Diploma Programme

Economics teacher support material

First assessment 2022

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Published February 2020

Published on behalf of the International Baccalaureate Organization, a not-for-profit educational foundation of 15 Route des Morillons, 1218 Le Grand-Saconnex, Geneva, Switzerland by the

International Baccalaureate Organization (UK) Ltd
Peterson House, Malthouse Avenue, Cardiff Gate
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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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Overview

This teacher support material (TSM) has been written by IB educators experienced in supporting students and fellow educators in the study and teaching of economics.

The advice is neither prescriptive nor exhaustive, but is designed to provide teachers with:

- further guidance on approaching the teaching and learning of economics
- suggestions for unit and lesson plans
- some responses to frequently asked questions.

Please note that any suggestions for unit and lesson plans, teaching ideas or approaches are intended as examples and helpful guidance only; they are not intended to be in any way prescriptive or restrictive. Teachers are encouraged to exercise creativity and flexibility when putting their economics course together, and to choose examples and materials that meet their specific interests and needs, as well as those of their students.

Acknowledgement and disclaimer

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Multilingualism and the four dimensions of teaching

Teaching in a linguistically diverse classroom provides opportunities as well as poses challenges for teachers in engaging learners to develop conceptual understanding while simultaneously supporting language development. As all IB teachers are responsible for academic language development, it is essential that they plan instructional and learning strategies that help learners acquire and develop cognitive academic language proficiency (CALP). The distinction between basic interpersonal communicative skills (BICS) and CALP as informed by many studies has enabled educators to engage their learners in activities that provide a continuum for language development in a subject-specific classroom.

The video "The IB Language and learning cycle" explains the links between language and learning.

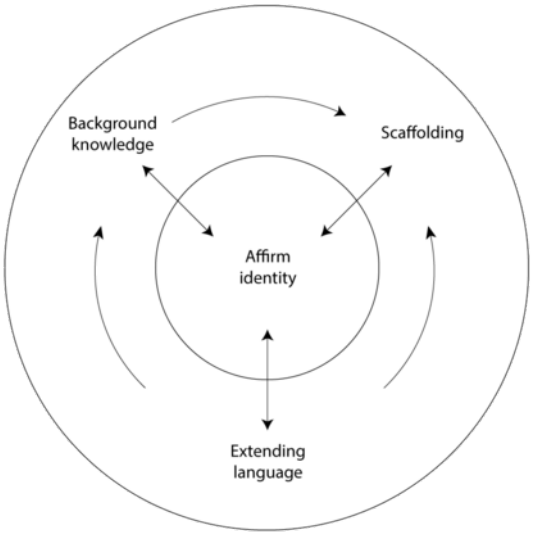
Jim Cummins (Inugai-Dixon 2007) proposes a pedagogy that emphasizes four dimensions of teaching for CALP development and for ensuring learner participation, promoting engagement and successfully constructing understandings.

As illustrated in figure 1, they are:

- activating prior understanding and building background knowledge
- scaffolding learning
- extending language
- affirming identity.

Figure 1

The language and learning cycle of good practice (based on the work of Jim Cummins, 2007)



Planning for CALP development

Figure 2 illustrates a framework to help teachers plan strategies for student CALP development as part of learning within the subject. The activities can extend to a lesson, series of lessons in a unit of inquiry or embedded within schemes of work.

Figure 2

A framework for planning CALP development

Cognitive Academic Language Proficiency SKILLS ↓	**PEDAGOGY** →			
	Activating background knowledge	Scaffolding for new learning input	Acquisition of new learning through practice	Demonstrating proficiency
Listening				
Speaking				
Interacting				
Reading				
Writing				
Command terms and thinking skills				

Pedagogy for CALP development

Teachers can help students acquire CALP through a range of activities that involve the following aspects.

Affirming identity

Each learner must be valued and recognized for the skills and knowledge that they bring with themselves to the classroom. To use their linguistic backgrounds as a resource for exploring new ways of thinking and knowing, three pedagogical dimensions (activating and building up background knowledge, scaffolding and extending language) should be embedded in the learning engagements.

Activating background knowledge

Background knowledge is the existing knowledge and the conceptual understanding a student has and could be in a language different from target language. To enable students to comprehend new learning their prior understanding needs to be activated and developed.

Scaffolding

To enable learners to construct and extend their learning, scaffolding strategies are used to make new content comprehensible to help students practice and gain confidence in its application. Scaffolding activities allow for contextualization so new learning becomes meaningful and is reinforced through practice.

Demonstrating CALP

Classroom environment should provide opportunities for students to independently practise and apply new learning in varied situations. This proficiency can be demonstrated through formative and summative assessments until this new learning becomes part of a student's background knowledge upon which more new and extended learning can be built in the next cycle.

References

Cummins, J, Brown, K, Sayers, D. 2007. *Literacy, Technology, and Diversity: Teaching for Success in Changing Times*. Boston, Massachusettes, USA. Pearson.

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Cummins, J. 2000. Chapter 4: Critiques of the Conversational/Academic Language Proficiency Distinction. In Cummins, J. *Language, Power, and Pedagogy: Bilingual Children in the Crossfire*. 86–111. Clevedon, UK. Multilingual Matters Ltd.

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CALP development in economics

As the DP economics course is conceptually focused, the following CALP activities are examples that allow for flexibility and freedom for teachers to explore the content through a range of contexts embedded in skills and assessment objectives.

A worked example of the use of a framework for planning for CALP development is given in figure 3.

Figure 3

CALP development in DP economics

	PEDAGOGY			
CALP	**Activating background knowledge**	**Scaffolding for new learning input**	**Acquisition of new learning through practice**	**Demonstrating proficiency**
Listening	Activity 2	Activity 2	Activity 3, 5	Activity 2, 3, 4
Speaking	Activity 1, 2	Activity 1, 2	Activity 1, 2	Activity 2, 3, 4
Interacting	Activity 1, 2	Activity 1, 2	Activity 1, 2	Activity 4, 5
Reading	Activity 1, 2, 4	Activity 1	Activity 1, 2, 3	Activity 2, 4, 5
Writing	Activity 2, 4	Activity 2, 5	Activity 1, 2, 3	Activity 2, 3, 4, 5
Thinking skills	Inquiry-based approach, collaborative tasks, conceptually driven and assessment objectives driven			

CALP activity 1

Unit focus	Unit 1: Introduction to economics Subtopic 1.1: What is economics?
Learning goals	An introductory activity to: • integrate learners with diverse linguistic backgrounds • activate their prior knowledge and • build their understanding of terminology related to the unit.
CALP skill focus	Thinking, speaking and interacting
Assessment focus	Knowledge and understanding (AO1) Terminology and definitions
Activity handout	Download the Activity 1 handout

Pedagogy and skills

Activating background knowledge and scaffolding

To activate prior knowledge and understanding, a handout with a list of terms and images will be given to the students. The students will be given some time to read, think and respond to this handout. They will be required to interpret the terms and images and add descriptions in their own words.

Speaking and interacting

The students will then share their work with peers in small groups, engaging in dialogues about the meaning of each term, identifying similarities and differences between their responses. The group will then record and present their meanings to the rest of the class.

Affirming identity and critical thinking

Through a whole-class discussion, the teacher will prompt students to respond to the question: in which subjects and in what context have you studied these terms? Why were they important?

This will enable students to extend their learning and prepare them for acquisition of new learning in the form of economic terminology.

Acquisition of new learning through practice

The teacher will then share with the students a list of terminology with definitions for this unit, asking students to draw an image that will closely represent their understanding of these terms. The students will be asked to keep these handouts for reference throughout the unit, to help them memorize and consolidate their learning.

CALP activity 2

Unit focus	Unit 2: Microeconomics Subtopic 2.7: Role of government in microeconomics
Learning goals	An introductory activity highlighting economic issues focused on the concepts of change and intervention to enable students to: • understand the role of government • read, comprehend and acquire skills of critical analysis and evaluation • extend abilities to investigate, read and present new information.
CALP skill focus	Thinking, speaking, interacting, reading, writing and listening
Assessment focus	Application and analysis (AO2) Synthesis and evaluation (AO3)
Activity handout	Download the Activity 2 handout

Pedagogy and skills

Scaffolding and activating background knowledge

Students will be given a handout with some scenarios to read, comprehend and respond independently to the related questions. The students will be able to apply their prior knowledge and problem-solving skills to answer the given questions that range from basic interpretation to higher order thinking skills.

Listening, speaking and interacting

They will then work in collaboration with their peers to compare and contrast their approaches and finally present to the rest of the class. This will enable students to acquire new learning through interaction and presentation.

Acquisition of new learning through practice

Students will be asked to conduct research to find an economic issue of their own interest from a media source. The questions listed in the handout will act as guided inquiry.

Demonstrating proficiency

Students will present their case study to their peers through a visual artefact of their own choice (semantic webs, spider maps, Venn diagrams, timelines, T-Lists, flow charts, story maps, and charts of various kinds).

CALP activity 3

Unit focus	Unit 4: The global economy Subtopic 4.10: Economic growth and/or economic development strategies
Learning goals	This activity is part of a plenary aimed towards: • consolidating students' understanding of economic growth and economic development • developing analytical and critical thinking skills through inquiry (real-world situations) that connect new knowledge with background knowledge.
CALP skill focus	Thinking, speaking, interacting, reading, writing and listening
Assessment focus	Application and analysis Graphical/data (AO2) Use and application of appropriate skills Select, interpret and analyse appropriate extracts from news media, interpret appropriate data sets (AO4)

Pedagogy and skills

Scaffolding and activating background knowledge

Use of questions to engage students in recalling and reviewing the content with a focus on deepening understanding of the relationship between economic growth and economic development.

Questions

- Define economic growth and economic development.
- How are the two measured?
- How can we represent the two using diagrams?
- How are the two similar?
- How are the two different?
- How does one affect the other?

Listening, speaking and interacting

These skills are used to demonstrate proficiency in connecting and linking various aspects related to the two concepts.

Extend and acquire new learning

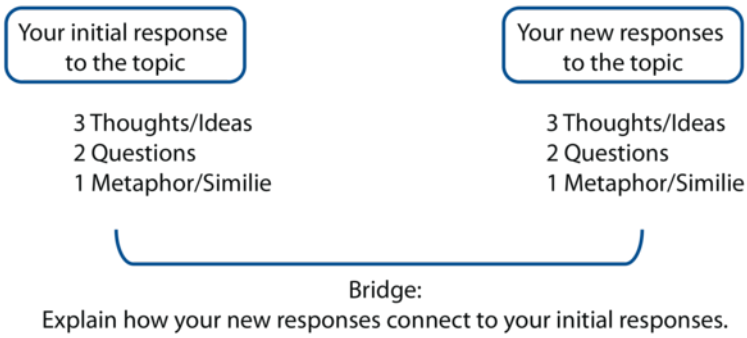
By researching the relationship between economic growth and economic development for a chosen country, new learning is extended and acquired. The teacher provides specific instructions on what information (data, graphs, charts/news articles) to look for and which performance indicators (GDP per capita, GNI, debt, Human Development Index (HDI), etc) to use to arrive at a reasonable argument/judgment.

Writing

Students will be asked to summarize their findings in a report (not exceeding an A4 page) to compare their prior knowledge with new knowledge. They could use a graphic organizer to collect their thoughts.

Figure 4

3-2-1 Thinking Routine to connect learning



CALP activity 4

Unit focus	Unit 2: Microeconomics Subtopic 2.8: Market failure—externalities and common pool or common access resources
Learning goals	An extension activity to enable students to: • apply knowledge and understanding of economic theories to real-world situations • develop problem-solving skills and value multiple perspectives through collaborative tasks • evaluate short-term and long-term consequences, stakeholder effects and trade-offs in policies.
CALP skill focus	Reading, speaking, interacting and thinking
Assessment focus	Application and analysis (AO2) Apply economic concepts and theories to real-world situations Synthesis and evaluation (AO3)

Pedagogy and skills

Reading, thinking, interacting

Students to work in groups to read a few scenarios provided by the teacher to respond to related questions. Since each group is given a different scenario they will be given time to prepare a role play to dramatize the situation and solutions thereof.

Example scenario: Humans cause over 95 percent of California wildfires
Humans cause over 95 percent of California wildfires. 10 August 2018. nationalgeographic.com/ Wildfires in Holy Jim Canyon California, USA, believed to be caused by humans, have destroyed over 6,200 acres of forests. **Questions** • **Why** is this situation a threat to environmental sustainability? • **Which** stakeholders are impacted by this situation and in what ways? • **How** can this situation be resolved? • **What** could be the consequences of the strategies/approaches used to resolve the situation? • **What** other strategies/approaches could have been used?

Scaffolding for new learning input

Allow students to research an economic issue and write an evaluative report using the questions provided earlier.

CALP activity 5

Unit focus	Unit 3: Macroeconomics Subtopic 3.1: Measuring economic activity and illustrating its variations
Learning goals	This is an inquiry-based activity to enable students to: • apply their knowledge and understanding of fluctuations in macroeconomic measures of economic activity to real-world issues • develop skills of data/graphical interpretation and analysis.
CALP skill focus	Reading, interacting and thinking
Assessment focus	Application and analysis (AO2) Identify and interpret economic data
Activity handout	Download the Activity 5 handout

Pedagogy and skills

Activating background knowledge and scaffolding

Students are asked to recall different measures of economic activity using the handout.

Listening, speaking and interacting

Allow students to work in pairs to engage in dialogues to help each other towards completing task 1: recall. They will then continue to work together to find, record and present task 2.

Extend and acquire new learning

Each student should choose a country and complete task 2.

Demonstrate proficiency

Students share their findings with their peers (pairs or in small groups) in response to task 3 to analyse trends; comparing and contrasting with possible reasons.

Introduction

Approaches to teaching and learning (ATL) in the Diploma Programme refer to deliberate strategies, skills and attitudes which permeate the teaching and learning environment. These approaches and tools are intrinsically linked with the IB learner profile attributes, enhance student learning and assist student preparation for the Diploma Programme assessment and beyond.

The five approaches to learning (developing thinking skills, social skills, communication skills, self-management skills and research skills) along with the six approaches to teaching (teaching that is inquiry-based, conceptually-focused, contextualized, collaborative, differentiated and informed by assessment) encompass the key values and principles that underpin IB pedagogy.

Please see the Diploma Programme *Approaches to teaching and learning* subject website on the programme resource centre for further information on approaches to teaching and learning in the Diploma Programme.

Approaches to teaching

Teaching based on an inquiry approach

An essential element of inquiry-based teaching and learning is that students are actively engaged in their own learning, constructing their own understandings. Rather than provide answers, the teacher facilitates the learning process by asking questions that require the students to apply their knowledge and think critically. The teacher supports students to create their own questions and develop the skills to find their own information. Inquiry-based teaching and learning thereby also supports the development of thinking and research skills. Inquiry-based learning may take various forms, for example, guided inquiry, open inquiry, experiential learning, problem-based learning, case-based learning and discovery learning.

The content of the IB economics course has been organized around six real-world issues. By exploring examples and real-world cases, students are given an opportunity to apply their theoretical knowledge of economics, making learning more engaging and relevant and deepening their understanding of subject. Each real-world issue has a section called "Inquiry—possible areas to explore" to give ideas of the wide range of rich and interesting possibilities.

Examples of inquiry-based teaching approaches and activities in economics include:

- individual and group research tasks, case studies and presentations
- economic games in which students explore strategies
- students playing the role of economic decision-makers, making policy recommendations based on data provided by the teacher or though student research
- students generating questions about data or information provided.

"Inquiry-based learning focuses on the use of active questioning by both the teacher and the student as a way to drive learning. Regardless of how an inquiry is structured in the classroom, a general goal is to promote the asking and answering of questions, while gradually releasing the scaffolds" (Marschall, French 2018).

Three approaches to inquiry-based learning have been identified and explored further: case-based learning, problem-based learning and experiential learning. For the first two of these approaches, there is a continuum to indicate the way in which the scaffolding provided by the teacher may be released. For experiential learning, it is inevitable that the teacher may direct the students to the desired experience, but it should be possible for different activities to involve more planning on the part of the student.

Case-based learning

Examples of how one topic could be treated at different levels of inquiry are given below:

Teacher-directed case study	Guided investigation	Self-directed inquiry
Teacher is a conductor Teacher develops the questions, selects the resources, leads the investigation and knows the outcome. Prior to the inquiry, the relevant economic theory/model has been taught. All steps of the inquiry are controlled by the teacher.	**Teacher is a strategic facilitator** Teacher sets the topic and may suggest some resources; students select their own case studies, develop questions in consultation with other students and the teacher, and conduct research.	**Teacher is a mentor** Teacher sets the general topic and students begin the inquiry prior to instruction. Students develop their own questions to guide the selection of their resources.

Teacher-directed case study	Guided investigation	Self-directed inquiry
Topic Minimum wage	**Topic** Minimum wage in different contexts	**Topic** Labour market policies
Example Students look at a current minimum wage change in a particular country–for example, the impact of an increase in the minimum wage in Seattle, Washington on workers and firms.	**Example** Students look at the consequences of a minimum wage in a setting of their own choice–for example, a change in the minimum wage for waiters in Canada.	**Example** Teacher sets the general topic of labour market economics and a student might choose to investigate minimum wage theory and application–for example, why economists disagree about the consequences of a minimum wage.
Prior learning The demand and supply model for a minimum price is taught, with appropriate labels for the labour market.	**Prior learning** The demand and supply model for a minimum price is taught. Students work out what the correct labels are for their case study.	**Prior learning** While students will have already learned the supply and demand model, they will not necessarily have been taught labour market theory. The objective in self-directed inquiry is for students to discover new learning on their own in response to authentic questions.
Active questions Why did the city government change the minimum wage? What was the change in the wage? Which workers were affected by the increase in the minimum wage? To what extent did the change in the minimum wage have an impact on equity and efficiency?	**Active questions** What are the reasons for the minimum wage policy in the specific case study? To what extent does the minimum wage have an impact on equity and efficiency?	**Active questions** Active questions will vary based on the selected case study.

Problem-based learning (PBL)

Problem-based learning starts with a compelling, real-world problem. Using their knowledge of economics, students are challenged to research and analyse the problem in order to develop reasoned solutions.

Teacher-directed PBL	Guided PBL investigation	Self-directed inquiry
Teacher is a conductor	**Teacher is a strategic facilitator**	**Teacher is a mentor**
Teacher identifies the problem, selects the resources, leads the investigation and is aware of proposed solutions. Prior to the inquiry, the relevant economic theory/model has been taught. All steps of the inquiry are controlled by the teacher.	Teacher identifies the problem and may suggest some resources; students develop questions in consultation with other students and the teacher and conduct research to develop reasoned solutions.	Teacher sets the general context and students, through research, identify a relevant problem that invites the use of economic analysis to develop reasoned solutions. Students develop their own questions to guide the selection of their resources.

Teacher-directed PBL	Guided PBL investigation	Self-directed inquiry
Problem The problem of plastic waste in the EU following China's ban on imports of plastic waste.	**Problem** The problem of plastic waste in the EU following China's ban on imports of plastic waste.	**Problem** Sustainability example Students identify an individual problem related to sustainability, for example, the problem of plastic waste in the EU following the decision of China to ban imports of plastic waste.
Prior learning Market failure/negative externalities theory has been taught.	**Prior learning** Market failure/negative externalities theory has been taught.	**Prior learning** While students will have already learned the negative externalities model, they may develop solutions involving other economic theories. The objective in self-directed inquiry is for students to discover new learning on their own in response to authentic questions.
Active questions What is the economic problem? Who are the stakeholders involved? What solutions have been proposed? How are they expected to work? To what extent is there a difference between possible short-run and long-run solutions? What would be the best solution? Why?	**Active questions** What is the economic problem? Who are the stakeholders involved? What solutions have been proposed? How are they expected to work? What new solutions could be considered? What would be the best solution? Why?	**Active questions** Active questions are standard, but students may offer additional questions in order to develop their own solutions. What is the economic problem? Who are the stakeholders involved? What solutions have been proposed? How are they expected to work? What new solutions could be considered? What would be the best solution? Why?

Experiential learning (EL)

Experiential learning is the process of learning through and reflecting upon experience. The following will all allow students to develop an understanding of economic theory, or to apply economic theory through their own experience.

- Games/simulations—for example, "the tennis ball game" to illustrate diminishing average/marginal returns, the "trade game" to illustrate disparities in power among trading nations, testing the prisoners' dilemma in paired situations.
- Field trips—for example, visits to institutions (banks, offices, factories, markets, international organisations).
- Field research—for example, conducting and analysing survey data related to consumer preferences, environmental externalities.
- Interviews—for example, Skype/email interviews with experts in given areas related to subject-specific content.

- CAS projects—for example, working with Habitat for Humanity building low-income housing alongside families, working with a Fairtrade organisation, working in a social enterprise, an internship.

Teaching focused on conceptual understanding

An important motivation for conceptually-focused teaching in IB programmes is to help students build their ability to engage with significant and complex ideas. Equally valuable are the discussions of the "big ideas" behind a topic, which can help students get to the heart of why they are learning what they are learning.

When students are learning using a conceptual perspective, they are integrating new knowledge into their existing understandings. They learn how seemingly discrete topics are connected and they become empowered to transfer their learning to new contexts. The subject emerges for them in a holistic light. In a classroom where conceptually-focused inquiry is happening, there is continuous movement between facts and what they mean, with students asking why the facts matter as a natural part of their learning process.

Concepts are central to the course and form the basis of our inquiry-based approach to the subject. The key concepts identified, provide a means to synthesize the elements of the course in a manner that is both holistic and provides new meaning to economic issues. The concepts can be applied in many ways and in all areas of economics.

The use of concepts in economics allow students to examine theory in a manner that enables them to access a more meaningful and deeper understanding of the subject matter. It enhances the level of economic literacy they are able to access and allows students to more fully appreciate the complexity of the issues, policies and decisions we explore.

Concept-based inquiry as an approach to examining real-world issues allows the transfer of understanding to other real-world examples and contexts to generate a more sustained understanding.

Nine key concepts underpin the economics course: scarcity, choice, efficiency, equity, economic well-being, sustainability, change, intervention and interdependence. These concepts can be regarded as organising ideas that enable the learner to make connections between different topics in economics. The conceptual understandings for each real-world issue highlight the concepts of particular significance, though teachers should feel free to explore other ways in which conceptual understanding may be developed. Explicit discussion of the concepts supports students in transferring previous learning to new contexts and helps them develop an appreciation of what the study of economics is fundamentally about. For example, as a student begins to recognize that debate over government intervention is a recurring theme, this deepens their understanding and makes the learning of discrete topics more meaningful. The internal assessment commentaries are an opportunity for students to demonstrate their conceptual understanding by recognising and applying key concepts to their chosen articles.

Examples of teaching approaches and activities that foster conceptual understanding in economics include:

- keeping the concepts visible in the physical or virtual learning environment
- building a student or class "concept diary" to which students add examples that reinforce their understanding
- explicit identification and discussion of the concepts in cases and news articles used in learning activities
- integration of the key concepts into formative and summative assessment tasks.

Possible concept-based learning activities

The following activity is a good way to investigate the way in which a particular case study can be viewed in terms of two concepts. There are many ways of doing this and it can apply to any investigation.

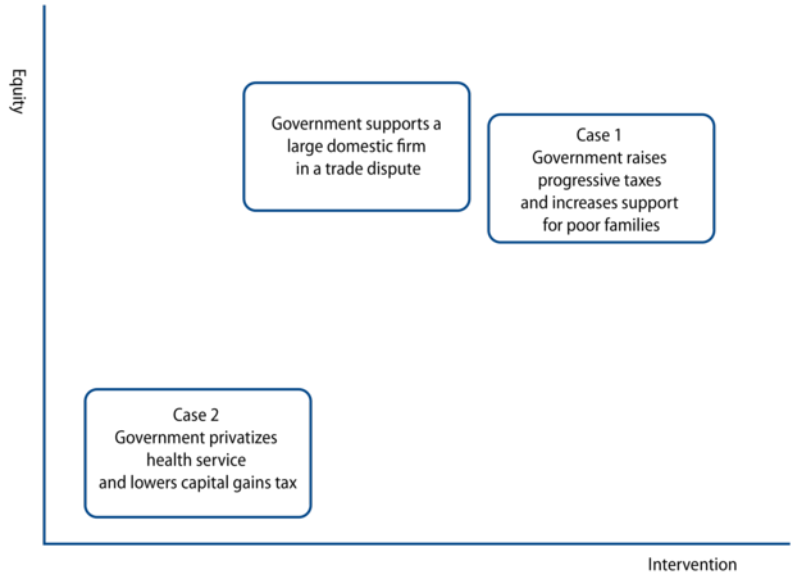
Based on the method outlined in *Concept-Based Inquiry in Action: Strategies to Promote Transferable Understanding* (Marschall, French 2018), this process can be divided into a number of phases.

1. Investigate a range of mini case studies, for example, through news extracts. These would relate to real-world examples that allow students to identify the two concepts to be graphed. It is perhaps better if groups of students have the same examples to enable comparison and reflection afterwards.

2. The graph could be placed where it is visible to all. The graph needs to be explained in order for students to understand its structure. The two concepts need to be revisited in the context of the real-world examples used.
3. The teacher might introduce a few simple but related examples, so students might consider where they fit on the graph.
4. Students should produce short summaries of salient information from the mini case studies on "post it" notes.
5. Students should in groups post the notes on the graph following discussion in the places they feel most appropriate.
6. Different groups compare and discuss differences in their results. Students might consider the real-world examples and consider how they might share elements of the same concept or how they might be different. Are particular real-world examples similarly placed on the concept graph, are there connections between different real-world examples that lead them to be placed in the same place on the graph? What has led to this? Is political bias an influence? What conclusions could be drawn from this?

Figure 5

A concept graph



In the concept graph (Figure 5) students place the examples they are looking at according to whether they feel there is more or less intervention evident in a particular example or case and also in comparison to the other examples being used. Students can then consider whether the example gives greater or less evidence of equity, depending on which key concepts they are using.

Linking real world examples through a concept

Search for two newspaper articles which tackle a similar problem or issue, for example, unemployment. Create a document with links to the articles and then present a concept, for example, "intervention". In this case students may be asked to read the sources and then respond to a couple of simple questions where they are asked to identify what the intervention is and what it is trying to do. They can then be asked to comment on the degree of success the measures have had. By comparing the two examples they can be asked to identify what generalizations may emerge and consider how these generalizations might be transferred to other real-world examples.

It may be useful to introduce some form of graphic organizer. For example, the following table that shows how real-world examples can be linked through a concept.

Figure 6

Linking real-world examples through a concept

A link to each market failure example*	A series of questions that apply to all the case studies selected**	Example question, What government action was taken?	What graph can illustrate the intervention?	How successful was the intervention?	What alternatives might have been attempted?
Link to case 1					
Link to case 2					

**Provide the news video or newspaper article link in this column.*

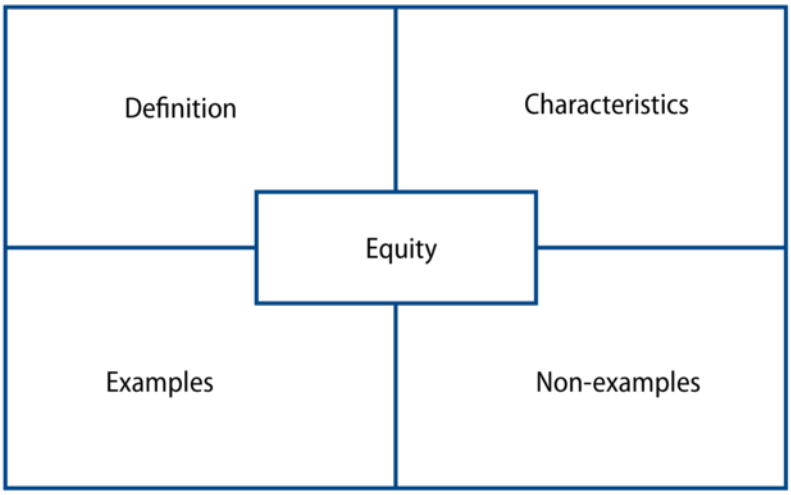
*** This column might ask students to summarize what the key elements of the source are.*

Students could review the information to try to generalize their understandings.

Frayer model graphic organizer

Figure 7

Frayer model



A concept, for example, "equity" is introduced and discussed in class at the start of a topic. During the topic, students conduct inquiry and then construct a Frayer model, identifying where the concept arises, where it does not in a given case study or inquiry, and the characteristics of the concept in the context of the inquiry being undertaken.

Assessment of concept applicability to a given real-world example

Several topics in economics lend themselves to this concept application activity. The idea is to spread the real-world examples along a continuum. Students will consider real-world examples and assess the extent to which each concept applies to the example.

1. Introduce students to the concept—real-world examples continuum model and explain what they are going to use it for.

2. The first round of this activity involves students using real-world examples where the concept of sustainability is examined. In the first sorting of the cards, students should place a number of cards that record different real-world examples along the continuum according to the degree of sustainability. The cards could represent different themes such as economies, firms, economic policies or specific case studies relating to sustainability.
3. Once the first round is completed the idea is to test another concept such as intervention or choice along a continuum in the same manner. Students then set their cards along the new continuum to see how this compares with the previous round.
4. This process may continue to a third or fourth round.
5. Students compare their results to discuss what they think is significant. What is unexpected? What seems to be out of place? Do the results of different groups differ significantly? What are the reasons?
6. Draw conclusions and identify what has been learned about the connections between concepts. Have new questions emerged?

Figure 8

Concept—real-world examples continuum

A concept role discussion

Split an inquiry according to all the different elements and issues that it is comprised of–concepts, sub concepts and areas of theory. Then write these elements down on cards.

1. Each student now takes one card.
2. Select a student and ask them to identify the card being held by another person they feel is most related to their own.
3. Ask them to explain why and allow discussion.
4. Continue the process around the room.

Teaching developed in local and global contexts

Economics is rich in opportunities to integrate local and global contexts. A focus on relevant contexts makes learning more engaging and meaningful, helping students to understand why they are learning what they are learning. International-mindedness is promoted as students have the opportunity to consider the ways in which social, political and cultural contexts may affect economic decision-making. Student appreciation of the uses and limitations of economic theories is also enhanced. In formal IB assessments, strong extended response paper answers must identify and develop real-world examples to support the arguments made.

Examples of contextualized teaching approaches and activities in economics include:

- discussion of economic events and issues in the news, which also helps prepare students for the economics internal assessment
- use of current news articles for creating data response questions
- use of online data banks to provide up-to-date information for analysis
- using students' own economic behaviour and decision-making as a basis for discussion and analysis

- having individual or groups of students become country "experts" who build up a collection of relevant data and resources as the course progresses.

Teaching focused on effective teamwork and collaboration

Teaching that fosters teamwork and collaboration helps create a dynamic learning environment in which students learn from one another and are exposed to different opinions and perspectives. Students develop their skills as team leaders, speakers and listeners.

Examples of teaching approaches and activities that foster teamwork and collaboration in economics include:

- guided and open inquiries undertaken by groups of students and presented to the class
- peer teaching and assessment activities
- carousel activities—students create products such as essay plans collaboratively, by moving from station to station
- establishing group work norms and working agreements
- use of discussion protocols
- reflection on the process of group work as well as the outcome.

Teaching differentiated to meet the needs of all learners

Individual students learn best in different ways and employing a range of teaching approaches is one way to address these differences. In addition, meeting the needs of all learners involves helping each student to identify appropriate goals, along with the strategies needed to reach them. All IB teachers are language teachers and thus, need to plan accordingly for the language skills of their students.

Examples of teaching approaches and activities that help meet the needs of all learners in economics include:

- being open to the choice of inquiries explored to allow students to pursue their interests
- employing a wide range of teaching approaches, resources and learning activities
- provision of extension questions and readings
- scaffolding learning activities and formative assessments, breaking up the task and providing temporary support for the different stages, as required
- creation of word banks or flash cards for economic terminology and diagrams
- using data from formative and summative assessment to adapt planning.

Teaching informed by assessment

All IB students will be required to demonstrate their knowledge, skills and understanding in formal IB summative assessments. It is therefore essential that, as well as being taught the course requirements, students have the opportunity to practise the kinds of tasks they will encounter. Throughout the course, assessment is used as a measure of the learning that has taken place. Assessment also plays a key role in supporting learning, allowing teachers and students to use the information from formative assessments to make modifications and adapt goals. Formative assessment often involves two-way feedback between the teacher and student.

Examples of teaching approaches and activities that provide assessment information in economics include:

- informal feedback given during classroom learning activities and discussions
- re-cap activities at the beginning and end of a learning session
- individualized written and oral feedback that focuses on what can be done to improve
- student reflections, polls and quizzes
- "exit cards" that check for understanding
- assessments that model IB economics formal summative assessments
- self-assessment and peer assessment activities.

Approaches to learning

Thinking skills

Thinking skills encompass a range of related skills and, in the Diploma Programme, there is a particular focus on critical thinking, metacognition and reflection. Critical thinking is an integral part of the economics curriculum and assessment. In order to meet the assessment objectives, students need to apply their knowledge to new contexts and demonstrate higher-level thinking skills such as analysis, synthesis and evaluation. Metacognition and reflection are assessed less explicitly but, nonetheless, support student achievement both in, and beyond, their economics course. In practising metacognitive skills, students think about the ways in which they learn. As they become aware of the techniques and strategies they use, they can begin to evaluate them and consider whether new strategies may be more effective. When students practise reflection, they take the time to assess what they have learned and achieved and become better at setting meaningful and realistic goals for themselves.

Examples of approaches and activities that develop students' thinking skills in economics include:

- techniques and tips for evaluation in written tasks
- policy discussions in the roles of different stakeholders
- "visible thinking" routines such as "see, think, wonder" and "connect, extend, challenge" (*Visible Thinking*. Harvard Project Zero, 2016)
- reflection and goal setting
- economics simulations and games
- idea-generating tools such as mind-mapping.

Communication skills

Communication skills consist of the ability to listen and understand various spoken messages, to read and understand diverse written texts and other forms of information, and to respond clearly and convincingly in spoken and written form. In economics, students are required to explain, analyse and discuss economic concepts, theories and issues. They present their ideas in essays, commentaries and shorter texts, integrating economic diagrams to support their written arguments. In the classroom environment, they communicate their ideas verbally in debates, discussions and presentations.

Examples of approaches and activities that develop students' communication skills in economics include:

- Socratic seminars and debates
- use of discussion protocols to encourage listening and to ensure that everyone's voice is heard, for example, "chalk talk" and "final word" ("Protocols" *School Reform Initiative* 2017)
- agreed norms for group work and discussion
- questioning and responding techniques
- group and individual presentations, using a variety of presentation formats and data presentation techniques
- use of digital tools such as online discussion boards
- student-created podcasts and videos.

Social skills

The development of effective social skills is related to the development of communication and collaboration skills. Throughout their study of economics, students will be exposed to different opinions, perspectives and values. Strategies for promoting communication skills, covered above, help students to express their opinions appropriately and respond to others with open-mindedness and respect. Group work is a common feature of most economics classrooms and being able to collaborate effectively is an important social skill. Fostering teamwork and collaboration in economics are mentioned in the other ATL skills.

Self-management skills

Self-management skills are vital for success in the Diploma Programme and, as with other skills, teachers can use explicit strategies to promote them. Self-management skills consist of organisational skills, such as setting goals and managing time and tasks effectively, and affective skills, such as managing one's state of mind, motivation and resilience. Organisational skills and time management are particularly important in economics when students are engaging in tasks such as open inquiries and internal assessment. In a challenging course such as IB economics, affective skills help students to view inevitable setbacks and challenges as a natural part of learning, developing perseverance and a growth mindset.

Examples of approaches and activities that develop students' self-management skills in economics include:

- establishing and enforcing clear deadlines
- breaking down larger assignments into chunks, each with its own deadline
- techniques for note-taking and examination revision
- providing formative assessment opportunities that allow students to learn from mistakes in a "low-stakes" environment
- encouraging self-reflection and realistic goal-setting based on feedback.

Research skills

Research skills include formulating focused and pertinent research questions, appraising sources, recording, synthesising and evaluating information, and presenting findings. The focus on inquiry and real-world application in IB economics is likely to increase the amount of research that students undertake, as teachers and students choose to pursue the global and local examples that best suit their context. When students begin research in economics, they are typically faced with a wide array of information, particularly from online sources. These sources will vary in reliability and may present ideas from a particular perspective. In order to select a manageable and appropriate body of research, it is essential to determine the validity, relevance and objectivity of the information. In addition, students must understand the importance of academic referencing and how to acknowledge the work of others.

Examples of approaches and activities that develop students' research skills in economics include:

- modelling good research questions in teacher-guided inquiries
- techniques for generating and evaluating research questions
- explicit discussion of the reliability of sources and data used in teaching materials
- guiding questions to support student evaluation of their own sources
- activities to support data interpretation–identification of patterns, trends and anomalies
- teacher-modelling of appropriate academic referencing in teaching materials
- scaffolding early inquiries by providing research questions and an appropriate range of sources.

References

Marschall, C and French, R. 2018. *Concept-Based Inquiry in Action: Strategies to Promote Transferable Understanding*. Pp132–33. Thousand Oaks, California, USA. SAGE Publications Inc.

Protocols. School Reform Initiative. 2017. http://www.schoolreforminitiative.org/

Visible Thinking. Harvard Graduate School of Education. 2016. http://www.pz.harvard.edu/

Resources

This list of freely-available resources has been put together to support teachers when teaching economics. The list is not exclusive or exhaustive and teachers should feel free to use other resources.

Teachers can embed these and other resources in their teaching and learning materials to help students unpack and understand the circular economy and hence move them from a basic to a deeper understanding of the term. This can be used to further explore the units of the course using a circular economy lens.

Unit 1: Introduction to economics

> Endless economic growth, based on the consumption of finite resources, cannot continue indefinitely. New economic models and social movements have challenged mainstream opinion about the purpose of growth and how the economy could be redesigned to support long-term prosperity.
>
> Economic thought: 21st century; increasing awareness of the interdependencies that exist between the economy, society and environment and the need to appreciate the compelling reasons for moving toward a circular economy.
>
> (IBO 2020)

Rethinking progress: The Circular economy (video)

A short animation by Ellen MacArthur Foundation explaining what the circular economy is. It explores how by changing our perspective we can redesign how our economy works. It raises the question of how creativity and innovation can be used to build a restorative economy.

Time: 3:48 minutes

Rethinking progress: The Circular economy. Ellen MacArthur Foundation. 2011. Also available from: https://www.youtube.com/.

The Performance Economy (video)

Walter Stahel explains the concept of circularity that is present in the natural world and applies it to the world created by humans through the concept of the performance economy (goods as services).

Circularity is intended to be a more intelligent use of resources that aims to create more from less and replace the current linear economy.

Time: 7:34 minutes

The Performance Economy. Walter Stahel Disruptive Innovation Festival - DIF. 2017. Also available from: https://www.youtube.com/.

Tim Jackson–Economics of a circular economy (video)

An excellent video by Ellen MacArthur Foundation exploring what an economy is for, the issues surrounding a growth-based economy, and the potential advantages of a circular economic model.

Time: 12:39 minutes

Tim Jackson-–Economics of a circular economy. Ellen MacArthur Foundation. 2012. Also available from: https://www.youtube.com/.

Prosperity Without Growth: Foundations for the Economy of Tomorrow (book)

This book openly challenges conventional economics, particularly the pursuit of exponential economic growth. It shows how the economy of tomorrow can be sustainable and still deliver ecological and financial stability.

Jackson, T. 2017. *Prosperity without growth: Foundations for the economy of tomorrow*. New York, USA. Routledge.

Rethinking Economics: Introduction to Pluralist Economics (book)

This textbook is a very engaging, student-friendly guide to a number of different economic schools of thought. It provides an accessible introduction to nine different approaches to economics: from feminist to ecological and Marxist to behavioural economics.

Fischer, L et al. 2017. *Rethinking Economics: An introduction to pluralist economics*. New York, USA. Routledge.

Doughnut economics: How to think like a 21st Century Economist (video)

Kate Raworth is the author of the influential book, *Doughnut Economics*. In this video interview she concisely explains what the "doughnut" is, and why we need to pay attention to it. Chapter 3 of her book provides an insightful summary of the circular economy in relation to building new economic prosperity.

Time: 45:44 minutes

Doughnut economics: How to think like a 21st Century Economist. 2017. https://www.youtube.com/. Disruptive Innovation Festival (DIF)

Raworth, K. 2017. *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist*. White River Junction, USA. Chelsea Green Publishing.

Doughnut Economics—an economy fit for the 21st Century (series of videos)

This series of short animations takes a look at the traditional story of economics and challenges the goal of GDP in favour of a regenerative approach.

Kate Raworth: Exploring doughnut economics. Kate Raworth. 2013–19. https://www.kateraworth.com/animations/.

Johan Rockstroëm introduces the Planetary Boundaries (video)

This TED Talk highlights the work of the Stockholm Resilience Center's work on identifying the nine planetary boundaries and where we are overshooting them. This provides students with a clear understanding of some of the consequences of economic growth.

Time: 18:41 minutes

Let the environment guide our development. Johan Rockstroëm TED Talk. 2010. https://www.youtube.com/.

Unit 2: Microeconomics

Inquiry—possible area to explore

How a country's economy could thrive without depending on the overuse of finite resources and still meet people's needs.

A Good Disruption: Martin Stuchtey (video)

Martin Stuchtey, CEO of SystemIQ, believes our economy is about to be disrupted. He has a vision for how we can make it a "good disruption".

Time: 19:13 minutes

A good disruption. Disruptive Innovation Festival (DIF). 2018. https://www.youtube.com/.

Challenging Common Conceptions (lesson plan)

In this lesson plan a series of videos is used as a stimulus for classroom discussion about how environmental goals could be aligned with economic goals. The lesson touches on the concepts of resource use, scarcity, as well as current sustainability solutions. This leads into the next lesson (Exploring the circular economy).

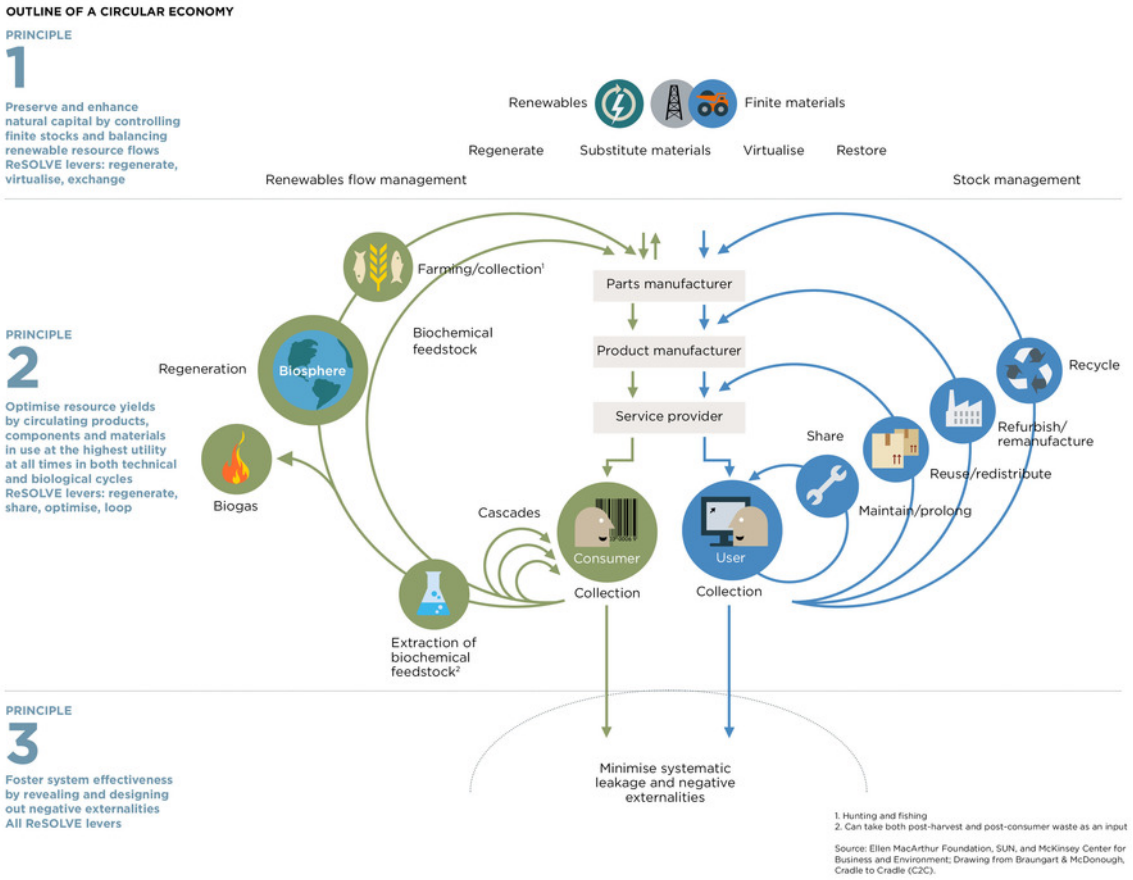
Lesson plan 1. Ellen MacArthur Foundation. 2017. https://www.ellenmacarthurfoundation.org/assets/downloads/schools-colleges/Schools-Colleges-WLL-Lesson-Plan-1-F.pdf.

Exploring the circular economy (lesson plan)

After considering the challenges associated with conventional approaches to resource use, in Challenging Common Conceptions, this lesson looks at the differences between linear man-made systems and living systems which are inherently circular. Students begin to explore what the concept of a circular economy could look like and how this might have benefits for the economy, society and environment.

Lesson plan 2. Ellen MacArthur Foundation. 2017. https://www.ellenmacarthurfoundation.org/assets/downloads/schools-colleges/Schools-Colleges-WLL-Lesson-Plan-2-V2.pdf.

The Butterfly diagram



The butterfly diagram is the visual representation of the circular economy and shows the different ways in which materials can be kept in use. The link provides an overview of the circular economy and its various technical and biological cycles. There are in depth articles and case studies looking at examples of circular economy in different sectors from the automotive industry to mobile phones.

Ellen MacArthur Foundation. *The butterfly diagram* [infographic].

Butterfly diagram animation (video)

A good introductory explanation of the circular economy in two dimensions.

Time: 2:26 minutes

Butterfly diagram explanation. Juan Diego Lopez Giraldo. 2017. https://www.youtube.com/.

The circular economy: from consumer to user (animation)

This animation provides some insights into the concept of a performance-based economy (access to goods and service over ownership). This is good for sparking debate and for thinking differently about resource use.

Time: 3:11 minutes

The circular economy: from consumer to user. Ellen MacArthur Foundation. 2013. https://www.youtube.com/

Seeing the Bigger Picture (series of 9 videos)

Introductory video series to the circular economy looks at the challenges of the current linear economy and why a "do less approach" isn't a long-term solution. Each video contains question prompts to deepen students' learning.

Seeing the Bigger Picture. Ellen MacArthur Foundation. 2013. https://www.youtube.com/.

Time: 8:40 minutes (series)

The IB has received permission from the Ellen MacArthur Foundation to use some videos in the series (these are linked). Videos that are not linked can be found on YouTube.

The Linear System - Seeing the Bigger Picture (Time: 0:56 minutes)

Recycling? Seeing the Bigger Picture (Time: 0:58 minutes)

Use Less? Seeing the Bigger Picture (available on YouTube) Time: 0:58 minutes

Last Longer? Seeing the Bigger Picture (Time: 0:50 minutes)

More efficient? Seeing the Bigger Picture (Time: 0:51 minutes)

Green? Seeing the Bigger Picture (available on YouTube) Time: 0:53 minutes

Fewer people? Seeing the Bigger Picture (Time: 1:03 minutes)

The economy of ants - Seeing the Bigger Picture (Time: 0:45 minutes)

A New Perspective - Seeing the Bigger Picture (available on YouTube) Time: 1:26 minutes

Unit 3: Macroeconomics

Inquiry—possible areas to explore

- How key stakeholders (such as businesses and governments) can continue to meet people's needs with limited resources.
- The cause of trade-offs between economic growth and sustainable development and how these might be addressed.
- What sustainable economic growth might look like and how it might be achieved.

Closing the loop–An EU action plan for the circular economy (report by the European Commission)

"The transition to a more circular economy, where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimized, is an essential contribution to the EU's efforts to develop a sustainable, low carbon, resource efficient and competitive economy. Such transition is the opportunity to transform our economy and generate new and sustainable competitive advantages for Europe." This report provides more insights on the above issue.

European Commission. 2015. *Closing the loop–An EU action plan for the circular economy*. https://eur-lex.europa.eu/resource.html?uri=cellar:8a8ef5e8-99a0-11e5-b3b7-01aa75ed71a1.0012.02/DOC_1&format=PDF.

European Commission website—focus on circular economy (article)

This article provides details of how a circular economy can help boost the European economy through key elements of product redesign, new business and consumption models and regulatory frameworks.

Circular economy. European Commission. 2015. https://ec.europa.eu/growth/industry/sustainability/circular-economy_en/.

Delivering Environmentally Sustainable Growth: The Case of China (report)

This report evaluates China's existing sustainability strategies and policies, its recent achievements, and remaining challenges to generate recommendations for policy-makers.

Asia Society. 2012. *Delivering Environmentally Sustainable Growth: The Case of China*. https://pdfs.semanticscholar.org/9a5c/c2dfe6a5962bfdabe1d3efd8e13bd94db49d.pdf.

Achieving 'Growth Within' (report)

A report by SYSTEMIQ, in collaboration with the Ellen MacArthur Foundation and sponsored by SUN, has identified ten attractive circular innovation and investment priorities for Europe until 2025, totalling €320 billion. The report was launched at the World Economic Forum's annual meeting in Davos in January 2017.

Achieving 'Growth Within'. Ellen MacArthur Foundation. 2017. https://www.ellenmacarthurfoundation.org/publications/achieving-growth-within.

Information about Systemiq, available from: https://www.ellenmacarthurfoundation.org/about/partners/knowledge/systemiq.

Information about SUN, available from: https://www.ellenmacarthurfoundation.org/about/partners/core-philanthropic/sun.

Doughnut economics: How to think like a 21st Century Economist (video)

Kate Raworth is the author of the influential book, *Doughnut Economics*. In this video interview she concisely explains what the "doughnut" is, and why we need to pay attention to it. Chapter 3 of her book provides an insightful summary of the circular economy in relation to building new economic prosperity.

Time: 45:44 minutes

Doughnut economics: How to think like a 21st Century Economist. Disruptive Innovation Festival (DIF). 2017. https://www.youtube.com/.

Doughnut Economics—an economy fit for the 21st Century (series of videos)

This series of short animations takes a look at the traditional story of economics and challenges the goal of GDP in favour of a regenerative approach.

Kate Raworth: Exploring doughnut economics. Kate Raworth. 2013–18. https://www.kateraworth.com/animations/.

Mariana Mazzucato - How your iPhone got smart and public sector innovation, 2018 summit (video)

Where did innovations like the GPS originate? University College London's (UCL) Mariana Mazzucato is on a mission to bust the myth that the private sector is only innovative and that the public sector is only bureaucratic. Indeed, she makes the point that many of our most popular examples of innovation today started with funding and focus from public sector institutions, and that we should embrace the critical role that they play in delivering positive innovation and solutions.

Time: 15:27mins

How your iPhone got smart and public sector innovation, 2018 summit. Ellen MacArthur Foundation. 2018 https://www.youtube.com/.

Sources of information regarding Finland's circular economy policies intending to achieve sustainable development

The circular economy enters the world stage, with Finland leading the way. The Guardian. 2017. https://www.theguardian.com/.

Eco-innovation at the heart of European policies. European Commission. 2017. https://ec.europa.eu/environment/ecoap/finland_en/.

Eco-innovation in Finland. European Commission/Eco-innovation observatory. 2016–7. https://ec.europa.eu/environment/ecoap/sites/ecoap_stayconnected/files/field/field-country-files/finland_eio_country_profile_2016-2017_1.pdf.

A circular economy. SITRA. 2018. https://www.sitra.fi/en/topics/a-circular-economy/.

Circular economy case studies

A good resource for understanding how businesses are adopting circular economy principles—search by sector or topic.

Case Studies. Ellen MacArthur Foundation. 2017. https://www.ellenmacarthurfoundation.org/case-studies/.

Introduction

This guidance should be read in conjunction with the Diploma Programme *Economics guide* (first assessment 2022).

The purpose of this teacher support material is to:

- outline the requirements for the standard level (SL) and higher level (HL) internal assessment (IA)
- provide teachers with examples of the kinds of IA work that can be undertaken
- provide teachers with further guidance on how to approach the IA and how to assist students with researching, writing and presenting.

Nature and purpose of internal assessment

Internal assessment is an integral, and compulsory, part of both the SL and HL course of study in economics and accounts for 20% of the final mark at higher level (HL) and 30% of the final mark at standard level (SL).

The internal assessment component, as well as being interesting and productive, forms an important part of the assessment of the economics course. It is essential that the teacher provides appropriate guidance to students. Students must also be given a copy of the internal assessment details—SL and HL and the internal assessment criteria in the *Economics guide* (first assessment 2022)

Internal assessment in DP economics

At a glance
• 20 hours of class time • Article identified, and commentary written independently • Portfolio of three commentaries • A different key concept is to be used in each commentary • 800 words (maximum) for each commentary • Marked by the teacher • Externally moderated by the IB • 20% of total marks at HL and 30% at SL

Internal assessment enables students to apply their knowledge of economic theory to real-world situations without the time constraints of written examinations. The production of a portfolio of three commentaries based on extracts from published news media has a number of further advantages.

The portfolio:

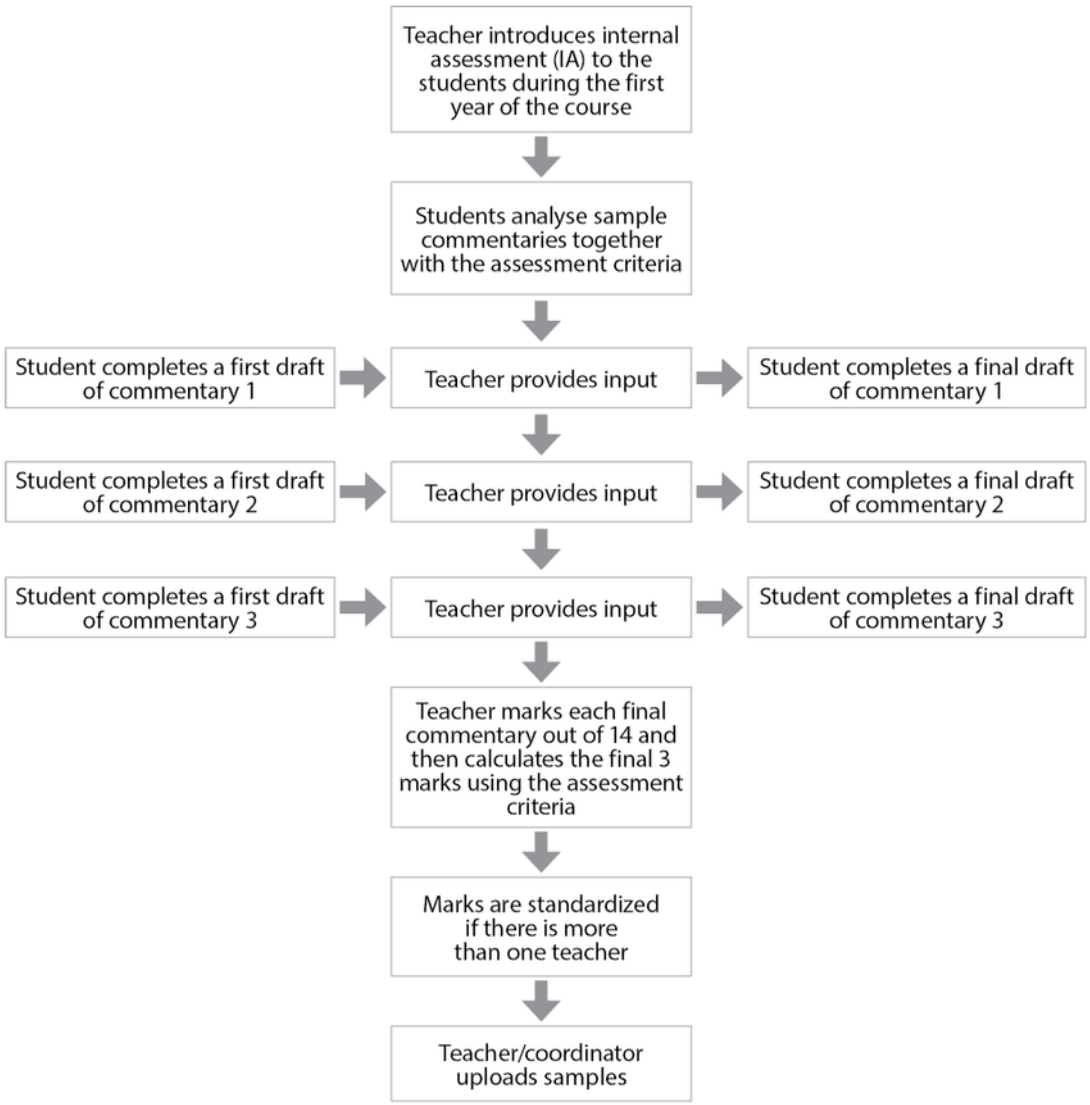
- allows students to follow contemporary issues
- allows students to explore theories in more detail
- encourages students to adopt and maintain a conceptual approach to economic issues
- enables students to follow up aspects of economics in which they are particularly interested. It enables them either to focus on international issues to broaden their understanding of the global impact of economics, or to focus on issues particularly relevant to their own country or region
- can be used as a motivating factor, increasing the liveliness and relevance of classroom sessions. As it does not add any content to the syllabus, it can be a natural part of classroom and homework activities
- is a way of rewarding student enthusiasm and achievements during the learning process.

Preparation and completion of internal assessment

The following diagram illustrates the suggested stages in the process.

Figure 9

Preparation and completion of internal assessment



How to choose an article

The nature of articles

The choice of an appropriate article is the most crucial aspect of writing a successful commentary. The article used does not have to be purely economic, as the application of economic theories and key concepts can be observed in many areas. Articles without any obvious economics are sometimes the most effective, allowing students to introduce economic analysis where it is not immediately apparent.

Articles that include substantial economic analysis, such as in The Economist, while allowable as a source, may leave little opportunity for further analysis. It is expected that students add value to the extract via analysis and evaluation.

Articles which contain mostly numerical data, with little supporting text, may be difficult to analyse effectively.

Suitable articles

Articles must be chosen from the news media: newspapers, magazines or the internet. Students need to look for articles relating to current events, and these must be published no earlier than one year before the writing of the commentary.

The internet is a good source of articles. However, news media websites are the only appropriate sources. The use of blogs is not allowed for internal assessment unless these are associated with recognized news organizations. Students must take care to record correctly the actual date the article was published, not just when it was posted on the internet.

Graphic sources (for example, pictures, cartoons and advertisements) are not to be used as source articles: these do not qualify as articles for the purpose of this internal assessment.

Students must take care not to choose articles where there is little room for their own analysis and evaluation.

When selecting articles, students must be confident that:

- they are able to identify relevant economic theory
- appropriate diagrams can be drawn to illustrate the issue(s)
- there is scope for effective evaluation
- they use one of the key concepts to analyse the issue being discussed in the article.

Time period of articles

It is helpful to encourage students to collect articles for their commentaries throughout the course. However, commentaries must be written within a year of the published date of the article.

Length of articles

Shorter articles are often a good choice as they tend to be focused on just one or two economic theories/concepts. A rough guide is approximately one full side of A4/letter-size paper (in font 10–12 with normal line spacing) and no longer than two sides of A4/letter-size paper. It is important to note that moderators (external examiners) will not read beyond two sides of text.

Articles that are too short will not usually provide enough interesting issues for students to analyse.

If students wish to use a long article, they must include the original article in its entirety, with the selected part(s) highlighted. This helps students to stay focused. Students must remember that the teacher and moderator will only read the highlighted section(s) and **it is crucial, therefore, to highlight all the relevant sections in the article.**

Students should ensure they choose an article with enough information to write a comprehensive commentary. Additional resources should not be used. If there is not sufficient information in the chosen article to write a comprehensive commentary on, the article is not suitable.

Language of articles

In most cases the article chosen will be in the same language as the commentary. If an article in another language is used, the student must provide an accurate translation of the whole article. Students must also include the original article in their portfolio.

If students wish to use a long article, the selected part(s) must be highlighted, both on the translation and the original. (See "Length of articles".)

Individual work on the articles and commentaries

Students must select their own articles to analyse. The teacher must not give the articles to the class or even a single extract to a group of students. It can happen that students select the same articles by chance. This is acceptable, provided the teacher is confident that each of the students involved sourced the article independently. However, the teacher may require students to find alternative articles.

The production of the commentary must also be each student's individual work and must not be prepared collaboratively with any other members of the class. Commentaries must not be based on any articles used for class activities.

For further information, refer to the sections "Responsibilities of the teacher" and "Responsibilities of the student".

Managing the process

Time allocation

It is important that the teacher prepares the students for the internal assessment requirements in good time to meet the school's internal deadlines in preparation for the external deadline.

Teachers can start the process once they consider that students have enough knowledge of economics to adequately address the articles. Experience suggests that the best time to introduce the internal assessment component to students is approximately halfway through the first year of a two-year course.

The three commentaries should be written over a period of about one calendar year, so that much of the syllabus is known to students and they are not restricted in the choice of economic theories/concepts to address in their commentaries.

The school should set its own internal deadlines and the students must be made aware of these.

When planning courses and deadlines, economics teachers should endeavour to coordinate deadlines with teachers of other Diploma Programme subjects and with the Diploma Programme coordinator.

Practice commentaries

Before students commence work on their own portfolios, it is strongly recommended that teachers introduce the process by using a practice article requiring the students to produce a practice commentary as a piece of formative assessment. Students may write one (or more) practice commentaries before writing the required three commentaries at regular intervals throughout the rest of the course.

It is also recommended that teachers introduce students to some of the sample commentaries in this publication, in order that they gain a good understanding of how the marking criteria are applied.

It is not in the best interests of students to write large numbers of commentaries as this may detract from their other course activities.

Integration into classroom activities

Internal assessment work should be included in normal classroom activities.

Some suggested activities include:

- presenting and discussing the nature of the internal assessment and the assessment criteria
- giving advice on suitable media resources to use
- encouraging students to bring into class articles they think are suitable sources
- discussing the way to write a commentary—focusing on strategies for writing commentaries and giving particular attention to evaluation and the relevance of key concepts.

Responsibilities of the teacher

It is the responsibility of the teacher to ensure that students are familiar with:

- the requirements of the type of work to be internally assessed
- the nature of the sources of the articles
- the formal requirements of the portfolio
- the nature of teacher support
- IB academic honesty policy
- the school's internal deadlines
- the assessment criteria; students must understand that the work submitted for assessment must address these criteria effectively.

The teacher must:

- ensure that all students understand the basic meaning and significance of concepts that relate to academic honesty, especially authenticity and intellectual property
- ensure that all students understand the meaning and significance of the nine key concepts in economics
- ensure that all student work for assessment is prepared according to the requirements and explain clearly to students that internally-assessed work must be entirely their own
- give advice to students on a first draft of the internally-assessed work—this advice could suggest the way in which the work could be improved, but this first draft must not be heavily annotated or edited by the teacher. The advice may be oral, written, or both. The next version handed to the teacher after the first draft must be the final one
- establish that all work submitted to the IB for moderation or assessment does not include suspected or confirmed malpractice
- mark each commentary in the final portfolio using the internal assessment criteria
- engage in an internal moderation process to ensure that teachers in the same examination centre are applying the assessment criteria in a consistent manner.

Authenticity

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 choice of articles.
- The first draft of the written work.
- The references cited.
- The style of writing compared with work known to be that of the student.

For further details refer to *Academic integrity* and the relevant articles in the *General regulations: Diploma Programme*.

Recommendations

It is strongly recommended that the teacher:

- reads recent economics subject reports
- prepares a guidance booklet for students

- dedicates 20 hours of class time to internal assessment
- ensures students are familiar with the internal assessment criteria and provides copies of the assessment criteria to students
- provides an exemplar portfolio for students to read and discuss
- provides the student with advice and guidance on how to choose articles for his or her commentaries, but does not choose these for the student
- provides the student with advice and guidance on how to produce a good commentary
- undertakes a practice commentary with students.

Assessing the commentaries and whole portfolio

Teachers must assess each commentary individually, using the internal assessment criteria, and decide which level is most appropriate for each criterion. Guidance is provided in the *Economics guide* (first assessment 2022) in the section "Using assessment criteria for internal assessment". See also the section "Internal assessment criteria–SL and HL" in this publication.

Each commentary is marked using criteria A–E, with a maximum of 14 marks awarded for each commentary. The marks for the three commentaries will provide a maximum of 42 marks.

The teacher must then assess the rubric requirements for the whole portfolio (that is, the three commentaries) by using criterion F, awarding a maximum of 3 marks.

The maximum marks for the whole portfolio is 45: (14 marks x 3 commentaries) + 3 marks = 42 + 3 marks.

If there is more than one economics teacher involved in assessing the portfolios, the teachers must agree and standardize the marks given to each student.

The teacher-generated marks are then externally moderated. Teachers must be aware that marks may be changed as a result of external moderation.

Irregular situations

If a student fails to produce three commentaries the work must be assessed accordingly.

Each individual commentary that is submitted is marked as normal (using criteria A–E, awarding a maximum of 14 marks for each commentary). For criterion F, relating to the rubric requirements for the whole portfolio, marks should be awarded normally and reduced by the percentage of the portfolio not submitted. For example, a student with two commentaries will lose one mark and a student with one commentary will lose two marks.

Full details on irregular situations and the procedures for students who do not complete the full internal assessment requirements are outlined in the Diploma Programme *Assessment procedures*.

Teacher comments on the portfolio

Teachers are encouraged to provide comments on all candidates' work submitted for internal assessment to indicate how marks have been allocated for each criterion. These comments can be written on accompanying forms (where applicable) and/or entered into the teacher comments box on the internal assessment mark entry and sample selection screen during the uploading process.

These comments are intended to provide guidance for the moderator on mark allocation. Comments should not be in the form of feedback to the student. Comments should not be written on the commentary.

Responsibilities of the student

It is the responsibility of the student to:

- choose the articles used for the three commentaries independently
- observe the regulations relating to internal assessment
- meet deadlines
- acknowledge all sources of information and ideas using a recognized referencing format that meets the minimum requirements of the IB.

It is strongly recommended that students:

- start work early
- take care, when selecting articles, that they are appropriate and enable the student to access all levels of the assessment bands
- pay careful attention to the assessment criteria
- consult news media sources regularly
- check and proofread the final version of each commentary carefully.

Academic honesty and referencing

It is the responsibility of teachers to ensure that all students understand the basic meaning and significance of concepts that relate to academic honesty, especially authenticity and intellectual property. Refer to the publication *Effective citing and referencing*. Teachers must ensure that all student work for assessment is prepared according to the requirements and must explain clearly to students that internally-assessed work must be entirely their own.

The following information does not require referencing:

- information and analysis based on standard economic theory
- quotations from the article upon which the commentary is based (see below).

Anything that does not fall into the above categories must be cited consistently by the student using the recognized academic reference format.

Students may use quotations from the articles but students must be careful not to include too many quotations, leaving little room for their own analysis. Quotations from the article do not need to be referenced, although these must be identified clearly as quotations by using inverted commas.

References from the internet must be cited fully, including the full web address and the date the site was accessed.

Sometimes students use sources that are from a news agency, for example, Thomson Reuters or Associated Press, and these appear in another publication. Students must cite the final publication, not the news agency, as the source.

Unit planner examples

These unit planners (in Word) are provided as examples and should not be taken as definitive but as inspiration.

Unit planner: Introduction to economics (Word) (PDF)

Unit planner: Microeconomics (Word) (PDF)

Unit planner: Macroeconomics (Word) (PDF)

Unit planner: The global economy (Word) (PDF)

Blank template (Word)

Lesson plan examples

Overview

The following lesson plan examples can be used by teachers to explore the course. The examples may be used as provided or adapted accordingly. Note that they are in two different forms, showing the flexibility in approaches.

Sample lesson plans

Unit 2: Microeconomics

Real-world issue 2: When are markets unable to satisfy important economic objectives —and does government intervention help?

Conceptual understandings
• The market mechanism may result in socially-undesirable outcomes that do not achieve **efficiency**, environmental **sustainability** and/or **equity** • Market failure, resulting in allocative inefficiency and welfare loss • Resource overuse, resulting in challenges to environmental **sustainability** • Inequity, resulting in inequalities • Governments have policy tools which can affect market outcomes, and government **intervention** is effective, to varying degrees, in different real-world markets

Development of real-world examples

This exercise will facilitate the development of real-world examples in the context of market failure. A cross-comparison chart can be used. This is used to compare real-world examples or inquiries with a conceptual question or concept as in this case.

This method allows students to organize a series of real-world examples into a table where they can examine connections with a concept. Students then fill in the columns based on the headings. The headings facilitate an inquiry using concepts. The structure allows students to deepen the knowledge of the field of inquiry. They can examine to what degree the inquiries reveal similar outcomes or characteristics. They can then explore the degree to which observations can be generalied to these and other real-world examples.

The individual real-world examples can be arranged as shown below in a cross-comparison chart to organize them and examine them in terms of one concept. In this case **intervention** is being examined.

Figure 10

A cross-comparison chart

A link to each market failure example*	A series of questions that apply to all the case studies selected**	Example question, What government action was taken?	What graph can illustrate the intervention?	How successful was the intervention?	What alternatives might have been attempted?
Link to case 1					
Link to case 2					

* *Provide the news video or newspaper article in this column*

** *This column might ask students to summarize what the key elements of the source are*

Students complete the table above. The prompts at the top of each column direct students to the concept and invite them to explore the market failure identified in terms of the concept **intervention**.

Unit 3: Macroeconomics

Real-world issue 1: Why does economic activity vary over time and why does this matter?

Conceptual understandings
• **Change** in the conditions of the demand and supply sides of the economy cause economic activity to vary over time • Fluctuations in economic activity impact the **economic well-being** of individuals and societies • Different schools of macroeconomic thought identify different causes and offer different solutions for macroeconomic problems

Scaffolding the internal assessment

This lesson plan example is intended to help scaffold the introduction of the new internal assessment which requires explicit links between articles and concepts to be established.

- Identify two key concepts.
- Students should search for macroeconomic articles they feel most represent these key concepts.
- Use a concept map with the key concepts as axes (refer to figure 11).
- Students read the articles and consider to what degree the key concepts apply. Which articles exemplify which concept the most? Discuss why.
- Place the heading of the article on the concept map (shown below), or the whole article if there is space. The ranking should be further discussed to establish as broad a consensus as possible.
- Students should then discuss what other key concepts they feel can be identified in the articles.
- The exercise above could potentially be repeated with further key concepts to see to what degree others might apply.

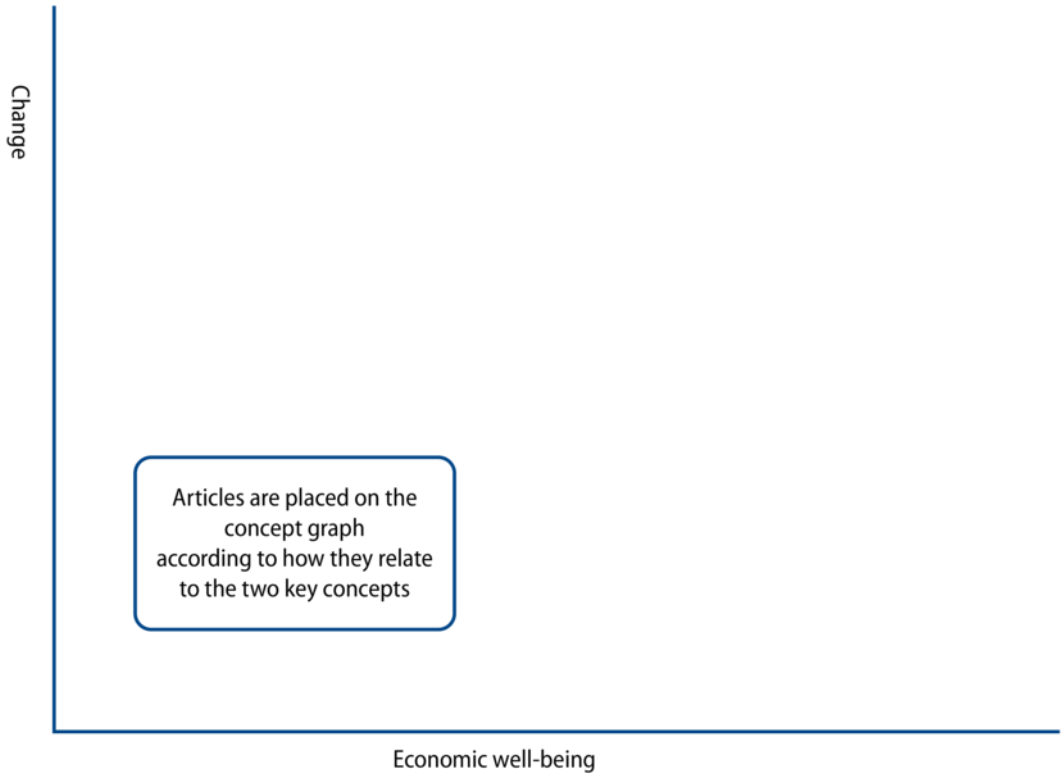
The intention is to:

1. support the internal assessment component of the course
2. develop students' understanding of the articles and their ability to apply key concepts to them
3. to further expand the range of inquiries undertaken
4. to broaden the range of real-world examples with which students are familiar.

The concept map could be drawn as shown below:

Figure 11

A concept map



Unit 4: The global economy

Real-world issue 1: Who are the winners and losers of the integration of the world's economies?

Conceptual understandings
• The increased **interdependence** of economies has benefits and costs
• Increased economic integration may result in **efficiency**, welfare gains and improvements in **economic well-being** but the benefits may not result in **equity**

A simulation using the trade game

This game is a simulation in which students are divided into countries which have different resource endowments. They then have to trade using the raw materials and factors that they have been "allocated". As a result of the distribution of resources and factors, the "richer" countries tend to be able to improve their wealth through trade more easily than the "poorer" countries.

Students then debate, what happened and why, using the key concepts. An inquiry follows in which students attempt to apply their conclusions to real world examples

Possible resources where these trading games can be found include:

- economicsnetwork.ac.uk
- nationalgeographic.org
- imf.org
- need.org

One class of 45 minutes or more

1. Download and prepare the game. The website offers complete instructions on how to run the game
2. Allow 45 minutes for the game to run. It is a good idea to introduce new additional quantities of resources that can just be allocated to a country. This helps to emphasize the luck element involved with the endowments of natural resources
3. At the end of the game students report their new levels of money and wealth
4. A discussion should now follow to try to explain what has happened and why. Which countries have the most money and resources? Did they have the most money and resources to begin with?
5. The discussion should focus on the key concepts of **economic well-being** and **equity**. What does **economic well-being** mean in this context? Has the **economic well-being** of all participants increased? Why? Why not?

Identify the other key concepts that could be used to examine the issue of International trade. Which ones would apply here? How would they apply?

Students should now research current issues relating to trade. Current trade disputes and trade agreements could be examined in light of the findings from the simulation.

Unit 4: The global economy

Real-world issue 2: Why is economic development uneven?

Conceptual understandings
• Perceptions of the meanings of development and **equity** change over time and vary across cultures
• Governments and other economic agents may intervene in an attempt to promote **economic well-being** and **equity** in societies
• The pursuit of **sustainability** is subject to various constraints
• Effective strategies should take account of the relevant social, economic, and political context

Development data

In this inquiry students need to obtain development data. A good source is the OECD website (data.oecd.org).

They have a very detailed site that allows data to be refined. It is a good idea to plan what data you want to collect. Also, identify which countries you will collect data for. Students may otherwise struggle with the quantity of data available. Ask students what data they think should be collected.

Students could assemble data collected into simple tables. They should be asked to articulate what relationships they can see in the data.

Is there equity reflected in the data?

This is best used and followed up with a concept roles exercise. Students adopt the role of key sub concepts (related concepts) or indicators that the data reveal or represent—life expectancy, equality, GDP per capita and welfare, etc. These should be written on cards so that others in the group can see what each student represents. Then the students form a circle. Each one is then asked to explain the link to the concept role (card) held by another student within the group that they feel is most strongly related to their own. They will need to justify their choice. The teacher should cross-examine the reasoning offered. Other students should also be encouraged to contribute. This activity can be repeated around the room to establish second and third choices.

This would lead to a piece of follow up writing to summarize the discussion.

Reference

Marschall, C and French, R. 2018. *Concept-Based Inquiry in Action: Strategies to Promote Transferable Understanding*. Pp132–33. Thousand Oaks, California, USA. SAGE Publications Inc.

Concept-based lesson plans

Unit 1: Introduction to economics

Lesson title: The problem of choice

Lesson time: 60 to 80 minutes

Conceptual understandings: The central problems of economics are **scarcity** and **choice**. This forces societies to face trade-offs, opportunity costs and the challenges of **sustainability**.

Inquiry statement: The problem of choice.

Key concepts: Scarcity, choice, sustainability.

TOK inquiry: To what extent have individuals shifted the paradigms of economics?

ATL skills: Thinking skills, social skills, collaboration skills, communication skills.

DP economics prior knowledge: Economics as a social science.

DP economics content: Unit 1.1: The problem of choice.

Note: each of the following tables shows an activity that is part of this lesson plan. The activities are intended to be used consecutively.

Teacher-initiated class discussion on scarcity	
Timing	5–10 minutes
Suggested approaches	Teacher initiates a class discussion on scarcity by asking a few though leading questions like: What is scarcity? What are our needs versus wants?
Possible resources	econlib.org, Investopedia.com
Outcome	Students are introduced to the concept of scarcity.

Provocation activity of building a straw bridge structure in small groups of 4 to 5 students	
Timing	5–10 minutes
Suggested approaches	Teacher to organize students in small groups for a provocation activity. Students in groups to be given some resources such that they are expected to build a feasible structure, for example, a straw bridge, within a limited time and with the condition that it must carry a specified amount of weight. (Materials such as straws, tape, scissors). However, each group is not to receive the same resources, but groups are allowed to trade with each other. Teachers may change this activity to any other construction activity where groups are given varied resources and may be required to trade with each other to complete their activity well.
Possible resources	Straws, tape, scissors, measuring stick or ruler *Hands-on Activity: Straw Bridges.* teachengineering.org
Outcome	Students experience in a fun manner the choices that they have to make when faced with scarce resources in the construction of the straw bridge.

Reflective class discussion	
Timing	10–15 minutes
Suggested approaches	Teacher to lead a reflective class discussion—why were some groups successful while others were not? What kind of trading did they indulge in? Was it helpful?

Reflective class discussion	
	Teachers are then to liken the student groups to economies in real life and discuss why some economies are successful while others are not.
Outcome	Students get an opportunity to understand why some economies are economically developed while others may not be, why some economies have high rates of economic growth while others may not.

Students are introduced to the various factors of production	
Timing	5–10 minutes
Suggested approaches	Teachers to lead the discussion to factors of production in an economy and whether there is enough for economies to produce all their needs and wants.
Outcome	Students are introduced to factors of production.

Short activity on identifying the factors of production in various economies	
Timing	5–10 minutes
Suggested approaches	Teachers to organize students in small groups for a short activity where the students in groups are to research/discuss and present to the class the major factors of production of five countries that provide them sources for economic power with evidence of economic data and its interpretation. This activity can also be carried out without research where the students contribute information about factors of production about various economies from their prior knowledge.
Outcome	Students learn about real-world examples of factors of production in various countries.

Class discussion on sustainable use of factors of production	
Timing	10–15 minutes
Suggested approaches	Teachers to lead a class discussion on whether economies are making sustainable choices in the use of their scarce factors of production? And also the TOK inquiry "To what extent have individuals shifted the paradigms of economics?" Topics such as global warming, irresponsible use of plastics, depletion of forests and wildlife etc can be discussed.
Outcome	Students learn about whether economies are making sustainable choices on the use of factors of production.

Class discussion on opportunity costs and wrap up of the concepts of scarcity, sustainability and choices that economies and individuals make	
Timing	10 minutes
Suggested approaches	Teachers introduce the concept of opportunity cost with any one of the world problems, for example, cheap palm oil to consumers and producers and ask what is the opportunity cost?
Outcome	Students are introduced to the concept of opportunity cost that arises from the sustainable or unsustainable choices that individuals or economies make.

Unit 2: Microeconomics

Lesson title: Examining economic propositions for solving market failure issues

Lesson time: 60 to 80 minutes

Real-world issue: When are markets unable to satisfy important economic objectives—and does government intervention help?

Inquiry statement: The impact of government policies to correct market failure resulting from externalities.

Key concepts: Change, intervention.

TOK inquiry: To what extent should fairness and justice inform economic thinking?

ATL skills: Thinking skills, Social skills, collaboration skills, communication skills.

DP economics prior knowledge: Government intervention methods, basic understanding of market failure.

Note: each of the following tables shows an activity that is part of this lesson plan. The activities are intended to be used consecutively.

Introduction to the topic of government intervention to societal issues	
Timing	10–15 minutes
Suggested approaches	Students are to be divided into small groups of 4 to 5 students based on class size. Teacher will initiate a short discussion regarding societal issues (smoking, pollution, global warming, etc) to serve as a provocation to the class activity based on recent happenings. As it is a provocation activity, the discussion needs to be kept short.
Resources	Knowledge of recent happenings of market failure in society Example: Article about extreme heat wave conditions in Australia *Extreme heatwave in Australia: catastrophic fire conditions as temperature records broken*. 28 December 2018. theguardian.com Example: Article about Yangtse river pollution *Chinese Authorities Crack Down on Yangtze River Environmental Offenders*. 30 July 2018. globalelr.com/.
Outcome	This short discussion is to serve as a provocation discussion to reinforce the prevalence of externalities in our society.

Students to individually read and analyse a news article provided by the teacher	
Timing	10–15 minutes
Suggested approaches	Students work in groups of 3 to 5. Each group member receives the same news article. Teacher to provide articles of case studies of the externalities found in different news media. Teachers may also choose graded reading news articles for differentiated readers. Alternatively, the students in each group can also search and find articles of their interest to read and analyse.
Resources	Examples of teacher provided articles or materials Global warming issues *Global Warming Impacts: The consequences of climate change are already here.* 17 January 2018. ucsusa.org/our-work/. Smoking issues

Students to individually read and analyse a news article provided by the teacher	
	Data and statistics: Fast facts and Fact sheets: Health Effects of Cigarette Smoking. 17 January 2018. cdc.gov/tobacco/.
Outcome	The news article provided by the teacher serves as examples of real-world externalities.

Student group discussion using the visible-thinking compass point technique	
Timing	20–25 minutes
Suggested approaches	Students in their groups are to discuss through visible thinking-compass point discussion technique the solutions that the students can think of to solve the problem, keeping in mind the TOK inquiry question "To what extent should fairness and justice inform economic thinking?" Teachers to explain the compass point discussion technique to the students, the prompts "excited", "worrisome", "need to know" and "stance" are used to start the discussion. Teacher to introduce the TOK focus for this lesson and guide students to examine the TOK inquiry question in their proposed solution "To what extent should fairness and justice inform economic thinking?" Teachers to move from group to group and encourage student participation in the discussion. Based on availability of time and the extension possible to this activity, the students can even be requested to explain their solutions through economic diagrams (tax, subsidy etc).
Resources	Visible thinking Compass point discussion technique (http://www.visiblethinkingpz.org/VisibleThinking_html_files/03_ThinkingRoutines/03c_Core_routines/CompassPoints/CompassPoints_Routine.html)
Outcome	A collaborative approach to problem solving through discussion and evaluation of the various propositions.

Presentation of a problem	
Timing	10–15 minutes
Suggested approaches	Presentation of a problem through a simple PowerPoint presentation/or simple verbal presentation to the class that represents their note taking and their suggestions. Teacher to facilitate the presentation.
Resources	LCD projector
Outcome	Students will gain an understanding of the various ways in which market failure can be solved through Government intervention.

Wrap-up discussion of the market failure issues and solutions	
Timing	10 minutes
Suggested approaches	Teacher summarizes the presentation discussions, draws connections to the previous learning of various forms of Government intervention.
Outcome	Student understanding and application of economic theory is reinforced.

Teachers may find it helpful to refer to the concept-based model by Lynn Erickson.

Erickson, L. "Synergistic Thinking and Conceptual Understanding in the IB Programmes". *2011 IBAEM regional conference*. The Hague, 27–30 October 2011.

Unit 3: Macroeconomics

Lesson title: The economic crisis in Venezuela

Lesson time: 60 to 80 minutes

Real-world issue: Why does economic activity vary over time and why does this matter?

Inquiry statement: How the government of a chosen country has responded to business cycle fluctuations

Key concepts: Change and economic well-being

TOK inquiry: To what extent do political ideologies influence a person's preference for one school of macroeconomic thought over another?

ATL skills: Research skills, social skills, collaboration skills, communication skills and thinking skills

DP economics prior knowledge: Business cycle concept, macroeconomic objectives

Note: each of the following tables shows an activity that is part of this lesson plan. The activities are intended to be used consecutively.

A broad general discussion of the historical development of Venezuela and the growing crisis	
Timing	5–10 minutes
Suggested approaches	Showcasing the video Teacher-led inquiry question such as: Do economies go through changes? What changes has Venezuela gone through recently? What has caused these changes in Venezuela? In order to address the TOK question of impact of political ideologies, a brief discussion regarding Venezuela's political ideology can be taken up.
Resources	Videos *Venezuela Crisis Explained (Short Documentary 2017).* 2017. https://www.youtube.com/. and/or *Why is Venezuela in crisis?* NowThis World. 2015. https://www.youtube.com/.
Outcome	Students gain a general understanding that economic well-being is not static and is subject to change.

PechaKucha style presentation	
Timing	25–30 minutes
Suggested approaches	Students will be grouped in small groups of four to five students and tasked to deliberate, discuss and prepare a short (less than five minutes) PechaKucha presentation on the impact of macroeconomic objectives on the changing economic well-being of Venezuela since the discovery of oil to its present state. Teachers may ask student groups to research based on a few suggested websites or provide a few article links to contain the length and depth of this short research activity. Alternatively, the activity can be extended based on the time availability for the lesson. Teachers may also provide recent websites, videos and articles appropriate for the needs of their class based on differentiated student needs
Resources	PechaKucha presentation (https://www.wabisabilearning.com/blog/how-to-make-great-presentations-with-pecha-kucha/.) Example of websites https://www.cia.gov/library/publications/the-world-factbook/. country.eiu.com.

PechaKucha style presentation	
	https://atlas.media.mit.edu/en/. Examples of article links Aid Row *Venezuela crisis: Border clashes as aid row intensifies*. https://www.bbc.co.uk/news/world-latin-america/ Minimum wage hike article *Venezuela's 5th minimum wage hike in a year shows its economy is collapsing*. Vox. 2017. https://www.vox.com/. Release of new banknotes *Venezuela releases new banknotes in cash crisis*. Business insider. 2017. https://www.businessinsider.com/.
Outcome	Students inquire, understand and track macroeconomic objectives and the impact on economic well-being with evidence from real-world events and happenings.

Sharing of PechaKucha presentations	
Timing	20–25 minutes
Suggested approaches	Students to share their presentation with their classmates. Teacher to encourage students to explain evidenced based reasons for their claims.
Outcome	Students gain an understanding that different student groups may confer or disagree with the economic reason and perspectives of changing economic well-being.

Wrap-up discussion	
Timing	5–10 minutes
Suggested approaches	Teacher-led discussion to wrap up the key concepts of change and economic well-being and the inquiry-based learning. Based on the initial discussions with the students, the following TOK question could also be taken up in the context of Venezuela: "To what extent do political ideologies influence a person's preference for one school of macroeconomic thought over another?"
Outcome	Students students to gain an overarching understanding of change and economic well-being in the context of "to what extent do political ideologies influence a person's preference for one school of macroeconomic thought over another?"

Unit 4: The global economy

Lesson title: Will China be the world's top economy?

Lesson time: 60 to 80 minutes

Real-world issue: Who are the winners and losers of the integration of the world's economies?

Inquiry statement: Methods a government uses to manage international trade practices for economic growth

Key concepts: Interdependence

TOK inquiry: To what extent would economic interdependence ever be considered undesirable?

ATL skills: Thinking skills, social skills, collaboration skills, communication skills

DP economics prior knowledge: Understanding of international trade

DP economics content: Global economy 4.1: Benefits of international trade

Note: each of the following tables shows an activity that is part of this lesson plan. The activities are intended to be used consecutively.

Teacher to introduce the Belt and Road Initiative (BRI) of the Chinese Government to the class	
Timing	10–15 minutes
Suggested approaches	Teacher to introduce the Belt and Road Initiative (BRI) of the Chinese Government to the class. Teacher to discuss China's growing population and its plans to be world's topmost economy and to economically develop China. For example, what is the BRI? Why is China invested in this project? How is the BRI project being financed? Why are countries cooperating with China—what do these other countries hope to gain from the BRI? Teachers may also introduce the trade war between China and the US, for example, the continual change/increase of tariffs on imports into US from China to the alternate measures of economic growth being made possible by China. If students are in countries impacted directly by the Chinese BRI, then teachers are to discuss the infrastructure initiatives being planned or that have taken place in the country.
Resources	Teacher can review the following videos which can also be shown to the students. *China's trillion dollar plan to dominate global trade.* Vox. 2018. https://www.youtube.com/. *Chinese Investment Boosts Ethiopia's Economy*. CGTN Africa. 2015. https://www.youtube.com/.
Outcome	Opening discussion to get the students interested in the strategies that countries adopt for economic growth and to serve as a diagnostic method to find out about the students previous learning and understandings.

Watch informative videos	
Timing	10–15 minutes
Suggested approaches	Students are to be shown the two videos given in resources. Teachers may replace the videos provided in resources with any other appropriate video. If time permits or if teachers wish to extend this activity, then they can also show episodes from CNA's The New Silk Road series.
Resources	*China's trillion dollar plan to dominate global trade.* Vox. 2018. https://www.youtube.com/. *Chinese Investment Boosts Ethiopia's Economy*. CGTN Africa. 2015. https://www.youtube.com/. *The New Silk Road series.* CNA International Edition. 2015. https://www.channelnewsasia.com/news/video-on-demand/.
Outcome	Students to understand China's role in world trade.

Students write a short 300-word individual reflective commentary on China's economic growth plans and the interdependence of the various partner countries	
Timing	10–15 minutes
Suggested approaches	Students write a short 300-word individual reflective commentary on China's economic growth plans and the interdependence of the various partner countries.

Students write a short 300-word individual reflective commentary on China's economic growth plans and the interdependence of the various partner countries	
	Teachers may give students the option of writing a digital commentary using online collaborative platforms, such as Padlet or any others.
Resources	Digital collaborative tools https://padlet.com/. Google docs
Outcome	Students understand the benefits of international trade.

Following the written commentary, students to be organized in groups of four to five students and tasked to take on a specific role for Circle of viewpoints visible-thinking routine to discuss the BRI. They are to answer the questions "Who are the winners and losers of the integration of the world's economies?" and "How soon will China be the world's top economy?"	
Timing	15–20 minutes
Suggested approaches	Following the written commentary, students to be organized in groups of four to five students and tasked to take on a specific role for Circle of viewpoints visible-thinking routine to discuss the BRI. They are to answer the questions: "Who are the winners and losers of the integration of the world's economies?" and "How soon will China be the world's top economy?" Teacher to help students to organize themselves in assigned roles so that the student groups can have a fruitful discussion with different points of view. For example, Government representative from China, a farmer/Investors/businessperson/ consumers/producers/human right activist in a country where the BRI is taking place, government representative from another country.
Resources	Visible thinking Routine–Circle of Viewpoints http://www.visiblethinkingpz.org/ VisibleThinking_ht ml_files/03_ThinkingRoutines/03e_FairnessRoutines/ CircleViewpoints/CircleViewpoints_Routine.html
Outcome	Students will be able to discuss the BRI initiative from various points of view to gain an understanding of who are the possible winners and losers of interdependence.

Student groups to present their viewpoints to the class	
Timing	10–20 minutes
Suggested approaches	Teachers to encourage all students to participate. Teachers may also extend this activity by allowing students to prepare a PowerPoint based on research and discussion, depending on time availability.
Outcome	Students gain a good understanding of the issue from various viewpoints to develop their own critical thinking of the issues of interdependence.

Wrap up general class discussion with students gaining an understanding of the TOK inquiry "To what extent would economic interdependence ever be considered undesirable?"	
Timing	15–20 minutes
Suggested approaches	Teachers to lead a general class discussion where the gains from interdependence are considered along with the TOK inquiry "To what extent would economic interdependence ever be considered undesirable?''

Wrap up general class discussion with students gaining an understanding of the TOK inquiry "To what extent would economic interdependence ever be considered undesirable?"	
Outcome	Students to gain a critical understanding of the pros and cons of economic interdependence.

New curriculum

When is the first assessment for the new iteration of the course and when is the last assessment for the previous course?

First assessment of the new course will be in May 2022 and the last assessment of the previous course will take place in November 2021.

What's new? How can I understand the changes at a glance?

Old (last assessment 2021)	New (first assessment 2022)
No formal introductory unit that forms part of the syllabus	Introduction to economics forms the first unit in the course
International economics and development economics sections are separate	The global economy unit contains elements of both international economics and development economics sections of the previous course
No key concepts addressed in the course	Nine key concepts form part of the course. These are explicitly assessed in the internal assessment
No introductory statements provided for each section of the syllabus	Each unit begins with statements of Conceptual understandings
Each syllabus section is divided into; subtopic, SL/HL core and HL only	Each syllabus unit includes the topic/subtopic, depth of teaching and a diagrams and calculations section (unit 1 only has a diagrams section in the last column)
SL and HL paper 1: students answer two questions. One out of two from microeconomics and one out of two from macroeconomics	SL and HL paper 1: students answer one question from a choice of three that are drawn from any of the four units of the syllabus
SL and HL paper 2; students answer two questions. One out of two from International economics and one out of two from Development economics	SL and HL paper 2 students answer one question from a choice of two that are drawn from any of the four units of the syllabus
HL paper 3: mostly quantitative in nature	HL paper 3: mostly quantitative but includes policy questions that are qualitative in nature

How many syllabus units are there?

There are four syllabus units that form the core content for SL and HL. These are:

- Unit 1: Introduction to economics
- Unit 2: Microeconomics
- Unit 3: Macroeconomics
- Unit 4: The global economy

Note: There is additional HL extension material in "Microeconomics", "Macroeconomics" and "The global economy" units. In the current course there is no formal introductory section in the syllabus but a brief introduction in the form of a possible unit of work. Unit 4 (The global economy) in the new course contains elements of international economics and development economics present in the current course.

Are there key concepts in the new course?

Yes. Nine key concepts have been introduced in the new course (scarcity, choice, efficiency, equity, economic well-being, sustainability, change, interdependence, intervention).

These key concepts should transcend the individual topics and bind together the insights of the discipline providing connectivity to students' learning of economics.

Do I have to cover all the key concepts?

The key concepts weave a thread throughout the course and it is expected that all students develop an understanding of these and can discuss them critically in relation to the content studied.

Will the key concepts be assessed?

Yes, they will be explicitly assessed in the internal assessment.

How are the syllabus units structured?

Each unit begins with conceptual understandings. These are statements summarizing important ideas and core processes that are central to a unit, including the key concepts. They synthesize what students should understand—not just know or do—as a result of studying a particular content area.

Each unit's topics are guided by assessment objectives regarding the depth of teaching required. There is also a diagrams and calculations column to indicate where these are required in the syllabus.

What about real-world issues and contemporary content?

Real-world issues

Students must explore the three units of "Microeconomics", "Macroeconomics" and "The global economy" through the lens of real-world issues; each unit has two real-world issues. Emphasis has also been placed on key global issues like environment, inequality and poverty.

Contemporary content

New aspects like behavioural economics, circular economy and the sustainable development goals (SDGs) are now part of the syllabus.

Is theory of the firm still part of the course?

Reorganization and alignment of some topics was undertaken, and market structure which was most relevant under theory of the firm is now explored using a market failure lens. This can be found in the "Microeconomics" unit under the topic *Market failure—Market power.*

What is the difference between SL and HL in terms of the taught curriculum?

In units 2, 3 and 4 there are HL extension sections and topics which must be addressed for HL students only.

What's new regarding the approaches to teaching and approaches to learning in the new course?

Inquiry is regarded as an important aspect of this new economics curriculum as a teaching and learning strategy. Teachers need to see the value of this approach in terms of allowing students to develop and demonstrate higher-order thinking such as critical-thinking skills. It is important to highlight that inquiry should to be taking place to ensure students are actively involved in researching economic issues. There is a set of suggested inquiry areas to explore in the guide for teachers to use but this is not an exhaustive list.

Inquiry plays an important role in the development of conceptual understanding. Concepts are anchored in the content of economics—its theories, models, ideas and tools—and come alive through the study of real-world issues and examples. Together these help students to acquire a holistic and integrated understanding of economics as a discipline.

How has the external assessment changed?

Paper 1—extended response paper

The structure for this paper is the same for SL and HL. HL questions can also be drawn from the HL extension material. Students now only answer one question from a choice of three, unlike the previous course where they answered two questions; one question from "Microeconomics" and another from "Macroeconomics". In addition, questions can be drawn from the four units of the syllabus unlike in the previous course, where they were only asked from "Microeconomics" and "Macroeconomics" sections respectively. The duration for this paper is 1 hour 15 minutes. The maximum mark for this paper is 25.

Paper 2—data response paper

The structure for this paper is the same for SL and HL. The text/data and questions may be the same at SL and HL. HL questions can be drawn from the HL extension material. Unlike in the previous course, where there were no quantitative questions for SL, SL students will be expected to answer some quantitative questions. HL students will be expected to carry out quantitative calculations, as in the previous course. Students now only answer one question from a choice of two unlike in the previous course where they answered two questions; one question for international economics and another from development economics. In addition, questions can be drawn from the four units of the syllabus unlike in the previous course where they were only asked from international economics and development economics sections respectively. Part (g) of this paper requires an extended response and is worth 15 marks. The duration for this paper is 1 hour 45 minutes. The maximum mark for this paper is 40.

Paper 3 HL only—policy paper

This is a structured HL-only quantitative and qualitative paper where students answer two compulsory questions unlike in the previous course where they answered two questions from a choice of three. Each question has subdivided question parts in addition to a policy question worth 10 marks that did not exist in the previous course. The duration for this paper is 1 hour 45 minutes. The maximum mark for this paper is 60 marks.

What about the internal assessment? How has that changed?

Concepts will be explicitly assessed in the internal assessment. The structure of the internal assessment will mostly stay the same as the previous model. However, students will need to demonstrate their understanding and application of three different key concepts by using them as a lens through which to analyse their commentaries. Each commentary will now have a maximum of 800 words.

Refer to the frequently asked questions on "Internal assessment" and the "Guidance for internal assessment" sections in this teacher support material.

What is the difference between SL and HL in terms of assessment?

There are many common aspects to the SL and HL assessment. The specific areas of difference are as follows.

- In paper 1, HL students respond to questions that may be drawn from the HL extension sections and topics as well.
- In paper 2, HL students respond to questions that may be drawn from the HL extension sections and topics as well.
- Paper 3 is for HL only.

I teach a combined SL/HL class. Will I be able to continue to do this?

Yes. However, how teachers manage time and class allocation is left to the discretion of the school, providing that SL and HL students meet their course requirements and contact time.

Internal assessment—general questions

How many areas of the syllabus have to be covered in the portfolio?

Each article in the portfolio must have a different unit of the syllabus (microeconomics, macroeconomics, the global economy) as its main focus. This means that the focus of the commentary will be on the area covered by the article, but it can draw on other areas of the syllabus too.

Does a newspaper and its website source count as the same source?

Yes.

What type of stimulus material should be used as extracts for the commentaries?

The extracts may be from a newspaper, journal or the world wide web but must not be from television or radio broadcasts. Avoid blogs unless they are written as a news extract. Avoid extracts where the analysis is already written (for example, "The Economist").

How should students cite syndicated news articles?

Sometimes students use sources that are from a news agency, for example, Thomson Reuters or Associated Press, and these appear in another publication. Students must cite the final publication as the source, not the news agency. For example, a portfolio might have two articles from Thomson Reuters that were published in two different newspapers.

What time period should the extract cover?

Extracts should be contemporaneous with the course, but they may include material collected up to one year before the commentary is written.

How important is it to meet the word limit requirements?

The word limit requirement is exact, and each commentary must not exceed 800 words. See the section "Word limit" in the *Economics guide* for full details of what is included in the word limit. Moderators will not read beyond 800 words in a commentary.

Is it appropriate to use the first person in the commentary?

There may be situations in which it is acceptable to use the first person. However, appropriate formal language is expected.

Can footnotes, endnotes and/or diagram labels be used to save words in the actual commentary?

No. These are used for referencing purposes only.

Is it essential that the commentaries are word processed?

It is not a requirement that the commentaries are word processed. However, tidy presentation and legibility are important qualities that are easier to achieve through word processing.

What will happen if students complete fewer than three commentaries?

See the sections "Assessing the commentaries and whole portfolio" and "Irregular situations" in the "Responsibilities of the teacher" section.

What information should the teacher provide at the start of the course?

See the section "Responsibilities of the teacher".

How much feedback can the teacher give?

See the section "Responsibilities of the teacher". It is important to note that once the student submits the final commentary, this must not be returned to the student for any alterations.

Can teachers be part of the selection process if a student writes more than three commentaries?

Teachers must not be part of the selection process if more than three commentaries are written. Students alone must decide which three commentaries to submit.

Whose responsibility is it to ensure that the work is that of the student?

This is both the student's and the teacher's responsibility. The use of an online plagiarism control, such as turnitin.com is highly recommended. If plagiarism is suspected the teacher must inform the Diploma Programme coordinator.

What happens if a student does not meet the school's internal deadline for each commentary without good reason?

This is a matter that the school must resolve itself, bearing in mind that the student may miss the external deadline. However, schools must not apply rudimentary penalties if candidates miss internal deadlines. Marks must be awarded on the criteria.

What happens if a student does not meet the external deadline for the portfolio?

The procedure for a student missing the deadlines is outlined in the Diploma Programme *Assessment procedures*. The teacher and Diploma Programme coordinator should check this prior to mark entry.

Internal assessment criteria—SL and HL

The internal assessment criteria are the same for both SL and HL students.

Criterion A: Diagrams

This criterion assesses the extent to which the student is able to construct and explain diagrams.

Marks	Descriptor
0	The work does not reach a standard described by the descriptors below
1	Relevant diagram(s) are included but not explained, or the explanations are incorrect
2	Relevant, accurate and correctly-labelled diagram(s) are included, with a limited explanation
3	Relevant, accurate and correctly-labelled diagram(s) are included, with a full explanation

Do diagrams have to be constructed using a computer?

No. These can be completed by hand, as can the whole commentary, although the use of a computer is recommended.

Is it necessary for a student to draw at least two diagrams?

No. It is possible to earn full marks for one relevant diagram, drawn and labelled correctly and explained fully.

Can complete diagrams be cut and pasted into commentaries?

Yes. If a student chooses to include a diagram not drawn by the student, he or she must reference it clearly. However, generic diagrams not specifically adapted to the commentary may mean that the student cannot reach the higher levels of criterion A. For example, where students download (generic) diagrams and do not draw their own diagrams to make them relevant to their article, top marks will not be awarded.

What is meant by "correctly labelled"?

Students should pay attention to axis labels. These should be labelled price of "something" and quantity of "something". Labelling these "p" and "q" does not count. A graph title is recommended but not compulsory for full marks. If a complete title is provided for the graph—for example, "Market for bananas"—price and quantity alone are sufficient as it is clear what the market is for.

Should all diagrams be dynamic, showing shifts from one situation to another?

Dynamic diagrams that clearly illustrate the changes taking place (either by arrows or labelling) are effective. There are certain situations where a static diagram, without any changes, may be effective, but these are limited.

What is the difference between a "full" and a "limited" explanation?

A limited explanation is one that may not refer to dynamic changes in the article. A limited explanation may also indicate that the diagram has not been explained in adequate detail to make it relevant, for example, by making no reference to specific points on the diagram

Criterion B: Terminology

This criterion assesses the extent to which the student uses appropriate economic terminology.

Marks	Descriptor
0	The work does not reach a standard described by the descriptors below
1	Economic terminology relevant to the article is included in the commentary
2	Economic terminology relevant to the article is used appropriately throughout the commentary

Should terms be defined?

As with responses in external examinations, the key terms should be defined. However, there is no need to define all economic terms within the commentary. This criterion is concerned with using the relevant terminology appropriately throughout the commentary, not definitions.

Good students will show thorough understanding of terms either by defining them or by using them accurately and with precision.

Criterion C: Application and analysis

This criterion assesses the extent to which the student recognizes, understands, applies and analyses economic theory in the context of the article.

Marks	Descriptor
0	The work does not reach a standard described by the descriptors below
1	Relevant economic theory is applied to the article with limited analysis
2	Relevant economic theory is applied to the article throughout the commentary with appropriate economic analysis
3	Relevant economic theory is applied to the article throughout the commentary with effective economic analysis

What is the difference between application and analysis?

Analysis of an economic problem can take place without the links to the article being effective. Application is how well the analysis links to the specific article. Questions that students should be asking themselves **must** focus on the relevance of their analysis to the actual article included. Students must show clearly how all the theories/concepts presented are illustrated/referred to in the extract.

Analysis means using **economics** to express economic understanding. The student should add value to the extract by fully explaining some consequences/implications of the data in the extract. The economic reasoning should be clear, with any necessary assumptions specified clearly.

Criterion D: Key concept

This criterion assesses the extent to which the student recognizes, understands and links a key concept to the article.

Marks	Descriptor
0	Either the work does not reach a standard described by the descriptors below **or** the key concept identified has already been used in another commentary.
1	A key concept is identified and there has been an attempt to link it to the article
2	A key concept is identified and the link to the article is partially explained
3	A key concept is identified and the link to the article is fully explained

What is a key concept?

The key concepts in economics are: scarcity, choice, efficiency, equity, economic well-being, sustainability, change, interdependence and intervention. Full explanations of these concepts can be found in the Diploma Programme *Economics guide* (first assessment 2022).

How should key concepts be linked to an article?

When selecting articles for commentary, students must ensure that a key theme of each chosen article relates to one of the nine key concepts (the three commentaries must relate to three different key concepts). It may be the case, for example, that a commentary based on market failure might be linked to the concepts of sustainability or economic well-being. Commentaries on macroeconomics may link to interdependence or change. Commentaries on the global economy might incorporate equity, efficiency or choice. These are examples only. The key concepts run through the whole course, and the concept identified will be determined by the nature and details of the article.

There are several approaches students could use to link a key concept to an article. Including:

- the student may synthesize at the end of the commentary, including an explanation of how the chosen key concept underpins the key issue(s) in the extract
- the student might refer to the key concept several times throughout the commentary, demonstrating in each case how the key concept is linked to the extract.

What does "fully explained" mean?

The student should demonstrate an understanding of the key concept and should explain how the concept impacts the individuals/societies which feature in the extract.

What happens if a student uses the same key concept in another commentary?

The student will lose three marks if two commentaries use the same key concept and six marks if all of the three commentaries use the same key concept.

Criterion E: Evaluation

This criterion assesses the extent to which the student's judgments are supported by reasoned argument.

Marks	Descriptor
0	The work does not reach a standard described by the descriptors below
1	Judgments are made that are supported by limited reasoning
2	Judgments are made that are supported by appropriate reasoning
3	Judgments are made that are supported by effective and balanced reasoning

What is "evaluation"?

This is the highest order skill at AO3 and is one of the key differentiators between stronger and weaker students. Students are expected to synthesize their analysis of the article, and then support this with reasoned arguments and justifications.

What are some examples of areas that could be included in "evaluation" of an article?

"Evaluation" implies a judgment of a theory and an application of the theory to a given situation, with awareness that the theory may not provide an accurate description.

Evaluation can take many forms.

- Students could identify the most important reasons or factors relating to an economic issue, and support this with reasoned arguments and justifications for their choice.
- When advantages and disadvantages are relevant, students could attempt to identify the most important advantage (or disadvantage) and then justify the reason for the choice.
- When strategies are presented, students could attempt to assess the short-term and long-term implications.

- When data is present, students may question its validity, in terms of whether it is appropriate, reliable or relevant. Students may also question whether the data provided is sufficient for drawing a conclusion.
- When considering a theory, students may question its validity in terms of whether it is appropriate, reliable or relevant.
- When discussing differing views, students may analyse the value proposition and objectives upon which the views may be based.
- Judgments about real-world effectiveness of policies could include limitations of non-economic constraints upon specific economic theory in reality.

Criterion F: Rubric requirements

This criterion assesses the extent to which the student meets the three rubric requirements for the complete portfolio.

- Each article is based on a different unit of the syllabus.
- Each article is taken from a different and appropriate source.
- Each article was published no earlier than one year before the writing of the commentary.

Marks	Descriptor
0	The work does not reach a standard described by the descriptors below
1	One rubric requirement is met
2	Two rubric requirements are met
3	Three rubric requirements are met

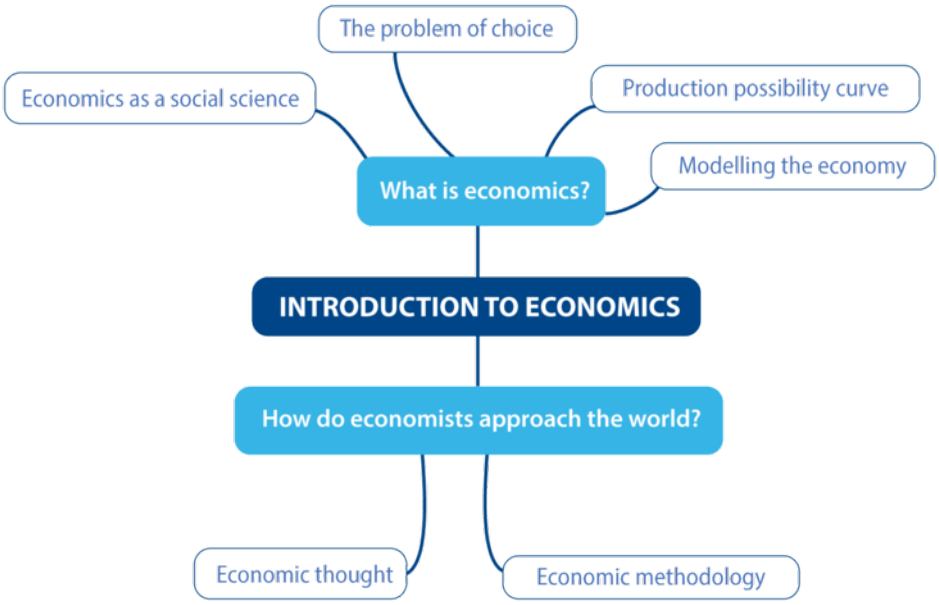
What are they?

What are they? Why are they included and what can people do with them?

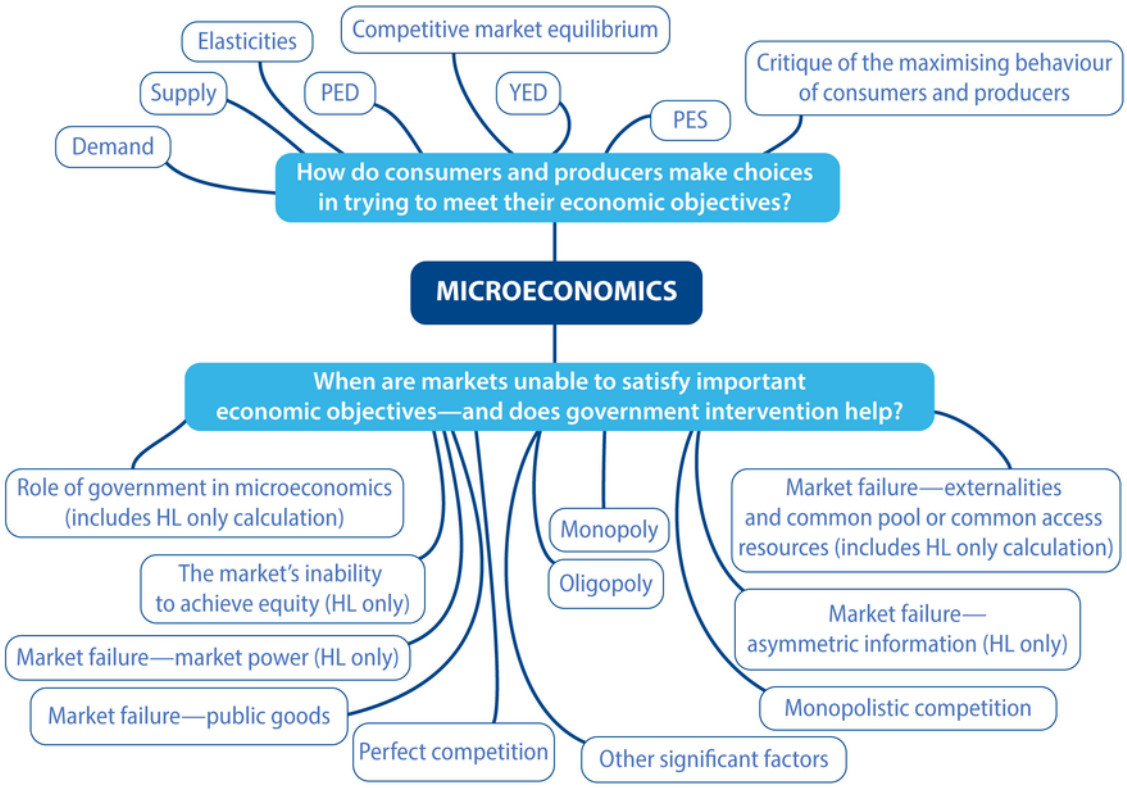
A mind map is a diagrammatic representation of topics, themes or concepts in a visual format. It is created around a central topic to which associated representations of subtopics, ideas or tools are added or linked. Mind maps have been known to help students to:

- better organize their ideas and understand them faster
- enhance their learning and thinking skills
- increase retention and memory
- improve achievement levels
- become motivated to learn as it can be fun and interesting.

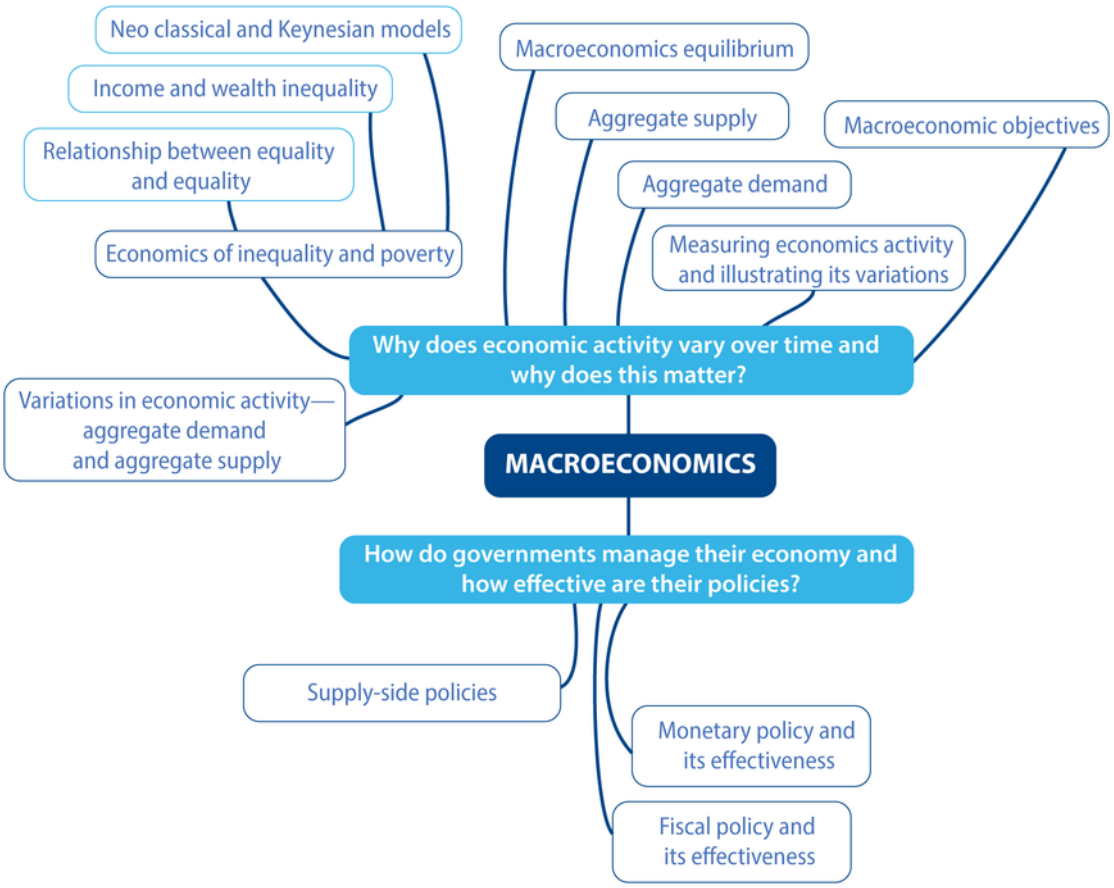
Unit 1: Introduction to economics mind map



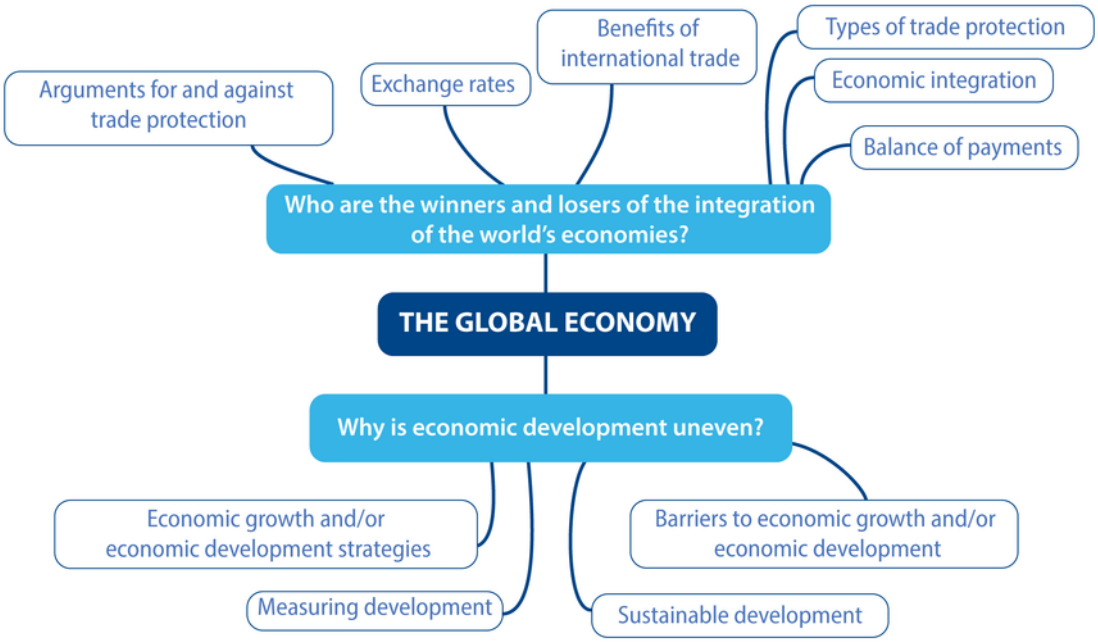
Unit 2: Microeconomics mind map



Unit 3: Macroeconomics mind map



Unit 4: The global economy mind map



Glossary of subject-specific terms

Glossary term	Glossary definition
Absolute advantage	This is where a country is able to produce more output than other countries using the same input of factors of production.
Absolute poverty	Absolute poverty is measured in terms of the basic need for survival. It is the amount of income a person needs to have in order to stay alive.
Actual growth	This occurs when previously unemployed factors of production are brought in to use. It is represented by a movement from a point within a PPC to a new point nearer to the PPC.
Adverse selection	This occurs when a buyer and seller do not have the same information, causing a transaction to take place based upon uneven terms.
Aggregate demand	The total spending in an economy consisting of consumption, investment, government expenditure and net exports.
Aggregate demand curve	A curve showing the relationship between the average price level and real GDP.
Aggregate supply (AS)	The total amount of domestic goods and services supplied by businesses and the government, including both consumer goods and capital goods.
Allocative efficiency	The level of output where marginal cost is equal to average revenue. The firm sells the last unit it produces at the amount that it cost to make it. The socially optimum level of output.
Allocative inefficiency	This occurs where the marginal social cost of producing a good is not equal to the marginal social benefit of the good to society. In different words, it occurs where the marginal cost of producing a good (including any external costs) is not equal to the price that is charged to consumers.
Anchoring	Anchors are mental reference points, relating to ideas or values, which are used to make decisions. Value is often set by anchors or imprints in our minds that we then use as mental reference points when making decisions. When an idea or a value is firmly anchored in a person's mind, it can lead to automatic decisions and behaviours.
Anti-monopoly regulation	Policies that are intended to regulate the market share of an individual company in order to enforce competition
Appreciation	An increase in the value of one currency in terms of another currency in a floating exchange rate system.
Appropriate technology	Technology that caters to the particular economic, social, and environmental characteristics of its users.
Asymmetric information	This is where one party in an economic transaction has access to more or better information than the other party.
Automatic stabilizers	The features of government fiscal policy (for example, unemployment benefits and direct tax revenues) that automatically counter-balance fluctuations in economic activity. For example, government spending on unemployment

Glossary term	Glossary definition
	benefits automatically rise and direct tax revenues automatically fall when economy activity is slow.
Average tax rate	The proportion of a person's income that is paid in tax, usually expressed as a percentage.
Balance of payments	It is a record of the value of all the transactions between the residents of a country with the residents of all other countries over a given period of time.
Balance of trade in goods	A measure of the revenue received from the exports of tangible (physical) goods minus the expenditure on the imports of tangible goods over a given period of time.
Balance of trade in services	A measure of the revenue received from the exports of services minus the expenditure on the imports of services over a given period of time.
Behavioural economics	This is a branch of economic research that adds elements of psychology to traditional models in an attempt to better understand decision-making by economic actors. It challenges the assumption that actors will always make rational choices with the aim of maximising utility.
Bounded rationality	This suggests that most consumers and businesses do not have enough information to make fully-informed choices and so opt to satisfice, rather than maximise their utility.
Bounded self-control	In reality, consumers are often not rational in their self-control and do not stop consuming, even when it is sensible to stop. They consume even though the price of the good or service is greater than the marginal utility they gain from consumption.
Bounded selfishness	Concern for the well-being of others.
Budget deficit	A situation that exists when planned government spending exceeds planned government revenue. A government may "run a budget deficit" in order to increase aggregate demand in the economy.
Business confidence	An economic indicator that measures the degree of optimism that business managers feel about the state of the economy and the prospects of their companies/ organizations.
Business cycle	A diagram showing the periodic/cyclical fluctuations in economic activity. The business cycle shows that economies typically move through a pattern of economic growth with the phases: recovery, boom, slowdown, recession.
Capital	The factor of production that comes from investment in physical capital and human capital. Physical capital is the stock of manufactured resources (e.g. factories, roads, tools) and human capital is the value of the workforce (improved through education or better health care).
Capital account	A measure of the buying and selling of assets between countries. The assets are often separated to show assets that represent ownership and assets that represent lending.
Capital flight	This occurs when money and other assets flow out of a country to seek a "safe haven" in another country.
Capital transfers	A measure of net monetary movements gained or lost through actions such as the transfer of goods and financial assets by migrants entering or leaving the country, transfers relating to the sale of fixed assets, gift taxes, inheritance taxes, and death duties.

Glossary term	Glossary definition
Carbon (emissions) taxes	Taxes levied on the carbon contents of fuel.
Central bank	The government's bank. The institution that is responsible for an economy's monetary policy.
Ceteris paribus	A Latin expression meaning "other things being equal".
Choice architecture	Choice architecture suggests that the decisions that we make are affected by the layout, sequencing, and range of choices that are available.
Circular economy	An economic system that looks beyond the linear take-make-dispose model and aims to redefine growth, focusing on society-wide benefits. It is based on three principles: design out waste, keep products and materials in use, and regenerate natural systems.
Circular flow of income	A simplified model of the economy that shows the flow of money through the economy.
Coase theorem	This theorem states that when an externality is created and there is a conflict due to assigned property rights, the two parties can bargain with each other to reach an efficient outcome regardless of who actually has the initial property rights. In this theorem, it is assumed that there are no costs associated with the bargaining that takes place between the two parties.
Collusive oligopoly	This is where a few firms act together to avoid competition by resorting to agreements to fix prices or output in an oligopoly.
Common access resources	Common access resources are natural resources over which there is no established private ownership—they are non-excludable, but rivalrous.
Common market	A customs union with common policies on product regulation, and free movement of goods, services, capital, and labour.
Comparative advantage	This is where a country is able to produce a good at a lower opportunity cost of resources than another country.
Competitive supply	This exists where products are produced by the same factors of production, and so compete for these resources for their production.
Complements	Goods are used in combination with each other. For example, digital cameras and memory cards.
Concentration ratios	Functions showing the percentage of market share (or output) held by the largest X firms in an industry, expressed in the form CR_x, where X represents the number of the largest firms. Most commonly, it is expressed as CR_4.
Consumer confidence	An economic indicator that measures the degree of optimism that consumers feel about the state of the economy and their own personal financial situation.
Consumer nudges	Positive reinforcement and indirect suggestions used to influence the behaviour and decision making of consumers.
Consumer price index (CPI)	A measure of the average rate of inflation which calculates the change in the price of a representative basket of goods and services purchased by the "average" consumer.
Consumer surplus	The additional benefit/utility received by consumers by paying a price that is lower than they are willing to pay.
Consumption (C)	Spending by households on consumer goods and services over a period of time.

Glossary term	Glossary definition
Contractionary monetary policy	A monetary policy designed to decrease aggregate demand and thus the level of economic activity.
Corporate social responsibility	An approach taken by firms where they attempt to produce responsibly/ethically towards the community and environment, demonstrating a positive impact on society.
Cost-push inflation	Inflation that is caused by an increase in the costs of production in an economy, i.e. a shift of the SRAS curve to the left.
Credit creation	The ability of commercial banks to expand the deposits of money that they receive by lending multiples of the amount, thus increasing the overall money supply.
Crowding out	A situation where the government spends more than it receives in revenue and needs to borrow money, forcing up interest rates and "crowding out" private investment and private consumption.
Current account	A measure of the flow of funds from trade in goods and services, plus net investment income flows (profit, interest, and dividends) and net transfers of money (foreign aid, grants, and remittances).
Current account deficit	This is where revenue from the exports of goods and services and income flows is less than the expenditure on the import of goods and services and income flows in a given year.
Current account surplus	This is where the revenue from the export of goods and services and income flows is greater than the expenditure on the import of goods and services and income flows in a given year.
Current transfers	These are recorded in the balance of payments whenever an economy receives goods, services, income, or financial items without something in return. All transfers not considered to be capital are current.
Customs union	An agreement made between countries, where the countries agree to trade freely among themselves, and they also agree to adopt common external barriers against any country attempting to export to the customs union.
Cyclical (demand-deficient) unemployment	Disequilibrium unemployment that exists when there is insufficient demand in the economy and wages do not fall to compensate for this.
Debt relief (cancellation)	The act of eliminating the debt owed by an economically least developed country in order to allow it to achieve development objectives.
Default choices	This is when consumers are automatically enrolled in a system, so that the consumer will "make" this choice if he/she takes no action.
Deflation	A persistent fall in the average level of prices in an economy.
Deflationary/recessionary gap	The situation where total spending (aggregate demand) is less than the full employment level of output, thus causing unemployment.
Demand	The willingness and ability of consumers to purchase a quantity of a good or service.
Demand curve	This shows the relationship between the price of a good or service and the quantity demanded. It is normally downward sloping.
Demand management	A (Keynesian) policy emphasising the importance of government intervention in managing the level of aggregate demand in the economy, through fiscal and monetary policies.

Glossary term	Glossary definition
Demand-pull inflation	Inflation that is caused by increasing aggregate demand in an economy, i.e. a shift of the AD curve to the right.
Demerit goods	Goods or services considered to be harmful to people that would be over-provided by the market and so over-consumed.
Depreciation	A fall in the value of one currency in terms of another currency in a floating exchange rate system.
Deregulation	A type of supply-side policy where the government reduces the number or type of regulations governing the behaviour of firms.
Devaluation	A decrease in the value of a currency in a fixed exchange rate system.
Development aid	Aid that consists of grants, concessional long-term loans, project aid, and programme aid.
Disinflation	A fall in the rate of inflation.
Disposable income	The remaining income available for an individual to spend or save, after taxation.
Dumping	It is the selling of a good in another country at a price below its unit cost of production.
Economic development	A broad concept involving improvement in standards of living, reduction in poverty, improved health and education along with increased freedom and economic choice.
Economic growth	The growth of the real value of output in an economy over time. Usually measured as growth in real GDP.
Economic well-being	A multi-dimensional concept relating to the level of prosperity and quality of living standards in a country.
Economically least developed countries (ELDC's)	Those countries classified by the UN as being "low-income countries confronting severe structural impediments to sustainable development. They are highly vulnerable to economic and environmental shocks and have low levels of human assets".
Economics	"Economics is the science that studies human behaviour as a relationship between ends and scarce resources which have alternative uses". Lionel Robbins (1932)
Economies of scale	Unit cost advantages that a business may experience as an outcome of increasing its scale of operations.
Efficiency	Efficiency is a quantifiable concept, determined by the ratio of useful output to total input.
Elasticity	A measure of the responsiveness of something to a change in one of its determinants.
Elasticity of demand for exports	A measure of the responsiveness of the quantity demanded of exports when there is a change in the price of exports.
Elasticity of demand for imports	A measure of the responsiveness of the quantity demanded of imports when there is a change in the price of imports.
Engel curve	A curve showing the relationship between income and quantity demanded.
Entrepreneurship	The factor of production involving organising and risk-taking.
Equilibrium	A state of rest, self-perpetuating in the absence of any outside disturbance.

Glossary term	Glossary definition
Equity	The concept or idea of fairness.
Excess demand	This occurs where the price of a good is lower than the equilibrium price, such that the quantity demanded is greater than the quantity supplied.
Excess supply	This occurs where the price of a good is higher than the equilibrium price, such that the quantity supplied is greater than the quantity demanded.
Exchange rate	The value of one currency expressed in term of another, for example, €1 = US $1.5.
Expansionary monetary policy	A monetary policy designed to increase aggregate demand and thus the level of economic activity.
Expenditure reducing	Policies implemented by the government that attempt to reduce overall expenditure in the economy, including expenditure on imports.
Expenditure switching	Policies implemented by the government that attempt to switch the expenditure of domestic consumers away from imports towards domestically produced goods and services.
Export promotion	Strategies based on openness and increased international trade. Growth is achieved by concentrating on increasing exports, and export revenue, as a leading factor in the AD of the economy. Growth in the international market should be translated into growth in the domestic market, over time.
Export revenue	Value of exports earned by producers
Exports	Goods and services produced in one country and purchased by consumers in another country.
External balance	The value of exports of goods and services minus the value of imports of goods and services.
Externalities	External costs or benefits to a third party, when a good or service is produced or consumed.
Factors of production	The four resources that allow an economy to produce its output: land, labour, capital and entrepreneurship (management).
Fairtrade	A scheme where products from producers in economically least developed countries can be certified to display the registered Fairtrade mark encouraging consumers to buy them because they know that the producers of the products have been paid a fair price and the products have been produced under approved conditions.
Financial account	A measure of the net change in foreign ownership of domestic financial assets.
Firms	Firms represent the productive units in the economy that turn the factors of production into goods and services.
Fiscal policy	A demand-side policy using changes in government spending and/or direct taxation to achieve economic objectives relating to inflation and unemployment.
Fixed exchange rate	An exchange rate regime where the value of a currency is fixed, or pegged, to the value of another currency, or to the average value of a selection of currencies, or to the value of some other commodity, such as gold.
Floating exchange rate	An exchange rate regime where the value of a currency is allowed to be determined solely by the demand for, and supply of, the currency on the foreign exchange market.

Glossary term	Glossary definition
Foreign aid	The international transfer of capital, goods, or services from a country, or international organization, for the benefit of a recipient country and its population.
Foreign direct investment (FDI)	A long-term investment by a multinational corporation in a foreign country, (where the foreign investor owns more than 10% of the domestic company).
Foreign sector	The segment of the circular flow of income that includes exports and imports.
Framing	This is the way that choices are described and presented. Changing the framing of a choice may affect tastes and preferences.
Free goods	The few things, such as air and salt water, that are not limited in supply (relatively scarce) and so do not have an opportunity cost.
Free market economy	An economy where the means of production are privately held by individuals and firms. Demand and supply (market forces) determine what/how much to produce, how to produce, and for whom to produce.
Free rider problem	This occurs when people who benefit from consuming resources, goods, or services do not have to pay for them, which results in overconsumption.
Free trade	International trade that takes place without any barriers, such as tariffs, quotas, or subsidies.
Free trade agreement	An agreement made between countries, where the countries agree to trade freely among themselves, but are able to trade with countries outside the free trade area in whatever way they wish.
Frictional unemployment	Equilibrium unemployment that exists when people have left a job and are in the process of searching for another job.
Full employment level of output	The level of output that is produced by the economy when there is only natural unemployment.
Gini coefficient (index)	A coefficient (index) that measures the ratio of the area between a Lorenz curve and the line of absolute equality to the total area under the line of equality. The higher the figure, the more unequal is the distribution.
Government (national) debt	The total outstanding borrowing of a government, made up of internal debt (owing to national creditors) and external debt (owing to foreign creditors).
Government spending (G)	Spending by governments on goods and services.
Gross domestic product (GDP)	The total money value of all final goods and services produced in an economy in a given time period, usually one year.
Gross national income (GNI)	The total money value of all final goods and services produced in an economy in one year, plus net property income from abroad (interest, rent, dividends and profit).
Growth in production possibilities	This occurs when the PPC curve shifts outwards, caused by an increase in the quantity and/or quality of factors of production.
Happiness Index	An index which is used to measure the collective happiness and well-being of a population.
Happy Planet Index	An index that combines four elements to show how efficiently residents of different countries are using environmental resources to lead long, happy lives.

Glossary term	Glossary definition
	The elements are well-being, life expectancy, inequality of outcomes, and ecological footprint.
Households	Households represent the groups of individuals in the economy who perform two functions. They are the consumers of goods and services and they are the owners and providers of the factors of production that are used to make the goods and services.
Human Development Index (HDI)	A composite index that brings together three variables that reflect the three basic goals of development, a long and healthy life, improved education, and a decent standard of living. The variables measured are life expectancy at birth, mean years of schooling and expected years of schooling, and GNI per capita (PPP US$).
Human Opportunity Index (HOI)	This index measures how individual circumstances, such as place of residence, gender, and education of the household head, can affect a child's access to basic opportunities such as water, education, electricity and sanitation. It is created by the World Bank.
Humanitarian aid	Aid given to alleviate short-term suffering, consisting of food aid, medical aid, and emergency relief aid.
Imperfect competition	A market structure showing some, but not all, features of perfect competition.
Imperfect information	This exists where some stakeholders in an economic transaction have more access to knowledge than others.
Import expenditure	Value of spending on imports.
Import substitution	Strategies to encourage the domestic production of goods, rather than importing them. It should mean that industries producing the goods domestically should grow, as will the economy, and then should be competitive on world markets in the future. The strategies encourage protectionism.
Imports	Goods and services purchased by consumers in one country that have been produced in another country
Incentive effect	Prices give producers the incentive to either increase or decrease the quantity that they supply. A rising price gives producers the incentive to increase the quantity supplied, as the higher price may allow them to earn higher revenues.
Income	A flow of earnings from using factors of production to produce goods and services. Wages and salaries are the factor reward to labour and interest is the flow of income for the ownership of capital.
Income effect	When a decrease in the price of a good or service that is being consumed means that consumers experience an increase in real income, usually allowing them to purchase more of the product. The income effect may be negative.
Income elasticity of demand (YED)	A measure of the responsiveness of the demand for a good or service to a change in income.
Indirect taxes	These are taxes on expenditure. They are added to the selling price of a good or service.
Infant industry	A new industry that should be protected from foreign competition until it is large enough to achieve economies of scale that will allow it to be internationally competitive.

Glossary term	Glossary definition
Inferior goods	A good where the demand for it decreases as income increases and more superior goods are purchased.
Inflation	A sustained increase in the general or average level of prices and a fall in the value of money.
Inflation rate	The percentage change of a price index over a certain time period.
Inflationary gap	The situation where total spending (aggregate demand) is greater than the full employment level of output, thus causing inflation.
Informal market	The part of an economy that is neither taxed nor monitored by the government. The activities of the informal economy are not included in a country's national income figures.
Infrastructure	The large-scale capital usually provided by government that is necessary for economic activity to take place.
Injections	The investment, government expenditure and export revenues that add spending to the circular flow of income.
Interest rate	The price of credit/borrowed money.
International Monetary Fund (IMF)	An organization working to foster global monetary cooperation, secure financial stability, facilitate international trade, and reduce poverty.
International trade	Trade that involves the exchange of goods or services between two countries.
Investment (I)	The addition of capital stock to the economy or expenditure by firms on capital.
J-curve	The J-curve suggests that in the short term, even if the Marshall-Lerner condition is fulfilled, a fall in the value of the currency will lead to a worsening of the current account deficit, before things improve in the long term.
Joint supply	Goods which are produced together, or where the production of one good involves the production of another product (for example, as a by-product of production).
Keynesian multiplier	The ratio of an induced change in the level of national income to an original change in one or more of the injections into the circular flow of income (i.e. investment, government spending, or export revenue).
Keynesian revolution	An economic school of thought based upon the works of John Maynard Keynes, challenging the classical (laissez faire) viewpoint and advocating the role of government in managing the level of aggregate demand.
Labour	The human factor of production. It is the physical and mental contribution of the existing work force to production.
Labour market flexibility	This refers to the speed with which labour markets adapt to fluctuations and changes in production, the economy, or society.
Labour union	An organization of workers whose goals include the improvement of working conditions and payments to workers. Unions work on behalf of workers through negotiations (collective bargaining) with management.
Laissez faire	The view that markets should be left alone, with minimal intervention by government.
Land	The physical factor of production. It consists of natural resources, some of which are renewable (for example, wheat) and some of which are non-renewable (for example, iron ore).

Glossary term	Glossary definition
Law of demand	As the price of a good falls, the quantity demanded will normally increase.
Law of supply	As the price of a good rises, the quantity supplied will normally rise.
Leakages	The savings, taxes and import expenditure that remove spending from the circular flow of income.
Long run aggregate supply (LRAS)	Aggregate supply that is dependent upon the resources in the economy and that can only be increased by improvements in the quantity and/or quality of factors of production.
Long-run Phillips curve	A curve showing the monetarist view that there is no trade-off between inflation and unemployment in the long run and that there exists a natural rate of unemployment that can only be affected by supply-side policies.
Lorenz curve	A curve showing what percentage of the population owns what percentage of the total income in the economy. It is calculated in cumulative terms. The further the curve is from the line of absolute equality (45-degree line), the more unequal is the distribution of income.
Macroeconomics	The study of aggregate economic activity. It investigates how the economy as a whole works.
Managed exchange rate	An exchange rate that floats in the foreign exchange markets but is subject to intervention from time to time by domestic monetary authorities, in order to resist fluctuations that they consider to be undesirable. Also known as a "dirty float".
Mandated choices	Mandated choices are when consumers are required to state whether or not they wish to take part in an action.
Manufactured goods	Goods that have been processed by workers.
Marginal costs	Marginal costs are the additional costs of producing one more unit of output.
Marginal propensity to consume (MPC)	The proportion of each extra amount of income that is spent by households on domestically produced goods and services, (consumption), expressed as a decimal.
Marginal propensity to import (MPM)	The proportion of each extra amount of income that is spent by households on imported goods and services, expressed as a decimal.
Marginal propensity to save (MPS)	The proportion of each extra amount of income that is saved by households, expressed as a decimal.
Marginal propensity to tax (MPT)	The proportion of each extra amount of income that is taken in tax, expressed as a decimal.
Marginal social benefit (MSB)	The extra benefit/utility to society of consuming an additional unit of output, including both the private benefit and the external benefit.
Marginal social cost (MSC)	The extra cost to society of producing an additional unit of output, including both the private cost and the external costs.
Marginal tax rate	The proportion of a person's additional income that is paid in tax, usually expressed as a percentage.
Marginal utility	The extra utility derived from consuming one more unit of a good or service.
Market	A market is where buyers and sellers come together to carry out an economic transaction.

Glossary term	Glossary definition
Market demand	The horizontal sum of the individual demand curves for a product of all the consumers in a market.
Market equilibrium	The point where the quantity of a product demanded is equal to the quantity of a product supplied. This creates the market clearing price and quantity where there is no excess demand or excess supply.
Market failure	The failure of markets to produce at the point where community surplus (consumer surplus + producer surplus) is maximised.
Market mechanism	This is the system in which the forces of demand and supply determine the prices of products. Also known as the price mechanism.
Market power	The ability of a firm (or group of firms) to raise and maintain price above the level that would prevail under perfect competition.
Market supply	The horizontal sum of the individual supply curves for a product of all the producers in a market.
Marshall-Lerner condition	This condition states that a depreciation, or devaluation, of a currency will only lead to an improvement in the current account balance if the sum of the elasticity of demand for exports plus the elasticity of demand for imports is greater than one.
Merit goods	Goods or services considered to be beneficial for people that would be under-provided by the market and so under-consumed.
Microeconomics	The study of the behaviour of individual consumers, firms, and industries and the determination of market prices and quantities of good, services, and factors of production.
Microfinance	The provision of small loans to poor entrepreneurs who lack access to traditional banking services.
Minimum reserve requirements	A requirement by the central bank that sets the minimum amount of reserves that commercial banks must maintain to back their loans.
Mixed economy	An economy that has elements of planning and elements of the free market. In reality, all economies are mixed. What is different is the degree of the mix from country to country.
Monetarist/new classical revolution	An economic school of thought which argues that changes in the money supply are the most significant determinants of the rate of economic growth and the behaviour of the business cycle. In this school of thought, policy makers should not intervene to manage the level of aggregate demand.
Monetary policy	A demand-side policy using changes in the money supply or interest rates to achieve economic objectives relating to inflation and unemployment.
Monetary union	This is where two or more countries share the same currency and have a common central bank.
Money supply	The total value of monetary assets available in an economy at a specific time.
Monopolistic competition	A market structure where there are many buyers and sellers, producing differentiated products, with no barriers to entry or exit.
Monopoly	A market structure where there is only one firm in the industry, so the firm is the industry. Monopolies may, or may not, have barriers to entry.
Moral hazard	This occurs when a party provides misleading information and changes behaviour after a transaction has taken place.

Glossary term	Glossary definition
Multidimensional Poverty Index (MPI)	An international measure of acute poverty covering over 100 economically least developed countries. It complements traditional income-based poverty measures by capturing the deprivations that each person faces at the same time with respect to education, health and living standards.
National income	The total value of the final output of all new goods and services produced in a country in one year.
Natural rate of unemployment	The rate of unemployment that is consistent with a stable rate of inflation. It is the rate where the long run Phillips curve touches the x-axis.
Necessity goods	A good where the demand for it increases as income increases, but the increase in demand is less than proportional to the rise in income.
Negative externalities of consumption	They are the negative effects that are suffered by a third party when a good or service is consumed.
Negative externalities of production	They are the negative effects that are suffered by a third party when a good or service is produced.
Net exports (X-M)	Export revenues minus import expenditure.
Nominal gross domestic product	The total money value of all final goods and services produced in an economy in a given time period, usually one year, at current values (not adjusted for inflation).
Nominal interest rates	Interest rates that have not been adjusted for inflation.
Non-collusive oligopoly	This is where firms in an oligopoly do not resort to agreements to fix prices or output. Competition tends to be non-price. Prices tend to be stable.
Non-excludable	Non-excludability exists when it is impossible to prevent a person, or persons, from consuming a good or service.
Non-government organization (NGO)	A non-government organization that exists to promote economic development and/or humanitarian ideals and/or sustainable development.
Non-produced, non-financial assets	A measure of the net international sales and purchases of non-produced assets, such as land, and intangible assets, such as patents and copyrights.
Normal goods	A good where the demand for it increases as income increases.
Normative economics	This deals with areas of the subject that are open to personal opinion and belief.
Nudge theory	This is generally used to describe situations where nudges (prompts, hints) are used to improve the life and wellbeing of people and society.
OECD Better Life Index	An index to compare well-being across countries, based on 11 topics that the OECD has identified as essential, in the areas of material living conditions and quality of life.
Official borrowing	International borrowing by a government to help to cover a current account deficit.
Official foreign aid	Aid that is provided to a country by another government or multilateral agency.
Oligopoly	A market structure where there are a few large firms that dominate the market.
Open market operations	The buying or selling of government securities in the open market in order to increase or decrease the amount of money in the economy.
Opportunity cost	The next best alternative foregone when an economic decision is made.

Glossary term	Glossary definition
Perfect competition	A market structure where there are a very large number of small firms, producing identical products that are incapable of affecting the market supply curve. Because of this, the firms are price takers. There are no barriers to entry or exit and all the firms have perfect knowledge of the market.
Perfect information	This exists where all stakeholders in an economic transaction have access to the same knowledge.
Perfectly elastic demand	This is where an increase in the price of a good or service leads to a fall in the quantity demanded of the good or service to zero. (PED would be infinity.)
Perfectly elastic supply	This is where a fall in the price of a good or service leads to a fall in the quantity supplied of the good or service to zero. (PES would be infinity.)
Perfectly inelastic demand	This is where a change in the price of a good or service leads to no change in the quantity demanded of the good or service. (PED would be equal to zero.)
Perfectly inelastic supply	This where a change in the price of a good or service leads to no change in the quantity supplied of the good or service. (PES would be equal to zero.)
Phillips curve	A curve showing the relationship between the rate of unemployment and the rate of inflation.
Pigouvian taxes	An indirect tax that is imposed to eliminate the external costs of negative externalities.
Planned economy	An economy where the means of production are collectively owned (except labour). The state determines what/how much to produce, how to produce, and for whom to produce.
Porter hypothesis	This hypothesis states that strict environmental regulations can lead to efficiency and encourage innovations for firms that help improve commercial competitiveness.
Portfolio investment	The purchase of financial investments such as shares and bonds in order to gain a financial return in the form of interest or dividends.
Positive discrimination	The practice of giving advantage to groups that have been treated unfairly in the past.
Positive economics	Positive economics deals with areas of the subject that are capable of being proven to be correct or not.
Positive externalities of consumption	The beneficial effects that are enjoyed by a third party when a good or service is consumed.
Positive externalities of production	The beneficial effects that are enjoyed by a third party when a good or service is produced.
Poverty	The scarcity or the lack of a certain amount of material possessions or money.
Poverty trap/cycle	Any circular chain of events starting and ending in poverty, such as low income means low savings means low investment means low growth means low incomes.
Preferential trade agreement	This is where a country agrees to give preferential access (for example, reduced tariffs) to certain products from one or more trading partners.
Price ceiling (maximum price)	A price imposed by an authority and set below the equilibrium price. Prices cannot rise above this price.
Price controls	Prices imposed by an authority, set above or below the equilibrium market price.

Glossary term	Glossary definition
Price deflator	A coefficient that removes the impact of inflation when measuring economic statistics.
(Price) elastic demand	This is where a change in the price of a good or service leads to a proportionally larger change in the quantity demanded of the good or service. (PED would be greater than one.)
(Price) elastic supply	This is where a change in the price of a good or service leads to a proportionally larger change in the quantity supplied of the good or service. (PES would be greater than one.)
(Price) inelastic demand	This is where a change in the price of a good or service leads to a proportionally smaller change in the quantity demanded of the good or service. (PED would be less than one.)
(Price) inelastic supply	This is where a change in the price of a good or service leads to a proportionally smaller change in the quantity supplied of the good or service. (PES would be less than one.)
Price elasticity of demand (PED)	A measure of the responsiveness of the quantity demanded of a good or service when there is a change in its price.
Price elasticity of supply (PES)	A measure of the responsiveness of the quantity supplied of a good or service when there is a change in its price.
Price expectations	The forecasts or views that consumers hold about future price movements that play a role in determining consumer demand.
Price floor (minimum price)	A price imposed by an authority and set above the market price. Prices cannot fall below this price.
Price mechanism	The system where the forces of demand and supply determine the prices of products. Also known as the market mechanism.
Primary commodities	Raw materials that are produced in the primary sector.
Primary sector	Extracts or harvests products directly from the earth in order to produce raw materials or food.
Privatisation	A type of supply-side policy where the government sells public assets to the private sector.
Producer surplus	The additional benefit received by producers by receiving a price that is higher than the price they were willing to receive.
Production possibility curve (PPC)	A curve showing the maximum combinations of goods or services that can be produced by an economy in a given time period, if all the resources in the economy are being used fully and efficiently and the state of technology is fixed.
Productive capacity	The maximum possible output of an economy.
Profit maximisation	Profit maximisation is producing at the level of output where profits are greatest: where marginal revenue equals marginal cost.
Property rights	The exclusive, legal, authority to own and determine how a resource is used, whether that resource is owned by the government or by individuals.
Proportional tax	A system of taxation in which tax is levied at a constant rate as income rises.
Public goods	Goods or services which would not be provided at all by the market. They have the characteristics of non-rivalry and non-excludability, for example, flood barriers.

Glossary term	Glossary definition
Public/private partnerships	A contractual arrangement between a public agency (federal, state or local) and a private sector firm.
Purchasing power parity (PPP)	A theory which states that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries.
Quantitative easing	An expansionary monetary policy where a central bank buys predetermined amounts of government bonds, or other financial assets, in order to stimulate the economy and increase the money supply.
Quantity demanded	The willingness and ability to purchase a quantity of a good or service at a certain price over a given time period.
Quantity supplied	It is the willingness and ability to produce a quantity of a good or service at a given price over a given time period.
Quasi-public goods	Goods which may satisfy the two public good conditions (non-rivalry and non-excludability) only to a certain extent or only some of the time.
Quota	Import barriers that set limits on the quantity or value of imports that may be imported into a country.
Rationing	An artificial control on the distribution of scarce resources.
Real GDP	The total money value of all final goods and services produced in an economy in a given time period, usually one year, adjusted for inflation.
Real GDP per person (per capita)	Real GDP divided by the population of the country.
Real GNI per person (per capita)	Real GNI divided by the population of the country.
Real interest rates	Interest rates that have been adjusted for inflation.
Relative poverty	Relative poverty is a comparative measure of poverty. A person is said to be in relative poverty if they do not reach some specified level of income, for example, 50% of average earnings for the country.
Remittances	Remittances are the transfer of money by foreign workers to individuals, often family members, in their home country.
Reserve assets	Foreign currencies and precious metals held by governments (central banks) as a result of international trade. Reserves may be held so that the government may maintain a desired exchange rate for the country's currencies.
Restricted choices	This is when the choice of a consumer is restricted, but still exists.
Revaluation	An increase in the value of a currency in a fixed exchange rate system.
Rivalrous	Goods and services are considered to be rivalrous when the consumption by one person, or group of people, prevents others from consuming the good.
Rules of thumb	Rules of thumb are mental shortcuts (heuristics) for decision-making to help people make a quick, satisfactory, but often not perfect, decision to a complex choice.
Satisficing	This occurs when entrepreneurs endeavour to cover their opportunity costs, but do not push themselves significantly further, even though they might be able to earn higher profits. It is essentially a mix of the words "satisfy" and "suffice".

Glossary term	Glossary definition
Say's Law	Say's Law states that the production of goods creates its own demand.
Scarcity	This is the limited availability of economic resources relative to society's unlimited demand for goods and services.
Screening	The use of a screening process to gain more information regarding a participant in a transaction, in order to reduce asymmetric information, and so reduce adverse selection.
Seasonal unemployment	Equilibrium unemployment that exists when people are out of work because their usual job is out of season, for example, a ski instructor in the summer.
Short-run aggregate supply (SRAS)	Aggregate supply that varies with the level of demand for goods and services and that is shifted by changes in the costs of factors of production.
Short-run Phillips curve	A curve showing the inverse relationship between the rate of unemployment and the rate of inflation, which suggests a trade-off between inflation and unemployment.
Signalling	The sending of a signal revealing relevant information to a participant in a transaction in order to reduce asymmetric information, and so reduce adverse selection.
Signalling effect	Prices give signal to both producers and consumers. A rising price gives a signal to producers that they should increase their quantity supplied, and signals to consumers that they should decrease the quantity demanded and vice versa.
Social conformity	The prevailing social norms or social customs will influence our daily behaviour/choice making.
Social enterprise	A company in the social economy, whose main objective is to have a social impact rather than to make a profit for their owners or shareholders. It operates by providing goods and services for the market in an entrepreneurial and innovative fashion and uses its profits primarily to achieve social objectives.
Social safety net	A collection of social welfare services provided by the state, or other institutions, targeted to to vulnerable, resource-deprived households, to prevent them from falling into poverty.
Social sciences	Studies of people in society and how they interact with each other.
Social/community surplus	The combination of consumer surplus and producer surplus.
Socially optimum output	This occurs where the marginal social cost of producing a good is equal to the marginal social benefit of the good to society. In different words, it occurs where the marginal cost of producing a good (including any external costs) is equal to the price that is charged to consumers. (P=MC)
Stakeholder	This is someone who has an interest, or stake, in an economic activity.
Standard of living	The level of wealth, comfort, material goods, and necessity goods available to a certain socioeconomic class in a country.
Structural unemployment	Equilibrium unemployment that exists when in the long-term the pattern of demand and production methods change and there is a permanent fall in the demand for a particular type of labour. There is a mismatch between skills and the jobs available.
Subsidies	Subsidies are financial support paid by governments to firms.

Glossary term	Glossary definition
Subsidy (international)	An amount of money paid by the government to a firm, per unit of output, to encourage output and to give the firm an advantage over foreign competition.
Substitutes	Goods which can be used in place of each other. For example, Adidas running shoes and Nike running shoes.
Substitution effect	When the price of a product falls, relative to other products, there is an incentive to purchase more of the product, since the marginal utility/price ratio has improved.
Supply	This is the willingness and ability of producers to produce a quantity of a good or service.
Supply curve	This shows the relationship between the price of a good or service and the quantity supplied. It is normally upward sloping.
Supply-side policies	Government policies designed to shift the long run aggregate supply curve to the right, thus increasing potential output in the economy.
Sustainability	Meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.
Sustainable development	The level of development needed to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.
Tariff	A duty (tax) that is placed upon imports to protect domestic industries from foreign competition and to raise revenue for the government.
Tastes	The subjective, individual preferences of consumers.
Total revenue	The aggregate revenue gained by a firm from the sale of a particular quantity of output (equal to price times quantity sold).
Tradable permits	Permits to pollute, issued by a governing body, which sets a maximum amount of pollution allowable. Firms may trade these permits for money.
Trade liberalisation	The process of reducing barriers to international trade.
Trade protection	Trade protection is an economic policy aiming to limit imports and/or encourage exports by setting up trade barriers.
Tragedy of commons	A situation with common access resources, where individual users acting independently, according to their own self-interest, go against the common good of all users by depleting or spoiling that resource through their collective action.
UN sustainable development goals (SDGs)	A collection of 17 global goals set by the United Nations to mobilize efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind.
Unemployment	The state of being eligible for work, actively looking for work, but without a job.
Unemployment benefits	Payments, usually made by the government, to people who are unemployed (and actively seeking employment).
Unemployment rate	The number of unemployed workers expressed as a percentage of the total workforce.
Unitary elastic demand	This is where a change in the price of a good or service leads to an equal and opposite proportional change in the quantity demanded of the good or service. (PED would be equal to one.)

Glossary term	Glossary definition
Unitary elastic supply	This is where a change in the price of a good or service leads to an equal proportional change in the quantity supplied of the good or service. (PES would be equal to one.)
Universal basic income	A regular cash payment given to all on an individual basis, without means test or work requirement.
Utility	A measure of the satisfaction derived from purchasing a good or service.
Wealth	The total value of all assets owned by a person, firm, community, or country.
Weighted price index	An approach to calculating the change in the price level by giving a weight to each item according to its importance in the consumers' budgets.
Welfare loss	A loss of economic efficiency that can occur when equilibrium for a good or service is not allocatively efficient.
World Bank	An organization whose main aims are to provide aid and advice to economically least developed countries, as well as reducing poverty levels and encouraging and safeguarding international investment.
World Trade Organization (WTO)	An international body that sets the rules for global trading and resolves disputes between its member countries. It also hosts negotiations concerning the reduction of trade barriers between its member nations.