Decision Making Exercise

The Background of DME at A level

We are surrounded by issues. Many have a geographical context and the study of our subject provides us with the skills we need to understand these issues, make our mind up about them, and argue our viewpoint effectively. You will be aware of local issues in your area. The photograph below for example, taken in County Antrim, reflects an issue felt strongly enough by a local individual that considerable expense and trouble has been taken to erect this sign. Thorough research would be needed to find out about this issue, to discover whether it is still a live issue or whether a decision has been made in relation to it and to explore the other side of the argument.

Source: Principal Examiner

Because there **always** is another side to the argument. Some will not agree with it, but there always is one. Some arguments are NIMBY (Not In My Back Yard) type arguments. This means that those making the argument agree that the development is required, but they don’t want it located next to them. Sometimes arguments are made claiming to represent a particular viewpoint, while having other underlying motives. An industrialist may claim that the proposed development is designed to help local people, but the main motive may be profit.

Even the language used can be interesting: while one side may describe a development as a ‘Waste to Energy Plant’, which has a positive ring to it, opponents may term it an ‘Incinerator’, which has much more negative connotations. One person’s ‘scrubland’ is another person’s ‘heath’. A ‘landmark icon’ for someone in favour of a development may be an ‘eyesore’ for someone opposing it. Taking into consideration the various reasons behind the arguments put and the emotive language used, a decision on which side have the stronger case can only be made when you have a good grasp of the issue and the competing arguments around it.

The Decision Making Exercise (DME) has been a component in A Level Geography examinations in Northern Ireland for 20 years. In that time it has evolved a little in its approach, but it remains a very similar exercise, with similar requirements and equally
arduous demands. The resilience of this component of the A Level examination reflects the fact that geographers remain very much concerned with geographical issues. These are often complex and contentious, and the DME examines one of these each year. The issues explored are real-world issues which have caused and are often still causing disputes, because they are also contemporary. There are differing views about the issues presented which are sincerely held and strongly argued on both sides. There are generally social, economic and environmental aspects to the issue and these have to be understood, thought through and presented coherently in a balanced way. Ultimately a decision has to be made and justified.

The issue at the heart of the Decision Making Exercise can be from any part of the world, although generally Northern Ireland issues are not selected. This is largely to avoid any perception that candidates who could be expected to have a strong local knowledge of the issue would be penalised or benefited. Indeed, since 1988, there has only been one issue located in Northern Ireland, which related to the first wind farm proposed here. This development because of its nature was fairly remote. The issue can be at any scale, from a relatively small scale development such as a new bridge or a by-pass, to a large scale hydroelectric scheme or port development.

<table>
<thead>
<tr>
<th>Year</th>
<th>Topic</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>A golf course in sand dunes</td>
<td>County Clare, Ireland</td>
</tr>
<tr>
<td>2002</td>
<td>A terminal at an airport</td>
<td>T5, Heathrow, England</td>
</tr>
<tr>
<td>2003</td>
<td>A container port</td>
<td>Southampton, England</td>
</tr>
<tr>
<td>2004</td>
<td>A Waste to Energy plant (incinerator)</td>
<td>County Meath, Ireland</td>
</tr>
<tr>
<td>2005</td>
<td>A hydroelectric plant and aluminium smelter</td>
<td>East Iceland</td>
</tr>
<tr>
<td>2006</td>
<td>Gas pipeline and terminal</td>
<td>Mayo, Ireland</td>
</tr>
<tr>
<td>2007</td>
<td>A new bridge over the Thames</td>
<td>London, England</td>
</tr>
</tbody>
</table>

An examination of recent DMEs demonstrates this variation in scale and location. Each of these was current when the examination was sat, although some had been decided upon before the examination itself. In passing, in respect to the issues in the table above, all have been fully agreed except for the gas pipeline and terminal, still very contentious locally in Mayo and wider afield, although its construction continues. All were given permission to be built, except for the container port in Dibden Bay, close to Southampton, England. However, this should not influence the choice that you will make for the issue with which you will be faced – you can equally make the case for or against the proposed development.

There is no incorrect answer in a DME, only one which is poorly supported with evidence.

While you cannot forecast the issue which will form the context of the examination – you would probably not be particularly advantaged if you could – the structure of the resources provided is very similar to year to year, and the questions asked vary only in terms of reflecting the issue provided and in some of the detail. One issue may be very rich in environmental resources for example and that would lead to more being evaluated around that theme compared to an issue where economic issues were more involved. However, basically the same sorts of environmental, social and economic aspects of issues turn up again and again.
Structure of the Paper

The Decision Making Exercise is now part of assessment unit A2 2: Physical Geography and Decision-Making, only offered during the summer series, which includes Physical Geography assessment. This combination, called Assessment Unit 4: Physical Geography and Decision-Making, has two sections.

Section A

This section of Assessment Unit 4 requires you to choose two of the three Physical Geography options and to answer one question from each of those chosen i.e. two questions in total. The Optional Units are:

- Fluvial and Coastal Environments,
- The Nature and Sustainability of Tropical Ecosystems, and
- The Dynamic Earth.

The time allowed for this exam is two hours and 30 minutes to complete this whole paper but the 'Information for Candidates' on the cover of the examination paper strongly recommends that you spend just one hour answering the two questions, one from each of the two Physical Geography options that you have studied. Thus you should spend 30 minutes per question in Section A. This is important advice which you should try to stick to closely. This will mean that 1 hour and 30 minutes remain to complete Section B, the Decision Making Exercise. To make sure that you have enough time to do justice to the DME you should try to make sure that you are not tempted to write too much in Section A. Experienced examiners will tell you that the quantity of what you write is generally not what makes a difference in an examination; it is the quality. The questions in Section A will be set with the limit of 30 minutes per answer in mind, so it should be straightforward for you to complete them in that time.

Section B

This section comprises the Decision Making Exercise. Further information on the cover of the examination paper advises you to spend 30 minutes reading the resources related to Section B and selecting those which you plan to use in your answer. This is again useful advice to which you should adhere. The range of text that you have to read and the number of maps and diagrams that you have to understand is designed to be approachable in that time, but you will need to use most of it. Of course, if you can do all of your reading and preparation in less time, say 25 minutes, so much the better. That will provide you with some leeway later, but it would be a false economy to rush the reading and preparation. You should certainly try to get through all the content and make your selection of resources within the 30 minute period. Spending longer than this will restrict what you can do with the resources that you have read and understood.

If you have timed the reading and preparation correctly, this should leave you 60 minutes to approach the answer itself. As the Decision Making will be worth 50 marks overall, this means that you should aim to spend about one minute per mark in each subsection. If you were to stick to this rigidly, you would have 10 minutes remaining. In practice much of this additional time will have been used in elements of the DME, such
as the skill element which is usually the completion of a graph from a table of data. Generally worth about 8 of the 50 marks, it is likely to take you longer than the 8 or so minutes that the 1 mark/1 minute guide would suggest that you spend. In any case it is always sensible to leave yourself a cushion of a few minutes. At the end of an examination this short time can be put to use very effectively in checking over your answer or in recovering from some minor error.

Despite the argument in the last paragraph, it is possible to answer a small mark question in fewer minutes than the marks allocated to it. A one or two mark question can often gain full marks for just a few words in a fraction of a minute, although you should not rush any answer. Make sure you have read the question correctly and that you have identified the appropriate answer, but do try to answer quickly and succinctly.

The general point of making sure that you allocate your time in each part of the examination paper in proportion to the marks available is valid. Spending 12 minutes to answer a question which has been allocated 4 marks is not sensible. You may:

- be writing too much and straying into irrelevant areas,
- be spending too long in looking for the resources that will help you to frame your answer, or
- be tempted by a question which you find straightforward to spend more time than you should in answering it.

All of these can be addressed. If you tend to go beyond the question to address areas not relevant to the question set, perhaps you have not read the question carefully enough. Perhaps you are pre-empting a later question and are straying into content best reserved for that. Careful planning of your answer before you start the first section of it should reduce the chances of this affecting your timing. Planning and preparation before attempting the answer will also help to deal with the second issue too. You could make sure that, in the 30 minute period that you will spend reading through the resources, you have underlined, highlighted, numbered or otherwise identified material appropriate to each part of the answer. Finally, tempted by a straightforward question to write and write and write? Don’t be. You are likely to have gained whatever marks you will be awarded long before you get to the end of your writing – the rest is wasted time and effort.

Spending too short a time on an answer to a substantial question demonstrates equally poor examination technique. If you spend 4 minutes in answering a 12 mark question, you are most unlikely to be covering it in the detail required, or you have missed something substantial that should be in your answer.

**Skills and techniques**

The skills involved in the DME are considerable. Some of them are geographical skills that you will have been developing since you first started studying the subject. Like many of the skills you have developed in your study of geography, these will be of value in further study and in the world of work. Report writing is a skill that many occupations require. Writing them under time pressure, while structuring them appropriately and including all the relevant information is a particular challenge. You have to engage with a geographical issue and develop an understanding of often complex text and graphical resources. You have to examine different viewpoints and show an empathetic
understanding of these conflicting values. You also have to make a decision and justify it. All of this has to be done in a report format which challenges you to present coherently but succinctly the context of the issue, both sides of an argument and your decision, alongside the justification for it.

The skill of being able to dispassionately evaluate an argument is important. You should not approach the DME with a preconceived viewpoint. For example, you may generally have strong views on the environment and may usually give it a pre-eminence in environmental/developmental issues. Alternatively you may hold the view that development must take precedence, even if some environmental damage is caused. However each issue must be taken on its own merits. The viewpoints in the resources must be given their due and the strength of each position should be acknowledged. Eventually a decision will have to be made, but your justification must be sound and based on rational argument and not blind belief. You should credit strong arguments, even from a viewpoint opposed to the decision you make, but be prepared to rebut them with counterarguments. Geographical issues are complex; if they were not, they would not be contentious and not be issues. Thus all ‘sides’ in an issue have a valid case to put and these deserve to be taken seriously and addressed with rational argument. It is possible that you can accept much of an argument provided from one viewpoint and see the strength in their case while ultimately not agreeing that their viewpoint should prevail – the counterarguments may be stronger.

The resource booklet in the examination

Quickly assimilating and developing an understanding of complex resources is a central part of the challenge of the DME. There will be a variety of resources presented each year in a resource booklet, some of which will provide resources for Section A and some for Section B. Those for Section B will vary from issue to issue but text and maps are likely to be recurrent features and tables of statistics, diagrams and photographs are also likely to be present in most years. There are considerable skills involved in absorbing information like this. If you reflect on what you have done in your study of geography, it is likely that you have been developing these skills for some time. A glance at any of your current geography textbooks will show that much of the information is conveyed through text with supporting tables, maps, photographs and diagrams. The DME is just the same. There are particular skills in assimilating the information in a restricted time. This you can improve, with practice. Past papers are often a good source of information and will provide practice in coming to grips with unseen resources and organising your answer. (However, be aware that some of the older DME sample papers provide different timings than those in the paper we are addressing and their length and/or the amount of detail provided in the resources will be greater from that in your examination)

We will look at each of the resources in turn to examine how best to deal with them

Text

This will form the bulk of the resources provided in the booklet. There is often a section giving the background, a section giving the arguments for, another giving the arguments against and a series of quotations from people with an interest in the issue. Do not neglect the preliminary text in the question paper as well – often it provides information
that can be used to give a context for the issue, or to provide some of the background to it.

The challenge in handling the text is in reading all of it effectively and developing and understanding of it in the time available. There is generally some jargon specific to the issue which has to be mastered. Probably most challenging is finding a way to retrieve the particular fact or statement that you remembered reading when you are in the middle of your answer and yet the paragraph which you remember well proves most difficult to find and valuable minutes are wasted looking for it.

Some candidates number the paragraphs of text and use these numbers in their plan; some use differently coloured highlighters, and there are other approaches that could be taken. Only practice will show you what strategy works for you in the time allowed: but not having a strategy will mean time wasted while you re-read whole sections to find that elusive bit of content.

Maps

These could be map extracts from commercial maps such as Ordnance Survey maps. The type used will vary according to the scale of the development. Most popular is generally the 1:50,000 (2 cm to 1 km) scale maps as these often show well the development in its spatial context i.e. you can see the land around it: the settlements and farms, the hills and valleys perhaps. You can see protected areas such as places designated as National Parks or Nature Reserves. Sometimes a smaller scale issue requires a more detailed map and often a 1:25,000 map (4 cm to 1 km) is used in those circumstances. These maps have different symbols to the 1:50,000 maps but this should not be a problem in either case as a key is always provided.

If there is a map excerpt of this sort, often the text will contain 4- and 6-figure grid references. These are there to help you to find the main places of interest in the issue, but you should not spend too long poring over the map to find every place mentioned – just do enough to get your bearings and to familiarise yourself with the area illustrated.

It is good practice to show that you have studied the map. You can occasionally use the grid references produced in the text, but it would be more creditable for you to spot something on the map not directly referred to in the text, to make reference to it and to give its grid reference. However, important as it is, it is worth repeating that you should not spend too long on this resource.

Other maps are likely to be present as well. These are maps drawn particularly for the examination and help you to visualise the place, and to locate it on the commercial maps. Since these are generally more simplified maps with much less detail, they are often a good place to start in trying to understand what the issue is about. Sometimes the other maps show the feature proposed in place, and the existing maps just show the landscape in which it will be placed.

These maps should also help to bring the issue to life for you, especially in combination with other resources. You can see that it is a real issue which affects real communities in a landscape which exists and which you could visit.
Diagrams or graphs

These are not always present but, where they are, they should provide useful information. Often they are taken from the EIS (Environmental Impact Statement) which developers often have to produce when applying for permission to proceed. They might show noise levels for example, or traffic flows over time or changing levels of pollution. Like the maps, these can be useful resources and, if possible, you should show you have looked at and understood them by incorporating a figure or some other detail from them in your answer. Remember though that, like the maps, you should not spend too long examining a diagram or graph: spending too long trying to decipher one that you find complex may put you in time difficulties later.

Tables

A table is a fairly common inclusion in the paper and this often the basis for the skill element described later, Even if is not, it can provide facts that you can use in your answer to give precision to it and to add weight to your argument.

Photographs

Alongside maps, these are often vital to help to give you a mental picture of the issue. They can also provide information that you can use in your argument. In the picture at the start of this description of the DME, for example, the photograph could be alluded to as a reflection of local anger at proposals which may damage a pristine countryside. Alternatively it could be described as using alarmist imagery to convey a misleading impression to those who see it.

Quotations

While strictly speaking these form part of the text resources, it is worth treating them separately here. There may be four or five of these. You could treat them as another background resource indicating the strength of feeling on both sides. Some may be neutral and balanced but most often they represent the views of one side or the other.

There is a great temptation to use these verbatim i.e. to just write out the whole thing. This is not good practice. What you can do is use a particularly effective word or phrase from a quotation, to support an argument that you are making. Saying

“This view is confirmed by one local councillor who felt so strongly about the development that he described it as a ‘blot on the landscape’ for residents”

is much better than

“Frank McGurk, local councillor said ‘This is a blot on the landscape … it is visible all along that stretch of the A45 and seriously impacts on the views of the local people of Glendermot, as well as reducing house values’ ”.
**Remember**

Resources often can be used to support either side of the argument, depending on the spin you put on them or your selection from them. Photographs, tables and diagrams might be able to be used to argue a either side of an issue.

**Other aspects of the report**

**Role**

You are usually required to ‘adopt and maintain’ a role in the DME. This is often as the person who is preparing the report, making the decision and justifying it. While it may be worth only 2 of the 60 marks on offer, it is not to be neglected as these should be easy marks to obtain, if you keep your wits about you. However, it important not to spend too long establishing your role. A simple ‘As Secretary of State for the Environment, I …’ or similar is all that is required.

You need to make reference to the role you are adopting in a couple of sections of your answer to get these marks.

**Graph**

Often the skill section of the paper involves preparing a graph from a table of data. As this can be worth up to 8 marks or so, it is a sizable proportion of all the marks available and so you should prepare yourself well for this potential challenge. While you cannot know the data you will be asked to represent, you can be aware of the potential types of graph you could draw and in which context you should use each. Also you should know when a type of graph is unsuitable. For example, using a line graph to show discrete data is not an appropriate technique. Line graphs are more suitable when drawing a graph with continuous values along one axis, for example time.

When considering what type of graphs are available to you, bear in mind that you will want to complete this in as short a time as possible. Constructing a series of pie charts may be an entirely appropriate technique, but are likely to be much too time consuming to construct in a limited time frame – another technique would therefore be preferable.

Make sure that you make reference to the graph within your answer in an appropriate place – marks are often allocated for this.

**Format**

There are often 1 or 2 marks for this, and they should be easy marks to gain. You will want to structure your response in any case, just to provide a framework for yourself, but these marks are designed to reward an answer which closely follows the structure provided, not one of your own devising. Follow that which has been provided closely, down to the names of the headings and sub-headings, to be sure of getting the marks and lay out the different section and sub-section headings clearly.
Levels of Response mark schemes

All of the longer questions in your paper are marked using a Levels of Response mark scheme. You should become aware of what these mark schemes look like and become familiar with how they are applied – you will quickly become able to distinguish between answers which are at the different levels, and even to apply marks within the levels as well. This is exactly what examiners do. At a Standardising Meeting they agree on the levels that would be awarded to a sample of scripts. When levels are agreed, then the marks within that level are decided upon. At that stage, with agreed levels, it is possible for the examiners to mark to a consistent standard. You can learn what these standards are.

If you look at a range of responses to a question alongside the mark scheme, you should be able to decide on the level in which you would put each answer and the marks you would award with that level. Does it resemble the Level 2 descriptors more than the Level 1 or 3, for example? Some take a bit of thought and maybe discussion with others at first. Eventually, having decided the level in which you would place the answer, at which end would you place it? Being able to recognise the level which an answer is hitting will allow you to redraft your answers to aim to reach, for example, Level 3, rather than mid-Level 2.

Timing

This is a recurrent theme in any discussion of how to approach a DME and this is not surprising because it is a vital component in trying to maximise your mark. As discussed earlier, you must ensure that you spend an amount of time on an answer proportional to its value. Don’t spend too long on a short question, and don’t spend too short a time on a longer one. Be very aware of when your finish time is, and leave enough time to complete the final part of the question, where you make your Decision. Sometimes it is the largest component in the whole section and you must leave enough time to cover it effectively. Often the question requires you to make a decision on the basis of ‘the greater overall benefits’. This means that you must balance one argument with the other, giving credit where necessary, being persuaded in places and mounting robust attacks in others. Finally you should weigh up the issue and make a decision, with a justification for your choice. Note that you cannot go outside the possible provided in the framework of the paper and invent a compromise, or a different decision. It must be one of the decisions open to you.

It might be thought that there is little you can do to prepare for an unseen geographical issue but, as we have seen, that is far from the case. There is a lot you can do, in reflection and in preparation, before the Decision Making Exercise component of Assessment Unit 4.
All website addresses are correct in Dec 2007. CCEA cannot be held responsible for any change in domain name and content.

CCEA accepts no responsibility or liability for any material supplied by or contained in any of the linked websites and does not necessarily endorse the views expressed within them. We cannot guarantee that these links will work all of the time and we have no control over availability of the linked pages.