



UNIVERSITY *of* CAMBRIDGE
International Examinations

Cambridge
International
AS Level

Teacher Guide

Cambridge International AS Level
Global Perspectives

8987

University of Cambridge International Examinations retains the copyright on all its publications. Registered Centres are permitted to copy material from this booklet for their own internal use. However, we cannot give permission to Centres to photocopy any material that is acknowledged to a third party even for internal use within a Centre.

© University of Cambridge International Examinations 2012.

Contents

Introduction: Aims of this Teacher Guide	3
Section 1: Introduction to Global Perspectives	5
1.1 Aims of the Global Perspectives course	
1.2 Assessment structure	
1.3 The assessment objectives	
1.4 The relationship between the scheme of assessment and the assessment objectives	
1.5 Paper descriptions	
Section 2: The Global Perspectives Course	11
2.1 Skills and content	
2.2 What are global perspectives?	
2.3 What is a personal perspective?	
2.4 What is the Critical Path?	
Section 3: Using the Critical Path	17
3.1 Teaching using the Critical Path	
3.2 Deconstruction	
3.3 Reconstruction	
3.4 Reflection	
3.5 Communication	
Section 4: Planning	35
4.1 Balance skills and subject-matter	
4.2 Progression of skills; moving from structured classes to seminars	
4.3 Sample scheme of work	
Section 5: Resources	39
5.1 Choosing resources	
5.2 Examples of English language resources from around the world	
5.3 Identifying arguments for deconstruction	
5.4 What resources are available from Cambridge and where can I find them?	

Introduction: The Aims of this Teacher Guide

This teacher guide is suitable for use with the following Cambridge qualifications: 8987 AS Global Perspectives (2012), the 1340 Global Perspectives Short Course (2012), the 9777 Pre-U Global Perspectives and Independent Research Report (2013), and the 9766 Pre-U Global Perspectives and Independent Research Report (International version, 2012).

This guide should be used in conjunction with the respective syllabuses for these qualifications. It offers information, guidance and advice on all aspects of our Global Perspectives courses.

- An explanation of the structure, content and assessment of these courses
- An explanation of the skills required and advice on how to deliver these
- Advice on choosing your course resources and stimulus materials
- Advice on planning and implementation
- An exemplar scheme of work

You should use this Teacher Guide if you are teaching the following groups:

- Candidates sitting the AS from June 2012
- Candidates sitting the Short Course from June 2012
- Candidates sitting the Global Perspective components in 2012 and the IRR (or all 4 components together) in 2013
- Candidates sitting the Pre-U GPR International Syllabus 9766 from November 2012

This Teacher Guide is not suitable if you are teaching the following groups:

- Candidates who have taken the Global Perspectives components in 2011 and will submit the IRR in 2012
- Candidates who have submitted the IRR in 2011 and will take the Global Perspectives components in 2012

Section 1: Introduction to Global Perspectives

1.1 Aims of the Global Perspectives course

The Global Perspectives course aims to equip learners with the skills they need in the rapidly changing intellectual and technical environment of the twenty-first century. It prepares and encourages learners to engage confidently with contemporary world affairs by developing skills in researching, processing, using and evaluating information and arguments about issues that inevitably have a global impact.

Cambridge Global Perspectives aims to develop learners by:

- providing opportunities to acquire disciplined and scholarly research skills
- promoting a critical, questioning approach to information that is often taken for granted
- encouraging self-reflection and an independence of thought
- encouraging an understanding of, and engagement with, some of the key global issues that they will face wherever they live and work
- encouraging awareness, understanding and respect for the diversity of perspectives on global issues
- encouraging an interdisciplinary approach to global issues

By studying global issues, learners will broaden their own understanding, empathy and tolerance. They will be encouraged to develop, scrutinise and present their own points of view with confidence. They will learn technical skills such as how to deconstruct and reconstruct arguments, and interpretative skills such as reflecting on the implications of their research and analysis from a personal perspective. They will also learn to communicate their findings and ideas as reasoned arguments.

1.2 Assessment structure

The assessment structure for the AS, the Short Course and the first year of Pre-U Global Perspectives and Independent Research Report from 2013 onwards are the same. These form a foundation course developing the skills listed above. All information is available in the respective qualification syllabuses but for convenience some has been reproduced below.

Component	Task	Duration	Weighting (%)	Type of Assessment
1	Written paper	1 hour 30 minutes	25	Externally assessed
2	Essay	–	30	Externally assessed
3	Presentation	max 15 minutes running time	45	Externally assessed

1.3 The assessment objectives

Throughout the course, candidates will gain knowledge and understanding of the background to a range of global issues and will appreciate the diversity of perspectives within them. This knowledge and understanding will underpin and inform the skills they will acquire but will not be separately assessed.

<p>AO1 Deconstruction Analyse and evaluate conclusions, arguments, reasoning or claims</p>	<ul style="list-style-type: none"> critically compare different perspectives analyse the structure of arguments, reasoning or claims and identify the key components evaluate the implications of the conclusions, arguments, reasoning or claims. analyse and evaluate the strengths and weaknesses of arguments, reasoning or claims evaluate the validity of the conclusions, arguments, reasoning or claims
<p>AO2 Reconstruction Analyse the evidence for conclusions, arguments, reasoning or claims</p>	<ul style="list-style-type: none"> research and analyse evidence to support conclusions, arguments, reasoning or claims evaluate sources used to support conclusions, arguments, reasoning or claims research and analyse alternative perspectives and conclusions against the supporting evidence identify and analyse the context upon which arguments have been based evaluate the reliability and credibility of sources
<p>AO3 Reflection Assess the impact of research on personal perspectives</p>	<ul style="list-style-type: none"> state personal perspectives before carrying out research research alternative perspectives objectively, and with sympathy and empathy evaluate the impact of alternative perspectives and conclusions on personal perspectives identify the need for further research and suggest its likely impact on personal perspectives
<p>AO4 Communication Communicate views, information and research effectively and convincingly</p>	<ul style="list-style-type: none"> select and present relevant information, in a balanced, coherent and well-structured way to a non-specialist audience present complex, global concepts and perspectives effectively, using appropriate media develop and present convincing and well-supported lines of reasoning based on supporting evidence use appropriate technical terms and cite references effectively

1.4 The relationship between the scheme of assessment and the assessment objectives

For the purposes of assessment, learners are asked to demonstrate different combinations of skills through different forms of presentation. Individual components provide the opportunity for particular skills to be tested in sufficient range and depth to give all candidates the chance to reach their maximum potential across the qualification as a whole. For example, AO1 (Deconstruction) is tested emphatically within Paper 1 although it is evidently necessary in all other papers as well. Though it has been focused on so specifically in the written paper it is taught as part of an indivisible continuum of skills. Teaching and learning in Global Perspectives is a holistic, creative process that develops skills using a reiterative process that reinforces independent thinking.

Assessment Objective	Component			Whole Assessment (raw marks)
	1: Written paper (raw marks)	2: Essay (raw marks)	3: Presentation (raw marks)	
AO1	18	3	6	27
AO2	12	12	6	30
AO3	0	10	16	26
AO4	0	5	12	17
Total	30	30	40	100

1.5 Paper descriptions

1.5.1 Component 1: Written paper

The written paper lasts 1 hour and 30 minutes.

Candidates answer compulsory, structured questions based on two or more sources provided with the paper. Questions will require both short and longer responses.

The stimulus material provided with the written paper may express different perspectives on issues of global significance taken from the topics listed in the syllabus.

Candidates will **not** be assessed on their knowledge and understanding of the specific issues represented in the stimulus material. Instead, candidates will be assessed on their thinking and reasoning skills focused mainly on analysing and evaluating arguments, evidence and contexts.

In carrying out a critical and comparative analysis of the stimulus material, candidates will be assessed on their ability to:

- identify and analyse the structure and context of arguments, reasoning and claims
- evaluate the strength of the arguments

- identify the key components of arguments
- identify and evaluate the strengths and weaknesses of arguments
- assess the validity of conclusions or claims
- assess the credibility of sources
- identify and evaluate different perspectives

Nature of assessment

This component is an externally set assessment, marked by Cambridge.

1.5.2 Component 2: Essay

Candidates write an essay on a global issue of their choice from the topics studied during the course.

The essay must be framed as a single question which is clearly focused on a global issue that lends itself to global treatment in 1,750 to 2,000 words. Candidates should be supported in formulating an appropriate question. See the syllabus for the role of the teacher and the level of guidance permitted.

Candidates should focus their individual research on identifying and exploring the context and basis of the arguments from different global perspectives. They should identify different perspectives, understand the arguments, reasoning or claims, upon which these perspectives are based, offer a critical view of them and reach a personal, supported view.

In the essay, candidates will be assessed on their ability to:

- identify and synthesise relevant sources
- assess the credibility of sources used
- analyse at least two conflicting perspectives
- identify and evaluate the evidence that supports the perspectives
- explain how the research has affected their personal perspectives
- show an awareness of the limitations of the arguments considered
- present convincing and well-supported conclusions that answer the question posed
- suggest further relevant research
- communicate effectively and concisely, using technical terms where appropriate

The essay must be written in continuous prose, include a list of sources used and be submitted in an electronic format. Quotations must be fully referenced. The essay must **not** exceed 2,000 words and an accurate word-count must be clearly stated on each essay. The word-count excludes the title, references and footnotes. Work beyond the 2,000 word maximum will **not** be included in the assessment.

Nature of assessment

Candidates decide on their own essay question for this component, which is externally marked by Cambridge. All materials for Paper 2 must be submitted electronically, see the *Cambridge Administrative Guide*. The deadline for submission to Cambridge is **31 May** (May/June session) or **31 October** (October/November session).

1.5.3 Component 3: Presentation

Candidates produce a presentation based on pre-released source materials provided by Cambridge. The stimulus material consists of a range of sources about at least one global issue seen through a variety of perspectives.

Candidates use the stimulus material to identify and research a topic for their presentation. Candidates must frame a single question that allows them to address contrasting perspectives on an issue derived from the stimulus material. They may research one or more perspectives for themselves. Candidates should be supported in formulating an appropriate question. See the syllabus for the role of the teacher and the level of guidance permitted.

Candidates should reflect on the alternative perspectives found in the source materials and from their own research and the focus of the presentation is mainly reflection and communication. In their presentation, candidates establish and present a coherent, personal perspective that shows an understanding of, and empathy with, alternative perspectives.

In the presentation, candidates will be assessed on their ability to:

- communicate a coherent argument
- engage with different perspectives, showing any relationships between them
- develop a line of reasoning based on supporting evidence
- express a relevant personal perspective
- evaluate their own personal perspective
- justify their own personal perspective
- present convincing and well-supported conclusions that answer the question posed

The presentation should:

- include relevant stimulus material
- communicate effectively to a non-specialist audience
- cite sources and references clearly and accurately

Candidates are normally expected to deliver their presentation to a live audience and candidates may choose any appropriate format to communicate their research (e.g. poster, PowerPoint, video, weblog, webpages or a mixture of different media). All materials must be submitted electronically. Teachers must ensure that the quality of any recording will permit accurate marking of the work.

Whether presented or not, the submission must include a verbatim transcript of the presentation. The running time for the presentation must not exceed 15 minutes. Work beyond the maximum 15 minutes running time will not be included in the assessment.

The pre-released source material will be available to Centres by 1 March (for the June session) or 1 August (for the November session) to allow candidates four weeks to complete their presentation. Each Centre may determine the precise timing of the four-week period to fit their own circumstances.

Teachers must ensure that, for each candidate, sufficient and appropriate supporting evidence is submitted to Cambridge to permit accurate marking of the work. Any recorded dialogue or oral presentation must be accompanied by a written transcript and supporting visual materials.

Nature of assessment

Candidates decide on their own presentation question based on the stimulus material provided by Cambridge. The presentation is marked by Cambridge. All materials for Paper 3 must be submitted electronically, see the *Cambridge Administrative Guide*. The deadline for submission to Cambridge is **31 May** (May/June session) or **31 October** (October/November session).

Section 2: The Global Perspectives Course

2.1 Skills and content

The aims of the course relate to what learners can do rather than what they know. So there is no fixed content that learners must learn by the end of the course. It is likely that they will learn a great deal of new information during the course but this will vary from learner to learner and school to school, depending on the topics chosen for study. The skills they will develop are as follows:

- analysing and making judgements about different views and arguments
- researching important issues of global significance
- communicating arguments in different ways
- considering and reflecting on the implications and consequences of judgements,
- empathising with others and understanding and respecting a variety of views on global issues
- articulating and communicating a personal perspective that builds on skills of interpreting, evaluating and assessing evidence.

Skills are developed through the analysis and exploration of issues of global significance using a method called the Critical Path (explained below), carried out in an open, critical and disciplined way.

These issues of global importance will have significance beyond any local or national context. For example:

An oil spill off the coast of America and what the oil company should do about it, could be seen as a local issue. However, the issue of environmental disaster, how it should be prevented and how it should be dealt with are of global importance. The consequences of the oil spill off the coast of America are also likely to be far-reaching; if local interests lead to a national policy that promotes renewable energies in the USA, the implications, effects and consequences will be felt around the world.

Initially they may arise within one of the broad themes of:

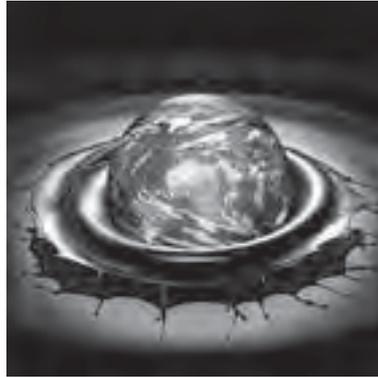
- Economics
- Ethics
- Environment
- Science and Technology
- Culture
- Politics.

However, the nature of these issues allows exploration using the other themes. For example:

Using the themes to analyse oil spills as a global issue

Ethical

- Who is to blame and what is blame?
- Would we gain anything by attaching blame?
- Why don't other specialists step in to help?
- Are we fundamentally a greedy society?
- What do the wildlife make of all this?
- Is damage to the US environment more important than the damage to poorer countries – e.g. Niger



Technological

- Why can't they cap the darned thing?
- Plastic booms and hurricanes???
- Oil dispersants their impact and effectiveness
- Biofuels
- Should we drill so deeply if we cannot guarantee safety?

Economic

- The cost of the clean-up
- The cost to investors and linked pension funds
- The cost to the environment
- The overall hidden costs to BP e.g. boycotts

Environmental

- Perceived and actual damage
- The impact on:
 - Wildlife
 - Fishing industry
 - Tourism
 - Human health

Political and Cultural

- Obama – 'kicking ass'!
- Cameron and Clegg have their first row!
- BP – British Petroleum?
- Which politician is on the soap box today?
- Effects on electorate in each state and country
- Are the middle-eastern countries laughing?

The syllabus lists a range of pre-selected topic areas, each of which presents multiple aspects for analysis (roughly aligned with the thematic areas above). Cambridge recommend that at least four of these topics should be studied during the course to enable development of the skills of the Critical Path. That list has been reproduced below. These topics effectively provide the subject matter which learners use as a medium for the development of the required skills. When learners come to choose the particular topic they wish to study for their essay in Paper 2 they must draw from amongst those topics studied during the course. This ensures that the topic is of sufficient breadth and depth to generate a great range of questions giving the learner the opportunity to achieve as many marks as they can.

- Alternatives to oil
- Artificial Intelligence
- Biodiversity and threats to the world's natural heritage

- Endangered cultures
- Ethical foreign policies
- Genetic engineering
- Global climate change
- Globalisation of economic activity
- Globalisation versus new nationalisms
- Impact of the internet
- Incorporating technology into buildings
- Industrial pollution
- Integration and multiculturalism
- International law
- Medical ethics and priorities
- Migration and work
- Online and interactive communities
- Standard of living/quality of life
- Sustainable futures
- Technology and lifestyles
- The challenge of GM crops
- The economic role of women
- The ethics and economics of food
- The emergence of a global superpower
- The religious-secular divide
- The speed of change in technology and global trade
- Transnational organisations (UN, World Bank, WU, NATO)
- Urbanisation and the countryside

2.2 What are global perspectives?

Learners should be encouraged to think in terms of PERSPECTIVES when investigating these issues. A perspective is comprised of more than just one argument. For example, those who favour increasing overseas aid to poor countries may be influenced by many considerations – ethical, religious or practical – they may think that richer countries have ethical responsibilities and that may involve a world view about the obligations of states and individuals; they may be moved by particular religious beliefs which underpin their lives but are not strictly ‘arguments’; they may be influenced by practical considerations of increasing world demand for products, or avoiding dangerous wars which destabilise regions, or preventing rival powers taking advantage of unrest caused by poverty.

Within a broad PERSPECTIVE there may be a variety of arguments, beliefs, assumptions (for example that instability is caused by poverty, or that richer nations have responsibilities). The opponents of overseas aid are also likely to be motivated by a variety of considerations. To understand the issue, it is necessary

to deconstruct the perspectives (or break them down into their different parts) rather than just look at individual ideas and arguments. This of course is also true of our own perspectives.

2.3 What is a personal perspective?

The learner will need some initial guidance on what constitutes a personal perspective as they will probably not have had to state their own views before in academic writing. Examples from previous learners' work or from the 'Example Candidate Responses' materials (available from Cambridge on CD-ROM to registered centres on the Teacher Support Site at www.teachers/cie.org.uk), are useful for demonstrating what it might look like.

When they first encounter a topic, learners should be advised to write down their initial reflections and at each subsequent point when a new revelation sheds more light on the issue. This will not only give them a map of their own learning but will also help to highlight points they may wish to articulate within their argument. It will remind them of the evidence supporting their own view. This is especially important for the presentation in Paper 3. These notes can be made alongside those indicating the significance and the consequences of each perspective they encounter. This makes it much easier for a student to remember how their own thoughts have progressed, rather than struggling to piece it together at the end of their work.

A personal perspective is the student's own view but it is a considered, informed view; considered in the light of all their acquired knowledge on a topic. It should be supported by their observations of the evidence – not just the facts of the case but also the cultural and social significance of any relevant knowledge or value within each perspective. This process allows learners to ultimately take a critical view of their own perspective which itself is likely to be influenced by the values of their own culture. This gives a context to their home culture. It also gives them the opportunity to demonstrate the sympathy and empathy that is mentioned in AO3.

2.4 What is the Critical Path?

The Critical Path is a teaching and learning process, a method of both investigation and exposition that enables teachers and learners to develop the skills required for Global Perspectives in a regular, systematic way. The model aims to produce above all, independent, reflective learners.

It is this skill-set rather than any specific content knowledge that is assessed in Global Perspectives. You can see this by looking back at the assessment structure and the description of the papers above.

The Critical Path can be seen as a repeating spiral; by following it, learners visit and revisit skills, each time with less structured support from you as the teacher, until they are able to use them confidently. As their confidence increases, so their ability to think independently and reflectively improves.

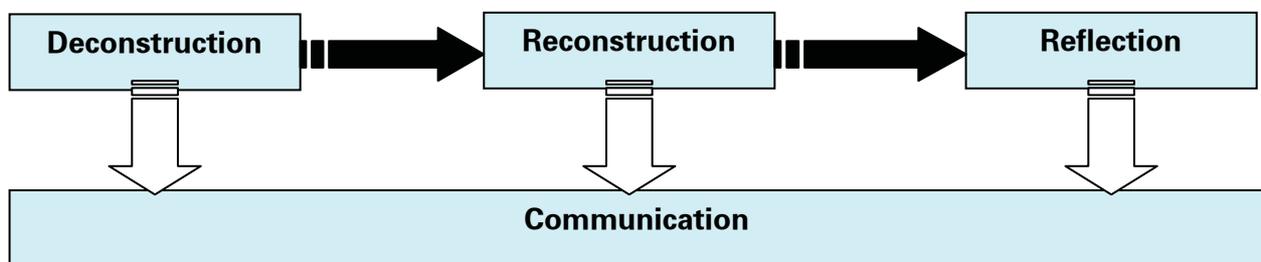
There are four, repeated steps in this spiral path:

- **Deconstruction** deciding on a research area; framing a question; analysing and evaluating arguments. Identifying and comparing the perspectives, the arguments, claims and assumptions they contain and looking critically at their strengths and weaknesses in order to judge their worth.
- **Reconstruction** researching different perspectives on a global issue and analysing and evaluating the evidence base for these perspectives; identifying the wider context of the arguments.

- **Reflection** tracking the changes in their personal perspective on any given issue before, during and after their researches, learners will arrive at their own judgement. They will then need to consider the implications of this judgement and whether there is enough evidence to support it or whether after more thought, the judgement could be modified.
- **Communication** learners need to learn to articulate explanations and arguments through discussions, seminars and presentations as well as through essay-writing.

Communication is not merely the last part of the process in which learners tell others about their thoughts. It is an important part of the learning process in which learners must become active thinkers. In order to persuade others, they have to engage with issues, organise, select and control material, revisit the thinking they have done previously and consider the best means of communicating to others. This means that they will need to practise these skills several times on a smaller scale as part of the spiral nature of the Critical Path model during the learning process.

The Critical Path



The assessment objectives of Global Perspectives echo the steps of the Critical Path process and the examination components emphasize certain combinations of skills but teachers should beware of thinking that each paper tests a specific assessment objective on its own. The Critical Path is part of the teaching and learning process and not a description of distinct stages of assessment.

Section 3: Using the Critical Path

3.1 Teaching using the Critical Path

3.1.1 What does the Critical Path mean for your teaching?

In each topic that they study, learners will need to research an area using questions to open up the issues (with the help of their teacher). They should consider the quality of arguments and evidence (with the help of their teacher). They should research the evidence base, considering different perspectives and building up the fuller context, including locating the issue in the global context, and in doing so they should use research and thinking skills. Learners should reflect on the evidence base, arguments, ideas and issues and their own perspective (initially in response to questioning, but increasingly independently). They should present their reasoning and reflection to their peers, building on the research, evaluation and reflection they have done.

In this way you can see that the Critical Path provides a framework around which teaching and learning activities can be organised.

3.1.2 The teacher as facilitator

As learners repeat and hone these skills across several topics they will become more independent and this means that the teacher gradually transforms into a facilitator, negotiator, motivator and manager, rather than a communicator of information. Each time you take your learners through the steps of the Critical Path they will need less structured support. It will be important for you to:

- introduce ideas and stimulus materials
- introduce thinking reasoning and research skills so that learners can think about their thinking and learning
- help learners to frame questions in areas that interest them
- respond to learners' interests
- respond to current world affairs
- prompt learners to think for themselves
- question learners in a way that helps them to develop their thinking and reasoning skills
- remind learners to use their thinking and research skills
- set the framework for the thinking classroom
- build in one-to-one meetings with individual learners
- set up and organise projects that allow learners to succeed in independent work.

It is likely that you will use seminars, group work and student-led classes to a greater extent than in a subject that is driven by content. It is also likely that you will run teacher-centred lessons helping learners to develop their thinking, reasoning and research skills – giving them the tools to use in their independent work.

Although learners will focus on different issues in each repetition of the journey through the Critical Path, they will essentially be practising the same skills each time and developing greater subtlety and independence in their use each time.

3.1.3 General teaching tips

You can begin building the skills needed for the Critical Path process early in the course, by following some of these suggestions:

- Allow some independent research early in the course that gives learners the chance to develop a critical sense, even on a limited scale, e.g. following up some points in an article deconstructed for Paper 1 and then discussing in class how this was done and the validity of the sources used.
- Establish early on the idea of a perspective, and how it differs from, say, a single argument.
- Establish early on the practice of meetings with individuals to discuss progress and help them to frame questions and research plans.
- Build in some practice in presentation before the formal 'slot' for Paper 3 – even if only a short talk or poster which one group might undertake and another group could evaluate.
- When choosing topics for the Paper 2 essay, an element of presentation could be introduced, in which students introduce their ideas, establish what the contrasting perspectives would be and discuss the global implications of their choice.
- The skills developed in Global Perspectives should enable candidates to perform better in other subjects. It may be useful to discuss with candidates how the skills can be transferred.
- Use ideas and arguments from students' other subjects to show how the GP skills are useful.

3.2 Deconstruction

3.2.1 Deconstructing the research area

The first and necessary task is to choose an area to investigate. For example, the learners and their teacher might be interested in biofuels, especially in the light of increasing food prices and hunger riots. Here, you could choose from a range of approaches. You may want to:

- discuss the general area of biofuels to discover what learners know and help them to organise their preliminary thoughts
- ask learners to research information on biofuels
- introduce a variety of stimulus material illustrating different perspectives to provoke learners to think
- introduce an argument firmly embedded in one perspective for structured deconstruction tasks.

Your choice of area to investigate will depend on the stage of the course and the specific aims for the session. It is worth remembering that structured deconstruction tasks may seem more purposeful in the light of general thinking around an issue and planning towards a presentation. So, even though there are no marks specifically attached to deconstructing the research area, this is a valuable part of the whole teaching and learning process that is the Critical Path.

Some exploratory questions to be used early in the process (perhaps after some initial information gathering) might include the following. This would count as deconstructing the research area.

- Which theme(s)/ topics would biofuels come under? Why?
- In what ways are biofuels of global importance and why?
- What do you think are the main issues involved in biofuels?
- At this early stage can you identify any different perspectives on this issue?

These questions should lead to a discussion of the ethical, economic, environmental, technical and political aspects of biofuels and is likely to raise a number of questions that students might be interested to think about. For example:

- Is it right to turn rainforest into maize fields so that we can keep driving our cars?
- Is it ever ok to use food for fuel instead of for feeding people?
- Are all biofuels the same? How much do the differences matter?

This discussion will enable students to start planning their research into different perspectives. Giving students an overview of the discussion area, and an understanding of the usefulness of deconstruction in thinking through issues, helps them to see the point of the technical deconstruction exercises.

3.2.2 Deconstruction of argument

The teacher or the learners might provide an argument for deconstruction. This might come from a website, a newspaper, an academic journal or a book. Academic articles and books are useful, but can prove challenging for learners to deconstruct, especially early in the course. Below is an example of a newspaper article.

Biofuels will not feed the hungry

Between 1990 and 2005 the proportion of children under five who were underweight declined by one fifth. But that progress is now under threat. Rising food prices mean that malnutrition and starvation once again threaten many of those at the bottom of the world's economic ladder. While recent spikes in prices are unlikely to be permanent, producers should stop wasting food by subsidising biofuels and give the World Food Programme the funds it needs to distribute calories to those who cannot cope by themselves.

International market prices for wheat, corn, soya beans and dozens of other commodities have doubled or trebled in recent years. The result is poverty – for millions, a doubling of food prices means destitution – and increased malnutrition. World Food Programme officials have told the Financial Times that the agency may have to cut food rations, or even the number of people it reaches, unless donors provide more cash to pay higher prices

Some factors affecting prices for the world's poor are clearly temporary. Bad US and EU harvests in recent years, plus drought in Australia, have reduced grain stocks. There has also been a particular squeeze on internationally tradeable oils and grains, as producers such as Russia introduced export quotas in order to control prices at home. Finally, record shipping rates have made food yet more expensive in the poorer, importing countries that need to buy it most.

Other factors suggest a more permanent change. Food production consumes energy – for machinery, for transportation and most of all to manufacture fertiliser – and if oil prices remain high it will have a lasting effect on food. Cuts to food production subsidies, most notably in the EU, will also have a permanent effect on supply.

(But) the biggest structural change is biofuels. In the space of a few years, the USA has diverted about 40m tonnes of maize to produce bioethanol – about 4 per cent of global production of coarse grains. That rapid growth is largely the result of subsidies – which must halt. The environmental benefits of maize biofuel are ambiguous at best and it should not be favoured over growing maize for food.

Those governments that are subsidising biofuels need to cough up and help fund the World Food Programme.

(Source: Adapted from the Financial Times: 25 February 2008)

(i) Deconstruction questions

The following questions can be used when attempting to deconstruct most arguments. The sample answers are a guide to how a student might answer these questions, but they are not intended as model answers. There are other good answers to most of these questions, especially those aimed at evaluating the strength of the argument. If you and your learners disagree with these answers (or with each other), discuss the answers and try to persuade each other.

(In the case of the biofuels article, the reader's opinion about the strength of this argument will depend to some extent on whether they accept the unstated principles that the author clearly holds dear: that governments have a duty to ensure that there is enough food for everyone in the world, and that feeding all the world's people is more important than combating climate change.)

(ii) Questions and sample answers

Q: Is this an argument, an explanation, a report, facts, opinions or a combination of these?

A: This text is an argument. It supports the author's conclusion with reasons. It uses some report and opinion as part of the support for the conclusion.

Q: What does the author want to persuade us to accept? Has the author stated or only implied this conclusion?

A: The author wants us to accept the statements: "Producers should stop wasting food by subsidising biofuels and give the World Food Programme the funds it needs to distribute calories to those who cannot cope by themselves." And "Those governments that are subsidising biofuels need to cough up and help fund the World Food Programme.").

Q: On what grounds, or for what reasons is the author trying to persuade us to accept this conclusion?

A: The author wants us to accept this because food prices are high, high food prices cause poverty and malnutrition, and biofuels are a significant contributing factor to high food prices. Furthermore, the rapid growth in biofuels is the result of subsidies, and the environmental benefits of maize biofuels are ambiguous, at best. So maize biofuels should not be favoured over growing maize for food, so (main conclusion) governments/producers should stop subsidising biofuels and contribute to the World Food Programme.

Q: What else would you need to accept in order to accept the conclusion? (What unstated reasons are there? What does the author believe but doesn't actually say? What is the author keeping quiet about?)

A: The author assumes that feeding the whole world is more important than addressing global warming by funding alternatives to fossil fuels. An alternative perspective might be that we should allow the weakest few to die out in order to ensure the long-lasting success of the rest, and that long-term success is best achieved by finding alternatives to fossil fuels, including biofuels.

(Addressing this assumption and possible challenges would lead to some interesting reconstruction work. So we can see that deconstruction work can help students to begin to understand different perspectives, and that it is an important building block in the Critical Path.)

The author assumes that maize biofuels are the main or only sort of biofuel. It may be that there are other kinds of biofuel that are not edible and not grown on land that could produce food. If so, there would be no case for governments/producers to withdraw their subsidies from biofuels altogether, just from those that threatened food production.

Q: What evidence does the author use to support their reasoning? (Note that reasoning is the structured organisation of the author's own thoughts, and evidence is the information, facts, statistics and references to others' ideas that the author uses to support their own reasoning).

A: Evidence used by the author here includes:

- The report of what the World Food Programme officials told the FT, that they "may have to cut food rations or even the number of people it reaches, unless donors provide more cash."
- "International market prices for wheat, corn, soya beans ... have doubled or trebled in recent years." (This evidence could be checked) and further backed up by specific increases but, providing that a check of prices backs up the general claim. It is not a weakness that the author has summarised the evidence in this kind of report rather than providing it in detail).
- "In the space of a few years, the USA has diverted about 40m tonnes of maize to produce bioethanol – about 4 per cent of global production of coarse grains."

Q: What additional evidence would be useful to make a judgement about this reasoning?

A: It would be useful to know what has happened since 2008 to the cost of oil, shipping and food production. This would help us to judge whether the author's predictions and thinking were accurate. As shipping and food production have traditionally used oil, it would be interesting to see whether the development of biofuels affects these costs. The author claims that the environmental benefits of maize fuel are ambiguous at best – it would be useful to research further evidence to see whether this claim can be supported or countered. In an argument about cutting subsidies for biofuels, it is not sufficient to simply assert that they are not (very) beneficial: this needs to be shown.

Q: What sort of evidence/argument might weaken or counter this reasoning?

A: Evidence that the high food/oil prices were only temporary in 2008 would counter the reasoning. If food prices have fallen since then, and if oil prices have fallen, the case for removing subsidies for biofuels would be much less strong. This could be researched during the reconstruction process.

Evidence that maize or other biofuels did have a significant beneficial effect on the environment would counter this reasoning by showing one of its reasons to be wrong. This could also be researched during the reconstruction process.

An argument showing that biofuels (maize or other) did not affect the amount of food available to the world would counter this argument, especially if it was based on evidence that the USA has not 'diverted' food maize but has found ways of growing biofuels on land that does not yield good food crops.

Research into arguments supporting biofuels might produce other ideas here.

Q: How strong/effective is the author's reasoning? Does the conclusion follow from the reasons or is it too strong? Are there any flaws that weaken the reasoning (if so how much and how much does this matter)? Is the evidence appropriate?

A: There is some merit to the author's reasoning. If maize biofuels are diverting food from people, and if in a time of high food and oil prices people are suffering because there is not enough food, then, at least for a time, governments should prioritise food production. One way of doing this would be to reduce incentives such as subsidies for biofuels. However, the reasoning does not fully support the conclusion. The author's clear bias against biofuels as 'wasting food' is evident in some emotive passages of reasoning, and after an objective look at the causes of high food prices, the author states without showing that biofuels are the biggest structural change, and that their benefits are not clear. It seems that the author is allowing belief to do the job of reason here, which is not rational and therefore unconvincing. More work needs to be done to show that biofuels are as important in the change in food prices as the author believes they are. Furthermore, it is not clear why a diversion of maize in the USA to biofuels should lead to a rise in the prices of wheat, corn and soya beans. The generalisation from maize biofuels to biofuels in general also weakens the author's case, as it would be reasonable for governments to subsidise biofuels that did not threaten food production, even in a global food crisis. Overall, the argument is quite strong – it certainly persuades me that this is an issue worth thinking about. But it leaves room for disagreement, and I would need to do further research and more thinking before deciding whether to agree or disagree with the author.

Q: Does the author include counter argument (different views)? If so, how relevant are they? How well has the author answered them?

A: The author has included some reasoning to show the other reasons why food prices might be high, but has not considered any real counter to his own argument. That is, he has not considered any reasoning why biofuels should be subsidised, or why feeding the world is not that important in this extract. How much does this matter?

Q: So, overall, how much of this reasoning do you accept (based on earlier thinking)?

A: I accept that there is a real question about whether biofuels should be subsidised and whether they are generally good for the environment. I need to find out more about what it means for a government to subsidise something – how does this affect what happens and how is it related to other market forces? I need to think about whether I think that making sure everyone has enough food to eat is a duty for all governments. I'm really troubled by this idea. As a human being I feel that it is right to help those in need and provide each person with basic needs. But I can see that there are too many people in the world. The world can't really cope with all of us. And global warming will make growing food more difficult, so we might need to make a difficult decision now to avoid worse situations in the future. And shouldn't my government do what is best for the people in my country? Isn't their duty to us before to other people in the world? But if biofuels don't help the environment, then we really shouldn't subsidise them. So I need to find out about this.

(Note that the student is planning out some reconstruction work (I need to find out ...) and is beginning to reflect on the issue and on their own relationship to it. It is worth making students aware of these different kinds of thinking when they emerge spontaneously. It will help them both to see the point of deconstruction and to understand their thinking.)

Q: How useful is this reasoning to your research?

A: It's very useful. I can certainly use it. Thinking about this article has helped me to plan further research. I know some of the information I'm going to look for, and some of the different perspectives that are involved. There's the ethical question of how we should treat other people and whether we should act on our duty and our feeling about what is right, or whether we should consider doing something that seems bad because it will be better in the long run. There are the economic questions about government subsidies, and what is the best choice economically. There are the environmental and technological issues about what is best for the environment. And there are the political issues about governments' choices and duties. I didn't know you could get so much out of one article.

(iii) Does deconstruction end here?

No, during the research process, learners should gradually begin to deconstruct articles automatically. By the end of the course it should be a matter of habit for them to ask of any argument:

- What does this author want me to accept and on what grounds?
- How effectively does the author persuade me to accept the conclusion?
- What further evidence do I need?
- What further issues does this material raise for my research?

There is no need for learners to do detailed technical deconstruction activities on every piece of reasoning they come across. Rather, they should gradually develop a questioning habit of mind.

3.3 Reconstruction

Having deconstructed the research area and an argument, it is time to set the issue back into the broader context. This means researching the evidence base for two or more different perspectives, evaluating these evidence bases, and ensuring that the issue is seen in the global rather than in only a local context. The deconstruction of argument activity above has produced a number of questions that the learner wants to research further, but the teacher will also need to discuss other issues with the class to ensure that other perspectives are introduced, not just different opinions that are rooted in the same perspective.

3.3.1 Research skills

Students are expected to learn how to:

- identify and use relevant tools for the research process: catalogues, databases, bibliographies, search engines
- identify relevant resources for the research process: books, journals, theses, websites
- select and store relevant resources
- evaluate the usefulness and reliability of the resources consulted
- return to earlier stages of locating relevant resources if necessary
- keep notes and records.

In the first iteration(s) of the Critical Path, you might provide a number of relevant sources in the form of a reading list, and expect learners to find known materials. Later in the course, learners would be expected to find a range of relevant materials independently, including books and websites.

3.3.2 Evaluating the usefulness and reliability of resources

Not all of the information available to learners is of equal value in conducting research. Learners need to learn how to tell the difference between resources that can reasonably be used in their study, and resources that should be avoided. This will depend on a number of factors, including the area that the student is researching.

- Is the writer likely to be selective or to interpret the evidence in a particular way? Most authors do, as most authors are embedded in a particular perspective. It is important to identify and consider that perspective, bearing in mind how it will affect the reasoning.
- Has the author checked the facts? Is the author using the most recent facts where appropriate, bearing in mind the time it takes to collect information? Learners should cross-check information!
- Is the publication suitably recent? For example, using a publication from 1997 on biofuels would be inappropriate, but a 1997 introduction to ethical or political theory might be fine.
- Is the quality of reasoning and argument strong? Has the author jumped to conclusions? Has the author made reasoning errors that mean that the conclusion cannot be accepted? Even highly respected academics sometimes make such errors. For example, a few years ago a number of studies showed that hard work was necessary to genius, brilliance and success. Many writers argued on the basis of this that young people who showed talent should not therefore be especially nurtured, because it was hard work, not talent, that led to success. The people arguing this included academics and policy makers. But the reasoning confused necessary and sufficient conditions. That is, it ignored the fact that hard work might be necessary for success, but that does not mean that it is sufficient. Talent and ability are probably also necessary for success. So there is a case for nurturing children with talent, and encouraging them to work hard as well.
- How can the resource be used to help the learner's reasoning/development of ideas?

However, there are several questions that students can ask in most cases. These include:

- Is this written by an expert? Is it: a seminal text, a minor publication, a reasoned argument in a reputable magazine by an expert, an opinion in the newspaper written by a journalist with some/no expertise, a rant? If an expert starts ranting, do we take them seriously? Is there a consensus of opinion on this matter? Is this material part of a healthy academic debate or is it a far-fetched theory discounted by most experts? Is this material produced by an individual with unusual opinions who finds the internet the best space for sharing these ideas?
- Might the writer have any reason to lie?

3.3.3 Possible sources

Let's look at some of the sources that a learner might use to help their research when following on from the deconstruction task about biofuels, above. The comments given here report the learner's thinking during the research process, not what they will write in an essay or presentation. The comments start with ideas about reliability, then move on to reflection on the issues and the research plan.

Source: <http://bio.org/ind/advbio/bioworldbiofuels.pdf> **Biofuels report: market realities, perspectives and challenges, Jim Greenwood, CEO of the Biotechnology Industry Organisation, 2006.**

This came up under an internet search for 'Perspectives biofuels.' It looks quite promising as a source, until you see the date. A 2006 document will not help me to investigate changes since 2008 that would affect my opinion on whether biofuels should be subsidised. But I looked at bio.org/ to see if they have got any new evidence, information or arguments. This site really pushes the benefits of biotechnology, so it could be a useful source of information from the perspective of people who will benefit from biofuels. They don't seem to take negatives into consideration, but to push the positives. I'll need to bear in mind that they might be selecting just the most positive evidence.'

Source: *'Famine, Affluence and Morality,' Peter Singer (written 1971) in Western Philosophy: an anthology* ed. Cottingham, Blackwell Publishing 2nd edition, 2008.

This is an old text but it seems to be an important one. It's about the morality of whether we should help people in need in other parts of the planet. I think I need help to understand this one. I want to understand the background of why we should help people, but this is a difficult text. I can see why he thinks it is good to help people who are suffering, but I don't follow why he thinks it is wrong not to help them. Can this text help me decide what to do about biofuels? Well, if he's right it might support the author of the first article, when he assumed that feeding the whole world is more important than addressing global warming by funding alternatives to fossil fuels. Check – is Peter Singer's view mainstream or unusual?'

Source: www.scientificblogging.com

This is a bit random. It's scientists writing, and many of them seem to know what they are talking about, but some of them seem to be getting over-enthusiastic about their special ideas. Some of it is too scientific and I don't understand it. But some of them also have summaries that are easy to understand. I think I could use some of this. I'll keep a note of it for later, it might be useful for other topics. This one makes me question the idea that blogs are ranting and not much good. It seems that some blogs might be useful, so I'll have to judge them as I go. It would be easier to just say they were all weak.

Source: www.euractiv.com/en/climate-environment/eu-should-involve-developing-countries-biofuels-debate-news-483458

Although it's a European source, this one starts to express a different perspective. It reports the view of a Malaysian biofuel producer. He's got a vested interest in getting Europe to buy palm oil, but that doesn't mean he's wrong to say that the EU should consider the views of developing countries about biofuels, especially as it's often them growing the fuels and they have to plan and invest. There is some useful evidence I could follow up about palm oil being efficient – does palm oil grow where maize doesn't? Is palm oil usable for food? I could also follow up ideas about governments and who they have a duty to. European governments are making decisions that affect people everywhere in the world. This could have really serious consequences. Do they have some kind of responsibility to make these consequences good ones?

Other possible sources include:

- Heywood, A. *Political Theory* Palgrave Macmillan, May 2004. This would be a good starting point for students who wish to follow up thoughts about governments and their relationships with people and approach the issue of biofuels from a politic perspective.
- Thomson, A. *Critical Reasoning in Ethics* Routledge, June 1999. This is an excellent book for helping students to reason through issues from an ethical perspective.
- www.biodieselmagazine.com
- www.greenenergy.com
- ClimateChangeCorp.com
- www.ethicalcorp.com
- [http://www.odi.org.uk/events/biofuels_07 index html](http://www.odi.org.uk/events/biofuels_07_index.html) (a presentation by Rachel Slater).

Note that Heywood and Thomson provide theoretical frameworks that can be applied to various issues. They have been included on the list because the student was showing signs of interest in politics and ethics, and raising questions that would best be answered with the aid of a theoretical framework. For a learner who was raising economic questions, an economics textbook (such as Cambridge AS /A2 Economics by Bamford et al) might be useful.

3.3.4 Do students need to know political, economic or ethical or cultural theories?

Learners do not need to know any particular theories. They should be able to look at issues under the broad themes of Economics, Ethics, Environment, Science and Technology, Politics and Culture. They should be able to think about issues from an economic or an ethical perspective. For example, some learners may find that a simple introduction to theory helps them to organise their thoughts and deepen their reflection. Other learners are inclined to hold onto theory as a replacement for thinking.

However, it is important to note that an understanding of theory is not an end in itself. It should not be taught as it would be in a main subject, but should, like any other source, be approached critically. Learners should judge the perspective and usefulness of theory, just as they would with articles from the newspaper. Theory should always be applied to real issues of global significance in our world. Learners with an interest in theory should be encouraged to use it to extend their understanding of real world issues and to consider the implications of the theory or the consequences of the theory in relation to real issues, such as biofuels. The following questions might help.

- What is the just or fair choice to make about biofuels? How do ethical theories help me to make the right decision about biofuels?
- What are the opportunity costs of biofuels? How do economic theories help me to make the right decision about biofuels?
- What are the political implications of biofuels? How does political theory help me to make the right decision about biofuels?
- Is the right ethical decision the same as the right economic decision? Is the right political decision the same as either the right ethical decision or the right economic decision? Are these decisions the same from the perspective of a Malaysian palm oil producer, an American oil company, a European driver and a Nigerian farmer?
- How can we judge between these competing ideas?

3.3.5 Bringing ideas together

Once learners have researched the evidence base for two or more different perspectives, they need to evaluate the evidence base. The evidence base consists of information, ideas, arguments and even the ideas and beliefs that underpin those ideas and arguments. Learners will need to find some way of judging between competing perspectives. The strengths and weaknesses of arguments, the fundamental beliefs underpinning the perspective, the consequences and implications of each perspective can all be used to evaluate and judge between perspectives.

3.4 Reflection

Reflection is about:

- deep thought based on previous thinking
- asking difficult questions and trying to find the answers to them
- considering consequences and implications and how much these matter
- weighing evidence
- weighing consequences and responsibilities
- following ideas through
- questioning our own beliefs in the light of evidence and other perspectives
- trying to decide what we think
- finding a personal perspective that takes other perspectives into consideration, possibly synthesising different perspectives.

3.4.1 How do I teach students to reflect?

Many learners have grown up in an environment that rewards 'knowing the answer' rather than personal thought. Some will feel liberated and valued when asked what they personally think. Others will feel lost.

Reflection is a deeply personal activity. It can best be taught by:

- allowing learners to think for themselves
- providing opportunities for thinking
- questioning learners in a way that prompts thinking
- rewarding attempts to think things through with interest and the generation of further questions.

Some reflection can be done during conversation and questioning, but quiet thinking is also important. One useful technique for promoting quiet thinking is to encourage students to keep a logbook. Learners do not need to share all of their reflection. This logbook could contain:

- notes on research
- reflections on the issue researched
- reflections on the research and learning process
- reflections on the lessons and the new learning styles
- responses to the course.

It is important to encourage learners to reflect and not just to write down evidence they have found.

The Critical Path can double back on itself. Reflection may indicate the need for more research. This might either be research that the student should do as part of their present project, or the student may find that there is a broad area needing further research that cannot be included in the present project. This is an important distinction. If reflection reveals that more research is needed within the scope of the present

project, then the student will have to revisit the reconstruction, and possibly the deconstruction, stages of the Critical Path.

As part of the reflection process, learners should apply a healthy scepticism to the conclusions they have reached. That is, they should be aware of the provisional nature of these conclusions. They should be subtle and nuanced, and they should not claim too much.

3.4.2 Let's look at two examples of teachers working with students.

Example A

Teacher A: Can anyone tell me what a biofuel is?

Student X: A plant used as fuel.

Teacher A: I want the full definition, quickly now. Y, can you help?

Student Y: A biofuel is a fuel such as methane produced from renewable biological resources such as plant biomass and treated municipal and industrial waste.

Teacher A: Yes, well done Y. Why do some people oppose biofuels?

Student Y: Because biofuels are diverting up to 4% of US grain to fuel production.

Teacher A: Good.

Example B

Teacher B: Can you remember what a biofuel is?

Student X: A plant used as fuel.

Teacher B: What sort of plant? Any plant?

Student X: They use maize and palm oil, and I've read about them using algae. I don't know if any plant would do. I suppose some of them aren't very good.

Teacher B: No, I don't know either. We'll have to find out. Do biofuels only come from plants?

Student Y: A biofuel is a fuel such as methane produced from renewable biological resources such as plant biomass and treated municipal and industrial waste.

Teacher B: You've looked it up Y, well done. So, what does that mean? Do biofuels only come from plants or are there other sources of fuel from biological resources?

Student Y: I don't know.

Teacher B: What do you think it means by, 'treated municipal and industrial waste'?

Student Y: I don't know. Do they get fuel from rubbish?

Student X: Oh yes! You're right Y. I read about things decomposing in landfill sites and making gas that we can burn for energy. Methane.

Teacher B: So what do you think about using biofuels?

Student Y: Biofuels are diverting up to 4% of US grain to fuel production.

Teacher B: Why does that matter?

Student Y: Because the World Food Programme officials have said that they might not have enough food for all the starving people.

Teacher B: So what's the connection?

Student Y: Food from the US could be sold or given to starving people instead, I suppose.

Teacher B: So, Y, what do you think about putting fuel into a car instead of feeding people with it?

Student Y: I think it's wrong. But I think global warming is wrong too. And I don't think it's such a simple dilemma as that. I think the problem is more complicated.

Student X: I don't think it's complicated at all, Y. Our lifestyle is just selfish and we've got to change it.

Student Y: But that's it, we've got to change our lifestyle, not just see it as an alternative between food and fuel. And that's difficult. If I could see people starving in front of me, I would give them food. But I can't. I'm just driving my car to school on a cold, wet day.

Teacher B: Go on, this is very interesting.

Student Z: I'm not even sure we'd give food to people if we could see them. We walk past beggars everyday, and we're just rude about them. We call them scroungers. And people who depend on state handouts and charity, we look down on them.

Student X: But it's different. Hardworking people who can't eat because of bad harvests and because of our choices about biofuels are different from lazy good-for-nothings who are lucky enough to live in a rich country and don't want to work.

Student Y: Isn't that a sweeping generalisation?

Teacher B begins by revising previous concepts and testing understanding of them, then moves on to asking for reflection. Y is not a confident learner, and tends to cling to known facts. But interest and questioning reveal that Y has been quietly reflecting and has seen some of the complexities of the situation. The discussion broadens out beyond biofuels, which is an important part of reflecting on the whole context. Teacher B may now find that she has a lively debate on her hands. Her task will be to ensure that learners are genuinely reflecting and going beyond their previous thinking, not just reaffirming their existing beliefs and prejudices.

The following books give useful further guidance on teaching reflection:

Fisher, R., Teaching Thinking (3rd edition), Continuum, 2008

Matthews, R and Lally, J. The Thinking Teacher's Toolkit, Continuum, 2010,

3.5 Communication

Communication, (including in the form of mini-presentations) occurs during the course, and in most cases it is part of the learning process rather than part of the assessment process. As discussed above, the need to present (to articulate their thoughts to others) encourages learners to engage with the issues, the evidence base and their own thinking and to organise all of these into a suitable format. During the course, presentation of ideas and thinking processes can take many forms including:

- role plays – sympathetic engagement;
- discussions – using evidence, answering others' arguments, reflecting on issues;
- debates – using evidence, answering others' arguments, organising thinking into a formal structure;
- seminars – engagement with the issues, evidence and argument, control and management of material;
- displays – combining visual and written presentation, organising material;
- short talks – getting to know the material, organising it into a structure;
- games such as 'Just a Minute' in which learners have to talk about a subject for a minute without hesitation, deviation from the subject or repetition – confidence and rapid reflection, access to thoughts we didn't know we had;

- essays – using and evaluating evidence, exploring perspectives, organising material into a coherent argument, forming and arguing for a judgement;
- formal presentations – developing a sustained, reasoned case which takes other perspectives into account, engages reflectively, sympathetically and intellectually with issues and perspectives and uses evidence to support this reasoning, organising the argument and visuals to communicate through speech not writing.

So, learners might make a display about biofuels, they might hand in a research diary, they might organise and take part in a seminar. Games and role plays could be mixed in with more formal presentations. All of these would help the students to process, deal with and organise the material they have found.

Teachers need to consider how to set up the presentation at or near the beginning of each cycle of the critical path. The nature of the presentation will shape the reconstruction and reflection stages, so it is important to plan it in the very early stages of deconstruction of the research area. For example, if learners are going to present a display, or talk to the class, they will need to know this early so that they can search for an appropriate visual representation of the ideas they wish to communicate. This may be pictures, cartoons, a flow diagram of their argument or any other appropriate visuals. The student will also need to take into account that a presentation intended to be spoken cannot be as dense as one intended to be read.

The nature of the presentation set up will also affect the quality of thinking that is done during early stages of the cycle. The instruction to ‘do a display on biofuels’ is likely to lead to information gathering and presentation of information without much organisation, evaluation or reflection. A more effective set of instructions might be:

Teacher A: We’ve started to look at the issue of biofuels. We’ve deconstructed one argument, and you’ve raised some questions that interest you, and thought of some lines of research to follow up. Karim, for example, wants to research some political theory about a government’s duties, and Ana wants to explore some algae based biofuels to see whether they can provide energy without taking land away from food production. In four weeks’ time you are going to present the results of your research in a display. Your display must [shows instructions on whiteboard]:

- answer a question of global significance about biofuels which we will set over the next week;
- include relevant images which really interact with your ideas;
- show at least two different perspectives (political v economic v ethical or small farmer v car driver v oil tycoon for example);
- use and evaluate at least five sources;
- show how you are going to judge between the perspectives;
- show your own reflection and thinking about the issue
- be presented to a very high standard in A1 format.

Student Q: What if we do some research and change our mind?

Teacher A: About the question or the answer?

Student Q: About the question. Now I might just go with the idea from the first article we looked at, because I haven’t thought of anything that interests me more. But what if I find some ideas that are more interesting?

Teacher A: It depends when it happens. If there’s still time for a change of focus, we’ll talk about it. If it’s two days before the deadline, it’s too late.

Setting a strong question towards the beginning of a cycle of the critical path can determine the success of the learning in that cycle. A weak question or no question can lead to description, fact collection and simple use (or cutting and pasting) of information from other sources. A strong question demands engagement, processing and organisation. So, what are the characteristics of a strong question?

A strong question:

- requires a judgement to be made (on an issue of global importance)
- allows for debate between different perspectives
- allows for the answer to be in the middle ground or to synthesise different perspectives
- is simple – one idea rather than many
- can be answered with the resources available to the student in the word limit allowed.
- really interests the candidate

Let's look at two different possible questions:

A: What different attitudes do people around the world have to the relationship between parents and children?

B: Should young people honour their parents (and if so, how far)?

Question A does not require a judgement to be made and is likely to lead to a description. It is likely to bring up information about different perspectives, but not to encourage candidates to engage with them or to evaluate them. There is no debate to be had here. It might meet the last three criteria in the list, although to be done within a word limit it would need to be narrowed down.

Question B does require a judgement, there is certainly a debate to be had, and very different perspectives (generational, Chinese / Indian v European / American). There is only one key idea here to be discussed, and it allows for some deconstruction of the word 'honour'. It could be answered within a limited word count using resources available in libraries and the internet. This is an issue that certainly might interest young people and which can be treated in a global way.

So, Question B is a better question for an examined presentation, and would be better than Question A to structure the bulk of a cycle through the Critical Path. Does this mean that Question A should not be used at all? Not necessarily. A general, information seeking question may be needed in the very early stages to help learners get to grips with the issues. If asked whether young people should honour their parents, most learners are likely to answer either 'yes' or 'no' depending on their cultural background. They may not be aware of the different perspectives and may need to seek information on differences before they are in a position to make a judgement about them.

Organising ideas, issues and evaluative use of source material into an argument does not come naturally to most learners. Rather than teaching learners the content, teachers will need to spend some time teaching learners how to organise and manage material and how to develop arguments. The following are some strategies that may help.

1. Start early by asking learners to express and justify their opinions. Ask them to think more deeply about their opinions. Present evidence which should make them question their opinions. Ask them to test their opinions in the light of opposing views – not just as opposition to be defeated but as persuasive reasoning which might affect their opinions or alternatively might be argued against. Ask, ‘if someone can’t defend their opinion against a persuasive opponent, should they change it?’ Question the role of emotion and gut feeling in opinion and in judgement. Discuss whether all opinions are of equal value, or whether a well thought through and supported judgement has more weight than an opinion based on prejudice. Repeat this process with judgements formed about academic issues, and expect learners to form a judgement and support it, but to be prepared to amend this judgement in the light of new arguments and evidence, possibly from different perspectives.
2. Get learners used to the need to frame and express their own thoughts by always asking them what they think and why. Make sure that they know that the answer is not in a book somewhere, it’s a judgement that each student must make and support for themselves. Make sure that they understand that an essay or presentation is about the process of their own judgement formation.
3. Teach learners the basics of developing an argument. One very simple exercise is: take an answer to a question (the conclusion). Give three (or four or five) reasons to accept this conclusion, and make sure they are good reasons focused on the precise answer / conclusion, not just general advantages or disadvantages. Then think of two, three or four reasons why we should accept each of the reasons (this will make them intermediate conclusions). Then think what sort of evidence would be needed to support the reasoning. More on this can be found in Lally et al OCR Critical Thinking for AS Chapters 13–15 (writing short arguments) and Lally et al OCR Critical Thinking for A2 Chapter 11. Remember that these skills need to be placed in the context of the longer arguments required by the GP course.
4. Ask learners to plan their answers (possibly using structures such as that described in 3 above). Schedule a discussion with each individual while the class are researching. Ask the student questions such as, ‘that’s a really interesting idea, but how will it help you to answer your question?’ and ‘is that really a different perspective?’ and ‘how are you going to answer this point?’ and ‘are you using this argument or just describing it?’ and repeatedly, ‘how will this help you to answer your question?’ For example, ‘Ana, you’ve found out a lot about algae based biofuels, and you clearly understand the science behind it. I’m not yet sure how this will help you to answer your question about whether governments should subsidise biofuel production. Can you explain the link?’

Technical presentation skills are useful in so far as they serve as tools to help learners communicate their thinking, just as written presentation skills are useful only in so far as they are tools to help learners communicate their thinking. So, this means that learners should think about how any visuals they use interact with the words they use to communicate ideas and reasoning. Good ideas include but are not limited to the following.

- Relevant images or cartoons (which should be referred to with words).
- Diagrams or flow charts showing the line of reasoning on a poster (these can be very helpful to an audience following a complex argument).
- Key ideas summarised in few words.
- A clear spoken presentation in good quality recording with no background noises accompanied by a written transcript (especially useful for Paper 3).

Less effective ideas include but are not limited to the following.

- Collages of pictures which have no deep connection to the words / ideas / arguments and are not referred to.
- A different animation technique on every slide.
- Irritating sounds and bleeps on slide transition, especially if they are much louder than your voice (the examiner will be using headphones).
- Pink writing on a green background.
- Writing which bounces around the screen while the audience (examiner) tries to read it.
- Lots of tiny writing crammed into each slide.

Audio recordings which are fuzzy, inaudible, spoken too fast so that lots of ideas can be crammed into fifteen minutes or slowed right down so that limited ideas can be made to last fifteen minutes.

Audio recordings in which the misbehaviour of other class members is more audible than the student being examined.

Section 4: Planning

When setting up your course in Global Perspectives it is helpful to consider the following organisational issues

- If you have a significant number of learners you will need to set up a coordinator and a team
- Your team will need to agree content incorporating some flexibility to deal with any contingencies that might affect timing
- You will need to agree an approach to
 - sharing objectives
 - student's responsibility for own learning
 - using assessment to promote learning
 - how much demand there will be for written work
 - training in research skills, finding sources, using the library
- You will need to agree a basic structure for the year
 - mocks, exams
 - deadlines for Paper 2
 - dates of release of Paper 3 material
 - slots for presentations
- You may need a skills progression flow chart – so that if multiple teachers teach the same learners on the same topic, they are aware of the previous learning that has taken place and what is required next
- Integrating any outside speakers/presentations by members of staff/visits to conferences etc. into the course
- Ensure your course has a sense of progression and is not just a series of topics

4.1 Balance skills and subject-matter

It is important to establish a good balance between skills and subject-matter in Global Perspective courses. Learners will be assessed on the skills specifically detailed in the assessment objectives, taught through the topic areas listed in the syllabus (and reproduced in Section 2 of this guide). These topics or issues of global significance, (like the texts in English Literature), constitute the medium within which these skills are developed, then honed. In the process of that development, students learn to research and investigate with increasing independence. Following on from this, they learn to view and evaluate all of the available information – the arguments, opinions and beliefs - from a variety of perspectives and can practice coming to their own conclusions (based on the evidence before them) and articulate their views in essays and presentations.

In planning the course the teacher should break down the teaching and learning that form the necessary steps to achieving the assessment objectives and find appropriate resources to facilitate the skills development. A sample scheme of work is included at the end of this section to illustrate one way of breaking down these skills into a progressive programme.

4.2 Progression of skills; moving from structured classes to seminars

In order to create independent thinkers teachers need to move from a structured classroom approach that allows initial techniques to be explained and demonstrated, to seminar-based lessons in which the teacher increasingly becomes a facilitator and learners can practice and deliver their work.

The progression of skills is reflected in the assessment structure. Learners will need to see Paper 1 and be familiar with how the skills of deconstruction are tested here. They need to choose a question and practise their essay technique for Paper 2 and to have sufficient skills in place to be able to develop their presentation for Paper 3 from the materials provided.

It is important therefore that lessons are built in to the programme in which learners are introduced to the 3 elements of the assessment and understand what they must do. They will need to be made familiar with the structure, style and format of the assessments.

It can also be helpful to let learners mark each others work or see previous work so that they can get an idea of what is expected of them.

4.3 Sample scheme of work

Below is an example of a scheme of work from Central Sussex College which has experience of delivering Pre-U Global Perspectives and Independent Research Report over the past few years.

In this scheme of work you can see that the skills have been broken down into a progression alongside the time available within the terms. Learners are instructed in basic deconstruction and research skills first and then allowed to practise these. Deconstruction skills in particular need a sufficient amount of practise to be properly retained. Next, seminar lessons are introduced in which learners have a platform for practising their presentation techniques on a set of defined issues. Seminar lessons continue with the introduction of higher level sources such as books, and presentations are given on more involved issues. At the same time learners are introduced to the assessments and are able to work on their responses for Papers 2 and 3.

Scheme of Work for Global Perspectives at Central Sussex College

First Term: First Half

Week 1	Introduction to the course: initial group research activity
Week 2	What is an argument? Reasons, conclusions, argument indicators with short examples. Begin to develop a research question on a global topic, using this to introduce tools for clarification.
Week 3	Evaluating argument strength, context and perspective. Introduce a number of short, actual arguments around the same topic (e.g. the war in Afghanistan, the legacy of 9/11, etc.). Introduce criteria for evaluating argument structure and context. Introduce and define perspectives as world-view and as combination of conclusions, assumptions, value judgements, evidence and context. Use to group arguments.
Week 4	Introduce advanced Google searching and subscription library resources, linking to evaluation of sources. Learners use skills to locate and group their own sources around the topic and evaluate them and an overall argument.
Week 5	Introduce a new topic – biofuels. Show initial video source and follow with structured grouping and analysis of selected further sources. Establish and evaluate initial questions.
Week 6	Introduce techniques for constructing a presentation poster. Learners complete research around own question and produce a poster.

First Term: Second Half

Week 1	Abbreviated version of 'English as a Global Language', exploring question, evaluating sources, evidence and perspectives.
Week 2	Introduce techniques of sequencing selections from sources and link to essay-writing. Use to write a short essay on this topic.
Week 3	Look at more detailed techniques for giving presentations and show best-practice in PowerPoint.
Week 4	Use to produce a PowerPoint presentation answering a research question in this topic.
Week 5	Switch to seminar format, splitting class in two (half-group in each seminar with additional independent research time). First seminar introduces sources on a topic in ethics (e.g. ethics of global pharmaceuticals, or stem cell research).
Week 6	Continue with seminars to introduce opposing perspectives, group sources, produce arguments and get learners to discuss possible questions. Leads to first possible Paper 2 essay, produced over Christmas break.

Second Term: First Half

Week 1	Work through specimen Paper 1 in class , linking to deconstruction skills established so far.
Week 2	Following this, begin second seminar sequence on a contrasting topic (e.g. multiculturalism). Use to introduce higher level sources (e.g. books) and for learners to give their own presentations in seminars.
Week 3	Continue this seminar sequence, with 2–3 learners per seminar giving extended presentations using posters, PowerPoint, etc.
Week 4	Continue this seminar sequence, with 2–3 learners per seminar giving extended presentations using posters, PowerPoint, etc.
Week 5	Continue this seminar sequence, with 2–3 learners per seminar giving extended presentations using posters, PowerPoint, etc.
Week 6	Complete second seminar sequence, leading to another possible Paper 2 essay completed for homework.

Second Term: Second Half

Week 1	Introduce Paper 3 booklet , briefing learners on exam board requirements. Learners read booklets and select their preferred sources, deconstructing arguments and producing possible questions in groups.
Week 2	Individual work on Paper 3 presentation in class and for homework. Includes a question proposal and justification by each learner, discussed with teacher.
Week 3	Continue work on Paper 3.
Week 4	Complete Paper 3 presentations and submit for onward transmission to Cambridge.
Week 5	Short final seminar sequence on further topic, built around Paper 1 style questions. However, learners can use to produce a further Paper 2 essay if they wish.
Week 6	Complete final seminar sequence. Review work completed and decide which Paper 2 to submit or write further Paper 2 essay over Easter.

Third Term: First Half

Week 1	Final practice for Paper 1, reviewing deconstruction skills and exam technique. First full mock exam.
Week 2	Review first mock exam and have second mock.
Week 3	If exam leave has not started, continue Paper 1 practice.
Week 4	Continue Paper 1 practice until exam leave. Opportunity also to review final Paper 2 entries with some learners, if required.
Week 5	Exam leave
Week 6	Exam leave

Section 5: Resources

5.1 Choosing resources

What makes a good Global Perspectives resource? Almost any material dealing with an issue of current global significance can be used as stimulus material.

Resources can come from:	Ask yourself the following questions when choosing stimulus materials.
<ul style="list-style-type: none"> • newspapers from around the world • journals • magazines • books – fiction, poetry, theory etc. • websites of charities, non-governmental organisations, government organisations, transnational organisations (such as the UN, the World Bank, NATO etc) • other websites – comments in response to online newspaper articles are often rooted very firmly in a particular perspective, and often contain reasoning flaws. 	<ul style="list-style-type: none"> • Will this material make my learners think? • Will this material help my learners to understand the issues and perspectives? • Will this material raise further questions for learners to investigate and reflect on? • What can I do with this material to make it useful/accessible/interesting? • Will this material suit my purposes? For example, in a deconstruction lesson, I want a simple argument for analysis – is this material an argument?

5.2 Examples of English language resources from around the world

Organisation Name	Web Address	Details
BBC	www.bbcworld.com www.bbc.co.uk/worldservice	International websites from the London based BBC.
Aljazeera	http://english.aljazeera.net/	Qatar based international news and current affairs channel.
New York Times	www.nytimes.com	News and opinion from serious US publication.
The Times	www.timesonline.co.uk	Serious UK newspaper. The Guardian and Independent sometimes give alternative views.
Daily Mail	www.dailymail.co.uk	Can be a very good source of arguments which include a lot of rhetorical and emotional tricks.
Mail and Guardian	www.mg.co.za	South African news and opinion.

New Zealand Herald	www.nzherald.co.nz	New Zealand perspective on news.
Straits Times	www.straitstimes.com	From Singapore.
Jakarta Post	www.thejakartapost.com	Asian view from Indonesia.
Bangkok Post	www.bangkokpost.com/news	From Thailand.
New Straits Times	www.nst.com.my	Malaysian source.
Pakistan Dawn	www.dawn.com	View from Pakistan.
Asia Times	www.atimes.com	Hong Kong based.
New Scientist	www.newscientist.co.uk	Good source for 'reasoning in a scientific context' but limited free availability.
Times of India	www.timesofindia.indiatimes.com/	From India. Useful comment and blogs.
China Daily	www.chinadaily.com.cn/opinion/	From China, with a very Chinese perspective.
Scientific American	www.scientificamerican.com	Scientific and technological perspective. Look out also for Scientific American Mind.
Oxfam	www.oxfam.org	Charity, which includes reports, appeals and some arguments.
United Nations	www.un.org/en	In addition to documents relating to the organisation itself, the website includes news, reviews, global issues, resources and reports. There are sections on Peace and Security, Development, Human Rights, Humanitarian Affairs and International Law.
Red Cross	www.redcross.org.uk/education	The Red Cross is a charity. Its website includes some very good teaching resources which put some emphasis on thinking through an issue. Many of these could easily be adapted for use in a course with a significant element of thinking and reasoning skills.
Sociolingo's Africa	www.sociolingo.com	This is a blog run by a person who has a background in sociolinguistics and education, which includes useful resources relating to Africa. Some are rather challenging and students may need help navigating the site.

Third World Network	www.twinside.org.sg	'Third World Network is an independent, non-profit international network of organisations and individuals involved in issues relating to development, Third World and North-South affairs' according to their website. Again, some of the content is fairly academic.
---------------------	---------------------	---

5.3 Identifying arguments for deconstruction

Deconstruction involves analysing and evaluating arguments. It is important to provide learners with arguments for deconstruction until they are able to distinguish between arguments and other forms of reasoning (such as explanation) or other forms of writing (reporting, commenting, ranting etc).

Identifying articles that contain argument can prove more problematic than anticipated. Very often what appears on the surface to meet the definition of an argument turns out to be a combination of opinion and explanation. On the other hand, promising and interesting articles on analysis are often found to be far more complex in structure than expected, and it is particularly important that learners focus on analysis and understanding of wider issues, rather than getting side-tracked into analysing the reasoning in a particular article.

The following guidance may assist in finding appropriate materials:

- Select topics which lend themselves to an interdisciplinary approach.
- An argument by definition attempts to persuade the reader of the writer's claim(s); newspaper reports generally give an account of events, plus evidence and explanation. Passages containing argument are more likely to be found in the editorial pages of newspapers and journals than amongst the reporting pages.
- As a general rule, shorter texts work better than longer ones – but careful editing may retain the structure of the argument whilst cutting unnecessary "padding". Be careful about using any article which is more than 600 words in length.
- Bear in mind that learners should not be expected to analyse the argument in the fullest possible detail, but firstly to identify the writer's conclusion and the main supporting reasons and evidence, and secondly to evaluate the writer's argument, by applying key questions

5.4 What resources are available from Cambridge and where can I find them?

5.4.1 Materials

- **The Syllabus**

This is an important document that outlines which skills learners need to develop and how these skills are assessed. Make sure you are using the right version! The year of the syllabus refers to the date of the examination not of first teaching. The syllabuses are available online at www.cie.org.uk. If you click on the relevant subject and level you can see the documents available to be downloaded.

- **Specimen Papers and Mark Schemes**

These give an idea of what the question paper for Paper 1 and the resource booklet for Paper 3 might look like. They are a guide only, not an exact version. They are available from www.cie.org.uk under the relevant subject and level.

- **Past Question Papers and Mark Schemes**

Your school will have designated an individual as your **'Teacher Support Coordinator'** when registering for the qualification. Usually this is the Examinations Officer although sometimes it can be another individual so please check with your administration. This coordinator will be issued with a login and password to the Teacher Support Site and will be able to provide you with your own access details.

Question papers and mark schemes from the most recent examination series will be available to registered centres on the Teacher Support Site under the relevant subject and level and in the section Past Exam Resources. Earlier past papers and their mark schemes will be made available on the public website www.cie.org.uk as they become available.

- **Example Candidate Responses**

Also available on the Teacher Support Site <http://teachers.cie.org.uk> to registered centres are CDs containing example candidate responses. Questions, mark schemes and examples of marked scripts are included along with examiner and moderator comments on these CDs, to establish a good understanding of the standard and of the assessment requirements.

5.4.2 Training

Face-to-face training is available in the form of workshops and lectures covering structure, planning and teaching strategies. To see what training courses are currently available in your region go to www.cie.org.uk/events. Online tutor-led training courses are also advertised at this address.

If you have any questions you can email Customer Services via international@cie.org.uk or call us on **+44 1223 553554** or **01223 553554** if you are in the UK.

If you would like to discuss bespoke training please contact our Training Services team at trainingservices@cie.org.uk. Face-to-face training can be arranged to meet your individual school requirements. This bespoke training will be tailored to the particular needs of your staff.

University of Cambridge International Examinations
1 Hills Road, Cambridge, CB1 2EU, United Kingdom
Tel: +44 (0)1223 553554 Fax: +44 (0)1223 553558
Email: international@cie.org.uk www.cie.org.uk

© University of Cambridge International Examinations 2012. v1 2Y01

