Teacher Guide Section 2

7 Water, food and agriculture

General

This chapter is part of a new phase of learning for students. It will help students to become more independent, to take early steps for themselves and to develop their skills without the pressures of assessment. In this section, the emphasis is on independence in remembering and attempting to use skills, and on students beginning to be independent in setting up their own work.

For the teacher this means starting to move into a mentoring and guidance role, controlling the environment rather than the students. It means focusing on praising attempts at independence, asking questions to develop thinking and an almost terrifying move away from “getting it right”. If you are setting targets, these could relate to independence, motivation and trying to think of the next step or to the next level. Try not to worry about performance yet. It will come with practice, and with that willingness to think to the next level.

For the students this transition can be terrifying, but also liberating. As in Section 1, students will need:

- reassurance that it is ok not to be perfect – failure, mistakes and partial attempts are all acceptable, and indeed, essential parts of the learning process
- encouragement to try thinking and acting for themselves
- reminders that the content is important and interesting, but that the ability to find, think about and use information is much more important than the actual information
- support as they learn to direct and manage their own learning – it is particularly important to give students time to make this step, rather than giving up in frustration and telling them what to do.

Guidance to activities

Activity 7.1

As in Section 1, encourage students to choose in line with their interests, but also to keep their minds open to change as they gain new information.

Consider how well it can work for your class to have groups of students working on different topics or different aspects of the topic. Students do not need to come out of the course with the same knowledge, but rather with the same skills and the same ability to think about their knowledge. As students gain independence, it should be possible, for example, for
one group of students to work on how their country can ensure its food security, while another group works on political agreements regarding climate change, another works on the possibilities for producing renewable energy, and a fourth group works on how local communities can reduce fuel use. Being able to make some choices in their learning can inspire and motivate even quite challenging students. This kind of organisation with groups working on different content can also help teachers to avoid the trap of delivering content rather than encouraging skills development.

**Activity 7.2**

Encourage students to think about the issues, consequences and perspectives rather than about the answers to the questions. Encourage students to find a way of working which helps them to clearly separates issues, consequences and perspectives (but acknowledge an overlap if necessary). This might include: use of colours; internet searches; skim reading; note taking; use of diagrams; reference to Skills Section 2, figures 2, 3 and 4; reference back to Skills Section 1, figures 3a, 3b and 4.

Do all students need to work on all of these? Are they better off choosing two to consider? Could students use their diagrams, posters and so on to present their thinking to the class or to make attractive displays which focus on the Global Perspectives skills?

Examples of possible student responses to statement (a) are:

<table>
<thead>
<tr>
<th>Farmers aren't making money because people want cheap food. So we're getting foreign food. So we haven't got any farmers.</th>
<th>☞ The student has addressed a limited chain of causes and consequences but hasn't made this clear, and doesn't seem to have done much research. It's a bit superficial and barely goes beyond the stimulus prompt. They also need to separate and clarify the issue, the consequences and the perspectives. Encourage this student by helping them to clarify an issue: Is this about food security, issues of right and wrong in food production, farming economics? What might be the reasons for local food costing more than imported food? Can any of these factors be changed? Should people be prepared to pay more for food that is well produced by well paid workers locally?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue: Is cheap food more important than food security? Consequences: If we prioritise cheap food and go for imported food, we might find ourselves in a difficult position if we get into a war. If we prioritise food security, there will be more people who can't afford good quality food. Perspectives: Personal – I don't think we're likely to have a war, and I'm going to be a student soon on a limited budget, so I think it's important to be able to get cheap food. National – the government should always plan in case there's a war, because individuals will always think short term and want what is cheap. Global – ???</td>
<td>☞ This student has clearly separated the issue from possible consequences and perspectives. The issue is relevant and likely to lead to interesting thinking. Encourage the student to look at more consequences, and to look at the consequences of the consequences. Ask whether governments should also make sure that people can afford to eat, whether the economy will benefit if people have enough good food to eat, whether actually we have too much cheap food leading to health problems, whether there are ethical issues to do with producing food very cheaply and so on. Suggest that the student looks for global perspectives as they read more. This is clearly a strong student who can develop their thinking to a very high level with a little encouragement.</td>
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Activity 7.3
Encourage independence here – help students to refer back to the relevant skills from Skills Sections 1 and 2, and to set up their own procedures. They could, for example, ask, “Where are you going to look to remind yourself about identifying key issues?”

As students are working, interact with them by asking questions to prompt deeper thinking and independent recognition of areas that need attention. For example: What is it that’s causing problems? You can’t think of any global perspectives? Well, are there any international consequences? Are there any international actions that could be taken? Does this matter at all to people in other countries? Why?

Some students may be ready to consider that there may be multiple national perspectives on an issue. Be ready to discuss this with these students.

Activity 7.4
Encourage independence and use questions to prompt development. Assist students in setting up their own procedures and in referring back to the relevant parts of Skills Sections 1 and 2. Try to help students to spot changes or improvements they need to make, but emphasise independence and interest over performance at this stage.

Activity 7.5
There are suggested answers here, but at this stage it is more important for students to begin to set up strategies they can use to help them to answer these questions independently than it is for them to achieve a specific level in their answers. Encourage students always to move one level deeper or further by asking questions.

Note also that the sample answers are not “expected” answers in terms of level. They are examples of ways that students can be encouraged to develop their thinking. For some students, identifying the consequences at all will be success for them. Others will be able to say that the consequences are reasonable (or not) but struggle to identify why. Some will be ready to push their thinking much deeper.

(a) The newspaper isn’t completely sensationalist, because it attempts to be moderate – “the government needs to seriously consider its policies” – whereas a sensationalist newspaper might say something like “Government failing farmers”, “Frantic farmers flee flocks” or “What will we eat when war comes?” Also, the article is quite thoughtful, analysing causes and consequences. But it talks about “our farmers” which is an emotional tactic, and doesn’t fully analyse the issues of food security, so it’s not a very serious newspaper.

(b) In the short term the consequences of getting food from abroad may be positive for developed countries – cheaper food, better trade links, selling other things abroad. But for less developed countries, “export agriculture” can lead to the need to import food, which is expensive. It can mean that people are hungrier or more malnourished than if food is grown locally to feed local people or it can just mean that people have
less disposable income for other things such as education, consumer goods and so on. Longer term, and in terms of food security, a country which relies on imports for food is likely to be vulnerable. Encourage students to think about how they would attack a country that depended on imported food; attacking their food supplies would be one key way, so you wouldn’t even have to be at war with a country that supplied food for this to be a real problem. Furthermore, war is not the only threat. What happens if oil prices rise so much that transporting food is really expensive, but you no longer have people with farming skills or you’ve built offices and homes on the farms?

(c) @whoduvthoughtit is not very reliable. Basic facts are wrong. Africa is not a country and not all of Africa is poor.

(d) The consequence that @whoduvthoughtit suggests are too extreme to be realistic. If meat and milk were more expensive, poor people would not have “nothing to eat”, they would just have to eat less meat and milk (and that might not be a bad thing). There is nothing to suggest that grain, lentils, soya, eggs or vegetables would be unaffordable. “We’d be a poor country like Africa”, even ignoring the factual problems, is far too extreme and unrealistic. There is no logical reason why meat and milk being more expensive would make a whole country poor.

(e) @whoduvthoughtit’s reasoning is poor. It touches on one important issue – poor people needing to be able to afford to eat – but does so in an exaggerated way. It is opinionated, doesn’t give reasons, and is emotional, illogical, ranting and lacking in empathy. It doesn’t suggest a reason why farmers should sell their products at less than the cost of producing them, and is unfairly emotive against farmers. It doesn’t consider that farming is not a job but a lifestyle and a business. Farmers may feel that they lack the skills to do a different job, they may love their land. And more importantly, this attack on farmers is missing the point of the argument – if farmers go out of business, food security is a serious issue.

(f) How reliable @Sweetpea’s source is depends partly on how well @Sweetpea actually knows John and his circumstances. A “friend’s step-dad’s old school friend” could be a distant connection, so this is very much second-hand evidence, which is fairly unreliable because this sort of testimony gets distorted and exaggerated. Or @Sweetpea and her friend could regularly spend time on the farm (playing, helping out) and have more first-hand evidence which would be more reliable. We’d also have to ask how typical John was.

(g) @Sweetpea is giving an example which explains her opinion that we should take the plight of farmers more seriously. As part of this, she gives some reasons about John’s situation which might apply to other farmers: “there’s no money to be made”, “he’s struggling”; “he can’t just choose another job”; “farming is in his blood and the land is part of him”.
**Activity 7.6**

Encourage students to attempt to set up their own procedures and to work independently (in groups, pairs or individually). Ask questions to prompt thinking to the next level.

**Activity 7.7**

Encourage students to really think about the issues, to spend time pondering in structured and unstructured ways. This activity is not about finding an answer but about finding your own place and perspective.

As in Skill Section 2, spend some time thinking about the difference between well thought through, supported opinions and prejudices. Encourage students to empathise but not to be governed by emotional responses.

Students might like to share plays, poems, film clips, and songs that are relevant to the issues, and talk about what they mean.

**Activity 7.8**

Encourage students to look back at the mini project plan from Section 1. They should remember how they approached the task, and think of ways to improve on that. What didn’t work last time? What can be made to work better this time?

Encourage students to think of one positive thing about the last attempt, and one area that needs improvement which they can focus on this time.

Encourage students to cooperate to find strategies to deal with classmates who didn’t pull their weight in the project last time. Can those students be made to feel more engaged? How? Can they be given a more personal stake in the project? Can they be made to feel that their contribution matters? Encourage students to consider that the attitudes of those who are hard-working and conscientious might contribute to the attitudes (and low self-esteem) of those who are not.

Once again, encourage students to focus on task planning rather than content at this stage.

Example 1: Make a poster about water

(a) Leader – Josh; researcher – Ben; poster maker – Ellie

(b)

<table>
<thead>
<tr>
<th>Task</th>
<th>Who will do it</th>
<th>When it should be done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>Josh</td>
<td>All the time</td>
</tr>
<tr>
<td>Research</td>
<td>Ben</td>
<td>Next week</td>
</tr>
<tr>
<td>Make poster</td>
<td>Ellie</td>
<td>Two weeks</td>
</tr>
</tbody>
</table>

These students need to develop their thinking and planning. For assessment purposes this outcome is too limited, and even for an introductory project it’s too vague – encourage the students to pick a more specific aspect of water, perhaps the cause and consequences of a local drought or flood, or on possible solutions to a water problem. For assessment purposes, a poster of (for example) the causes and
consequences of drought sounds like a good part of a project, but on its own it is not really a global perspectives project – it doesn’t allow enough interaction with the issues or perspectives. Encourage these students to think about how they might use their poster.

The plan needs to be broken down and made more specific. Ask the students what tasks Josh will be doing as leader, how the researcher and poster maker will interact, what specific tasks contribute to research and model making.

Example 2: Outcome—make a photo display of different problems associated with water. Explain the causes and consequences of these problems.

(a) Team – Josh, Ellie, Ben, Sunita, Kwami; leader – Sunita, creative director – Kwami

<table>
<thead>
<tr>
<th>Task</th>
<th>Who will do it</th>
<th>When it should be done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brainstorm all the water problems we can think of and choose some good ones</td>
<td>All of us.</td>
<td>This lesson</td>
</tr>
<tr>
<td>Allocate one problem to each of us to research</td>
<td>All negotiate, Sunita to decide if there is disagreement</td>
<td>This lesson</td>
</tr>
<tr>
<td>Decide what we want our display to look like – photos, diagrams etc.</td>
<td>All of us</td>
<td>This lesson</td>
</tr>
<tr>
<td>Begin research</td>
<td>All</td>
<td>Bring in first ideas next lesson</td>
</tr>
</tbody>
</table>

These students have made a very good start at breaking down the tasks, and have shown a clear idea of the kind of teamwork and leadership they want. They have chosen a project from the textbook which allows them to have a SMART outcome and deal with issues, causes and consequences. Encourage them to think one step further: What are the consequences/implications of their decisions about what the display looks like for their research? Do they need to make a list of things to find during their research? Could they make lists of key words for a search? Encourage them also to think about the final deadline and make sure that all the tasks are scheduled, along with review meetings.

**Activity 7.9**

Encourage students to remember the procedures and processes they used in Section 1 to write their short report, and structure the work for themselves as much as possible. Talk to them about reviewing their research material, and the diagrams and thoughts they have had on the material. Discuss selecting only the most useful and relevant ideas. Students can sometimes be reluctant to discard material that they have researched. Having a real or imaginary shelf for interesting ideas that you can come back to later can help here.

As in Section 1, encourage students to write one, two or three clear sentences for each heading, using their own words. Suggest that they use a maximum of one quotation per section, and/or refer to statistics briefly. For causes and consequences, students might be more comfortable using diagrams or charts, as used in the skills section. This is not intended to
be assessment-ready work. Encourage relevance, clear summaries of the issues, use of own words and clear analysis of the issues. Discourage overly long responses, overload of information and long passages clearly taken without manipulation from sources. Some able students may find the restrictions frustrating, and may need to be reminded that selecting the right 300 words is a greater skill than producing 3,000 words with less thought.

**Activity 7.10**

Encourage students to think carefully about their project work. These questions will lead eventually to project evaluations, but at this stage students are only beginning the process. They may need assistance in considering problems and solutions without unpleasant recriminations or blame casting.

**Developing material from this section for assessment**

The tasks in this section are intended as introductory materials and not as assessment-ready work. However, the topics are on the IGCSE Global Perspectives syllabus and work in these areas can be submitted for assessment. If students choose to submit work in these areas, it is recommended that they revisit the areas after further study.

**Research questions**

The research questions suggested in the topic could be used for assessed work, with more developed, analytical answers. It might be useful to move from “how” to “what actions could we/governments take”. Remember to always consider the global perspective as well as the personal and national perspectives.

**Projects**

The first project suggested in this topic is too limited to be submitted for assessment. It could be amended as follows:

Work with a school in a different country to suggest solutions to two different problems relating to water, food or agriculture experienced by your countries. Make displays for an open day. Remember to consider causes, consequences and personal, national and global perspectives.

The second project needs only to include cross-cultural communication. Working with a school in another country, perhaps T-shirts could be designed and sold to each other.