

Guidance on the team project

This booklet is designed to give you some basic guidance on conducting the team project in your school. It covers the following 3 steps:

Step 1: Teaching the skills

Step 2: Forming groups and communicating the rubric

Step 3: Monitoring progress

Preparing for and starting the Team Project

Step 1: Teaching the skills

If students are to be prepared for the Team Project, teachers will need to teach some essential skills, monitor students' progress, and provide guidance. These may be done on a class basis, or in small groups, or individually, whichever is most appropriate at any given time. The teaching of essential skills is likely to have taken place during class work carried out in preparation for the Team Project, though it may be necessary to revisit some of what has been taught at the point when the skill is required, if students are still unsure. The following outlines a process that may help guide students through the Team Project, either as individuals or in their teams, and sometimes both:

Planning the project (group activity)

- Selecting and defining the focus of the project and the issue to be investigated
- Planning the research to ensure there is sufficient scope for multiple perspectives to be considered by individual team members
- Making sure the issue has local significance and global implications
- Allocating the different research areas
- Developing an appropriate question

Carrying out the research (individual activity)

- Focusing the research to consider a range of perspectives
- Selecting appropriate and credible sources of information

Using the research (individual activity)

- Analyzing research to assess current situation - causes and effects
- Drawing conclusions
- Developing ways of addressing the issue based on the research

Report presenting (individual activity)

- Reviewing, selecting and organizing information
- Communicating effectively and concisely

Reflecting (individual and group activity)

- Working reflectively
- Evaluating the strengths and weaknesses of the group work
- Considering how research findings have impacted positively and/or negatively on personal perspective

- Come to an agreed set of solutions to the issue

Step 2: Forming groups and communicating the rubric

Forming groups

Students produce the team project in groups of 2 – 5. Groups may be formed in a variety of ways. For instance, students may be assigned to groups based on common areas of interest, or based on their different strengths in terms of what they can bring to the project, or they may be randomly assigned. Teachers may wish to assign students to groups themselves. When teams have been formed (but before beginning on the project) teachers will need to provide guidance on:

Working as a group (group activity)

- Contributing positively to group work and discussion
- Allocating work fairly within the group
- Making decisions as a group
- Resolving conflict
- Managing time

Communicating the Scoring Rubric

At this stage, teachers will need to explain clearly to their students what work they need to produce, both as a group, and as individuals, and how their work will be scored.

What is produced?	By whom?	How many points?
<p>An 8 minute multimedia presentation</p> <ul style="list-style-type: none"> • structure and communicate a coherent argument • research and identify with different perspectives (local and global), showing any relationships between them • develop a line of reasoning based on supporting evidence • differentiate their personal perspective from the work of the team as a whole • present convincing and well-supported conclusions which respond to the overall question posed by the team • present complex global concepts, perspectives and arguments in a creative and effective manner using multimedia appropriate to the presentation. 	Individual	Max 25 marks
<p>Reflective Paper no more than 800 words</p> <ul style="list-style-type: none"> • evaluate the effectiveness of their work with others in a team to identify an appropriate local problem with global relevance • work with others in a team to consider a range of effective and workable solutions • consider the ways in which personal standpoints may have been affected by the research and collaborative experience • identify the need for further research in light of the research findings. 	The individual and the whole team	Max 10 marks

Monitoring project progress and staged submissions

Step 3: Monitoring progress

In order to monitor the progress of the project and ensure authenticity of work and provide timely guidance, teachers are advised to have monitoring milestone points to check progress.

It is also possible to stage the submission of the group and individual reports and the scoring of work. This is in order to make the process of submission more manageable. However, it is **not** compulsory, and if they prefer, teachers can have their students submit all their work at the end of the project and score it at that stage.

If teachers decide to adopt a monitoring milestone and staged submission approach, it will be necessary for students to retain a copy of the work they submit at the different stages to refer to if necessary. Such an approach might look like this:

Teacher's Monitoring Milestones (and points for staged submissions)	Learner activity on the project
<p>Monitoring Milestone 1: Approving Team Project proposals and observing group dynamics</p> <p>The submission of a project proposal is a useful way for teachers to check that the topics selected by groups are of local relevance and of global importance and that the nature of the issues identified for exploration will allow students to consider multiple perspectives. At this stage, teachers may find it appropriate to provide some of the guidance to the class as a whole, with follow-up to groups and individuals within the groups (see 'The role of the teacher' in the syllabus). Group discussions surrounding the project proposal and planning will also provide an opportunity for the teacher to observe group interaction.</p>	<p>Students are working in their groups, developing ideas for research questions and allocating research areas and tasks.</p> <p>Students write a project proposal.</p>
<p>Monitoring Milestone 2: Checking progress on Personal research</p> <p>2a: suggest midway through research process</p> <p>2b: suggest viewing a draft of their personal research</p>	<p>Students conduct their individual research and write up their findings in preparation for the presentation</p>
<p>Submission</p>	
<p>Monitoring Milestone 3: Checking progress of individual reflection report</p> <p>Suggest viewing a draft of personal reflection</p>	<p>Students write their reflections on the group work for the Personal report.</p>
<p>Monitoring Milestone 4: Checking team solutions</p> <p>Suggest viewing a draft of the team solutions</p>	<p>Students collaboratively agree their solutions</p>
<p>Submission</p>	

The role of the teacher

The teacher should take an active role in creating teams. The maximum team size is five, the minimum two; however, in most instances teams of three or four may work together more readily and find it easier to agree on a problem to research.

Teachers should support each candidate and team in:

- understanding the nature of the task
- formulating an appropriate research question
- developing a means through which candidates can research different perspectives
- developing organisational skills
- citing and referencing their sources
- focusing on reflection and communication
- developing clear oral arguments
- working collaboratively towards the same shared outcome.

Teachers should note that the use of multimedia (audio and/or visual) does not need to be extensive but rather should be fit for purpose and reflective of working in the twenty-first century.

Teachers must not:

- offer or provide detailed subject guidance to candidates or teams
- undertake any research on behalf of candidates
- prepare or write any subject-specific notes or drafts for candidates
- correct any part of a candidate's notes used for the presentation
- prepare any part of the presentation
- produce any part of the transcript to accompany the oral commentary
- suggest amendments to or comment on any part of the presentation or reflective paper.

Candidates must be taught the meaning and significance of plagiarism.

Cambridge use plagiarism detection software packages. Candidates will be required to include a statement of declaration that the presentation and reflective paper are their own work. The teacher responsible will be required to verify this declaration, verifying that these regulations have been observed. This declaration must be included as part of the candidate's submission to Cambridge.

Appendix 1: Examples for Guidance

Section 1: Some possible Team Project issues (U.K. context)

Topic 1	Local Issue	Global Relevance
Science and Technology (Transportation - Aviation)	There is a debate currently going on over whether Stansted airport should be expanded, or a new airport built in the Thames estuary	With globalization, there is increased demand for air travel and several countries have had to expand their capacity (e.g. Hong Kong, Singapore, China etc.) in order to remain competitive.
Possible question for group report to address		
How important is it for Britain to increase its air carrying capacity and what is the best way to do it?		
Possible perspectives		
Local people, domestic airlines likely to be affected, airline travelers, environmental groups, politicians, the business/commercial world, etc.		

Topic 2	Local Issue	Global Relevance
Culture (Crime – Gangs)	There have been problems with gangs and stabbings in our local area. There was a recent case in the area of a fight between 2 rival gangs in which one teenage boy was stabbed.	There are many countries in the world where gang warfare is a problem and the problem mainly affects young people.
Possible question for group report to address		
Why has there been an increase in the amount of knife crime and what can be done to reduce or eradicate the problem?		
Possible perspectives		
Young people themselves, the police, the local authorities who are responsible for leisure facilities in the area, parents, teachers, youth workers etc.		

Topic 3	Local Issue	Global Relevance
Ethics (Medical ethics – Assisted suicide)	There was a report in our local newspaper recently about a man with a terminal illness who wanted his doctor to be able to help him commit suicide when the time came because he would be physically unable to do it himself.	Many countries have and will have ageing populations and will face mounting costs for health care.
Possible question for group report to address		
Is it ever acceptable for a doctor to assist a patient to die?		
Possible perspectives		
Patients, doctors, palliative care workers, religious leaders, high court judges, the general public etc.		

Section 2: An example of Individual Research and Reflection reports

Please note that the information contained in the table below does not form part of the word count. It is presented here simply to provide the context for an Individual Presentation transcript.

Topic	Local Issue	Global Relevance
Biodiversity and ecosystem loss	We need to improve the biodiversity of The Byes, Devon, UK in order to tackle the potential problem of ecosystem loss.	A reduction in biodiversity and ecosystem loss is happening all over the world. If this continues, because human beings and the environment are inter-dependent, it will have a major impact on all human communities worldwide.
Possible question for group report to address		
What might be the impact of biodiversity and ecosystem loss on people overseas and at home and what can people do to reduce the impact of the problem?		

The following example Individual Presentation Transcript and Reflective reports are provided as the basis for discussion at the training event.

Individual Research

My research focus

I have explored global issues to do with biodiversity and ecosystem loss from the environmental, scientific and technological, economic and cultural perspectives. My report begins with an overview of contrasting perspectives that can be usefully applied to the issues. I then consider some local projects currently in operation to address the issue in my area: Sidmouth, Devon, UK. The report ends with some suggestions for additional ways of alleviating the loss.

Perspectives:

Environmental

“It seems to me that the natural world is the greatest source of excitement; the greatest source of visual beauty; the greatest source of intellectual interest.”
 David Attenborough.

Biodiversity and ecosystems exist within the earth’s landmass and waterways, for example in our oceans and rivers as well as in parks, forests, grasslands and woodlands. Biodiversity and ecosystems are currently threatened by many factors that are both natural and the result of the actions of humans. Because of these threatening factors, a huge amount of biodiversity and many ecosystems are declining at an alarming rate. Almost all resources that humans and animals rely on come from ecosystems, which are finite. The destructive actions of humans and natural damaging factors means vital natural resources are declining and not replenishing themselves sustainably.

Tropical rainforests are an example of highly a productive ecosystem and a major source of biodiversity. Although they make up just 6 per cent of the surface area of the Earth, about 80-90 per cent of the entire species of the world exist in tropical rainforests.¹ Tropical rainforests are well documented as being at threat of deforestation from human action.

Science and Technology

“In just 50 years, over half of the world’s natural rainforests has been cleared and sadly, over 100 species of animals are being made extinct every day because of this, most often before they have been discovered.”

(Human planet, BBC1, 03/02/2011 at 20:00)

Not only are rainforests home to a huge amount of biodiversity, all types of plants are natural consumers of carbon dioxide. Amazon rainforests produce about 40% of the world's oxygen² and the loss of these valuable ecosystems will mean that the amount of oxygen produced will fall. As well as this, the tree burning and natural decomposition that is involved in forest clearing creates even more methane and carbon dioxide that will be released into the atmosphere, therefore having an even bigger impact on the full-time issue of global warming than just the removal of trees alone. This will mean that oxygen levels released into the atmosphere will fall quite dramatically, and the amount of certain types of greenhouse gases released into the atmosphere will increase dramatically as well.

Although there have been and still are great efforts to reduce or prevent the amount of deforestation, there are also many different reasons for why deforestation still continues.

Economic

Man's contribution to deforestation includes farming, (i.e. crop production and grazing) for building and construction and the raw material itself. Globally, subsistence farming is responsible for 48% of deforestation; commercial agriculture is responsible for 32% of deforestation; logging is responsible for 14% of deforestation and fuel wood removals make up 5% of deforestation.³ This data shows that people may unknowingly benefit from things in everyday life that may contribute to deforestation (i.e. by-products of wood are utilised as well, e.g. palm oil which is used in many western food products). However, there are negative consequences that affect many people.

Culture

Deforestation causes biodiversity and ecosystem loss and impacts greatly on the indigenous people. It causes the loss of natural food sources that people have relied upon for everyday life including diet and medicine. An example of just one tree that would be affected would be the palm species because they are so versatile (i.e. the roots can be medicinal, the fruits can be edible, and the trunk can be used for construction (canoes, huts) and the fronds for roofing and crafts such as baskets). Consequently, the indigenous population are losing a hugely valuable part of their diet and livelihood and in many areas there is a loss of a traditional way of life:

*"Almost no native group obtains the majority of its food by traditional nomadic hunting and gathering. Nearly all cultivate crops, with hunting, gathering, and fishing serving as a secondary or supplementary food source."*⁴

Ways of addressing the issue

Considering all of these factors shows there is a need to focus on potential solutions to alleviate the loss of ecosystems and biodiversity. There are currently local, national and international trusts and charities that are attending to the issues that cause biodiversity and ecosystem loss all around the world. Sadly these efforts are often limited in terms of the scale of biodiversity and ecosystem loss. For example, conservation of biodiversity and ecosystem loss can be costly, (e.g. re-forestation) and in poorer or less developed countries where biodiversity and ecosystem loss is an issue, it isn't a priority because producing food is paramount. Hence there is not always enough funding for such large-scale schemes. Large scale operations to help improve or repair damaged ecosystems are often very difficult and expensive:

*"When forests are killed, nature basically requires people to renew the forest. Reforestation is one concept that is in the opposite direction as deforestation, but is proven to be a much harder effort than deforestation."*⁹

However in the developed world, although still limited for this cause, money is more readily available and local people can do something to prevent ecosystem loss. A local initiative here in Sidmouth to encourage people to do something to enhance biodiversity and improve existing ecosystems is the "£50,000 lottery bonanza for the Byes". The aim of this project is to help biodiversity and create new ecosystems by planting new types of trees and hedges. This would help attract bees, bats, birds, butterflies, invertebrates and mammals as well as replace older varieties of trees that are nearing the end of their life (Sidmouth Herald Friday, February 4, 2011). Not only will this project considerably help biodiversity by introducing additional ecosystems into the area, it will also provide an attraction for the community and other people who visit it. Thus it will have a dual role; an aesthetic quality as well as providing a home to many animals.

Some of the other things that could be done to contribute to the reduction of biodiversity and ecosystem loss include setting up and giving a regular donation to a charity such as Friends of the Earth or a more localised charity such as the Devon Wildlife Trust. A small amount such as £2 or even as little as 50p per month would be all that is needed. It is possible to support these charities through other means such as purchasing their products, for example environmentally friendly cards and gifts to reduce deforestation. Another means of support would be to work as a volunteer to assist on projects, e.g. tree planting. Gaining sponsorship for charitable events would support the cause of a particular charity (e.g. a sponsored run/walk). Advertising through Twitter and Facebook would highlight the issue and advertise events so others are made aware of the issue and can show support for ways of addressing it. (1198 words)

References

1. <http://www.dhushara.com/book/diversit/hab.htm#anchor244736#>
2. <http://library.thinkquest.org/5736/causes.htm>http://thinkexist.com/quotes/david_attenborough/4.html
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8. <http://www.restorethegulf.gov/sites/default/files/documents/pdf/Consolidated%20Wildlife%20Table%2010210.pdf>
9. <http://ezinearticles.com/?The-Effect-of-Deforestation&id=510236>

Reflection

Group dynamics

I think our group mainly worked very well together, considering that we have different personalities and working styles. Some people are organised and like to have a clear plan with fixed deadlines, but others like to do their work at the last minute. Also, sometimes unavoidable things happen preventing you from getting things done on time. I think our proposal work-plan was good because it built in extra time in case things did not go to plan.

Everyone had a team job to do, apart from our own work. I think this was good as it was a reminder to us that we were also working towards a group report. If we'd just focused on our own work, when it came to the group report, we might have wasted time trying to sort out who was going to do what. We elected a group leader, record keeper, research summariser and report compiler. I think we chose a good group leader who made sure we stuck to the plan. She led our group discussions and kept track of everything. However, I think it's important for the leader to make everyone feel included and I don't think we always felt like that. Our leader was very focused on getting the work done and sometimes, when we couldn't really agree on something, she went ahead and made the decisions, making us feel redundant. However, it is true that we often spent time arguing over small details instead of focusing on the main issues. Maybe this is why our group leader felt she had to make decisions. Perhaps I may have had more empathy with her if I'd experienced this role. I think the other roles we assigned were also very useful to what we had to do and we did tap on people's strengths when we assigned them.

All in all I think our approach was systematic and we supported each other well. I think our weakness was that perhaps we were a bit too systematic. For instance, we could have covered more perspectives if we'd changed our approach and considered a range of different viewpoints within a perspective, as well as looking at different perspectives. As it was, we chose the perspectives that we thought were most suitable for our issue. Also, if we'd let people decide for themselves what perspectives they wanted to look at, we might have got some different ones, such as looking at the issue from a farmer's perspective.

The research and my personal perspective

Before we started on this project, I thought that this issue mainly affected people in other countries, but I realise now that it is truly global. For instance, I learned that the Amazon rainforests alone produce 40% of the world's oxygen (see citation above) and that over half of the world's rainforests have been destroyed in just 50 years. I didn't realise that the problem is not just about cutting down trees, but also burning trees to clear land which releases poisonous gases into the air. Since we all breathe the same air and human populations are increasing, if we allow this to continue, the amount of clean air available is going to be less and we could end up poisoning ourselves. I also learned something valuable from my research into the cultural perspective. There are indigenous tribes in the Amazon who use some of the plants as medicines. We hear a lot about the search for a cure for cancer which so many people suffer from. What if there is a cure for cancer out there in some of these plants which we don't yet know about? We could be losing our chance to beat the disease if we don't do anything to stop their destruction when the forests are cleared.

The most important thing I've learned is that although nature gives us a lot of things to support life, like food and shelter, and beauty for us to appreciate, we must find ways to give back and restock our natural resources, otherwise everything we need and enjoy may disappear. Although what we are doing in Sidmouth and Devon is small scale compared to the size of the problem, at least it's a start. I really think the answer lies in making young people everywhere aware of the problem, because they will be the ones who will have to deal with the consequences in the future. That's why I suggested using Facebook and Twitter to highlight the problems. Most of us communicate through social network sites and we can get the message across at home and globally. Protecting our world is not just the responsibility of people in distant countries, it's everyone's responsibility and if we don't accept responsibility, we will all suffer

(793words)