry project into impacts and implications of digital systems for people and communities. The requirements are common to SL and HL students.	5.1 Global well-being 5.2 Governance and human rights 5.3 Sustainable development
SL and HL teaching hours: 30	*HL teaching hours: 90*

Note: The total teaching time is 150 hours to complete SL courses and 240 hours to complete HL courses. Allocated teaching hours are **recommendations only** based on the requirement to integrate course topics and components in a balanced manner. Teachers may adjust this allocation.

Format of syllabus topics

Syllabus topics are common to SL and HL students with the exception of those included in the HL extension. Syllabus topics are presented in the format described in the table below.

<table>
<tr><th colspan="2">Prescribed enduring understandings</th></tr>
<tr><td colspan="2">Prescribed enduring understandings summarize the most important ideas for students to understand, apply, analyse, evaluate and synthesize.</td></tr>
<tr><th>Prescribed areas for inquiry</th><th>Supporting details</th></tr>
<tr><td>Prescribed areas for inquiry are required elements of the course for students to understand, apply, analyse, evaluate and synthesize.
Areas are intended to be combined, integrated and connected through inquiry.
Areas are purposefully open ended to give teachers and students opportunities to be guided by their interests, current events and new developments.</td><td>Supporting details consist of possible examples, issues, terms and initial inquiry questions useful to support inquiry.
Supporting details are suggestions and starting points intended to spark curiosity and inspiration for inquiry.
Supporting details are not exhaustive. Teachers and students are free to explore additional supporting details.
Supporting details may appear with multiple topics or be helpful to consider with more than one topic.</td></tr>
</table>

Guidance for integrating topics through inquiry

- Topics in the syllabus are not intended to be studied in isolation. An iterative and integrative approach to topics is encouraged so that they are addressed more than once in the delivery of the course.
- More than one inquiry may be developed using the same area for inquiry. Inquiries may also combine multiple areas from several topics. For example, the same area for inquiry may be considered using different combinations of course concepts, content and contexts as well as distinct real-world examples.
- For many topics, local and current supporting details may be more appropriate than those suggested in this guide.
- Many more supporting details are listed than are expected to be covered during the course.
- Teachers should exercise their judgment on when enough supporting detail has been addressed for students to have gained a rich and balanced understanding of the relevant prescribed enduring understandings and prescribed areas for inquiry.

Note: Examination questions are set using the prescribed enduring understandings and prescribed areas for inquiry. Examination questions must be answered with relevant and accurate knowledge.

1. Introduction

This section **introduces digital society** and should be returned to during the course to enrich understanding.

1.1 What is digital society?

Prescribed enduring understandings		
• "Digital society" is a contested term used to describe contemporary life. There may be multiple digital societies rather than just one. • Digital society involves the transformation of analogue processes and objects into digital forms.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
1.1A	Digital society has multiple names	Information age, computer age, post-industrial society, network society, fourth industrial revolution
1.1B	Digital society is characterized by uneven access to digital systems	Digital divide(s)
1.1C	Milestones in the development of digital society	Integrated circuit, microprocessor, personal computer, the internet, online social networks, mobile and cloud computing
1.1D	Digital systems use binary digits to represent data and information	Binary, bits, bytes
1.1E	The digital is different from the analogue	*Analogue* • Continuous physical qualities and signals *Digital* • Discrete signals with finite set of values
1.1F	Digitization changes data and information from analogue to digital	Digital preservation, digital archives, digital reformatting
1.1G	Digitalization is the use of digital systems to change the structure and/or operation of an organization	Digitalization and disruption in education, businesses and organizations

2. Concepts

Concepts are powerful, pervasive and debatable perspectives that provide **insight for inquiry.** Each concept must be addressed. Students are encouraged to develop an informed foundational awareness of distinct emphases associated with each concept rather than a comprehensive knowledge of each concept.

Concepts invite young people to "think like a practitioner" by considering, for instance, how a geographer, sociologist, anthropologist or ethicist might approach the impact and implications of different digital systems in the world. The enduring understanding for each concept indicates some of the subjects, disciplines and fields that explore and investigate digital society.

2.1 Change

Prescribed enduring understandings		
• Change in digital society is explored and investigated by diverse subjects, fields and professions, such as history, science and technology studies (STS) and future studies.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
2.1A	Change is the evolution, transformation, adaptation or movement from one form, state or value to another.	*Possible initial inquiry questions:* • What is a technological revolution? • Is technological change and innovation distinct from historical change?
2.1B	Change involves understanding and evaluating people, ideas, objects and forces that shape the world: past, present and future.	*Possible initial inquiry questions:* • What caused change in the past? What is driving change in the present? • What obligations do we have toward future generations? How might digital systems and technologies help us meet these obligations?
2.1C	The nature and importance of change is debated.	*Possible initial inquiry question:* • Is progress an inevitable outcome of advances in digital systems and technologies?
2.1D	Change may indicate continuity or discontinuity with prior established ways of understanding or doing things.	*Possible initial inquiry question:* • How might past events, patterns or trends help us to forecast future developments?

2.2 Expression

Prescribed enduring understandings	
• Expression in digital society is explored and investigated by diverse subjects, fields and professions, such as media studies, digital humanities, communications, languages and literature, the arts, film and art history.	
Prescribed areas for inquiry	**Supporting details (possible examples, issues, terms and initial inquiry questions)**

2.2A	Expression is the act, process or instance of representing ideas, emotions and/or experiences using different modes and media.	*Possible initial inquiry question:* • In what ways do digital systems influence how we express ourselves?
2.2B	Expression serves many functions, including storytelling, world-building, artistic innovation and political activism.	*Possible initial inquiry question:* • What different kinds of stories are possible through digital media?
2.2C	Expression brings people and communities together while also introducing significant dilemmas.	*Possible initial inquiry question:* • Are there forms of digital expression that should be limited? Who decides and how?

2.3 Identity

Prescribed enduring understandings		
• Identity in digital society is explored and investigated by diverse subjects, fields and professions, such as psychology, cultural studies, political science, social and cultural anthropology, sociology and philosophy.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
2.3A	Identity helps define a person, group, social entity and/or community.	*Possible initial inquiry questions:* • How do different fields and professions understand digital identity? • Does a robot have an identity?
2.3B	Identity is not static but changes over time and according to context and the perspectives of others.	*Possible initial inquiry questions:* • How do online identities change over time? • How do digital systems and technologies influence or construct identity?
2.3C	Identities are intersectional and may include aspects related to age, nationality, religion, culture, gender, sexuality, race, ethnicity as well as social and economic class.	*Possible initial inquiry question:* • To what extent do different aspects of our identity intersect on digital platforms?

2.4 Power

Prescribed enduring understandings		
• Power in digital society is explored and investigated by diverse subjects, fields and professions such as global politics, social and cultural anthropology. political science, public policy, philosophy, sociology and law.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
2.4A	Power is a feature of all social relations that involves a person's or group's capacity to influence or control the actions of others.	*Possible initial inquiry question:* • How is power embedded or exercised through a specific digital system, technology or platform?

2.4B	Power is structural and embedded within institutions, organizations and governments.	*Possible initial inquiry question:* • Do digital systems and technologies enable or constrain the exercise of power?
2.4C	Power is not equally distributed.	*Possible initial inquiry questions:* • Is it inevitable that power in digital society is unequally distributed? • How might digital systems and technologies influence the distribution of power?

2.5 Space

Prescribed enduring understandings		
• Space in digital society is explored and investigated by diverse subjects, fields and professions such as mathematics, geography, design, social and cultural anthropology, immersive media, sociology, architecture and urban planning.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
2.5A	Humans organize, construct and represent space based on physical, geographic, cultural and/or social features (for example, into locations, regions, borders, zones).	*Possible initial inquiry questions:* • How do digital systems and technologies affect how we experience specific spaces and locations? • Do physical or political borders still have meaning in a digital society?
2.5B	Different spaces often serve distinct functions for people and communities.	*Possible initial inquiry questions:* • In what kinds of spaces do digital divides exist? • How does online space differ from physical space? How are they similar?
2.5C	Access, movement and flows are significant considerations involving space.	*Possible initial inquiry question:* • How does media circulate and move through digital society?
2.5D	Space can be understood using multiple scales and dimensions, including local, regional, national and global as well as virtual.	*Possible initial inquiry question:* • To what extent does physical space influence virtual space (and vice versa)?

2.6 Systems

Prescribed enduring understandings	
• Systems in digital society is explored and investigated by diverse subjects, fields and professions such as sociology, environmental systems and societies (ESS), science and technology studies (STS), information science, computer science and design. • Systems thinking provides powerful tools for understanding human, natural and built environments, and the role of people and communities within them.	
Prescribed areas for inquiry	**Supporting details (possible examples, issues, terms and initial inquiry questions)**

2.6A	Systems provide one way to think about structure and order in human, natural and built environments.	*Possible inquiry question:* • Are digital systems distinct from social systems?
2.6B	Systems involve sets of interacting, interdependent and/or interconnected elements.	*Possible inquiry question:* • What are the human elements involved in the design or use of a specific digital system?
2.6C	Changes within a system of interdependent connections may generate intended and unintended consequences.	*Possible inquiry question:* • How might a new technology result in unintended consequences in digital society?
2.6D	Models, maps and visualizations can help us understand connections within and between systems.	*Possible inquiry question:* • What do models and maps reveal about a digital system or technology?

2.7 Values and ethics

Prescribed enduring understandings		
• Values and ethics in digital society are explored and investigated by diverse subjects, fields and professions such as ethics, philosophy, world religions, law and public policy.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
2.7A	Values and ethics are ways to determine possible distinctions between right and wrong, fair and unfair, just and unjust, legal and illegal, proper and improper.	*Possible inquiry question:* • Can we program or code values and ethics into AI? • Can there be a universal system of digital ethics?
2.7B	Values and ethics guide human action in the world, including individual and group conduct, and decision-making.	*Possible inquiry question:* • Do robots have ethics? Should they?
2.7C	Values and ethics may be personal, shared, collective and/or professional.	*Possible inquiry question:* • Do hackers share values or an ethical code?
2.7D	Values and ethics are expressed through frameworks, codes, rules, policies and laws.	*Possible inquiry question:* • What happens when different ethical frameworks are applied to the same issue in digital society?
2.7E	Values and ethics influence and shape ideas, objects, practices, systems and spaces.	*Possible inquiry question:* • Do the designers of digital technologies have an ethical obligation to their users?

3. Content

Content **informs inquiries** with details related to digital systems. Each content topic must be addressed. Students are not expected to cultivate an in-depth knowledge of every aspect related to digital systems. It is not possible, for instance, to fully explore every digital system relevant to the course.

3.1 Data

Prescribed enduring understandings		
• There are many types, uses and ways of representing data. • Big data and data analytics involve extracting and processing useful information in ways that are often impossible for humans. • There are significant opportunities and dilemmas associated with data in digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
3.1A	Data as distinct from information, knowledge and wisdom	Data, information, knowledge and wisdom (DIKW) pyramid
3.1B	Types of data	• Quantitative and qualitative • Cultural, financial, geographical, medical, meteorological, transport, scientific, statistical • Metadata
3.1C	Uses of data	• Identify trends, patterns, connections and relationships between different items • Collect and organize measurable facts about people and communities
3.1D	Data life cycle	Create/collect/extract, store, process, analyse, access, preserve, reuse
3.1E	Ways to collect and organize data	• Primary and secondary data collection • Databases organize and structure collections of data so that they are accessible, manageable and capable of being updated. • Data classifications and relationships
3.1F	Ways of representing data	Charts, tables, reports, infographics, visualizations
3.1G	Data security	• Encryption, data masking, data erasure • Blockchain
3.1H	Characteristics and uses of big data and data analytics	*Characteristics* • Volume, variety, velocity, veracity *Uses* • Predictive analysis, modelling, understanding past, current and future human behaviour
3.1I	Data dilemmas	• Data bias, reliability and integrity

		• Control, ownership and access to data • Data privacy, anonymity and surveillance, personally identifiable information

3.2 Algorithms

Prescribed enduring understandings		
• Algorithms are defined sequential steps or instructions to solve a specific problem or perform a task. • The effectiveness of an algorithm is often evaluated according to its efficiency. • The use of algorithms poses significant opportunities and dilemmas in digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
3.2A	Characteristics of an algorithm	Unambiguous, finite, well-defined inputs and outputs, feasible
3.2B	Components of an algorithm	Instructions, variables, conditionals, loops
3.2C	Ways of representing algorithms	Natural language, flow chart, code, programming languages
3.2D	Uses of algorithms	• Sorting, searching, filtering, prioritizing, classifying, associating, counting • Programming, software development and implementation • Machine learning, neural networks and in the creation of other algorithms
3.2E	Algorithmic dilemmas	• Algorithmic bias and fairness • Algorithmic accountability and transparency, black box algorithms • Erosion and/or loss of human judgment

3.3 Computers

Prescribed enduring understandings		
• A computer is a machine that automatically executes sets of instructions to perform specific tasks. • Computers have evolved over time and are increasingly ubiquitous in the everyday life of people and communities.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
3.3A	Types of computers	Mainframe, server, personal computer, tablet, smart/ mobile device, wearable computers and devices
3.3B	Components of a computer	*Hardware* • Motherboard, central processing unit, memory, storage, graphics and sound components, power supply, input and output devices, sensors *Interfaces* • User interfaces, such as graphic and haptic

		Software • Operating system software • Software applications, apps • Malicious software
3.3C	Uses and forms of computer coding	Computer coding and programming uses specific languages and rules to communicate instructions to computers.
3.3D	Evolution of computing	• Generations in computing, for example, first to fifth generations of computing • Moore's law • Emerging areas of computing, such as quantum computing

3.4 Networks and the internet

Prescribed enduring understandings		
• Networks connect computers, people and communities allowing data and information to be created, accessed and shared in a distributed manner. • Networks and the internet are defining features of digital society that have evolved over time. • Networks and the internet involve significant opportunities and dilemmas for life in digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
3.4A	Types of computing networks	• Wired, wireless, cloud • Personal area network (PAN), local area network (LAN), metropolitan area network (MAN), wide area network (WAN) • Client-server, peer-2-peer (P2P)
3.4B	Components of computing networks	• Client, server, modem, router, switch, hub, channels, network interface
3.4C	Characteristics of computing networks	*Standards and protocols* • Interoperability, domain names, addresses *Security* • Identification, authentication, encryption • Firewall, proxy server, virtual private network (VPN), security layers *Capacity* • Bandwidth, data compression, net neutrality *Infrastructure* • Internet backbone
3.4D	Computing network providers and services	*Providers* • Internet service provider *Services* • Chat, texting, email, file sharing, VOIP, online messaging, hosting, video conferencing

3.4E	The world wide web	• As distinct from the internet • URL, HTTP, browser • The World Wide Web Consortium (W3C)
3.4F	Evolution of the internet and the web	• Innovators and innovations in the early development of the internet and web • Rise of online social media platforms • Internet of things and ubiquitous networking
3.4G	Internet dilemmas	• Privacy, anonymity and surveillance, the right to be forgotten, spyware, identity theft • Cybercrime, hacking, viruses, spam, social engineering, ransomware, denial of service, dark web, trolling

3.5 Media

Prescribed enduring understandings		
• Digital media are defined by the convergence of computing, communication and content. • Digital media are created and distributed through multiple channels and platforms. • Digital media are associated with significant opportunities and dilemmas in digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
3.5A	Types of digital media	• Text, images, audio, animations, video, web pages • Gaming and e-sports • Blogs, vlogs, podcasts, vodcasting and live streaming, hashtags, memes, wikis, streaming media • User-generated content • Synthetic digital media, such as artificial intelligence (AI)-generated media and deepfakes
3.5B	Characteristics of digital media	Rapid sharing, efficient storage, interactive, linear and non-linear content, convergence (of media forms and layers)
3.5C	Immersive digital media	Augmented reality (AR), virtual reality (VR), mixed reality (MR) and X reality (XR) technologies
3.5D	Digital media dilemmas	• Addiction and other psychological concerns • Impact on journalism, for example, fragmentation and consolidation in the media industry • Media authenticity, sourcing and deepfakes • Ownership, copyright, copyleft, Creative Commons, open source, remix culture • Media obsolescence and digital preservation • Censorship, content filters, moral panics, decency standards, offensive speech, objectionable content

3.6 Artificial intelligence

Prescribed enduring understandings		
• Artificial intelligence (AI) involves agents, devices or systems that adapt to perform tasks (or appear to do so) that once required the cognitive and creative processes of human beings. • There are several types of existing, emerging or proposed AI. These categories frequently overlap or are contested. • AI has evolved over time and introduces significant opportunities and dilemmas in digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
3.6A	Types of AI	Strong, full, general, weak, narrow, domain-specified • The Turing test
3.6B	Types and uses of machine learning	*Types* • Supervised, unsupervised, reinforcement learning, deep learning *Uses* • Pattern recognition, facial and speech recognition, image analysis, natural language processing
3.6C	Uses of artificial neural networks	Learn and model complex and non-linear relationships, generalize from initial inputs
3.6D	Evolution of AI	• AI in science fiction and philosophy • Cybernetics • AI winters • The singularity and the multiplicity
3.6E	AI dilemmas	• Fairness and bias in design and use • Accountability in design and use • Transparency in design and use • Uneven and underdeveloped laws, regulations and governance • Automation and displacement of humans in multiple contexts and roles

3.7 Robots and autonomous technologies

Prescribed enduring understandings	
• Robots and autonomous technologies demonstrate a capacity to sense, think and/or act with some degree of independence. • Robots and autonomous technologies have evolved over time and are increasingly ubiquitous, pervasive and woven into the everyday lives of people and communities. • Robots and autonomous technologies introduce significant opportunities and dilemmas in digital society.	
Prescribed areas for inquiry	**Supporting details (possible examples, issues, terms and initial inquiry questions)**

3.7A	Types of robots and autonomous technologies	*Robots* • Industrial and productivity robots, service robots, social robots *Autonomous technologies* • Internet of things, autonomous vehicles, drones, virtual assistants
3.7B	Characteristics of robots and autonomous technologies	• Sensory inputs for spatial, environmental and operational awareness • The ability to logically reason with inputs, often using machine vision and/or machine learning • The ability to interact and move in physical environments, sometimes remotely • The demonstration of some degree of autonomy
3.7C	Evolution of robots and autonomous technologies	• Early forms of robots and autonomous technology • Robots in science fiction and philosophy • Use in industry and manufacturing • Expanding interactions with human users • Machine consciousness, cognitive robotics and robot rights
3.7D	Robots and autonomous technology dilemmas	• Anthropomorphism and the uncanny valley • Complexity of human and environmental interactions • Uneven and underdeveloped laws, regulations and governance • Displacement of humans in multiple contexts and roles

4. Contexts

Contexts **situate inquiry** into areas significant to life in digital society. Each context must be addressed. Students are not expected to cultivate an in-depth knowledge of every issue relevant to course contexts. It is not possible to fully explore all contextual details about life in a digital society.

By the end of the course, students must be able to understand, analyse and evaluate unseen real-world examples as well as the impacts and implications of digital systems relevant to each context.

4.1 Cultural

Prescribed enduring understandings		
• The cultural context includes ways that people and communities express themselves as well as how they live, travel and associate together in a digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
4.1A	Arts, entertainment and popular culture	• Genres, techniques and forms • Ways to experience art and entertainment, such as online galleries and exhibitions, streaming platforms • Memes, online forums, internet celebrities and influencers
4.1B	Home, leisure and tourism	• Home appliances, services and technologies • Sports, gaming and hobbies • Travel, sharing platforms and tourism
4.1C	Heritage, customs and celebrations	• Rites of passage • Expression and preservation of cultural heritage, customs and celebrations
4.1D	Subcultures	• Youth cultures • Online communities and forums

4.2 Economic

Prescribed enduring understandings		
• The economic context includes ways that people and communities work as well as how they exchange goods and services in a digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
4.2A	Business	• Operation and organization of businesses • Diversity in businesses and corporations

4.2B	Employment and labour	• Working practices, for example, office design, remote working, digital nomadism and employee organizations • Crowd work, microwork and gig economies • Automation and employment
4.2C	Goods, services and currencies	• E-commerce, e-trading and online marketplaces • Personalized and targeted marketing • Cryptocurrency, non-fungible tokens (NFTs), cashless society and micro-transactions • Additive manufacturing
4.2D	Globalization	• Borderless selling and global sourcing • Offshoring, outsourcing, reshoring, inshoring, and insourcing

4.3 Environmental

Prescribed enduring understandings		
• The environmental context includes ways that people and communities interact with the natural and built worlds around them in a digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
4.3A	Natural resources and ecosystems	• Use and distribution of natural resources, including in digital systems and devices • Protection and threats to ecosystems and biodiversity • Natural events and disasters
4.3B	Pollution and waste	• Recycling and waste management • Types of pollution, including air, water, solid, noise and light pollution • Green computing, e-waste, planned obsolescence
4.3C	Cities, infrastructures and built environments	• Design and use of urban spaces and cities • Local and regional infrastructures • Transportation and wayfinding, maps, global positioning systems (GPS) and geographic information systems (GIS)
4.3D	Agriculture	• Agricultural production and distribution

4.4 Health

Prescribed enduring understandings
• The health context encompasses the physical and mental health of people and communities as well as changing understandings of the human body in a digital society.

Prescribed areas for inquiry		Supporting details (possible examples, issues, terms and initial inquiry questions)
4.4A	Medicine and health	• Approaches to the design and delivery of medical diagnostics and care • Medical research and development • Health and wellness records, monitoring and tracking
4.4B	The human body	• Human enhancement, bio-hacking, implanted technology, exoskeletons and organ printing • Accessibility approaches for differently abled people and communities • Ergonomic design
4.4C	Mental health	• Approaches to understanding and ensuring mental health • Intersections of digital systems and mental health, for example, attention, addiction and anxiety

4.5 Human knowledge

Prescribed enduring understandings		
• The human knowledge context encompasses ways that people and communities learn and create new knowledge in a digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
4.5A	Learning and education	• Design and delivery of formal education, for example, in schools and remote learning • Approaches to non-formal and post-formal education, for example, skill training, competency development and self-directed learning • Digital pedagogies
4.5B	Science and technology innovation	• Approaches to scientific and technology research and development

4.6 Political

Prescribed enduring understandings		
• The political context encompasses ways that people and communities operate, organize and govern themselves politically in a digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
4.6A	Political processes	• Voting and campaigning • Formal and informal forms of political participation, such as lobbying, political movements and activism

		• Political advertising and propaganda
4.6B	Governing bodies	• Organization and role of local, regional, national and global governing institutions • Non-governmental organizations (NGOs) • Non-state political actors
4.6C	Conflicts and war	• Warfare and terrorism
4.6D	Laws, regulations and policies	• Crime and lawbreaking • Surveillance and monitoring • Public and private policy, including professional codes, rules and regulations

4.7 Social

Prescribed enduring understandings		
• The social context encompasses ways that people and communities are grouped as well as how they understand and form relationships with others in a digital society.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
4.7A	Social components of identity	• Aspects related to international-mindedness and/or common humanity • Age and demographic components • Gender, gender expression and sexuality • Race and ethnicity • Ability status • Religious beliefs and practices
4.7B	Social class	• Organization, role and impacts of social class • Intersection of social class in major areas of life, such as employment, education, health and illness, housing
4.7C	Families and relationships	• Ways of understanding, forming and connecting families • Friendship, companionship and personal relationships • Online relationships and group memberships

5. HL extension

In the HL extension, students conduct extended inquiries to address **challenge topics** and **interventions** in digital society.

Conducting extended inquiries

Extended inquiries align to the inquiry stages and approaches discussed in the *"Approaches to teaching and learning in digital society"* section of the guide.

Extended inquiries should start from the beginning of the course and may be standalone activities or build on an inquiry shared with SL students. Collaboration in extended inquiries may take the form, for example, of sustained inquiry shared among multiple HL students with particular interests in different course concepts and/or contexts. The goal is for students to develop a challenge mindset and team-based approach to the HL extension.

During (or as part of) extended inquiries, practical and design-oriented formative activities are an effective way to test and prototype intervention ideas and approaches to challenge topics. Such activities can be adapted for use with a CAS project or other practical portfolio.

Detailed steps for conducting an extended inquiry follow below.

Step 1: Create an extended inquiry focus

Students create an extended inquiry focus that integrates a prescribed area for inquiry from one of the challenge topics.

5.1 Global well-being	5.2 Governance and human rights	5.3 Sustainable development
Prescribed areas for inquiry • Local and global inequalities • Changing populations • The future of work	**Prescribed areas for inquiry** • Conflict, peace and security • Participation and representation • Diversity and discrimination	**Prescribed areas for inquiry** • Climate change and action • Use of resources • Managing pollution and waste

Step 2: Explore and investigate challenges

Students explore sources and investigate their extended inquiry focus by considering some of the following questions.

- What is the relationship between digital systems and this challenge?
- What is the nature and scope of this challenge in digital society?
- What course concepts, content and contexts will be most helpful to consider with this challenge?
- How does this challenge manifest itself at local and global levels?
- Who are the specific people and communities affected by this challenge?
- What are some impacts and implications related to this challenge?

Step 3: Identify interventions

As part of the HL extension framework, students must identify at least one intervention for each prescribed area for inquiry.

Interventions studied in the HL extension must involve digital systems, but they do not need to always refer to discrete devices, services, apps or platforms. A policy or rule change, for example, may also be considered as an intervention that involves digital systems.

Interventions may fall into one or more of the categories described in the table.

Categories of intervention	
Mitigates	The intervention **mitigates** or reduces negative aspects relevant to a challenge.
Intercedes	The intervention **intercedes to change a process and/or trend** contributing to negative aspects relevant to the challenge.
Enhances	The intervention **enhances** positive or effective aspects relevant to a challenge.
Resolves	The intervention **resolves** negative aspects relevant to a challenge.

Intervention categories may overlap and inform one another, but each identified intervention must lend itself to sustained investigation involving specific people and/or communities.

Step 4: Evaluate interventions and recommend steps for future action

As part of the HL extension framework, students must evaluate at least one intervention for prescribed area for inquiry and consider recommended steps for future action.

The table below provides criteria for students to use in their evaluations and recommendations. Students do not need to address all evaluation criteria with each intervention but should select those criteria most relevant and appropriate to their specific extended inquiry.

Intervention evaluations and recommendations		
Evaluation criteria	**Description**	**Steps for future action**
Equity	Does the intervention equitably address the needs, claims and interests of specific people and/or communities affected by the challenge? This may involve, for example, considerations of fairness, inclusion and reciprocity.	• What are the recommended steps to address inequities? • How could the intervention be made more equitable for more people?
Acceptability	Do specific affected people and/or communities view the intervention as acceptable? This may involve, for example, considerations of accountability and transparency for people and communities.	• What are the recommended steps to address the acceptability of the intervention for the affected people and/or communities in question? • How could the intervention be made more accountable and transparent?
Cost	What are the financial, social, cultural and environmental costs associated with the intervention? Do these costs outweigh the benefits of the intervention?	• What are the recommended steps to address costs to ensure a better balance with the benefits of the intervention?
Feasibility	Is the intervention technically, socially and politically feasible? What are some of the current or emerging barriers to implementing the intervention?	• What are the recommended steps to address some of these barriers?

Intervention evaluations and recommendations		
Evaluation criteria	**Description**	**Steps for future action**
Innovation	Is the intervention innovative in its approach or has this approach been unsuccessfully attempted before? What type of innovation is the intervention? For instance, an incremental, sustaining and/or disruptive innovation?	• What are the recommended steps to adapt or refine the intervention to avoid risks, failures or limitations?
Ethics	Is the intervention ethically sound? How and who determines the ethical status of the intervention?	• What are the recommended steps to ensure that the intervention is developed and/or used in an ethical manner?

Additional guidance for extended inquiries

The following statements should be considered when conducting extended inquiries.

- Each challenge topic and its prescribed enduring understandings and prescribed areas for inquiry must be addressed at some point during the course.
- Each intervention criteria must be addressed at some point during the course. However, every intervention studied need not address each criterion.
- Challenge topics do not directly align with only one course concept, content topic or context. Challenge topics are designed to be integrated using multiple and changing combinations of concepts, content and contexts.
- Students are not expected to cultivate an in-depth knowledge of every issue relevant to each challenge topic. It is not possible, for example, to fully explore all details about sustainable development in digital society.
- By the end of the course, students must be able to identify, analyse and evaluate an intervention for each challenge topic. Students must also be able to recommend steps for future action in response to an unseen intervention.

5.1 Global well-being

Prescribed enduring understandings		
• Global well-being is a significant challenge involving diverse issues and concerns. Global well-being intersects in important ways with many digital systems.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
5.1A	Local and global inequalities	• Economic inequality and stratification • Food insecurity and access to safe, nutritious and sufficient food • Access to health care and medicine
5.1B	Changing populations	• Population growth • Shifting demographics, for example aging and youth populations • Migration and the movement of people
5.1C	The future of work	• Automation and employment

		• Ensuring meaningful and secure employment • Addressing the collective needs of workers

Sample extended inquiry interventions

The following are possible examples of interventions that students might consider during extended inquiries into prescribed areas of this challenge topic.

- A government agency develops a track and trace app to mitigate the local impact of a global pandemic disease.
- A non-governmental organization (NGO) proposes to employ a big data approach to better understand and represent a refugee crisis.
- Employees at a ride-sharing platform create an organization to share experiences and to construct an employee charter to advocate for better working conditions.

These are examples only. Students should, as part of their extended inquiries, consider their own real-world examples and interventions to evaluate their effectiveness as well as to recommend steps for future action.

5.2 Governance and human rights

Prescribed enduring understandings		
• Governance and human rights are significant challenges in digital society. Governance and human rights intersect in important ways with many digital systems.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
5.2A	Conflict, peace and security	• Wars and civil conflicts • Regional, national and global security
5.2B	Participation and representation	• Political speech and activism • Access and representation in governing bodies and institutions
5.2C	Diversity and discrimination	• Gender equality • Racial and ethnic discrimination • Ability, access and inclusion • Tolerance for religions and cultural differences

Sample extended inquiry interventions

The following are possible examples of interventions that students might consider during extended inquiries into prescribed areas of this challenge topic.

- A peace activist creates an online social network to connect with prominent activists around the globe.
- A student develops an online information campaign to highlight dates and times for local government meetings.
- A microblogging platform announces an automated rating system to label and/or block hate speech from their users.

These are examples only. Students should, as part of their extended inquiries, consider their own real-world examples and interventions to evaluate their effectiveness as well as to recommend steps for future action.

5.3 Sustainable development

Prescribed enduring understandings		
• Sustainable development is a significant challenge in digital society. Sustainable development intersects in important ways with many digital systems.		
Prescribed areas for inquiry		**Supporting details (possible examples, issues, terms and initial inquiry questions)**
5.3A	Climate change and action	• Global efforts to address climate change • National, regional and local efforts to address climate change
5.3B	Responsible use of resources	• Responsible consumption, production and distribution of products and services • Designing for responsible use of shared infrastructures and resources, for example, energy, transportation and built spaces
5.3C	Managing pollution and waste	• Pollution and waste monitoring • Pollution and waste prevention • Pollution and waste reduction

Sample extended inquiry interventions

The following are possible examples of interventions that students might consider during extended inquiries into prescribed areas of this challenge topic.

- A science organization provides a live-streaming feed of ice-shelf activity to raise awareness of climate change.
- A company offers a 3D printing service for customers to design housing goods using recycled plastic.
- A digital artist promotes circular economy principles with an augmented reality app that visualizes the waste implications of common purchases.

These are examples only. Students should, as part of their extended inquiries, consider their own real-world examples and interventions to evaluate their effectiveness as well as to recommend steps for future action.

About DP assessment

Assessment is an integral part of learning and teaching. The most important aims of assessment are to support and encourage student learning. Both external and internal assessments are used in the DP.

IB examiners mark work produced for external assessment, while work produced for internal assessment is marked by teachers and externally moderated by the IB.

The approach to assessment used by the IB is criterion-related, not norm-referenced. This approach to assessment judges students' work by their performance in relation to identified levels of attainment, and not in relation to the work of other students.

Assessment-related resources

For more information about assessment in the IB, please refer to the following resources.

Assessment

- *Diploma Programme Assessment procedures* (updated annually)
- *Assessment principles and practice—Quality assessments in a digital age*
- *Conduct of examinations booklet* (updated annually)
- *Programme standards and practices*

Assessment access and inclusion

- *Access and inclusion policy*
- *Learning diversity and inclusion in IB programmes*
- "B1 General regulations: Diploma Programme" in the *Diploma Programme Assessment procedures*

Academic integrity

- Academic integrity page
- *Academic honesty in the IB educational context*
- *Effective citing and referencing*
- *Diploma Programme: From principles into practice* (For use from August 2015)
- "B1 General regulations: Diploma Programme" in the *Diploma Programme Assessment procedures*
- "C5 Academic honesty" in the *Diploma Programme Assessment procedures* (updated annually)

TSM resource
The TSM includes resources to students and teachers as they prepare for assessment.

Assessment methods

External assessment

Two methods are used to externally assess students in the course.

Analytic markschemes—these are prepared for examination questions that expect a particular kind of response and/or a given final answer from students. They give detailed instructions to examiners on how to

break down the total mark for each question for different parts of the response. The analytic markschemes are specific to each examination and are published separately in a markscheme document.

Markbands—these are comprehensive statements of expected performance against which responses are judged. They represent a single holistic criterion divided into level descriptors. Each level descriptor corresponds to a range of marks to differentiate student performance. A best-fit approach is used to ascertain which particular mark to use from the possible range for each level descriptor. Markbands are aligned to the assessment objectives established for the digital society course and the individuals and societies grade descriptors. Markbands are published in this guide.

Internal assessment

Internal assessments are marked by the teacher and submitted for external moderation. Assessment criteria are used to internally assess students in the course.

Assessment criteria are used when the assessment task is open-ended. Each criterion concentrates on a particular competency or skill that students are expected to demonstrate. An assessment objective describes what students should be able to do, and assessment criteria describe how well they should be able to do it. Using assessment criteria allows discrimination between different answers and encourages a variety of responses. Each criterion comprises a set of hierarchically ordered level descriptors. Each level descriptor is worth one or more marks. Each criterion is applied independently using a best-fit approach. The maximum marks for each criterion may differ according to the criterion's importance. The marks awarded for each criterion are added together to give the total mark for the piece of work. Details on the use of assessment criteria are provided with the internal assessment criteria below.

Assessment outline

SL assessment outline

Assessment component	Weighting
External assessment (2 hours 45 minutes)	**70%**
Paper 1 (1 hour 30 minutes) Four structured questions that address the common SL and HL syllabus and real-world examples in an integrated way. Students answer two of four structured questions. (40 marks)	40%
Paper 2 (1 hour 15 minutes) Four source-based questions that address the common SL and HL syllabus in an integrated way. Sources may include text, visuals, data, diagrams and/or infographics. Students answer all four questions. (24 marks)	30%
Internal assessment	**30%**
Inquiry project (30 hours) Students conduct an inquiry into impacts and implications of digital systems for people and communities. The submission requirements for the project include: • an inquiry process document not to exceed 1500 words • a recorded multimedia presentation that does not exceed 10 minutes • a list of references. (24 marks)	

HL assessment outline

Assessment component	Weighting
External assessment (4 hours 45 minutes)	**80%**
Paper 1 (2 hours 15 minutes) Six questions in two sections that address syllabus topics and real-world examples in an integrated way. ***Section A*** Students answer two of four structured questions on the common SL and HL syllabus. ***Section B*** Students answer one of two extended response questions based on the HL extension. (52 marks total)	35%
Paper 2 (1 hour 15 minutes)	20%

Assessment component	Weighting
Four source-based questions that address the common SL and HL syllabus in an integrated way. Sources may include text, visuals, data, diagrams and/or infographics. Students answer all four questions. (24 marks)	
Paper 3 (1 hour 15 minutes) Questions that address an intervention related to an HL extension challenge topic. A brief statement indicating the real-world nature of a selected challenge topic will be released prior to the examination. Students answer all four questions. (30 marks)	25%
Internal assessment	**20%**
Inquiry project (30 hours) Students conduct an inquiry into impacts and implications of digital systems for people and communities. The submission requirements for the project include: • an inquiry process document not to exceed 1500 words • a recorded multimedia presentation that does not exceed 10 minutes • a list of references. (24 marks)	

External assessment

About external assessment

External assessment in the course consists of two examination papers at SL and three examination papers at HL that are externally set and externally moderated. Examination papers allow students to demonstrate learning aligned to the stated assessment objectives and the digital society syllabus. All questions on examination papers will be based in the topics contained in this guide.

Command terms

Assessment components in the course use specific command terms that direct students to demonstrate learning across multiple levels of increasing complexity. Command terms are scaffolded according to assessment objective levels from AO1 to AO3.

Examination questions may use any command term from the assessment objective level specified in the paper descriptions found in this guide.

The command terms used in examinations are indicated below and defined in the "Glossary of command terms" in the appendices.

Students and teachers must be familiar with the command terms used in the course.

Assessment objective level (AO)	Command terms	Description
AO1: Knowledge and understanding	Define Identify Describe Outline State	Command terms that require students to demonstrate knowledge and understanding.
AO2: Application and analysis	Analyse Distinguish Explain Suggest	Command terms that require students to demonstrate application and analysis.
AO3: Evaluation and synthesis	Compare Compare and contrast Contrast Discuss Examine Evaluate Justify To what extent Recommend	Command terms that require students to demonstrate evaluation and synthesis.

Relevant and accurate knowledge

Students are expected to support their responses with relevant and accurate knowledge, which can include real-world examples studied during inquiries. When real-world examples are used, students should not just state the example as this is too limited but should also offer some explanation of the example in relation to the question. Students are expected to use terminology consistent with relevant and accurate knowledge.

Terminology may be included in examinations that is not indicated in syllabus topics. Where appropriate, additional terminology will be defined on the examination papers.

Download: External assessment details and markbands (PDF)

External assessment details—SL

Paper 1

Duration: 1 hour 30 minutes

Weighting: 40%

Students answer two of four structured questions that address real-world examples and the common SL and HL syllabus. In the third part of each question, students may be asked to include, as appropriate, real-world examples that they have studied during the course.

Each structured question will include the parts outlined below.

Part / marks	AO level	Description
Part a 6 marks	AO1	Requires knowledge and understanding and may be subdivided into multiple parts.
Part b 6 marks	AO2	Requires application and analysis and may be subdivided into multiple parts.
Part c 8 marks	AO3	Requires evaluation and synthesis.

Paper 2

Duration: 1 hour 15 minutes

Weighting: 30%

Paper 2 is the same for SL and HL.

Students respond to four questions involving a range of sources that address the common SL and HL syllabus. Sources may include text, visuals, data, diagrams and/or infographics.

The question structure for paper 2 is outlined below.

Question / marks	AO level	Description
Question 1 2 marks	AO1	Question 1 requires knowledge and understanding related to a source. This can be demonstrated, for example, by identifying a claim or perspective from a source or by describing information about an infographic, diagram or data-based source. Question may be subdivided into multiple parts.
Question 2 4 marks	AO2	Question 2 requires application and analysis related to the sources. This can be demonstrated, for example, by analysing how a term is used or by explaining a claim or perspective from a source.

Question / marks	AO level	Description
		Question may be subdivided into multiple parts.
Question 3 6 marks	AO3	Question 3 requires comparing and/or contrasting two of the sources. This may be demonstrated, for example, by comparing and/or contrasting claims and perspectives of sources. Students may be asked to make use of their own knowledge from the course.
Question 4 12 marks	AO3	Question 4 requires evaluation and synthesis that integrates sources with knowledge from the course.

External assessment markbands—SL

Paper 1, part c

In addition to paper-specific analytic markschemes used for all questions, marks for part c are also allocated using markbands. While level descriptors are written in the form of individual bullet points, markbands are applied holistically using a best fit approach.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	• The response shows **limited understanding** of the demands of the question. • There is **limited relevant knowledge**. The response is descriptive and consists mostly of unsupported generalizations. • The response has **limited organization** or is only a list of items.
3–4	• The response shows **some understanding** of the demands of the question. • **Some relevant knowledge** is demonstrated, but this is not always accurate and may not be used appropriately or effectively. The response moves beyond description to include some analysis, but this is not always sustained or effective. • The response is **partially organized**.
5–6	• The response shows **adequate understanding** of the demands of the question. • Response demonstrates **adequate and effective analysis** supported with relevant and accurate knowledge. • The response is **adequately organized**.
7–8	• The response is focused and demonstrates an **in-depth understanding** of the demands of the question. • Response demonstrates **evaluation and synthesis** that is effectively and consistently supported with relevant and accurate knowledge. • The response is **well-structured** and **effectively organized**.

Paper 2, question 4

In addition to paper-specific analytic markschemes used for all questions, marks for question 4 are also allocated using markbands. While level descriptors are written in the form of individual bullet points, markbands are applied holistically using a best fit approach.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.

Marks	Level descriptor
1–3	• The response shows a **limited understanding** of the demands of the question. • There is **limited relevant knowledge**. • Evidence from sources is **not integrated** with the response. • The response has **limited organization**.
4–6	• The response shows **some understanding** of the demands of the question. • **Some knowledge** is demonstrated but this is not always relevant or accurate. • Evidence from sources is **partially integrated** into the response. • The response is **partially organized**.
7–9	• The response shows **adequate understanding** of the demands of the question. • **Relevant and accurate knowledge** is demonstrated with some lapses. • There is **adequate integration** of evidence from the sources, but this is not always sustained. • The response is **adequately organized**.
10–12	• The response is focused and shows an **in-depth understanding** of the demands of the question. • **Relevant and accurate knowledge** is demonstrated throughout, adding insight to the response. • There is **consistent and effective integration** of evidence from the sources. • The response is **well-structured** and **effectively organized**.

External assessment details—HL

HL paper 1

Duration: 2 hours 15 minutes

Weighting: 35%

Students answer questions in two sections.

For **Section A**, students answer two of four structured questions that address real-world examples and the common SL and HL syllabus. In the third part of each question, students may be asked to include, as appropriate, real-world examples that they have studied during the course.

For **Section B**, students answer one of two extended response questions based on the HL extension.

The question structure for HL Paper 1 is outlined below.

Section A

Students answer two of four questions as described.

Part / marks	AO level	Description
Part a 6 marks	AO1	Requires knowledge and understanding and may be subdivided into multiple parts.
Part b 6 marks	AO2	Requires application and analysis and may be subdivided into multiple parts.
Part c 8 marks	AO3	Requires evaluation and synthesis.

Section B

Students answer one of two questions as described.

Marks	AO level	Description
12 marks	AO3	Extended response question that requires evaluation and synthesis as well as a consideration of counter-claims related to the HL extension. Additional stimuli may be provided.

Paper 2

Duration: 1 hour 15 minutes

Weighting: 20%

Paper 2 is the same for SL and HL.

Students respond to four questions involving a range of sources that address the common SL and HL syllabus. Sources may include text, visuals, data, diagrams and/or infographics.

The question structure for paper 2 is outlined below.

Question / marks	AO level	Description
Question 1 2 marks	AO1	Question 1 requires knowledge and understanding related to a source. This can be demonstrated, for example, by identifying a claim or perspective from a source or by describing information about an infographic, diagram or data-based source. Question may be subdivided into multiple parts.
Question 2 4 marks	AO2	Question 2 requires application and analysis related to the sources. This can be demonstrated, for example, by analysing how a term is used or by explaining a claim or perspective from a source. Question may be subdivided into multiple parts.
Question 3 6 marks	AO3	Question 3 requires comparing and/or contrasting two of the sources. This may be demonstrated, for example, by comparing and/or contrasting claims and perspectives of sources. Students may be asked to make use of their own knowledge from the course.
Question 4 12 marks	AO3	Question 4 requires evaluation and synthesis that integrates sources with knowledge from the course.

Paper 3 (HL only)

Duration: 1 hour 15 minutes

Weighting: 25%

Students answer four questions that address an intervention related to an HL extension challenge topic. Students will be required to evaluate an intervention and recommend steps for future action.

Knowledge of course concepts, content and contexts may be required to address questions. Stimulus on paper 3 may include text, visuals, data, diagrams and/or an infographic.

A pre-release statement will be provided four months in advance of Paper 3.

The pre-release statement will consist of a short description of 250–400 words indicating the real-world nature of a selected challenge topic from the HL extension.

The pre-release may also indicate possible resources, terms and approaches to consider for an extended inquiry. The pre-released statement should be used by students in extended inquiries into relevant digital interventions in advance of paper 3.

The question structure for HL Paper 3 is outlined below.

Question / marks	AO level	Description
Question 1 4 marks	AO1	Question 1 requires knowledge and understanding of the intervention and/or challenge topic. Question may be subdivided into multiple parts.
Question 2 6 marks	AO2	Question 2 requires application and analysis of the intervention and/or the challenge topic. Question may be subdivided into multiple parts.
Question 3 8 marks	AO3	Question 3 requires evaluation of the intervention.
Question 4 12 marks	AO3	Question 4 requires recommendations for future action related to an intervention and/or challenge topic.

External assessment markbands—HL

Paper 1, part c

In addition to paper-specific analytic markschemes used for all questions, marks for part c are also allocated using markbands. While level descriptors are written in the form of individual bullet points, markbands are applied holistically using a best fit approach.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	• The response shows **limited understanding** of the demands of the question. • There is **limited relevant knowledge**. The response is descriptive and consists mostly of unsupported generalizations. • The response has l**imited organization** or is only a list of items.
3–4	• The response shows **some understanding** of the demands of the question. • **Some relevant knowledge** is demonstrated, but this is not always accurate and may not be used appropriately or effectively. The response moves beyond description to include **some analysis**, but this is not always sustained or effective. • The response is **partially organized**.
5–6	• The response shows **adequate understanding** of the demands of the question. • Response demonstrates **adequate and effective analysis** supported with relevant and accurate knowledge. • The response is **adequately organized**.
7–8	• The response is focused and demonstrates an i**n-depth understanding** of the demands of the question. • Response demonstrates **evaluation and synthesis** that is effectively and consistently supported with relevant and accurate knowledge. • The response is **well-structured and effectively organized**.

Paper 1, Section B

In addition to paper-specific analytic markschemes used for all questions, marks for Section B are also allocated using markbands. While level descriptors are written in the form of individual bullet points, markbands are applied holistically using a best fit approach.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–3	• The response shows a **limited understanding** of the demands of the question. • There is **limited relevant knowledge**. The response is descriptive and consists mostly of unsupported generalizations. • Counter-claims are **not considered or addressed**. • The response has **limited organization**.
4–6	• The response shows **some understanding** of the demands of the question. • **Some relevant knowledge** demonstrated but this is not always accurate and may not be used appropriately or effectively. The response is primarily descriptive with some analysis, but this is not sustained. • Counter-claims are only **partially addressed**. • The response is partially organized.
7–9	• The response shows **adequate understanding** of the demands of the question. • Response demonstrates **adequate and effective analysis** supported with relevant and accurate knowledge. • Counter-claims are **adequately addressed**. • The response is **adequately organized**.
10–12	• The response is focused and shows an **in-depth understanding** of the demands of the question. • Response demonstrates **evaluation and synthesis** that is effectively and consistently supported with relevant and accurate knowledge. • Counter-claims are **effectively addressed** in the response. • The response is **well-structured and effectively organized**.

Paper 2, question 4

In addition to paper-specific analytic markschemes used for all questions, marks for question 4 are also allocated using markbands. While level descriptors are written in the form of individual bullet points, markbands are applied holistically using a best fit approach.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–3	• The response shows a **limited understanding** of the demands of the question. • There is **limited relevant knowledge**. • Evidence from sources is **not integrated** with the response. • The response has **limited organization**.
4–6	• The response shows **some understanding** of the demands of the question. • **Some knowledge** is demonstrated but this is not always relevant or accurate. • Evidence from sources is **partially integrated** into the response. • The response is **partially organized**.

Marks	Level descriptor
7–9	• The response shows **adequate understanding** of the demands of the question. • **Relevant and accurate knowledge** is demonstrated with some lapses. • There is **adequate integration** of evidence from the sources, but this is not always sustained. • The response is **adequately organized**.
10–12	• The response is focused and shows an **in-depth understanding** of the demands of the question. • **Relevant and accurate knowledge** is demonstrated throughout, adding insight to the response. • There is **consistent and effective integration** of evidence from the sources. • The response is **well-structured and effectively organized**.

Paper 3, question 3

In addition to paper-specific analytic markschemes used for all questions, marks for question 3 are also allocated using markbands. While level descriptors are written in the form of individual bullet points, markbands are applied holistically using a best fit approach.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	• The response shows a **limited understanding** of the demands of the question. • Response is of **limited relevance**. The response is descriptive and consists mostly of unsupported generalizations. • The response has **limited organization**.
3–4	• The response shows **some understanding** of the demands of the question. • The response is primarily descriptive with **some evaluation** demonstrated but this is not sustained or fully supported. • The response is **partially organized**.
5–6	• The response shows **adequate understanding** of the demands of the question. • Response demonstrates **adequate evaluation** that is relevant and supported. • The response is **adequately organized**.
7–8	• The response is focused and shows an **in-depth understanding** of the demands of the question. • Response demonstrates **sustained evaluation** that is relevant and well-supported throughout. • The response is **well-structured and effectively organized**.

Paper 3, question 4

In addition to paper-specific analytic markschemes used for all questions, marks for questions 4 are also allocated using markbands. While level descriptors are written in the form of individual bullet points, markbands are applied holistically using a best fit approach.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–3	• The response shows a **limited understanding** of the demands of the question.

Marks	Level descriptor
	• The response consists mostly of unsupported generalizations with **limited relevant knowledge**. • No recommendations are presented or those that are presented have only **limited** support. • The response has **limited organization**.
4–6	• The response shows **some understanding** of the demands of the question. • The response demonstrates **some knowledge**, but this is not always relevant or accurate and may not be used appropriately or effectively. • Recommendations are presented with some support although this is not sustained and only **partially effective**. • The response is **partially organized**.
7–9	• The response shows **adequate understanding** of the demands of the question. • Response is **adequately supported** with relevant and accurate knowledge. • Recommendations are presented and **effectively supported**. • The response is **adequately organized**.
10–12	• The response is **focused** and shows an **in-depth understanding** of the demands of the question. • Response is **well-supported** throughout with **relevant and accurate knowledge**. • Recommendations are presented and **well-supported** with a clear consideration of **possible trade-offs and implications**. • The response is **well-structured and effectively organized**.

Internal assessment

Internal assessment information

Purpose of internal assessment

Internal assessment is an integral part of the course that enables students to demonstrate course aims and assessment objectives while pursuing personal interests through coursework. The internal assessment component should be woven into teaching and learning and not be a separate activity conducted after the course has been taught.

TSM resource
The TSM includes resources to students and teachers as they prepare for assessment.

Guidance, authenticity and academic integrity

Guidance for supporting students

The internal assessment must be the student's own work. However, it is not the intention that students should decide on an inquiry focus and then be left to work on the project without any further support from the teacher. The teacher plays an important role during planning and the period when the student is working on the project itself. It is the responsibility of the teacher to ensure that students are familiar with:

- the project requirements
- resources to support successful completion of the project
- IB's academic integrity policy
- the project's assessment criteria.

Teachers and students must discuss the internally assessed work. Students should be encouraged to initiate discussions with the teacher to obtain advice and information, and students must not be penalized for seeking guidance.

As part of the inquiry process, teachers should provide targeted feedback at each inquiry stage during the project as well as one completed draft of the inquiry process document and presentation. The teacher should provide oral or written advice on how the inquiry process document and presentation could be improved but must not edit the draft. The next version handed to the teacher must be the final version for submission.

Students may also solicit feedback at different stages of development from peers. Students must understand work submitted for assessment must address the project's requirements and assessment criteria.

Students should be informed that examiners will only assess work that falls within prescribed word and time limits. Submitted work must not contain appendices as these will not be read by examiners.

Students and teachers must review the quality of each digital file before completing the submission. The IB cannot guarantee that a request to reset a submission will be approved; therefore, it is very important to check that the correct files have been uploaded and that they are in good order.

Ensuring authenticity of student work

Teachers must ensure that all student work for assessment is prepared according to the requirements and must explain clearly to students that the internally assessed work must be entirely their own. All work

submitted to the IB for moderation or assessment must be authenticated by a teacher and must not include any known instances of suspected or confirmed malpractice. Each student must confirm that the work is his or her authentic work and constitutes the final version of that work. Once a student has officially submitted the final version of the work, it cannot be retracted. The requirement to confirm the authenticity of work applies to the work of all students, not just the sample work that will be submitted to the IB for the purpose of moderation.

Authenticity may be checked by discussion with the student on the content of the work and scrutiny of one or more of the following:

- the student's initial and refined inquiry focus
- planning documents, schedules and records of in-process and completed work
- one completed draft of the inquiry process document and the multimedia presentation
- sources cited and referenced
- the style of writing compared with work known to be that of the student.

Teachers must also ensure that submitted materials do not include work used by the student in any other DP assessment task including the extended essay.

Academic integrity and student work

Academic integrity is a positive and constructive aspect of teaching and learning that must be clearly communicated and modelled so that students understand:

- their responsibility for producing ethical and authentic individual work
- how to locate, access, integrate and attribute sources in ways that acknowledge the work and ideas of others
- how to properly acknowledge all ideas, words and intellectual content taken or adapted from other sources.

More information on academic integrity

Further guidance for citation and referencing in the inquiry project are provided with the task details. For more information on academic integrity in the DP, see resources linked in "Academic integrity" section of the guide**.**

Time allocation

The inquiry project contributes 30% to the final assessment in the SL course and 20% to the final assessment in the HL course. It is recommended that approximately 30 hours of teaching and learning time be allocated to the project. This includes time to explain requirements and for students to:

- plan the project and document feedback
- develop and refine an inquiry focus
- explore and collect research from diverse and relevant sources
- investigate impacts and implications of chosen digital systems for people and communities
- develop findings and conclusions for presentation in a recorded multimedia presentation
- receive and act on teacher and peer feedback.

Teachers must prepare students for the project through the careful design and delivery of the course. Teachers are encouraged to create formative activities that develop and refine the appropriate skills to complete the internal assessment task prior to beginning the project. These activities do not count against allocated hours.

Using assessment criteria

It is important for the integrity of the moderation process that the internal assessment by the teacher is based on the same evidence as that available to the moderator. When there is more than one teacher teaching students in this component, internal standardization must take place.

- Assessment criteria consist of level descriptors describing specific achievement levels within a range of possible marks.
- Level descriptors concentrate on positive achievement, although for the lower levels failure to achieve may be included in the description.
- Teachers must judge the internally assessed work at SL and at HL against the criteria using the level descriptors.
- For each criterion, the aim is to find the descriptor that most accurately conveys the level attained by the student using a best-fit model. A best-fit approach means that compensation should be made when a piece of work matches different aspects of a criterion at different levels. The mark awarded should be one that most fairly reflects the balance of achievement against the criterion. It is not necessary for every single aspect of a level descriptor to be met for that mark to be awarded.
- When assessing student work, teachers should read the level descriptors for each criterion until they reach a descriptor that most accurately describes the level of the work being assessed. If work seems to fall between two descriptors, both descriptors should be read again and the one that more accurately describes the student's work should be chosen.
- Where there are two or more marks available within a level, teachers should award the upper marks if the student's work demonstrates the qualities described to a great extent; the work may be close to achieving marks in the level above. Teachers should award the lower marks if the student's work demonstrates the qualities described to a lesser extent; the work may be close to achieving marks in the level below.
- Only whole numbers should be recorded; partial marks (fractions and decimals) are not acceptable.
- Teachers should not think in terms of a pass or fail boundary but concentrate on accurately matching work to attained level descriptors.
- The highest-level descriptors do not imply faultless performance but should be achievable by a student. Teachers should not hesitate to use extremes if they are accurate descriptions of work being assessed.
- A student who attains a high achievement level in relation to one criterion will not necessarily attain high achievement levels in relation to other criteria. Similarly, a student who attains a low achievement level for one criterion will not necessarily attain low achievement levels for other criteria.

Procedure for submission

The procedure for submitting assessment materials including details on acceptable file types and size limitations can be found in *Diploma Programme Assessment procedures* on the programme resource centre.

Download: Internal assessment details and criteria (PDF)

Internal assessment details—SL and HL

Duration: 30 hours

Maximum marks: 24 at SL and HL

Weighting: 30% at SL and 20% at HL

About the inquiry project

The internal assessment is an individual inquiry project into the impacts and implications of digital systems for people and communities. An open inquiry approach in which the student leads the project is required. The inquiry project has common requirements for SL and HL students.

Inquiry project submission requirements		
Inquiry process document	**Presentation**	**A list of references**

Inquiry project submission requirements		
A written document that does not exceed 1500 words total.	A recorded multimedia presentation that does not exceed 10 minutes.	A list of references for materials used in the project.

Inquiry process document—details

The inquiry process document is submitted as one document. The inquiry process document must not exceed 1500 words total. References, captions and/or headings do not count against the word total. Details are described below.

Word count

The inquiry process document must not exceed 1500 words in total. A word count must be included with each section. Words in excess of the 1500 total word count will not be assessed.

Bolded sections detailed below are required elements that must be included and labelled in the inquiry process document in the order indicated.

Inquiry process document—section details

Inquiry focus

The student's inquiry focus provides:

- an explanation of the connection between the inquiry question, a specific, relevant real-world example as well as course concepts, content and contexts.

The inquiry focus must be targeted to meet the demands of corresponding criteria and appropriate for a presentation that does not exceed 10 minutes in length. The same inquiry focus must be used in the inquiry process document and the presentation. In the focus, course concepts, content and contexts used in the inquiry must be addressed, but a balance is not required.

The recommended maximum word count for the inquiry focus section is 300 words.

Claims and perspectives

The student demonstrates how research was conducted with:

- a discussion of the claims and perspectives for three sources including a justification of their usefulness to the inquiry.

Every source used in the inquiry is not required to be discussed in this section.

Students should be guided to select only the most relevant sources for their discussion based on the word limit for this section as well as the demands of the corresponding criterion.

- All sources and materials used in the inquiry as well as the construction of the presentation must also be included in the list of references.

The discussion for each source should justify why and how the source supported the inquiry and student understanding as well as addressing of the source's origin and purpose, meaning and methods as well as corroboration and use.

The recommended maximum word count for the claims and perspectives section is 1200 words.

Presentation—details

The presentation is a recorded multimedia presentation that does not exceed 10 minutes in length and that is submitted as one file. The presentation may include a combination of modes and media including text, still and moving images as well as sound.

Each section described in the presentation details must be addressed. Equal time, however, for each area is not required or intended in order to fulfil the demands of the project.

Bolded sections detailed below are required elements that must be included and labelled in the presentation in the order indicated.

Presentation—section details
Introduction This section begins the presentation by: • re-stating the inquiry focus and briefly outlining its significance for digital society The introduction must include the same inquiry focus provided in the IPD. **Analysis and evaluation** This section comprises the balance of the presentation and provides: • the student's own sustained and well-supported analysis and evaluation of impacts and implications of the digital systems for people and communities. Sample supporting questions useful to consider in the student's analysis and evaluation can be found in this guide. In order to be effective and to meet the demands of corresponding criterion this section must integrate student's own thinking as supported by evidence. **Conclusion** This section concludes the presentation by providing: • further insight reflecting the student's new understanding and ideas about their inquiry focus following their analysis and evaluation • a discussion of emerging trends and future developments. In order to be effective and to meet the demands of the corresponding criterion, the conclusion must be well-supported and relevant to the preceding analysis and evaluation.

Both the content and communication in the presentation are assessed.

The following details will help students prepare the presentation for assessment.

Presentation—communication
Organization The presentation must organize ideas and evidence in a logical manner that supports understanding. **Coherent use of media** The presentation must demonstrate a coherent use of media. This can be achieved by ensuring that visuals, text and/or sound are carefully used and combined in such a way as to support understanding. In order to support organization and the coherent use of media in the presentation, the following considerations apply: • The presentation must contain an audible recorded commentary in the student's voice throughout the presentation. Text-to-speech tools may also be used for the recorded commentary as long as the text is the student's own work. • Students may include breaks in their recorded commentary to enable other audio-visual material included in the presentation to be clearly heard, and likewise should reduce the volume of audio-visual material during the recorded commentary to ensure that it is entirely audible. • Students must ensure that the presentation is audible and constructed with visually appropriate material. • All text must be legible when viewed on screen. • Students may use subtitles on the presentation to facilitate understanding. Please note that work that does not meet these requirements may prevent the teacher and/or moderator from accurately marking the presentation.

A list of references—details

A list of references for materials used in the project must be submitted. Throughout the project, students must clearly distinguish between their words and those of others. To ensure this requirement, student must:

- cite sources at the point of use with written, visual and/or vocal cues accompanied by a corresponding entry in the list of references.
- acknowledge in the list of references audio-visual material, text, graphs, images and/or data used in their work that is not their own.
- acknowledge in the list of references, the source of ideas, words and intellectual content quoted or used in the inquiry.

The table summarizes these requirements. General IB requirements can be found in *Effective citing and referencing* on the programme resource centre.

List of references (submitted with the project)
Where known and appropriate, the following details for sources must be included in the list of references: • Surname of author or creator • Title of source • Date of publication • Format of source • Page numbers or time codes as applicable • URL and date of access for online sources.
Citations (provided at the point of use in the project)
Sources used in the inquiry process document and presentation must be briefly cited at the point of use. Citations may be written, visual and/or verbal. Citations should include the following, *if known*: • Surname of author or creator • Date of publication.

The intentional failure to comply with requirements in this section may result in an academic integrity violation.

Internal assessment criteria—SL and HL

Duration: 30 hours

Maximum marks: 24 at SL and HL

Weighting: 30% at SL and 20% at HL

Overview

Criteria marks are applied to project elements as indicated in the table.

Criterion	Project element	Marks
A: Inquiry focus	Inquiry process document	3
B: Claims and perspectives	Inquiry process document	6
C: Analysis and evaluation	Presentation	6
D: Conclusion	Presentation	6
E: Communication	Presentation	3
		Total: 24 marks

Criterion A: Inquiry focus (3 marks)

Project element: Inquiry process document

The inquiry process document demonstrates provides an inquiry focus with:

- an explanation of the connection between the inquiry question, a specific, relevant real-world example as well as course concepts, content and contexts.

Resource
The "focus stage of inquiry" includes details about developing and refining an inquiry focus.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1	The focus is **limited and/or incomplete.** The focus does not include all required elements and/or the real-world example is not specific or relevant to the inquiry.
2	The focus is **adequate.** The focus includes an inquiry question and a partial explanation of its connection to a specific, relevant real-world example and course concepts, content and contexts.
3	The focus is **appropriate and targeted**. The focus includes an inquiry question and a thorough explanation of its connection to a specific, relevant real-world example and course concepts, content and contexts.

Criterion B: Claims and perspectives (6 marks)

Project element: Inquiry process document

The inquiry process document demonstrates how research was conducted with:

- a discussion of the claims and perspectives for **three** sources including a justification of their usefulness in the inquiry.

Resource
The "explore stage of inquiry" and "course toolkit" includes details about claims and perspectives, including how to effectively consider a source's **origin and purpose, meaning and methods** as well as **corroboration and use.**

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	The discussion of claims and perspectives is **limited** and primarily descriptive in nature. Fewer than three sources are discussed or there is no justification for their use in the inquiry.
3–4	There is a **partial** discussion of the claims and perspectives for each source that includes some justification for their usefulness in the inquiry, but this is not fully developed.
5–6	There is a **thorough** discussion of the claims and perspectives for each source that includes a clear justification for their usefulness in the inquiry.

Criterion C: Analysis and evaluation (6 marks)

Project element: Presentation

The balance of the presentation consists of:

- the student's own sustained and well-supported analysis and evaluation of impacts and implications of the digital systems for people and communities.

Resource
The "investigate stage of inquiry" includes sample supporting questions useful to consider for analysis and evaluation. Additionally, the "course toolkit" provides details about critical and creative thinking relevant to this criterion.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	There is **limited** analysis and evaluation which is primarily descriptive in nature or of limited relevance to the inquiry focus.
3–4	The student's analysis and evaluation of impacts and implications for people and communities is **adequate**, but this is not always sustained or well-supported.
5–6	The student's analysis and evaluation of impacts and implications for people and communities is **effective**, **sustained** and **well-supported** by evidence.

Criterion D: Conclusion (6 marks)

Project element: Presentation

The presentation concludes by providing:

- further insight reflecting the student's new understanding and ideas about their inquiry focus following analysis and evaluation
- a discussion of emerging trends and future developments.

Resource
The "reflect stage of inquiry" includes details about offering further insight at the close of inquiry. Additionally, the "course toolkit" provides details about critical and creative thinking relevant to this criterion.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	The conclusion is **limited** with little further insight into the inquiry focus. Emerging trends and future developments are referenced with limited or no discussion.
3–4	The conclusion provides **adequate** further insight into the inquiry focus with a partial discussion of emerging trends and future developments.
5–6	The conclusion provides **effective and well-supported** further insight into the inquiry focus with a thorough and substantiated discussion of emerging trends and future developments.

Criterion E: Communication (3 marks)

Project element: Presentation

The presentation supports understandings through:

- organization of ideas and evidence
- coherent use of media.

Resource
The "share stage of inquiry" includes details about sharing discoveries with others. Additionally, the "course toolkit" provides details about effective communication relevant to this criterion.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1	Communication is **limited**. The presentation's organization and use of media are limited and do not support understanding.
2	Communication is **adequate**. The presentation is adequately organized and the use of media is at times coherent but this is not sustained or only partially effective in supporting understanding.
3	Communication is **effective**. The presentation is well-organized and coherently uses media to support understanding.

Connections to subjects and programmes

Students and teachers are encouraged to connect experiences in the digital society course with those encountered throughout the IB. Possible connections are outlined below.

Digital society and the DP core

Theory of knowledge

In theory of knowledge (TOK), students explore the nature of knowledge and knowing through different themes and areas. Open dialogue about what counts as knowledge in a variety of contexts is central to both TOK and digital society. As with TOK, digital society students are invited to interrogate claims to truth and knowledge. Knowledge questions that a digital society student might consider include the following:

- How do online and virtual communities differ from face-to-face communities?
- How are data, information, knowledge and wisdom similar to, and different from, one another?
- How do digital systems extend or transform different modes of human cognition and communication?
- What are some ways that digital systems change our understanding of originality, authorship, creativity, audiences and consumption?

Extended essay

In an extended essay (EE), students undertake independent research into a topic of personal interest. Long-form well-researched writing supported by varied perspectives is a principle activity of social scientists and humanities scholars. By completing an EE in digital society, students will gain experience:

- using primary and secondary sources, including peer-reviewed academic research
- consulting research databases
- managing research and inquiry projects, including planning and documentation
- developing and refining communication skills by sharing findings and conclusions with others
- approaching academic integrity as a constructive and positive aspect of learning.

A digital society EE should be relevant to the course concepts, content and contexts. EE topics usually begin broad and become more specific as students consult with supervisors and conduct research.

Students and supervisors must ensure that an EE does not duplicate other work submitted for the DP, including the internally assessed inquiry project for this course. There are differences between the inquiry project and the EE as outlined in the table below.

	The inquiry project	The extended essay (EE)
Purpose	The purpose of the inquiry project is to investigate impacts and implications of digital systems for people and communities in an open and exploratory way.	The purpose of the EE is for students to research an area of interest relevant to the topics of the digital society course in order to add knowledge to an existing body of research.
Process	The inquiry project process integrates elements (for example, course framework, inquiry model and toolkit) unique to the digital society course.	The EE process integrates a supervised research model shared by all DP students who complete an EE.

	The inquiry project	The extended essay (EE)
Format	The format of the inquiry project involves multiple modes and media.	The format of the EE is an academic piece of writing modelled on those produced for journals.

Extended essay resource
The extended essay page on the programme resource centre includes guidance for completing a digital society EE.

Creativity, activity, service

The creativity, activity, service (CAS) component of the DP core provides an excellent way to strengthen the links between the digital society course and practical real-world experiences. Teachers and students are strongly encouraged to connect digital society inquiries with meaningful and practical CAS experiences. Students might choose, for example, to connect digital society inquiries with CAS by:

- creating digital projects for the school, local or wider community
- designing a working prototype of a digital intervention to an HL challenge topic
- organizing or participating in social media outreach or advocacy campaigns
- attending or leading technology and media sessions and workshops such as coding and robotics clubs.

CAS experiences can be a single event or an extended series of events. It is important that CAS experiences are distinct from, and not submitted as part of, a digital society assessment.

Digital society and other DP subjects

Several DP subjects offer insight into life in a digital society. There are numerous ways that teachers and students might connect course concepts, content and contexts to these other courses, including by:

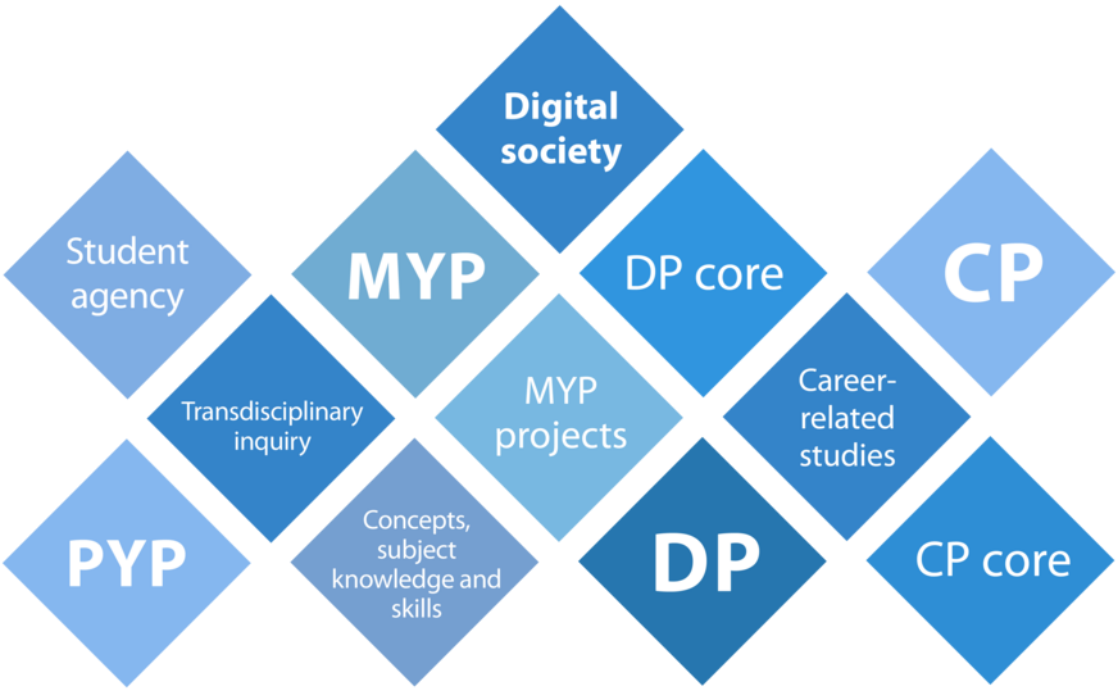
- collaborating on interdisciplinary projects within and across subject groups
- sharing resources, spaces and materials with other courses offered in the school and community.

Connections to IB programmes

In addition to the DP, the IB offers three other programmes of study: the Primary Years Programme (PYP) (ages 3–11), the Middle Years Programme (MYP) (ages 11–16) and the Career-related Programme (CP) (ages 16–19). The section below outlines some of the connections to these other programmes.

Figure 5

Digital society connections across IB Programmes



Primary Years Programme

The PYP emphasizes the development of caring, creative and informed students through transdisciplinary inquiry. In the PYP, young people find connections with communities and cultures by learning about, and through, the experiences of others. As with the PYP, the digital society course empowers students to approach local and global issues with agency, empathy and curiosity.

Middle Years Programme

The MYP involves inquiry into contexts that inform the lives of people and communities. Several MYP subjects, including individuals and societies, design as well as the arts, provide a useful foundation for students who go on to study the digital society course. Key and related concepts used in the MYP are consistent to those found in digital society and may serve as a foundation for future digital society students. Studying digital society extends the knowledge, understanding and skills developed through MYP projects. For example, students' organization, collaboration, research and presentation strategies that began in the MYP will become more sophisticated while undertaking the digital society course.

Career-related Programme

In the CP, students study at least two DP subjects, a core consisting of four components and a career-related study. The digital society course can assist CP students planning careers in a variety of professional fields. Digital society helps students understand the underlying mechanisms of the contemporary world and to engage with current affairs. Students explore different cultural, social and economic structures and practices, leading to a greater understanding of the world around them. Digital society encourages the development of strong communication skills, critical thinking and ethical approaches that will assist students in the global workplace.

Glossary of command terms

Command terms for digital society

Assessment components in the course use specific command terms that direct students to demonstrate learning across multiple levels of increasing complexity. Command terms are scaffolded according to assessment objective levels from AO1 to AO3. Examination questions use any command term from the assessment objective level specified in this guide.

Assessment criteria may also refer to command terms. The command terms used in the course are indicated and defined below. Students and teachers must be familiar with the command terms used in the course.

AO1: Knowledge and understanding

Command terms that require students to demonstrate knowledge and understanding.

AO1 command terms	Definition
Define	Give the precise meaning of a word, phrase, concept or physical quantity.
Identify	Provide an answer from a number of possibilities.
Describe	Give a detailed account.
Outline	Give a brief account or summary.
State	Give a specific name, value or other brief answer without explanation or calculation.

AO2: Application and analysis

Command terms that require students to demonstrate application and analysis.

AO2 command terms	Definition
Analyse	Break down in order to bring out the essential elements or structure.
Distinguish	Make clear the differences between two or more concepts or items.
Explain	Give a detailed account including reasons or causes.
Suggest	Propose a solution, hypothesis or other possible answer.

AO3: Evaluation and synthesis

Command terms that require students to demonstrate evaluation and synthesis.

AO3 command terms	Definition
Compare	Give an account of the similarities between two (or more) items or situations, referring to both (all) of them throughout.

AO3 command terms	Definition
Compare and contrast	Give an account of similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.
Contrast	Give an account of the differences between two (or more) items or situations, referring to both (all) of them throughout.
Discuss	Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.
Examine	Consider an argument or concept in a way that uncovers the assumptions and interrelationships of the issue.
Evaluate	Make an appraisal by weighing up the strengths and limitations.
Justify	Give valid reasons or evidence to support an answer or conclusion.
Recommend	Present an advisable course of action with appropriate supporting evidence/reason in relation to a given situation, problem or issue.
To what extent	Consider the merits or otherwise of an argument or concept. Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument.

Updates to the publication

This section outlines the updates made to this publication over the past two years. The changes are ordered from the most recent to the oldest updates. Minor spelling and typographical corrections are not listed.

Corrections for February 2023

Throughout the publication

Removal of out-of-date or incorrect content.

For SL and HL paper 2, the option to use an "audio" source has been removed because this format is not feasible for paper-based examinations.

Assessment > External assessment

"Paper 3 (HL only)"

Removal of out-of-date or incorrect content.

The following statement was removed: "There is no pre-release for the HL extension questions in Section B of paper 1."

The following phrase was removed from the description for question 3: "and/or the challenge topic and may be subdivided into multiple parts". The description now reads "Question 3 requires evaluation of the intervention".

Assessment > Internal assessment

"Inquiry process document—details"

Correction of error in the previous version.

The guidance on the maximum word count for each section of the inquiry process document has been rephrased to read "The recommended maximum word count for …"